

# **APPENDIX C**

---

## Traffic Impact Study

**Traffic Impact Study –  
Shopping Center Development at  
60<sup>th</sup> Street West & West Avenue K  
in Lancaster, CA**

**August 21, 2008**

*Prepared For:*  
**Environmental Science Associates**  
707 Wilshire Blvd., Suite 1450  
Los Angeles, CA 90017  
(213) 599-4300

*Prepared by:*  
 **KOA CORPORATION**  
PLANNING & ENGINEERING  
1055 Corporate Center Drive, Suite 300  
Monterey Park, California 91754  
(323) 260-4703

JA62M5X

# Table of Contents

---

<b>EXECUTIVE SUMMARY .....</b>	<b>I</b>
<b>I. INTRODUCTION .....</b>	<b>1</b>
A. PROJECT LOCATION.....	1
B. PROJECT STUDY AREA .....	3
C. ANALYSIS METHODOLOGY.....	3
<b>2. EXISTING (YEAR 2007) CONDITIONS.....</b>	<b>9</b>
A. EXISTING ROADWAY SYSTEM .....	9
B. EXISTING TRANSIT SERVICE.....	10
C. EXISTING LEVEL OF SERVICE ANALYSIS .....	12
D. EXISTING ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS.....	16
<b>3. FUTURE (2012) PRE-PROJECT CONDITIONS.....</b>	<b>17</b>
A. AMBIENT GROWTH RATE .....	17
B. AREA PROJECTS.....	17
C. PEAK HOUR INTERSECTION LEVEL OF SERVICE .....	22
D. ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS .....	24
<b>4. PROJECT TRIP AND PARKING GENERATION .....</b>	<b>31</b>
A. PROJECT TRAFFIC GENERATION.....	31
B. PROJECT TRAFFIC DISTRIBUTION & ASSIGNMENT.....	35
C. PROJECT PARKING GENERATION .....	42
<b>5. FUTURE (2012) POST-PROJECT CONDITIONS .....</b>	<b>45</b>
A. PEAK HOUR INTERSECTION LEVEL OF SERVICE .....	45
B. ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS .....	46
C. PROJECT DRIVEWAY TRAFFIC OPERATIONS.....	49
<b>6. SIGNIFICANT TRAFFIC IMPACTS.....</b>	<b>50</b>
A. METHODOLOGY FOR SIGNIFICANT IMPACT CALCULATIONS .....	50
B. DETERMINATION OF STUDY INTERSECTION IMPACTS.....	50
C. DETERMINATION OF STUDY ROADWAY IMPACTS.....	53
<b>7. PROPOSED TRAFFIC IMPACT MITIGATION MEASURES .....</b>	<b>54</b>
A. STUDY INTERSECTION MITIGATION MEASURES.....	54
B. STUDY ROADWAY SEGMENT MITIGATION MEASURE .....	57
C. FAIR-SHARE CALCULATIONS .....	57

## List of Figures

FIGURE 1 – PROJECT SITE LOCATION	2
FIGURE 2 – LOCATION OF STUDY INTERSECTIONS AND ROADWAY SEGMENTS	5
FIGURE 3 – EXISTING STUDY INTERSECTION APPROACH CONFIGURATIONS	11
FIGURE 4 – EXISTING (2007) AM PEAK TURN MOVEMENT VOLUMES	14
FIGURE 5 – EXISTING (2007) PM PEAK TURN MOVEMENT VOLUMES	15
FIGURE 6 – FUTURE (2012) WITH AMBIENT GROWTH - AM PEAK TURN MOVEMENT VOLUMES	19
FIGURE 7 – FUTURE (2012) WITH AMBIENT GROWTH - PM PEAK TURN MOVEMENT VOLUMES	20
FIGURE 8 – LOCATIONS OF AREA PROJECTS	21
FIGURE 9 – AREA PROJECTS ONLY TRIP ASSIGNMENT – AM PEAK HOUR	27
FIGURE 10 – AREA PROJECTS ONLY TRIP ASSIGNMENT – PM PEAK HOUR	28
FIGURE 11 – FUTURE (2012) GROWTH WITH AREA PROJECTS – AM PEAK TURN MOVEMENT VOLUMES	29
FIGURE 12 – FUTURE (2012) GROWTH WITH AREA PROJECTS – PM PEAK TURN MOVEMENT VOLUMES	30
FIGURE 13A – PROPOSED PROJECT SITE PLAN	33
FIGURE 13B – ANALYZED PROJECT PASS-BY TRIP ADJUSTMENTS	34
FIGURE 14 – PROJECT TRIP DISTRIBUTION – INBOUND	36
FIGURE 15 – PROJECT TRIP DISTRIBUTION – OUTBOUND	37
FIGURE 16 – AM PEAK PROJECT TRIP ASSIGNMENT	38
FIGURE 17 – PM PEAK PROJECT TRIP ASSIGNMENT	39
FIGURE 18 – AM PEAK PROJECT TRIP ASSIGNMENT AT SITE	40
FIGURE 19 – PM PEAK PROJECT TRIP ASSIGNMENT AT SITE	41
FIGURE 20 – FUTURE (2012) GROWTH WITH AREA PROJECTS AND PROJECT – AM PEAK TURN MOVEMENT VOLUMES	47
FIGURE 21 – FUTURE (2012) GROWTH WITH AREA PROJECTS AND PROJECT – PM PEAK TURN MOVEMENT VOLUMES	48

## List of Tables

TABLE 1 – INTERSECTION LEVEL OF SERVICE – EXISTING (2007) CONDITIONS	12
TABLE 2 – EXISTING (2007) ROADWAY SEGMENT LEVEL OF SERVICE	16
TABLE 3 – AREA PROJECTS TRIP GENERATION	18
TABLE 4 – INTERSECTION LEVEL OF SERVICE – FUTURE (2012) GROWTH-ONLY CONDITIONS	22
TABLE 5 – INTERSECTION LEVEL OF SERVICE – FUTURE (2012) PRE-PROJECT CONDITIONS	23
TABLE 6 – ROADWAY SEGMENT LEVEL OF SERVICE – FUTURE (2012) GROWTH CONDITIONS	25
TABLE 7 – ROADWAY SEGMENT LEVEL OF SERVICE – FUTURE (2012) PRE-PROJECT CONDITIONS	26
TABLE 8 – PROJECT TRIP GENERATION	32
TABLE 9 – TOTAL PROJECT PARKING REQUIREMENTS	42
TABLE 10 – PROJECT SEASONAL PARKING DEMAND CALCULATIONS	44
TABLE 11 – INTERSECTION LEVEL OF SERVICE – FUTURE (2012) POST-PROJECT CONDITIONS	45
TABLE 12 – LEVEL OF SERVICE – FUTURE (2012) POST-PROJECT ROADWAY SEGMENT	46
TABLE 13 – DETERMINATION OF STUDY INTERSECTION IMPACTS – WEEKDAY AM PEAK PERIOD	51
TABLE 14 – DETERMINATION OF STUDY INTERSECTION IMPACTS – WEEKDAY PM PEAK PERIOD	52
TABLE 15 – DETERMINATION OF ROADWAY SEGMENT IMPACTS – WEEKDAY DAILY PERIOD	53
TABLE 16 – SUMMARY OF INTERSECTION MITIGATION MEASURES	55
TABLE 17 – SUMMARY OF INTERSECTION MITIGATION MEASURES	56
TABLE 18 – PROJECT SHARE OF NEW AREA TRAFFIC AT IMPACTED INTERSECTIONS – AM PEAK	58
TABLE 19 – PROJECT SHARE OF NEW AREA TRAFFIC AT IMPACTED INTERSECTIONS – PM PEAK	58

# **Appendices**

---

APPENDIX A – ANALYSIS METHODOLOGIES

APPENDIX B – TRAFFIC COUNT DATA

APPENDIX C – ANALYSIS WORKSHEETS FOR EXISTING (YEAR 2007) CONDITIONS

APPENDIX D – ANALYSIS WORKSHEETS FOR FUTURE (YEAR 2012) PRE-PROJECT CONDITIONS

APPENDIX E – ANALYSIS WORKSHEETS FOR FUTURE (YEAR 2012) POST-PROJECT CONDITIONS

APPENDIX F – SCOPING DOCUMENT (IS FORM) – TRAFFIC IMPACT STUDY

APPENDIX G – SHARED PARKING ANALYSIS

## Executive Summary

---

This following are the conclusions made from the analysis within this report. Project significant impacts were calculated by thresholds established within the traffic study guidelines published by the City of Lancaster.

- Based on the scoping document submitted to the City and discussed and verified with staff, the Project study area included 14 study intersections and six roadway segments. Significant traffic impacts of the proposed Project were analyzed for the weekday a.m. peak and weekday p.m. peak periods.
- During the existing conditions scenario, two of the 14 study intersections operate at a poor level of service (LOS E or F) during both of the analyzed weekday peak periods. All of the six study roadway segments operate at good LOS values of A under this scenario.
- During the future pre-Project period, with traffic from ambient growth and planned area projects, all but four of the study intersections would operate at poor LOS values of E or F. During this period, one of the study roadway segments would operate at a poor LOS value of F.
- The proposed Project land uses would consist of 236,109 square feet of gross shopping center floor area. Specific commercial uses would include the following:
  - A gas station and car wash with a 3,000 square-foot convenience market;
  - A home improvement center with 139,410 square feet of gross floor area and an outdoor garden center of 31,659 square feet in gross area;
  - A pharmacy with a drive-thru facility and general retail and restaurant spaces totaling 32,769 square feet of gross floor area;
  - Two fast-food restaurants with drive-thru facilities and other restaurant spaces, totaling 14,271 square feet of gross floor area; and
  - Other non-leasable building and covered areas within the gas station pad total 15,000 square feet of area
- Including reductions for pass-by trips (existing trips that currently use area roadways but would begin to stop at the proposed Project as linked trips), the proposed Project would generate a net total of 10,770 daily weekday trips, 274 weekday a.m. peak-hour trips (162 inbound and 112 outbound), and 997 weekday p.m. peak-hour trips (480 inbound and 517 outbound).
- Significant Project traffic impacts within either the a.m. peak or p.m. peak weekday periods would occur at 11 of the 14 study intersections and at one of the study roadway segments.
- Implementation of traffic signals at seven unsignalized impacted study intersections would mitigate traffic impacts to a level of insignificance. In addition to signalization, the following physical improvements are recommended at seven of the significantly-impacted study intersections for the full mitigation of significant impacts from the proposed Project (when combined with the recommended signalization measures):
  - 60<sup>th</sup> Street/Avenue J (intx #2): A second southbound thru lane
  - 60<sup>th</sup> Street/Avenue K (intx #7): Second northbound and southbound thru lanes
  - 50<sup>th</sup> Street/Avenue K (intx #8): Northbound left/thru/dual right lanes, and eastbound and westbound second thru lanes and left turn lanes

- 45<sup>th</sup> Street/Avenue K (intx #9): Eastbound and westbound second left turn lanes
- 60<sup>th</sup> Street/Avenue L (intx #12): Southbound new thru lane
- 50<sup>th</sup> Street/Avenue L (intx #13): Eastbound and westbound new thru lanes
  
- With implementation of the recommended signalization and approach capacity improvements summarized above, all but one of the significant impacts of the proposed Project at the study intersections would be removed. The significant impact at the intersection of 50th Street West & Avenue K would be infeasible and the impact at that location would be significant and unavoidable.
- In order to avoid on-site queuing that could occur at the southern full-access site driveway, which could create on-site traffic conflicts within parking aisles and other on-site roadways, it is recommended that the southern full-access driveway be signalized. With signalization, the driveway intersection with Avenue K would operate at a good LOS value of A. Signalization of the driveway intersection would be the responsibility of the Project.
- Funding of the mitigation measures at the study intersections by the Project should be based on a sharing of impacts across multiple projects. These calculations have been provided for each impacted intersection.
- At the impacted roadway segment of Avenue K, to the east of 60th Street, it is recommended that the roadway be upgraded from a two-lane cross section to a four-lane cross-section to mitigate significant impacts of the proposed Project. Funding of the mitigation measures by the Project should be based on a sharing of impacts across multiple projects. These calculations have been provided for the impacted roadway segment.
- Based on the floor area of the planned Project land uses, the total parking requirement per City code would be 1,019 spaces. Based on this application of City code and a planned supply of 950 spaces, there would be a 69-space supply deficit. Applying typical seasonal demand fluctuations for shopping centers, it was found that this impact would occur within the first part of December (before the Christmas holiday).
- Based on the Project land use, there would likely be some sharing of parking between the restaurant and retail uses would be minimal. An application of the Urban Land Institute Shared parking methodology estimates a demand reduction of 4.27 percent or 43 vehicles on weekdays and a reduction of 7.83 percent or 79 vehicles on Saturdays.
- Utilizing national parking reference data for shopping centers from the Urban Land Institute, the proposed Project would have a parking deficit within the first part December (thru the Christmas holiday). During the period between the Christmas holiday and the New Years holiday, the Project would likely provide an adequate number of spaces for typical demand.
- The Project would not meet parking code requirements of the City of Lancaster for shopping centers, but based on national demand rates, shared parking calculations (between retail areas and restaurants), and expected seasonal fluctuations, the Project supply would be adequate for typical demand outside of the core December shopping period.

- During the December period (excluding the inter-holiday period at the end of the month), the proposed Project parking supply of 950 spaces and the expected demand would result in a parking supply deficit of 90 spaces.
- If the Project can manage on-site parking during the typical peak month, mitigation measures will not be necessary. As the proposed shopping center uses would not include department stores or discount retail centers, parking impacts during the peak holiday period would be unlikely.

## I. Introduction

---

The purpose of this study is to identify the potential traffic impacts associated with the shopping center (“Project”), to be developed on the northwest corner of 60<sup>th</sup> Street West and Avenue K, in Lancaster. The proposed Project site was formerly the Meadowlark Golf Course. KOA Corporation was retained by Environmental Science Associates (ESA) to study the traffic impacts of the proposed Project. Under pending approval of GPA #05-01 and ZC#05-01, a shopping center will be built with the following uses:

- A gas station and car wash with a 3,000 square-foot convenience market;
- A home improvement center with 139,410 square feet of gross floor area and an outdoor garden center of 31,659 square feet in gross area;
- A pharmacy with a drive-thru facility and general retail and restaurant spaces totaling 32,769 square feet of gross floor area;
- Two fast-food restaurants with drive-thru facilities and other restaurant spaces, totaling 14,271 square feet of gross floor area; and
- Other non-leasable building and covered areas within the gas station pad total 15,000 square feet of area

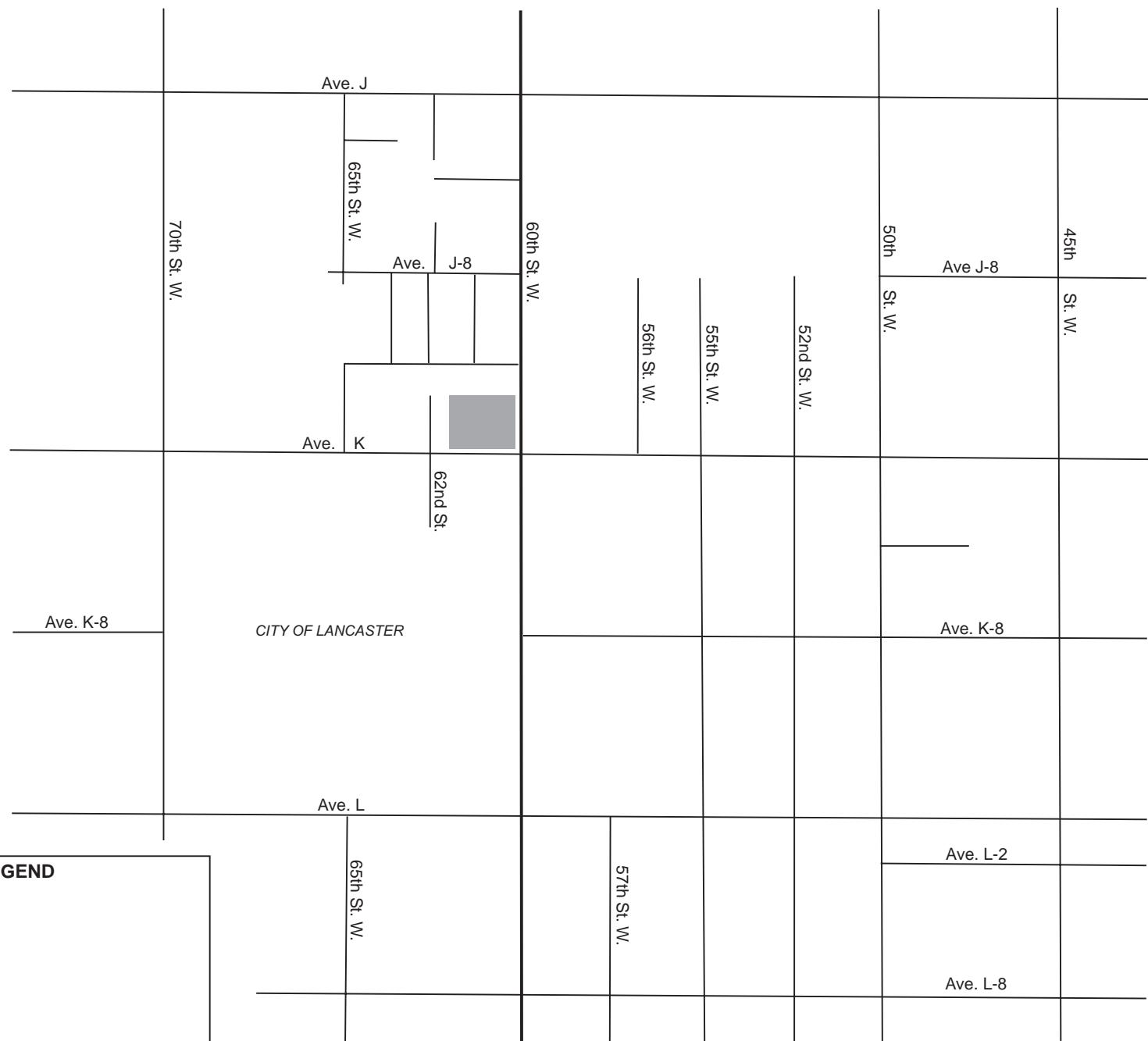
According to the site plan of April 15, 2008, the total developed building area of the Project would total 236,109 square feet.

The Project study area, as defined through consultation with the City of Lancaster, encompasses 14 roadway intersections and six roadway segments. The study intersection analysis is based on weekday a.m. peak and p.m. peak turning movement volumes. Daily counts on the study roadway segments were conducted for two consecutive 24-hour weekday periods. City count sources were utilized where possible. New counts were taken at locations where existing counts were not available.

Key tasks undertaken for this traffic analysis include: 1) definition of study approach, 2) determination of existing traffic conditions, 3) trip generation forecasts of the planned project land use, 4) assignment of Project-generated trips to the study area roadway system and, 5) evaluation of the impact of project traffic at the study intersections. This report follows significant traffic impact guidelines defined within the City of Lancaster *Interim Traffic Study Guidelines* (July 31, 2007).

### A. Project Location

The proposed Project site is located at the northwest corner of 60<sup>th</sup> St West and Avenue K. The Project site location is illustrated on Figure 1.



## B. Project Study Area

### Study intersections

The analyzed study area included the following 14 intersections, where weekday a.m. peak and p.m. peak period traffic was analyzed within each study scenario:

1. 70<sup>th</sup> Street / Avenue J
2. 60<sup>th</sup> Street / Avenue J
3. 50<sup>th</sup> Street / Avenue J
4. 60<sup>th</sup> Street / Avenue J-8
5. 70<sup>th</sup> Street / Avenue K
6. 62<sup>nd</sup> Street / Avenue K
7. 60<sup>th</sup> Street / Avenue K
8. 50<sup>th</sup> Street / Avenue K
9. 45<sup>th</sup> Street / Avenue K
10. 60<sup>th</sup> Street / Avenue K-8
11. 70<sup>th</sup> Street / Avenue L
12. 60<sup>th</sup> Street / Avenue L
13. 50<sup>th</sup> Street / Avenue L
14. 60<sup>th</sup> Street / Avenue L-8

### Study Roadway Segments

The study area also included the following six roadway segment locations, where daily traffic was analyzed within each study scenario:

1. 60<sup>th</sup> Street, south of Avenue J
2. 60<sup>th</sup> Street, north of Avenue K
3. Avenue K, west of 60<sup>th</sup> Street
4. Avenue K, east of 60<sup>th</sup> Street
5. Avenue K, east of 50<sup>th</sup> Street
6. 60<sup>th</sup> Street, south of Avenue K

The locations of the study intersections and study roadway segment locations are illustrated on Figure 2.

## C. Analysis Methodology

The proposed Project site is located within the City of Lancaster. KOA coordinated with the City at the start of this study to achieve consensus on assumptions such as study intersections, ambient growth rates, area projects, and Project trip generation. Traffic impact guidelines defined within the City of Lancaster *Interim Traffic Study Guidelines (July 31, 2007)* were utilized to develop this traffic study. The following text further describes the methodology utilized for the Project traffic impact analysis.

A CEQA Initial Study (IS) form dated July 2, 2007 for the traffic study was provided to KOA by the City. This form provided details on the assumptions for the report, such as study intersection and roadway segment locations, Project trip generation and distribution, ambient growth rates, and Project floor area. An earlier draft report was completed by KOA, but the site plan was modified since that report was completed. Updates to the IS form were discussed with the City before conducting the analysis of the revised site plan. These updates were incorporated into this study report, but an updated IS form was not received from the City before the completion of this report.

### Study Scenarios

Weekday AM & PM peak-hour capacity analysis were evaluated at the study intersections and roadway segments for each of the following traffic scenarios, per the City traffic study guidelines:

- Existing (Year 2007) Conditions
- Future (Year 2012) Ambient Growth Conditions
- Future (Year 2012) Ambient Growth Conditions + Area Projects
- Future (Year 2012) Ambient Growth Conditions + Area Projects + Project
- Post-project scenario plus mitigations for impacted locations

Counts were conducted in 2007 at the start of this study. Year-2007 volumes are considered valid for existing conditions for this report. The TRAFFIX software was used by KOA to perform the analysis of level of service at the study intersections.

### Existing Period Conditions

In order to define existing traffic conditions at the study intersections, new peak-hour turning movement counts were collected at the study intersections during the following periods:

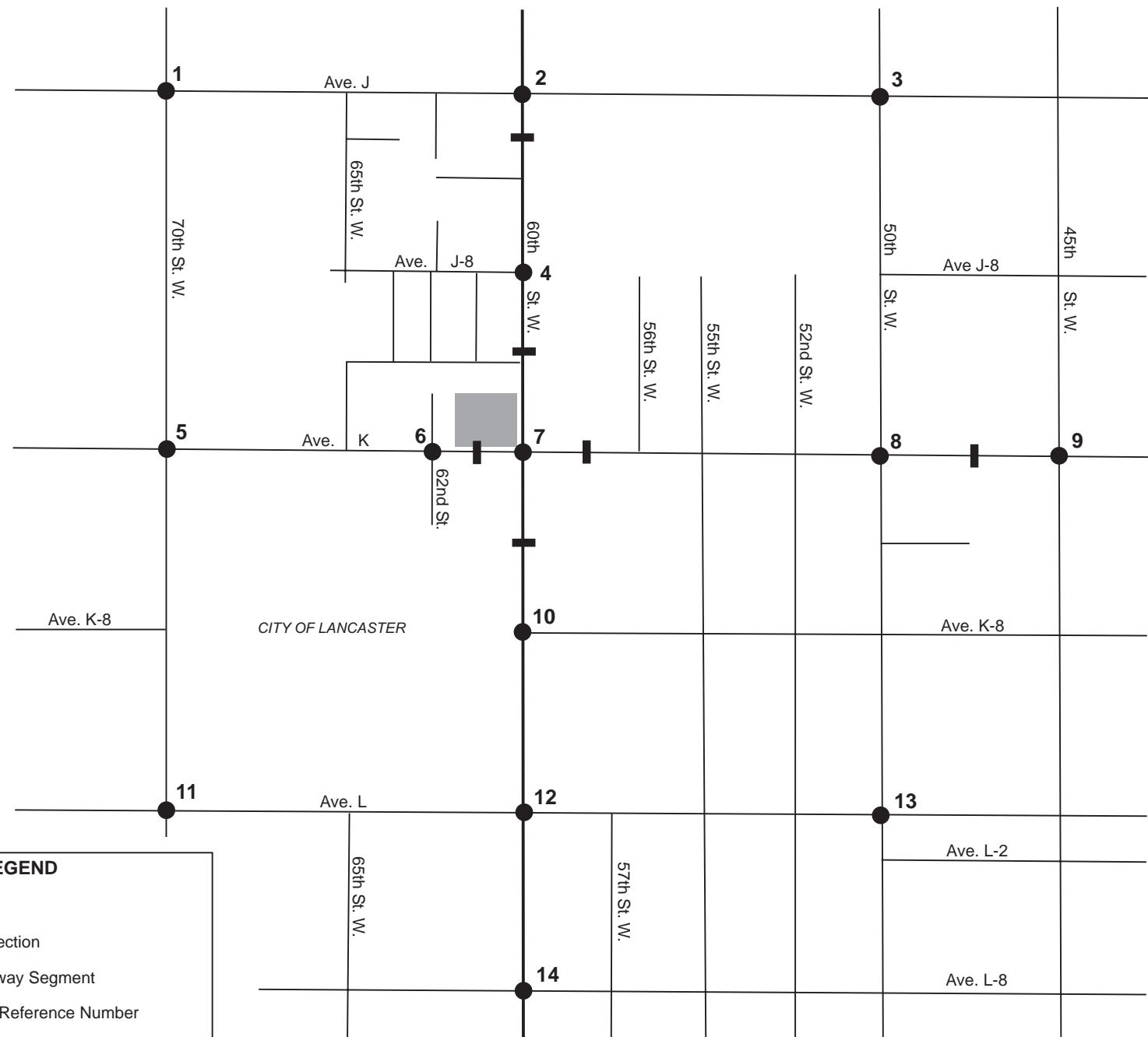
- Weekday a.m. period: 6:30 a.m. to 8:30 a.m.
- Weekday p.m. period: 4:00 p.m. to 6:00 p.m.

Daily weekday volume counts were also collected at the study roadway segments for two consecutive 24-hour periods (and then averaged together). Fieldwork within the Project study area was undertaken to identify the condition of major roadways, to identify traffic control and approach lane configuration at each study intersection, and to identify the locations of permitted on-street parking.

KOA compiled new manual intersection turn movement counts that were conducted at the study intersections and roadway segments during May 2007. The City of Lancaster provided previous counts for four of the study intersections, from data collected in August 2006 and March 2007 during the hours of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. Traffic counts conducted within 2006 were factored upward by one year of ambient growth, as defined for the future conditions analysis.

The results of the counts were utilized to determine existing weekday peak-period conditions. The highest four consecutive 15-minute periods were used to define the peak-hour for analysis from each of the two-hour count datasets.

Existing level of service values at the study intersections and roadway segments are discussed within Section 2 of this report.



### Future Pre-Project Conditions

In order to define regional traffic growth that would affect operations at the study intersections during the Project year, an ambient/background traffic growth rate was defined. This rate was based on development trends in the area and verified with the City of Lancaster during the scoping process. An annual rate of two percent was defined within the Initial Study form by the City for the Project traffic study. This rate was utilized to increase existing (year 2007) traffic volumes to future (year 2012) base traffic volumes.

In addition to future ambient growth, traffic from planned area (cumulative) projects that are approved or pending was considered before examining significant traffic impacts from the proposed Project. KOA compiled an area projects list from a verified development list provided by City planning staff. The City guidelines were followed in the application of these projects to the traffic analysis study area. Peak-hour trips that would be generated from each of the area projects were computed based on *Trip Generation* (7<sup>th</sup> edition), published by the Institute of Transportation Engineers.

Operations at the study intersections for the future pre-project scenarios are discussed within Section 3 of this report.

### Project Trip Generation and Distribution

Trip distribution for the Project was based on the hierarchy of area roadways and the predominant development patterns within the study area. Cardinal-direction percentages used for trip distribution are provided below. Breakdowns of these percentages by study intersection are provided later in this report.

North: 30%	East: 32%
South: 23%	West: 15%

The trip generation basis was defined by rates for shopping center floor area within ITE *Trip Generation* (7<sup>th</sup> Edition), and the proposed total floor area of the Project. All proposed floor area was conglomerated into a single shopping center use for the trip generation analysis. Trip generation of the proposed gas station was defined by ITE rates and the number of fueling positions at that planned use.

As allowed by current City policy for maximum pass-by credits within traffic studies, a 15% credit was taken within the trip generation calculations to provide reduction for trips that currently pass the site but would deviate to the site shopping center uses on a mid-point linked trip. A 50 percent credit was taken in a similar manner for the gas station use. Turns into and out of the site due to pass-by trips are added back into the analysis, both at the study driveways and at the closest intersection where the new turns would occur.

### Level of Service Analysis and Impacts

KOA Corporation quantitatively assessed weekday peak-hour traffic impacts of the proposed Project at 14 study intersections and six study roadway segments. In cases where capacity increases are possible, KOA Corporation analyzed mitigation measures that would restore operations commensurate with the future pre-Project period or better.

Level of service for future conditions with both area projects traffic and Project traffic at the study intersections is discussed within Section 5 of this report. Significant Project traffic impacts are discussed within Section 6 and recommended mitigation measures are discussed within Section 7.

#### Intersection Level of Service Methodology

The analysis of peak hour intersection Level of Service (LOS) is the primary indicator of circulation system performance. This study is based on the Intersection Capacity Utilization (ICU) methodology, which provides an output value that represents a volume-to-capacity ratio or V/C value.

For the stop-controlled study intersections, Levels of Service were evaluated using stop-controlled methodologies from the *2000 Highway Capacity Manual*. For this methodology, conditions are based upon intersection delay, defined as the average delay experienced by users of the intersection who must stop or yield to free-flow through traffic. This method uses a “gap acceptance” technique to predict driver delay. This methodology is applicable to unsignalized intersections on major streets where there is potential for crossing difficulty from the minor approaches due to heavy traffic volumes on the major approaches.

Level of service (LOS) values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating “capacity” of a roadway. Generally, the City of Lancaster defines LOS C as the design LOS and LOS D as the minimum LOS. The City therefore strives to keep facilities operating at D or better, as allowed by facility constraints. Appendix A of this report provides information regarding traffic analysis methodology and LOS definitions for both signalized and unsignalized roadway intersections.

#### Roadway Level of Service Methodology

The City traffic study guidelines define level of service and capacity at study roadway segments based on number of lanes, roadway characteristics (presence of medians) and posted roadway speeds. The following are the City standards for roadway segment level of service analysis:

<b>Number of Travel Lanes</b>	<b>SPEED LIMIT</b>				
	<b>55</b>	<b>50</b>	<b>45</b>	<b>40</b>	<b>35</b>
2	22,200	19,100	18,300	16,900	13,500
2 – with median *	23,300	20,200	19,200	17,800	14,300
4	44,400	38,400	36,800	34,100	29,300
4 – with median *	46,700	40,500	38,800	35,900	31,000
6	66,500	57,800	55,400	51,300	46,200
6 – with median *	70,100	60,800	58,300	54,000	48,700

\* The presence of a raised median or a striped two-way center left turn lane triggers the alternate capacity values.

Volumes provided above represent the assumed maximum carrying capacity of each facility and any volumes above these values would represent LOS F conditions. For the analysis of roadways that are partially-improved (with some four lane segments and some two lane segments) the higher capacity was utilized as it was assumed that the remaining capacity improvements would be in place within the Project timeframe.

## **2. Existing (Year 2007) Conditions**

---

This section documents the existing conditions within the study area. The discussion presented here is limited to major roadways within the study area. Figure 3 depicts the approach lane configuration and traffic control at the study intersections.

### **A. Existing Roadway System**

Significant roadway facilities within the study area are described below. The discussion presented here is limited to roadways that are approaches to the study intersections or provide regional access.

**70th Street West** is a two-lane secondary arterial roadway that provides north-south access between Kern County and the City of Lancaster, with its southern terminus at West Avenue N. Within the study area, traffic on this roadway is controlled by stop signs at key intersections, and parking is generally prohibited along this roadway. The posted speed limit is 55 mph.

**60th Street West** is a two- to three-lane secondary arterial roadway that provides access between Kern County on the north and the City of Lancaster on the south. Adjacent to the Project site, the roadway is currently configured with one southbound lane and three northbound lanes, due to completed improvements on the east side of the roadway. Some two-lane segments of the roadway to the south of Avenue K have been widened from two lanes to four lanes. To the south of Avenue N, the roadway name transitions to Godde Hill Road, which connects with Elizabeth Lake Road (a County highway). Within the study area, traffic on this roadway is controlled by traffic signals and stop signs at key intersections, and parking is generally prohibited along this roadway. The posted speed limit ranges from 45 mph (on the southbound side of the roadway) to 55 mph (on the northbound side).

**50th Street West** is a two- to three-lane secondary arterial roadway that provides discontinuous north-south access within Lancaster. In the study area, the northern terminus of the roadway is at West Avenue G, where it transitions into the main on-site roadway within General William J. Fox Airfield. At its southern terminus (south of West Avenue N), 50th Street West becomes Rancho Vista Boulevard, which extends to Palmdale. Within the study area, traffic on the roadway is controlled by traffic signals and stop signs at key intersections, and on-street parking is generally prohibited. The posted speed limit ranges from 35 mph (south of Avenue L), and 45 mph to 55 mph (north of Avenue L).

**45th Street West** is a two-lane collector roadway that provides discontinuous north-south access within Lancaster. In the study area, its northern terminus is at West Avenue I and its southern terminus is at West Avenue L-14. Within the study area, traffic on this roadway is controlled by stop signs at key intersections, on-street parking is generally permitted on both directions, and the posted speed limit is 40 mph.

**62nd Street West** is a two-lane local roadway that provides discontinuous north-south access within the Lancaster. Within the study area, on-street parking is generally permitted in both directions. Within the immediate project area, it provides access from West Avenue K to a residential subdivision.

**Avenue J** is a two-lane secondary arterial roadway that provides east-west access within Lancaster. Within the study area, traffic on this roadway is controlled by traffic signals and stop signs at key intersections, and on-street parking is generally prohibited. The posted speed limit is 55 mph.

**Avenue J-8** is a two- to three-lane local roadway that provides discontinuous east-west access within

Lancaster. Within the study area, on-street parking is generally permitted on the westbound roadway, west of 60<sup>th</sup> Street West. The posted speed limit ranges from 30 mph (on the westbound side of the roadway) mph to 45 mph (on the eastbound side).

**Avenue K** is a two-lane to four-lane secondary arterial roadway that provides east-west access within Lancaster. Within the study area, traffic on this roadway is controlled by traffic signals and stop signs at key intersections, and on-street parking is generally prohibited. Some local segments of the roadway, within the local study area have been widened from two lanes to four lanes. The posted speed limit ranges from 45 mph to 55 mph.

**Avenue K-8** is a two- to four-lane local roadway that provides discontinuous east-west access within the City of Lancaster. Within the vicinity of 60<sup>th</sup> Street, at the center of the study area, the roadway is built with a four-lane cross-section and serves local neighborhoods. Within the study area, parking is generally prohibited along the roadway. The posted speed limit is 40 mph.

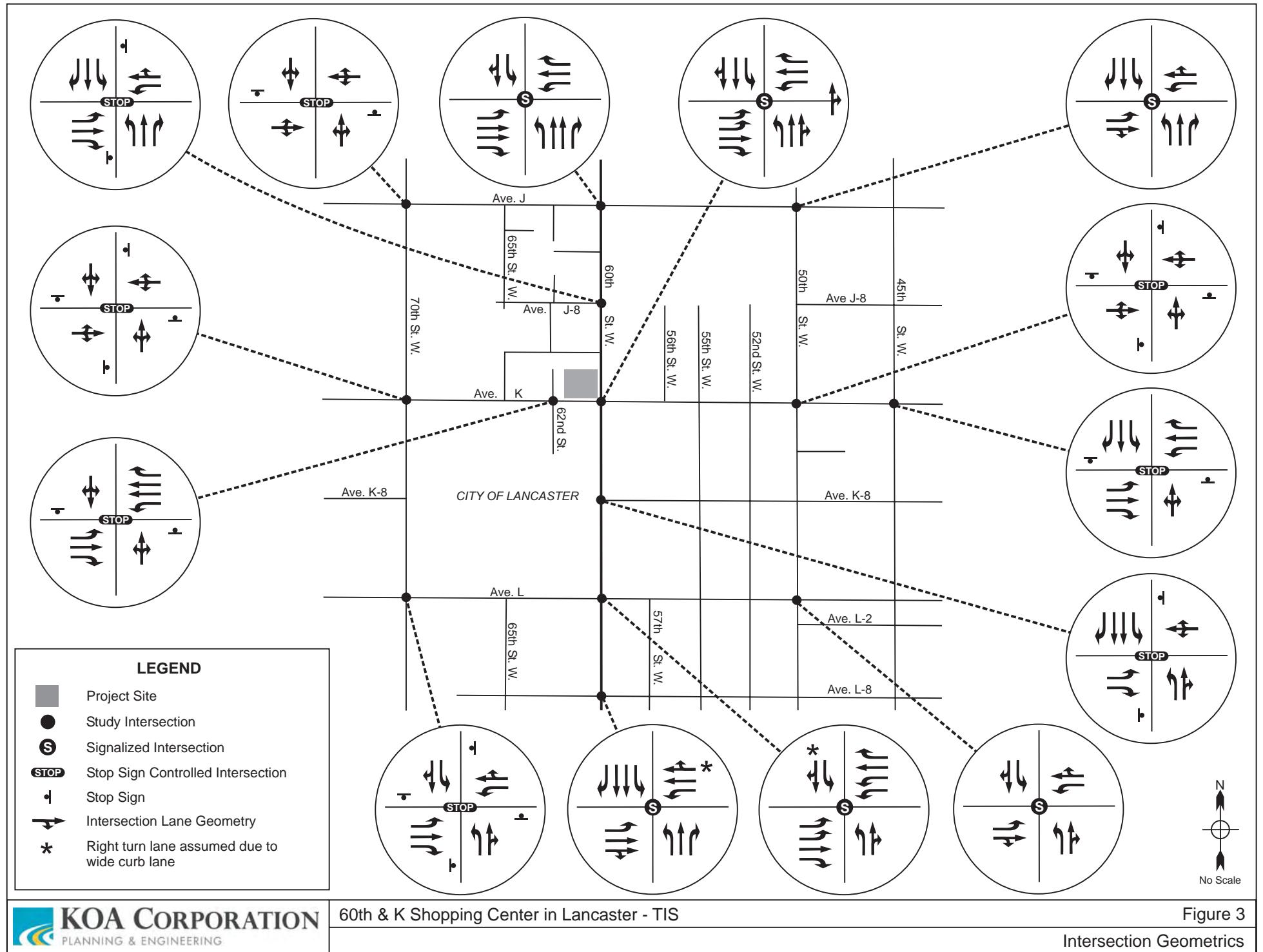
**Avenue L** is a two-lane secondary roadway that provides east-west access within Lancaster. Within the study area, traffic on this roadway is controlled by traffic signals and stop signs at key intersections, and on-street parking is generally permitted along the eastbound roadway and prohibited along the westbound roadway. The posted speed limit is 45 mph.

**Avenue L-8** is a four-lane local roadway that provides discontinuous east-west access within the City of Lancaster. Within the study area, parking is generally prohibited along the roadway. The posted speed limit is 40 mph.

#### **B. Existing Transit Service**

The Antelope Valley Transit Authority (AVTA) operates fixed-route bus and dial-a-ride service throughout the high desert area within and near the cities of Lancaster and Palmdale. In the vicinity of the Project site, AVTA operates Line 7. This line provides service between the Palmdale Transportation Center on the south, the Quartz Hill neighborhood, and the city center of Lancaster on the north.

AVTA Line 7 operates on an hourly trip frequency during weekdays and a two-hour frequency on weekends. This level of transit service is skeletal and may provide some employee access to and from the Project site but would not likely be patronized by customers of the shopping center. Therefore, transit trip reduction credits were not taken within the trip generation analysis, as the mode split of transit for the Project is expected to be minimal.



### C. Existing Level of Service Analysis

From the weekday peak hour traffic counts at the study area intersections, level of service (LOS) values were calculated. Table I provides the volume/capacity ratios (or average vehicle delay for the unsignalized study intersections) and related LOS values, for existing conditions. LOS values of E or F are highlighted as bold text within the table.

**Table I – Intersection Level of Service –  
Existing (2007) Conditions**

#	Intersections	AM Peak		PM Peak		LOS
		ICU or Delay (sec.)	LOS	ICU or Delay (sec.)	LOS	
1	70th Street / Avenue J *	10.7 Sec.	B	10.1 Sec.	B	
2	60th Street / Avenue J	0.425	A	0.374	A	
3	50th Street / Avenue J	0.479	A	0.414	A	
4	60th Street / Avenue J-8 *	42.1 Sec.	<b>E</b>	15.1 Sec.	C	
5	70th Street / Avenue K **	8.8 Sec.	A	7.8 Sec.	A	
6	62nd Street / Avenue K *	11.7 Sec.	B	10.7 Sec.	B	
7	60th Street / Avenue K	0.452	A	0.372	A	
8	50th Street / Avenue K **	11.1 Sec.	B	12.1 Sec.	B	
9	45th Street / Avenue K *	14.1 Sec.	B	15.3 Sec.	C	
10	60th Street / Avenue K-8 *	21.3 Sec.	C	13.6 Sec.	B	
11	70th Street / Avenue L **	9.7 Sec.	A	8.8 Sec.	A	
12	60th Street / Avenue L	0.727	C	0.509	A	
13	50th Street / Avenue L	0.967	<b>E</b>	0.814	D	
14	60th Street / Avenue L-8	0.532	A	0.428	A	

Note: All level of service values are based on average delay (seconds per vehicle) for unsignalized intersections and Intersection Capacity Utilization (ICU) values for signalized intersections.

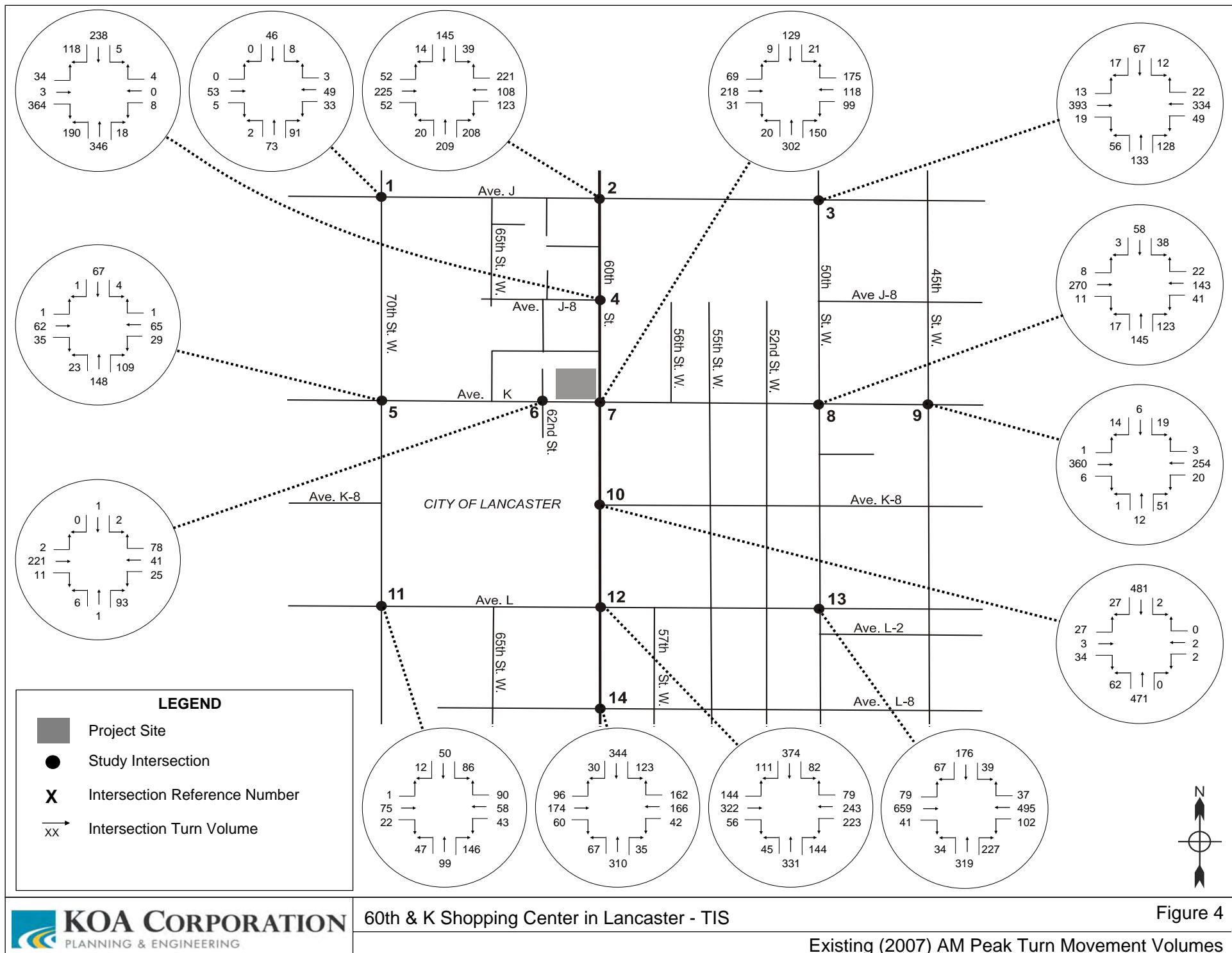
\* Unsignalized intersection with two-way stop sign control

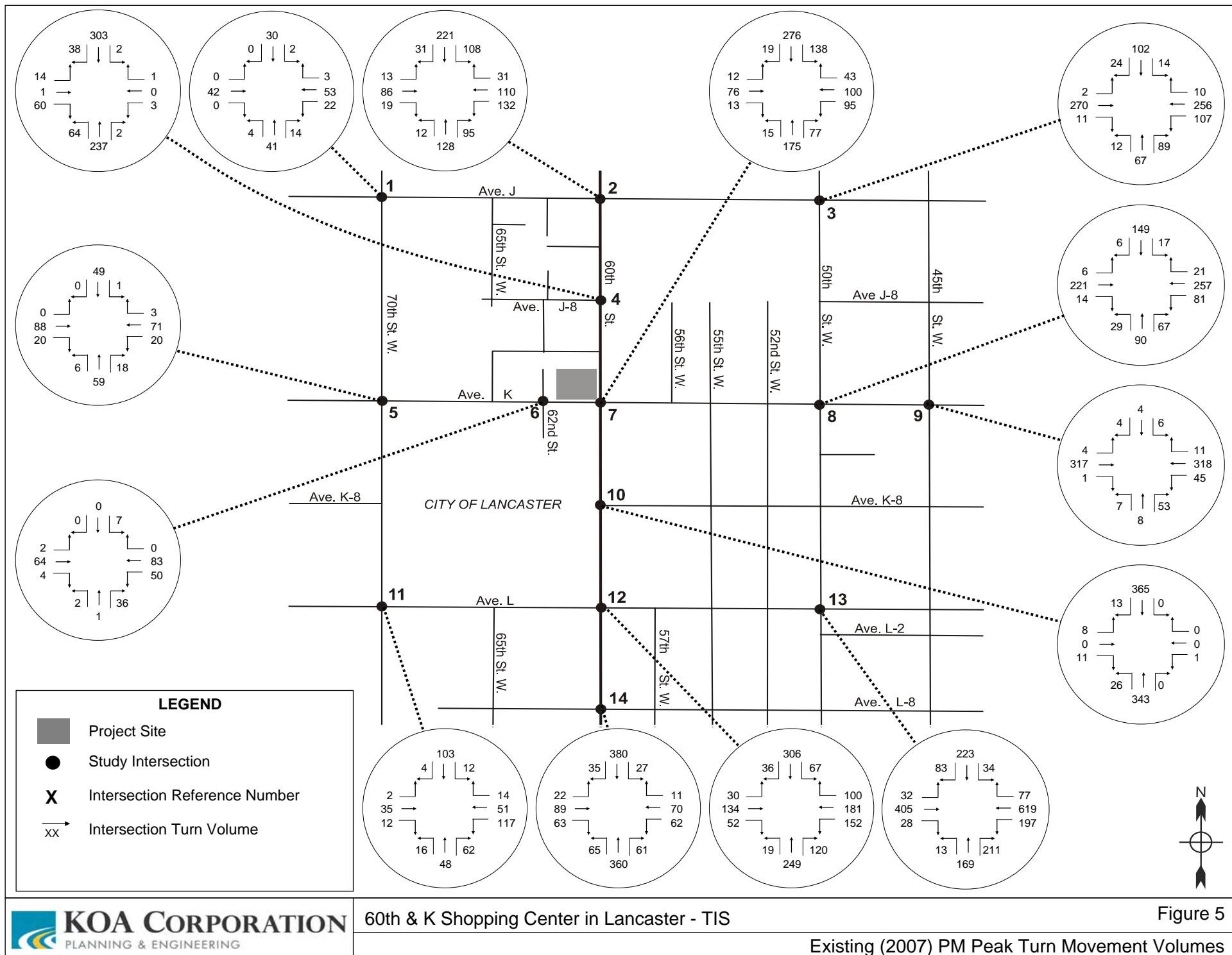
\*\* Unsignalized intersection with all-way stop sign control

The data within Table I indicates that two of the 14 study intersections operate at poor LOS values (E or F) during at least one of the peak periods under existing conditions. The following intersections operate at poor level of service:

- 60<sup>th</sup> Street / Avenue J-8 (LOS E in the a.m. peak hour)
- 50<sup>th</sup> Street / Avenue L (LOS E in the a.m. peak hour)

The traffic analysis worksheets for existing weekday conditions are provided in Appendix C of this report. The existing peak-hour turn movement volumes at the study intersections and study roadway segments are provided within Figure 4 (a.m. peak) and Figure 5 (p.m. peak).





#### D. Existing Roadway Segment Level of Service Analysis

Table 2 summarizes the existing volume totals for the study roadway segments. Two days of daily automatic (machine) traffic counts were conducted on each of these roadway segments, in order to define existing conditions. The two days of weekday count data were averaged to create the analyzed weekday totals. Capacity was defined by the number of travel lanes, the lowest locally-posted speed limit, and the maximum volume matrix within the City traffic study guidelines. Based on this methodology, all resulting volumes correspond to LOS values of A.

These roadway segments were chosen for this specific review as they are the closest major roadway segments to the proposed Project site. Potential Project traffic impacts at these roadway segments are analyzed in Section 6 of this report.

**Table 2 – Existing (2007) Roadway Segment  
Level of Service**

Roadway Segments	Posted Speed Limit	Daily Roadway Volume Capacity	Existing Daily Volume	V/C	LOS
60th Street, south of Avenue J	45 mph	38,800	7,215	0.186	A
60th Street, north of Avenue K	45 mph	38,800	8,779	0.226	A
Avenue K, west of 60th Street	45 mph	36,800	3,530	0.096	A
Avenue K, east of 60th Street	45 mph	18,300	7,562	0.413	A
Avenue K, east of 50th Street	45 mph	18,300	10,701	0.585	A
60th Street, south of Avenue K	45 mph	36,800	8,530	0.232	A

### **3. Future (2012) Pre-Project Conditions**

---

This section documents future (2012) traffic conditions at the study intersections and roadway segments. The year 2012 was selected for analysis based on the anticipated buildout date of the project. Ambient growth rates were included in this scenario to reflect anticipated regional traffic growth outside of trips generated by the defined area projects. This scenario therefore represents future pre-Project conditions.

#### **A. Ambient Growth Rate**

For the analysis of background traffic through the project year, an annual traffic growth rate factor of 2% was utilized to provide for increases in traffic from the existing traffic counts. This annual rate was based on the City's *Interim Traffic Study Guidelines (July 31, 2007)*.

To apply this ambient growth rate to existing (year 2007) volumes, a factor of 1.10 was utilized. This factor provides a 2% annual increase over the five-year period between existing conditions and future (year 2012) conditions.

The future pre-project volumes within the study area, with ambient growth only, are provided within Figure 6 (a.m. peak hour) and Figure 7 (p.m. peak hour).

#### **B. Area Projects**

An area of influence, defined by an approximate two-mile radius from the Project site, was utilized to identify the locations of other approved and pending projects.

These projects were anticipated to be operational by the Project year of 2012. KOA collected information pertaining to approved projects and projects pending approval in the study area from planning staff at the City of Lancaster. Table 3 provides the trip generation estimate for all the area projects utilized in the future analysis scenarios. The estimated trips were defined by rates within *Trip Generation, (7<sup>th</sup> edition)*, published by the Institute of Transportation Engineers, along with the anticipated intensity of each development. Figure 8 illustrates the locations of these projects.

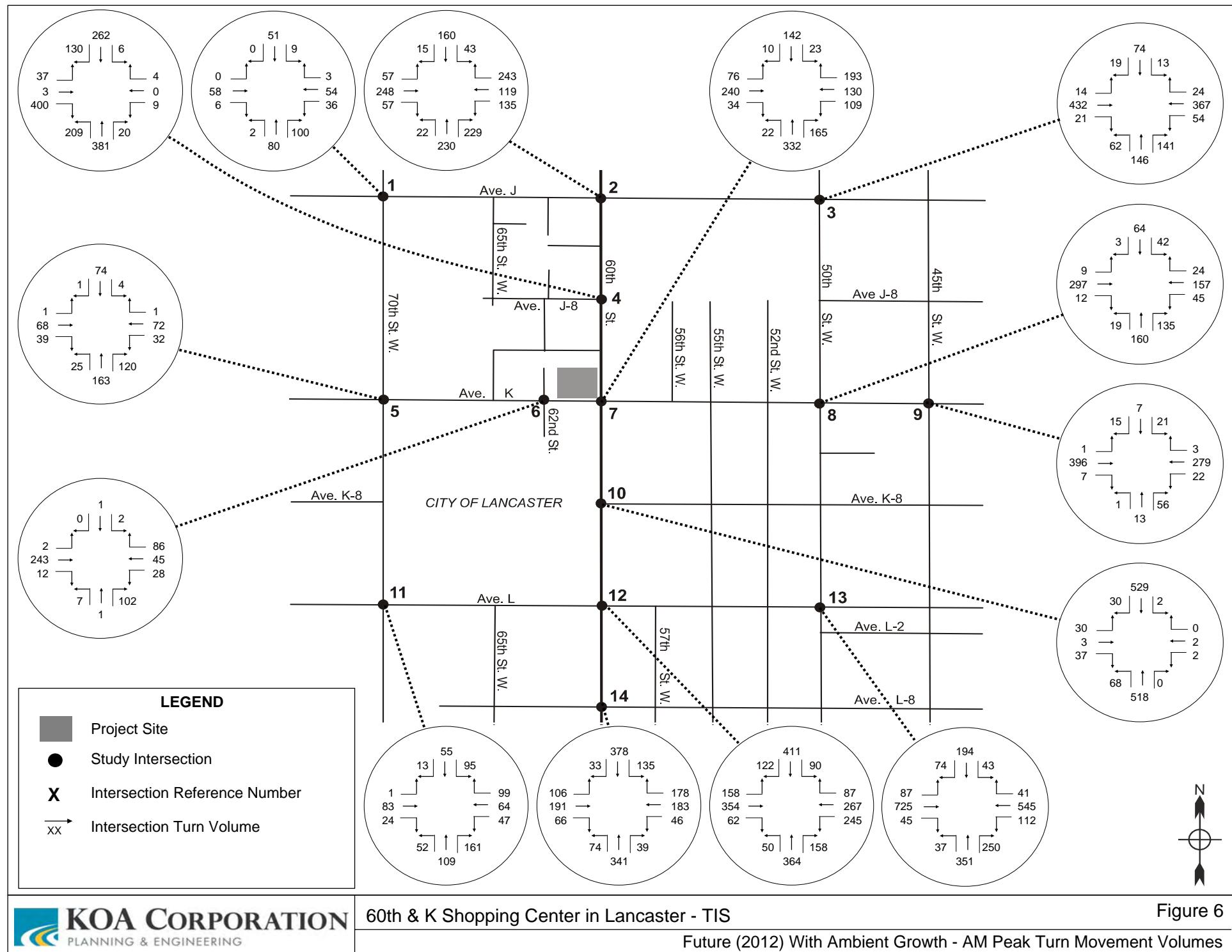
For purposes of analysis, the area projects were separated into zones within the Traffix model used in the preparation of this analysis. Traffic from each area project zone was added to the surrounding street system using the same distribution and assignment methodology applied for Project trips, with some adjustments for projects of various uses and for those located near the edges of the study area.

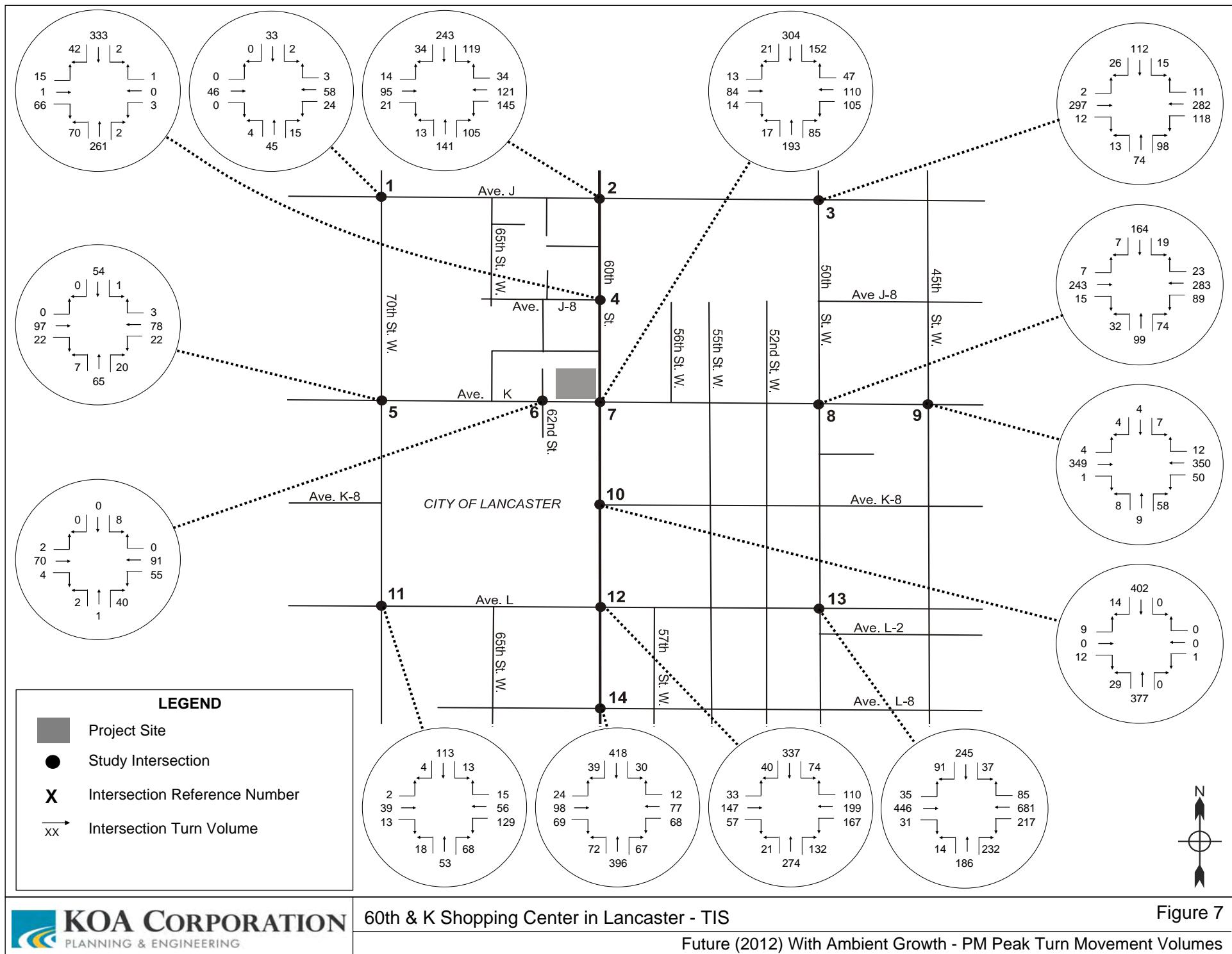
**Table 3 – Area Projects Trip Generation**

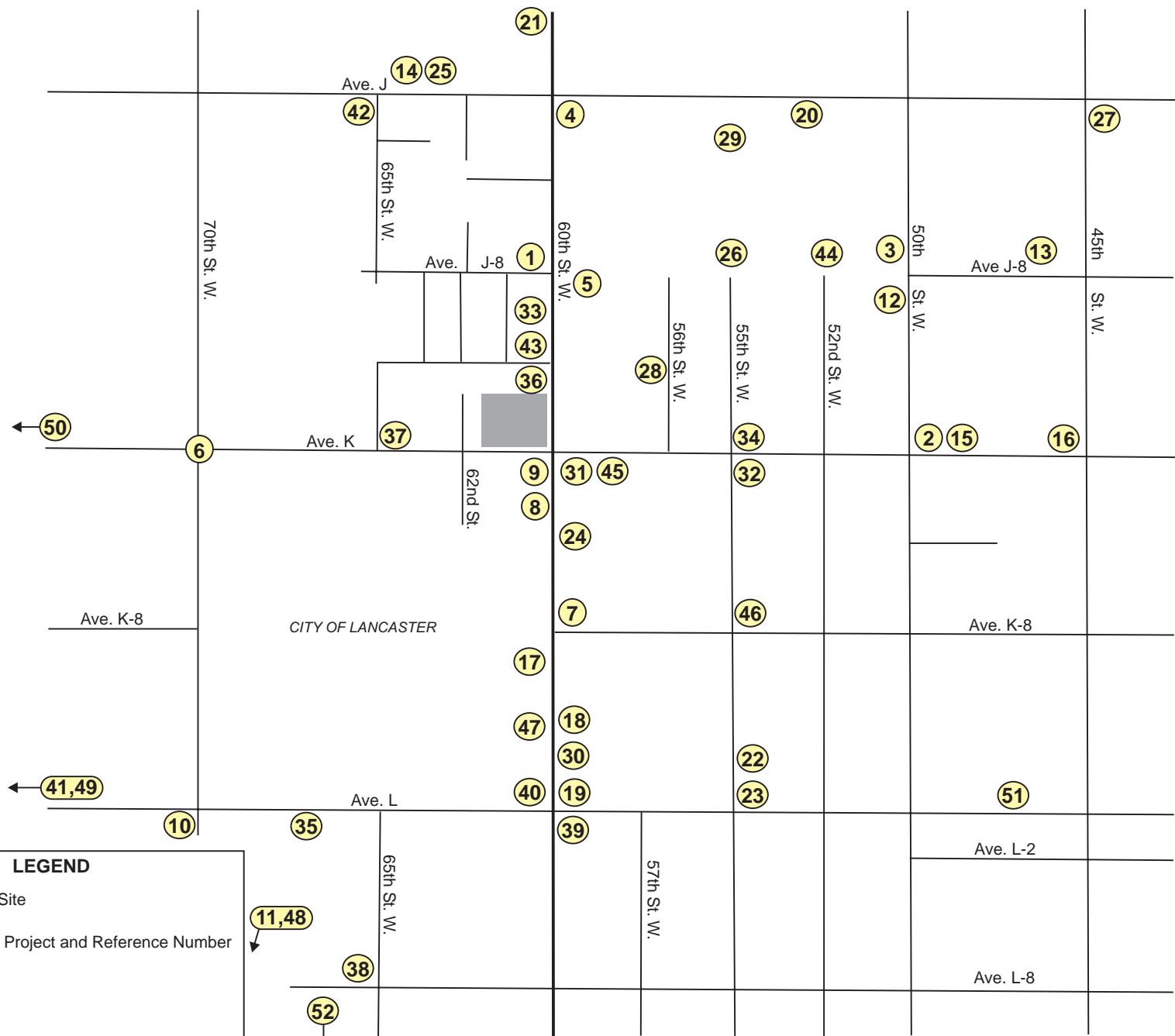
Map #	Related Cases	Locations	Land Use	Intensity	Units	Daily Total	AM Peak			PM Peak		
							Total	In	Out	Total	In	Out
<i>City of Lancaster</i>												
1	CUP 98-05	NW corner of Avenue J-8 & 60th St. West	Church	8.350	k.s.f.	76	6	3	3	6	3	3
2	TTM 52719	NE corner of 50th St. West & Avenue K	Single Family Residential	80	d.u.	766	60	15	45	81	51	30
3	TTM 61489	NW corner of 50th St. West & Avenue J-8	Single Family Residential	152	d.u.	1,455	114	29	85	154	97	57
4	TTM 60034	SE corner of 60th St. West & Avenue J	Single Family Residential	106	d.u.	1,014	80	20	60	107	67	40
5	TTM 60034	SE corner of 60th St West & Avenue J-8	Single Family Residential	105	d.u.	1,005	79	20	59	106	67	39
6	TTM 53229	70th St. West & Avenue K	Single Family Residential School Park	1,594	d.u.	15,255	1,196	299	897	1,610	1,014	596
7	TTM 53642	NE corner of 60th St. West & Avenue K-8	Single Family Residential	156	d.u.	1,493	117	29	88	158	100	58
8	TTM 60450	West of 60th St. West & ±660 ft. South of Avenue K	Single Family Residential	50	d.u.	479	38	10	28	51	32	19
				87	d.u.	833	65	16	49	88	55	33
				78	d.u.	746	59	15	44	79	50	29
				50	d.u.	479	38	10	28	51	32	19
9	TTM 61680	SW corner of 60th St. West & Avenue K	Single Family Residential	77	d.u.	737	58	15	43	78	49	29
10	TTM 54369	SW corner of 70th St. West & Avenue L	Single Family Residential	31	d.u.	297	23	6	17	31	20	11
11	TTM 54370	NW corner of 70th St. West & Avenue L-8	Single Family Residential	207	d.u.	1,981	155	39	116	209	132	77
12	TTM 60003	SW corner of 60th St. West & Avenue J-8	Single Family Residential	36	d.u.	345	27	7	20	36	23	13
13	TTM 60126	Between 46th St. to 47th St. West & North of Avenue J-8	Single Family Residential	20	d.u.	191	15	4	11	20	13	7
14	TTM 60294	NE corner of 65th St. West & Avenue J	Single Family Residential	99	d.u.	947	74	19	55	100	63	37
15	TTM 60434	NE corner of 50th St. West & Avenue K	Single Family Residential	39	d.u.	373	29	7	22	39	25	14
16	TTM 60435	NW corner of 45th St. West & Avenue K	Single Family Residential	38	d.u.	364	29	7	22	38	24	14
17	TTM 60524	60th St. West & ±300 ft. south of Future Avenue K-8	Single Family Residential	43	d.u.	412	32	8	24	43	27	16
18	TTM 60811	NE corner of 60th St. West & Future Avenue K-12	Single Family Residential	41	d.u.	392	31	8	23	41	26	15
19	TTM 60889	NE corner of 60th St. West & Avenue L	Single Family Residential	85	d.u.	813	64	16	48	86	54	32
20	TTM 60987	SW corner of 52nd St. West & Avenue J	Single Family Residential	42	d.u.	402	32	8	24	42	26	16
21	TTM 61038	West of 60th St. West & ±660 ft. North of Avenue J	Single Family Residential	41	d.u.	392	31	8	23	41	26	15
22	TTM 61040	NE corner of 55th St. West & Avenue K-14	Single Family Residential	58	d.u.	555	44	11	33	59	37	22
23	TTM 61041	NE corner of 55th St. West & Avenue L	Single Family Residential	40	d.u.	383	30	8	22	40	25	15
24	TTM 61042	NE corner of 60th St. West & Avenue K-4	Single Family Residential	86	d.u.	823	65	16	49	87	55	32
25	TTM 61118	NW corner of 62nd St. West & Avenue J	Single Family Residential	33	d.u.	316	25	6	19	33	21	12
26	TTM 61490	NE corner of 55th St. West & Avenue J-8	Single Family Residential	73	d.u.	699	55	14	41	74	47	27
27	TTM 61535	SE corner of 45th St. West & Avenue J	Single Family Residential	240	d.u.	2,297	180	45	135	242	152	90
28	TTM 61542	SW corner of 56th St. West & Avenue J-12	Single Family Residential	22	d.u.	211	17	4	13	22	14	8
29	TTM 61554	NE corner of 55th St. West & Avenue J-4	Single Family Residential	20	d.u.	191	15	4	11	20	13	7
30	TTM 61600	±640 ft. East of 60th St. West & South of Avenue K-12	Single Family Residential	33	d.u.	316	25	6	19	33	21	12
31	TTM 61677	SW corner of 57th St. West & Avenue K	Single Family Residential	58	d.u.	555	44	11	33	59	37	22
32	TTM 61679	SE corner of 55th St. West & Avenue K	Single Family Residential	60	d.u.	574	45	11	34	61	38	23
33	TTM 61734	±658 ft. West of 60th St. West & ±663 ft. North of Avenue J-12	Single Family Residential	19	d.u.	182	14	4	10	19	12	7
34	TTM 61920	NE corner of 55th St. West & Avenue K	Single Family Residential	108	d.u.	1,034	81	20	61	109	69	40
35	TTM 61989	SW corner of 67th St. & Avenue L	Single Family Residential	56	d.u.	536	42	11	31	57	36	21
36	TTM 61992	SW corner of 60th St. & Avenue J-12	Single Family Residential	21	d.u.	201	16	4	12	21	13	8
37	TTM 62409	NE corner of 65th St. West & Avenue K	Single Family Residential	36	d.u.	345	27	7	20	36	23	13
38	TTM 45474	NW corner of 65th St. West & Avenue L-8	Single Family Residential	180	d.u.	1,723	135	34	101	182	115	67
39	CUP 06-08	SE corner of 60th St. West & Avenue L	Shopping Center *	407,000	k.s.f.	14,848	356	217	139	1,297	623	674
40	CUP 06-09 TPM 61850	NW corner of 60th St. West & Avenue L	Shopping Center *	395,000	k.s.f.	14,410	346	211	135	1,259	604	655
41	TTM 62332 TTM 62604	NW corner of 80th St. West & Avenue L	Single Family Residential	600	d.u.	2,226	120	46	74	156	95	61
42	TTM 62757	SW corner of 65th St. West & Avenue J	Single Family Residential	650	d.u.	6,221	488	122	366	657	414	243
43	TTM 60885	West of 60th St. West & North of Avenue J-12	Single Family Residential	51	d.u.	488	38	10	28	52	33	19
44	TTM 67582	NE corner of 52nd St. West & Avenue J-8	Single Family Residential	8	d.u.	77	6	2	4	8	5	3
45	TTM 61678	SE corner of 57th St. West & Avenue K	Single Family Residential	58	d.u.	555	44	11	33	59	37	22
46	TTM 69132	NE corner of 55th St. West & Avenue K-8	Single Family Residential	52	d.u.	498	39	10	29	53	33	20
47	TTM 64922	NW corner of 60th St. West & Avenue K-12	Single Family Residential	88	d.u.	842	66	17	49	89	56	33
48	TTM 66802	NE corner of 70th St. West & Avenue L-8	Single Family Residential	118	d.u.	1,129	89	22	67	119	75	44
49	TTM 65509	SE corner of 75th St. West & Avenue L	Single Family Residential	245	d.u.	2,345	184	46	138	247	156	91
50	TTM 65510	NW corner of 80th St. West & Avenue K	Senior Housing	600	d.u.	2,226	120	46	74	156	95	61
<b>Subtotal (City of Lancaster)</b>						<b>88,053</b>	<b>5,208</b>	<b>1,594</b>	<b>3,614</b>	<b>8,601</b>	<b>5,030</b>	<b>3,571</b>
<i>Los Angeles County</i>												
51	RCUP 200500153	4609 W Avenue L	Shopping Center	14,112	k.s.f.	606	15	9	6	53	25	28
52	RCUP 5200500221	6705 W Avenue M	Senior Housing	75	d.u.	278	15	6	9	20	12	8
<b>Subtotal (Los Angeles County)</b>						<b>884</b>	<b>30</b>	<b>15</b>	<b>15</b>	<b>73</b>	<b>37</b>	<b>36</b>
<b>Total</b>						<b>88,937</b>	<b>5,238</b>	<b>1,609</b>	<b>3,629</b>	<b>8,674</b>	<b>5,067</b>	<b>3,607</b>

Notes:

\* Per City of Lancaster Planning staff, 15% trip reduction was applied to shopping center uses.







### C. Peak Hour Intersection Level of Service

To analyze future pre-project conditions, intersection turn volumes with ambient growth and area projects trips were utilized as inputs.

Table 4 summarizes the peak-period LOS operations of the study area intersections under future (2012) conditions with ambient growth only. Under this scenario, trips generated by area projects were not included in the analysis. LOS values of E or F are highlighted as bold text within the table.

**Table 4 – Intersection Level of Service –  
Future (2012) Growth-Only Conditions**

#	Intersections	AM Peak		PM Peak	
		ICU or Delay (sec.)	LOS	ICU or Delay (sec.)	LOS
1	70th Street / Avenue J *	11.0	Sec.	B	10.2 Sec.
2	60th Street / Avenue J	0.458		A	0.402
3	50th Street / Avenue J	0.517		A	0.445
4	60th Street / Avenue J-8 *	59.2	Sec.	<b>F</b>	16.4 Sec.
5	70th Street / Avenue K **	9.1	Sec.	A	7.9 Sec.
6	62nd Street / Avenue K *	12.2	Sec.	B	11.0 Sec.
7	60th Street / Avenue K	0.488		A	0.399
8	50th Street / Avenue K **	12.2	Sec.	B	13.7 Sec.
9	45th Street / Avenue K *	15.3	Sec.	C	16.6 Sec.
10	60th Street / Avenue K-8 *	24.1	Sec.	C	14.5 Sec.
11	70th Street / Avenue L **	10.2	Sec.	B	9.0 Sec.
12	60th Street / Avenue L	0.789		C	0.550
13	50th Street / Avenue L	1.054		<b>F</b>	0.885
14	60th Street / Avenue L-8	0.575		A	0.461

Note: All level of service values are based on average delay (seconds per vehicle) for unsignalized intersections and

\* Unsignalized intersection with two-way stop sign control

\*\* Unsignalized intersection with all-way stop sign control

With the inclusion of future ambient growth, operations at two of the 14 study intersections would worsen from LOS E to LOS F:

- 60<sup>th</sup> Street / Avenue J-8: From LOS E to F in the a.m. peak period
- 50<sup>th</sup> Street / Avenue L: From LOS E to F in the a.m. peak period

The other 12 study intersections would continue to operate at good LOS values of LOS D or better.

Table 5 summarizes the peak-period LOS operations of the study area intersections under future (2012) conditions with both ambient growth rates and trips generated by area projects. LOS values of E or F are highlighted as bold text within the table.

**Table 5 – Intersection Level of Service –  
Future (2012) Pre-Project Conditions**

#	Intersections	AM Peak		PM Peak		LOS
		ICU or Delay (sec.)	LOS	ICU or Delay (sec.)	LOS	
1	70th Street / Avenue J *	14.6 Sec.	B	13.7 Sec.	B	
2	60th Street / Avenue J	0.628	B	1.032	<b>F</b>	
3	50th Street / Avenue J	0.711	C	0.720	C	
4	60th Street / Avenue J-8 *	> 100 Sec.	<b>F</b>	> 100 Sec.	<b>F</b>	
5	70th Street / Avenue K **	57.8 Sec.	<b>F</b>	63.9 Sec.	<b>F</b>	
6	62nd Street / Avenue K *	35.0 Sec.	D	41.4 Sec.	<b>E</b>	
7	60th Street / Avenue K	0.932	<b>E</b>	0.925	<b>E</b>	
8	50th Street / Avenue K **	> 100 Sec.	<b>F</b>	> 100 Sec.	<b>F</b>	
9	45th Street / Avenue K *	> 100 Sec.	<b>F</b>	> 100 Sec.	<b>F</b>	
10	60th Street / Avenue K-8 *	79.5 Sec.	<b>F</b>	76.4 Sec.	<b>F</b>	
11	70th Street / Avenue L **	22.1 Sec.	C	29.3 Sec.	D	
12	60th Street / Avenue L	1.125	<b>F</b>	1.313	<b>F</b>	
13	50th Street / Avenue L	1.295	<b>F</b>	1.520	<b>F</b>	
14	60th Street / Avenue L-8	0.703	C	0.864	D	

Note: All level of service values are based on average delay (seconds per vehicle) for unsignalized intersections and Intersection Capacity Utilization (ICU) values for signalized intersections.

\* Unsignalized intersection with two-way stop sign control

\*\* Unsignalized intersection with all-way stop sign control

With the inclusion of trips that would be generated by area projects, operations at 10 of the 14 study intersections would worsen from LOS E to LOS F:

- 60<sup>th</sup> Street / Avenue J: From LOS A to F in p.m. peak hour
- 60<sup>th</sup> Street / Avenue J-8: Worsening within LOS F in the a.m. peak hour and worsening from LOS C to F in the p.m. peak hour
- 70<sup>th</sup> Street / Avenue K: From LOS A to F in the a.m. peak and p.m. peak hours
- 62<sup>nd</sup> Street / Avenue K: From LOS B to E in the p.m. peak hour
- 60<sup>th</sup> Street / Avenue K: From LOS A to E in the a.m. peak and p.m. peak hours
- 50<sup>th</sup> Street / Avenue K: From LOS B to F in the a.m. peak and p.m. peak hours
- 45<sup>th</sup> Street / Avenue K: From LOS C to F in the a.m. peak and p.m. peak hours
- 60<sup>th</sup> Street / Avenue K-8: From LOS C to F in the a.m. peak hour and from LOS B to F in the p.m. peak hour
- 60<sup>th</sup> Street / Avenue L: From LOS C to F in the a.m. peak hour and from LOS A to F in the p.m. peak hour
- 50<sup>th</sup> Street / Avenue L: Worsening within LOS F in the a.m. peak hour and worsening from LOS D to F in the p.m. peak hour

#### **D. Roadway Segment Level of Service Analysis**

Table 6 summarizes the peak-period LOS operations of the study area roadway segments under future (2012) conditions with both ambient growth rates and trips generated by area projects. LOS values of E or F are highlighted as bold text within the table.

All of the analyzed roadway segments would continue to operate at LOS A or B with the addition of ambient growth to existing volumes.

**Table 6 – Roadway Segment Level of Service –  
Future (2012) Growth Conditions**

Roadway Segments	Posted Speed Limit	Daily Roadway Volume Capacity	Existing Daily Volume	Ambient Growth %	Growth-Only Volumes	LOS
60th Street, south of Avenue J	45 mph	38,800	7,215	10%	7,936	A
60th Street, north of Avenue K	45 mph	38,800	8,779	10%	9,657	A
Avenue K, west of 60th Street	45 mph	36,800	3,530	10%	3,883	A
Avenue K, east of 60th Street	45 mph	18,300	7,562	10%	8,318	A
Avenue K, east of 50th Street	45 mph	18,300	10,701	10%	11,771	B
60th Street, south of Avenue K	45 mph	36,800	8,530	10%	9,383	A

Table 7 summarizes the peak-period LOS operations of the study area roadway segments under future (2012) conditions with both ambient growth rates and trips generated by area projects. LOS values of E or F are highlighted as bold text within the table.

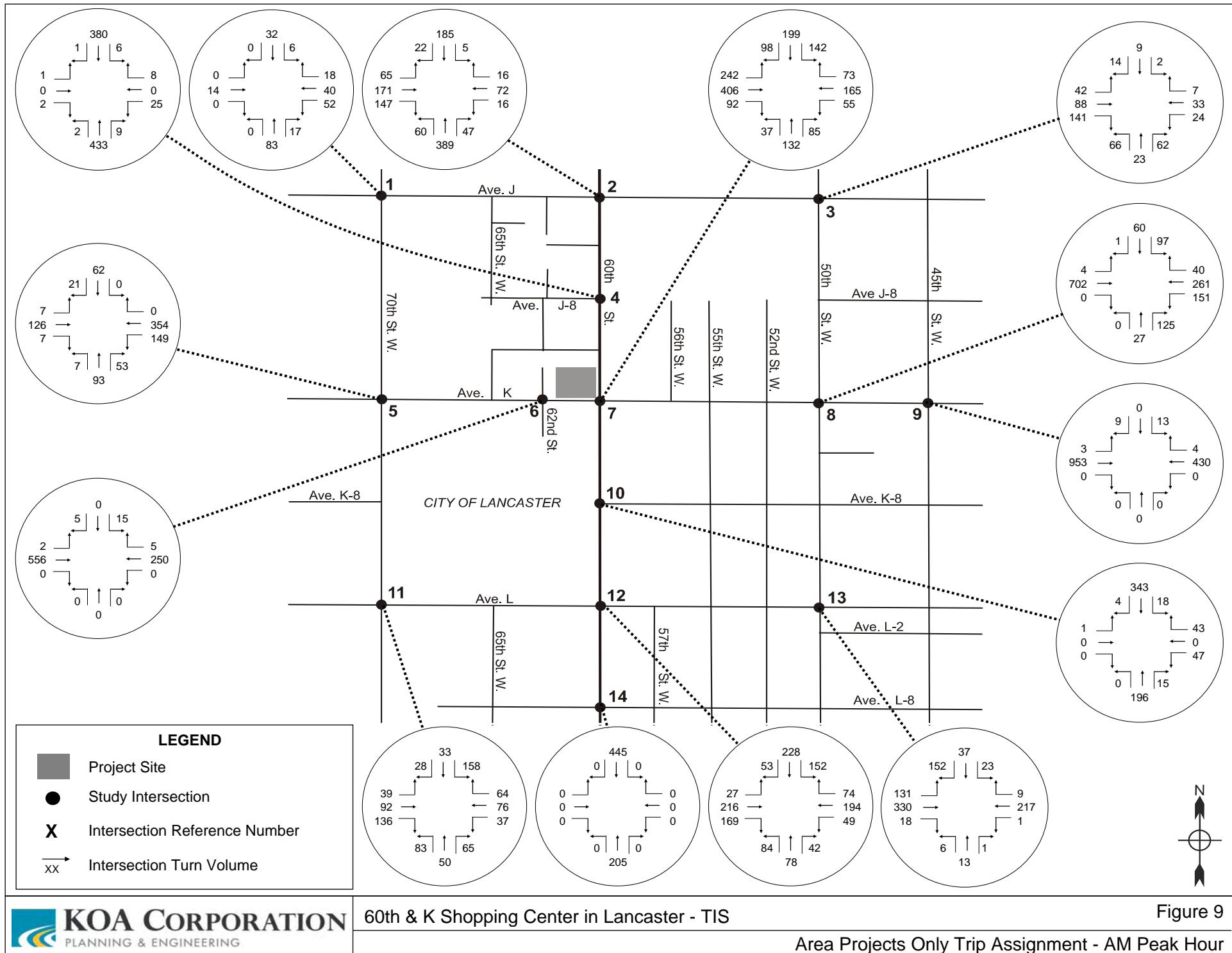
The roadway segment of Avenue K, east of 60<sup>th</sup> Street, would worsen from LOS A to F based on daily operations with the addition of ambient growth and trips generated by area projects.

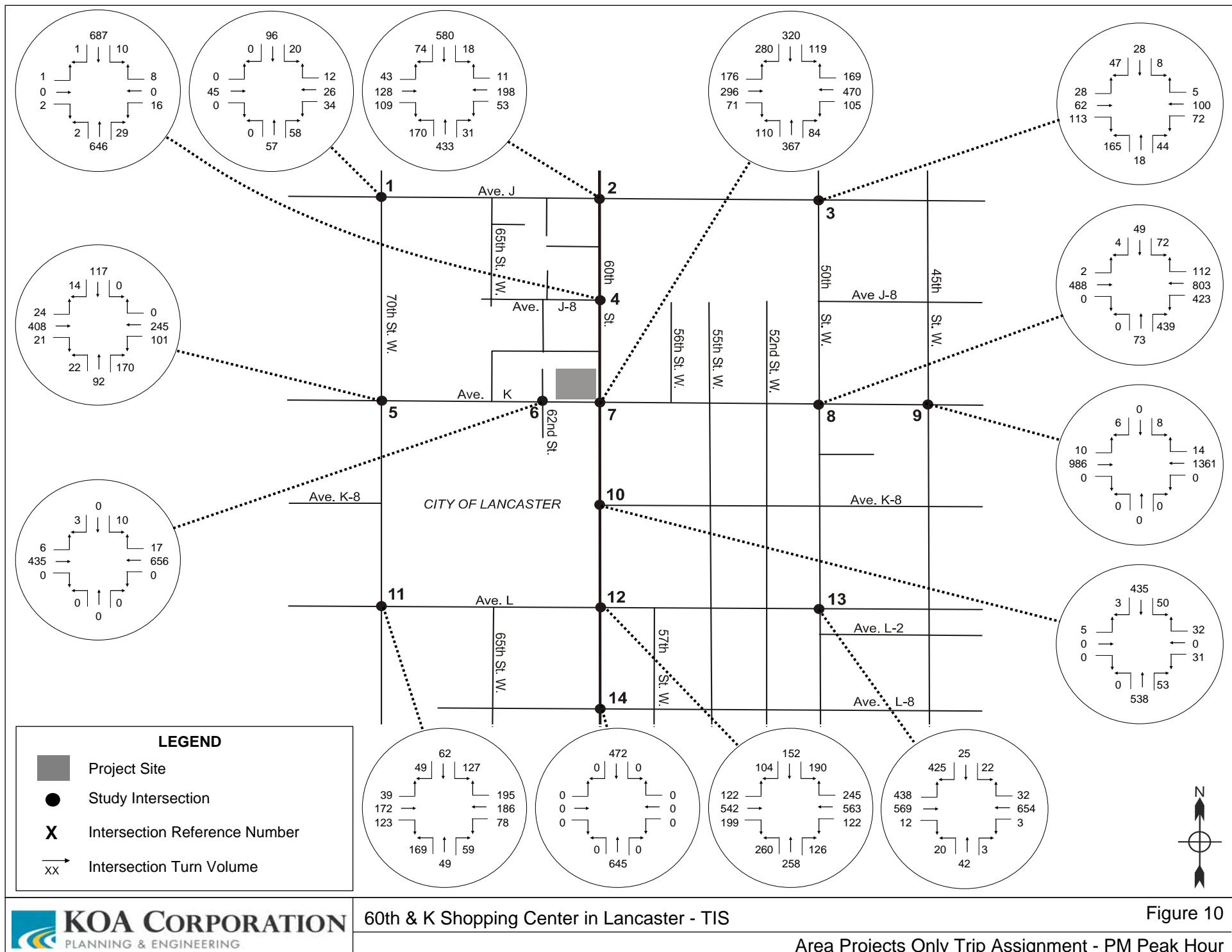
**Table 7 – Roadway Segment Level of Service –  
Future (2012) Pre-Project Conditions**

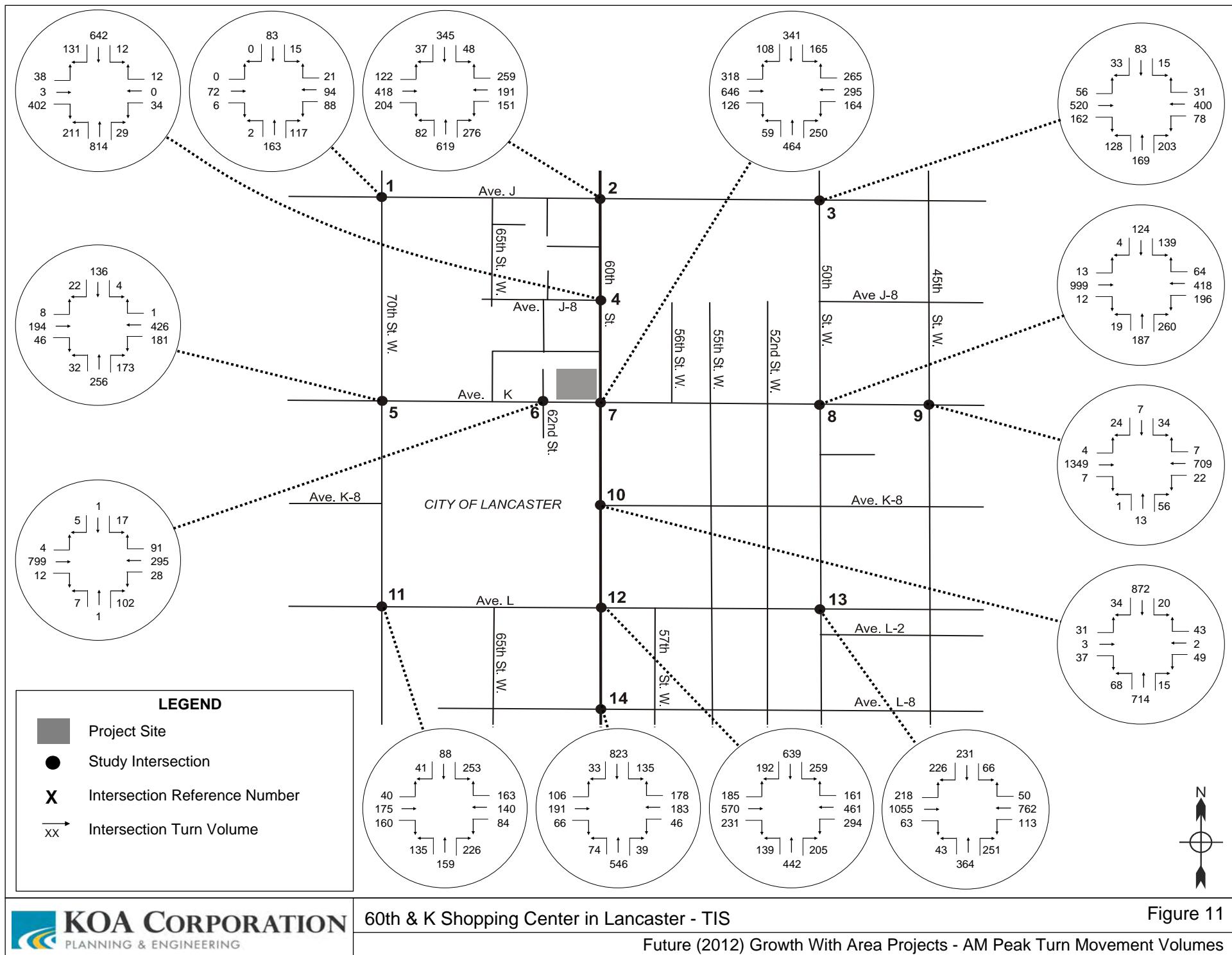
Roadway Segments	Posted Speed Limit	Daily Roadway Volume Capacity	Existing Daily Volume	Ambient Growth %	Area Projects	Future + Area Projects	V/C	LOS
60th Street, south of Avenue J	45 mph	38,800	7,215	10%	14,797	22,733	0.586	A
60th Street, north of Avenue K	45 mph	38,800	8,779	10%	15,525	25,182	0.649	B
Avenue K, west of 60th Street	45 mph	36,800	3,530	10%	10,881	14,764	0.401	A
Avenue K, east of 60th Street	45 mph	18,300	7,562	10%	13,132	21,450	1.172	<b>F</b>
Avenue K, east of 50th Street	45 mph	18,300	10,701	10%	273	12,044	0.658	B
60th Street, south of Avenue K	45 mph	36,800	8,530	10%	12,297	21,680	0.589	A

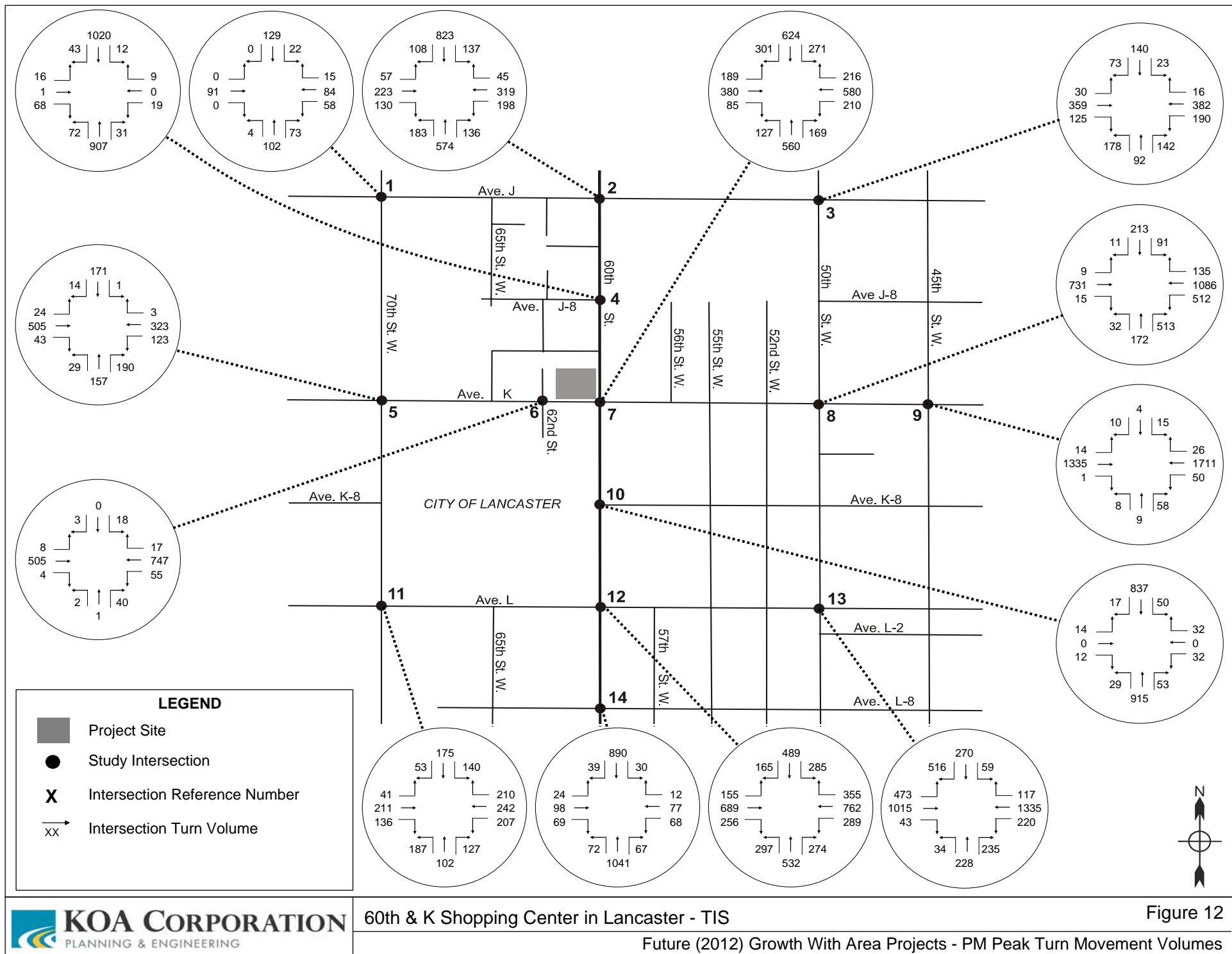
The assignment for area project trips is illustrated in Figure 9 (a.m. peak), and Figure 10 (p.m. peak). The total future pre-project volumes within the study area, including ambient growth and trips from area projects, are provided within Figure 11 (a.m. peak) and Figure 12 (p.m. peak).

The levels of service worksheets for this analysis scenario are provided within Appendix D of this report.









## **4. Project Trip and Parking Generation**

---

The proposed project is a shopping center complex that would be located at the northwest corner of 60<sup>th</sup> Street and Avenue K, on the site of the former Meadowlark Golf Course. Under pending approval of General Plan Amendment #05-01 and Zone Change #05-01 by the City, a shopping center would be built with the following land use intensities:

- The proposed Project land uses would consist of 236,109 square feet of gross shopping center floor area. Specific commercial uses would include the following:
  - A gas station and car wash with a 3,000 square-foot convenience market;
  - A home improvement center with 139,410 square feet of gross floor area and an outdoor garden center of 31,659 square feet in gross area;
  - A pharmacy with a drive-thru facility and general retail and restaurant spaces totaling 32,769 square feet of gross floor area;
  - Two fast-food restaurants with drive-thru facilities and other restaurant spaces, totaling 14,271 square feet of gross floor area; and
  - Other non-leasable building and covered areas within the gas station pad total 15,000 square feet of area

The analyzed Project buildout date is the year 2012. The proposed Project site plan is provided on Figure 13A.

### **A. Project Traffic Generation**

Trip generation calculations for the proposed Project include rates established within *Trip Generation*, (7<sup>th</sup> edition), published by the Institute of Transportation Engineers (ITE). Application of these rates to the proposed land uses are summarized in Table 8.

Other calculations within the table provide for net trip generation reductions from pass-by trips (drivers passing by the site who stop and patronize a retail business within a larger trip to a final destination). Pass-by trip rates – equating to a reduction of 15 percent for the general commercial uses and 50 percent for the gas station use – were applied based on maximums allowed by the City of Lancaster.

The proposed Project would generate a net total of 274 trips in the a.m. peak hour and 997 trips in the p.m. peak hour. These totals represent both inbound and outbound trips.

**Table 8 – Project Trip Generation**

ITE Land Use Code	Land Use Type	Sub Land Use & Rate Type	Method	Size Basis	Basis Type	In	Out	Total	In	Out	Total	Total
FORMULA CALCULATION RESULTS												
820	Retail	Shopping Center (Adj Streets, 7-9A, 4-6P)	Best Fit - Fitted Curve	233.109	1000 sq ft	159	101	260	525	569	1,094	11,772
946	Services	Gasoline/Service Station with Market & Car Wash (Adj Streets, 7-9A, 4-6P)	Linear Rate	10.000	Vehicle Fueling Positions	54	52	106	67	67	133	1,528
COMMERCIAL PASS-BY TRIP REDUCTION												
Reduction of 15% for retail uses, per pass-by traffic reduction allowed by City policy:						-24	-15	-39	-79	-85	-164	-1,766
Reduction of 50% for gas station use, per pass-by traffic reduction allowed by City policy:						-27	-26	-53	-33	-33	-67	-764
NET TOTAL PROJECT TRIPS						162	112	274	480	517	997	10,770

AM peak fitted-curve formula:

$$\ln(T) = 0.60 \ln(X) + 2.29$$

PM peak fitted-curve formula:

$$\ln(T) = 0.66 \ln(X) + 3.40$$

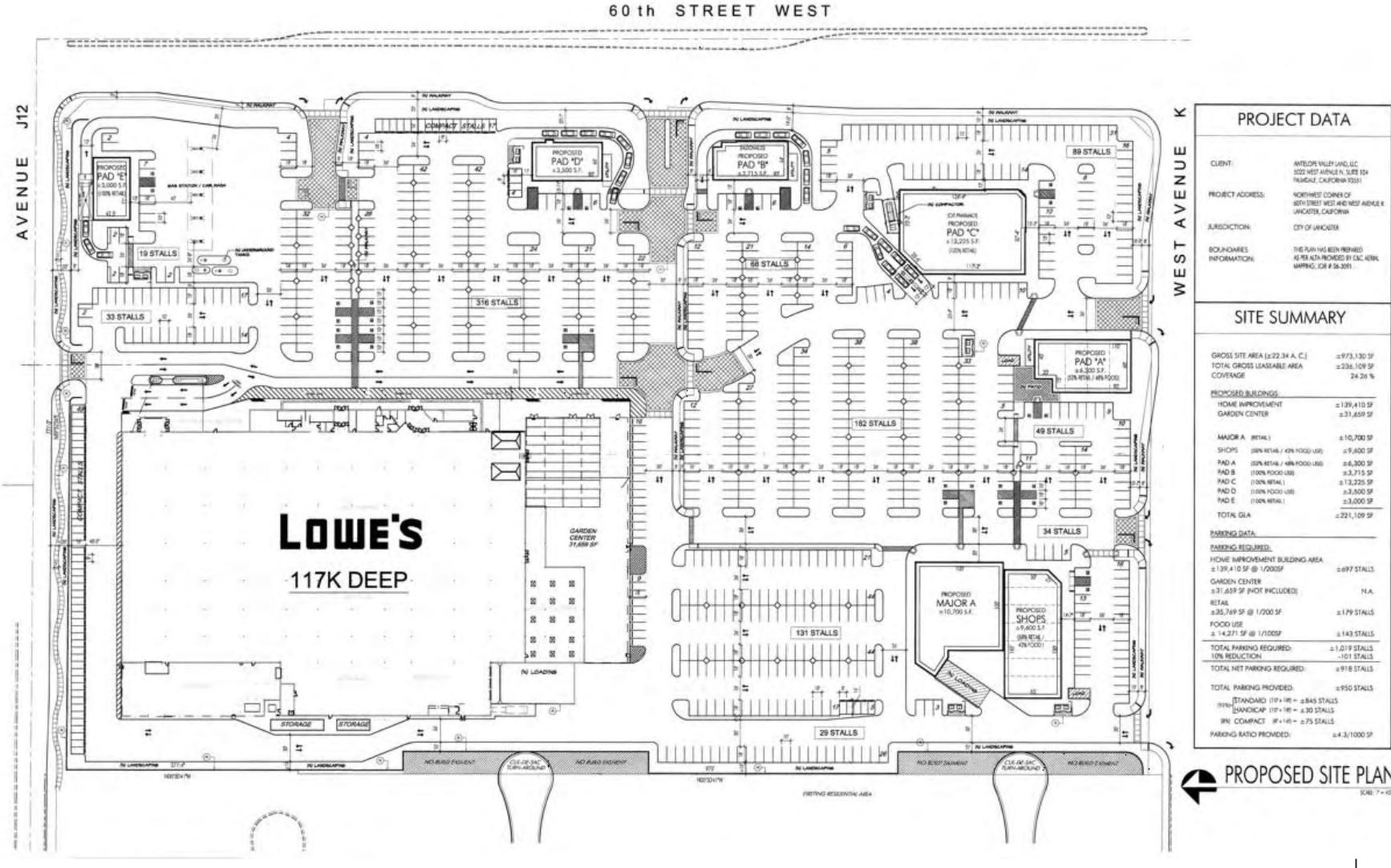
Daily fitted-curve formula:

$$\ln(T) = 0.65 \ln(X) + 5.83$$

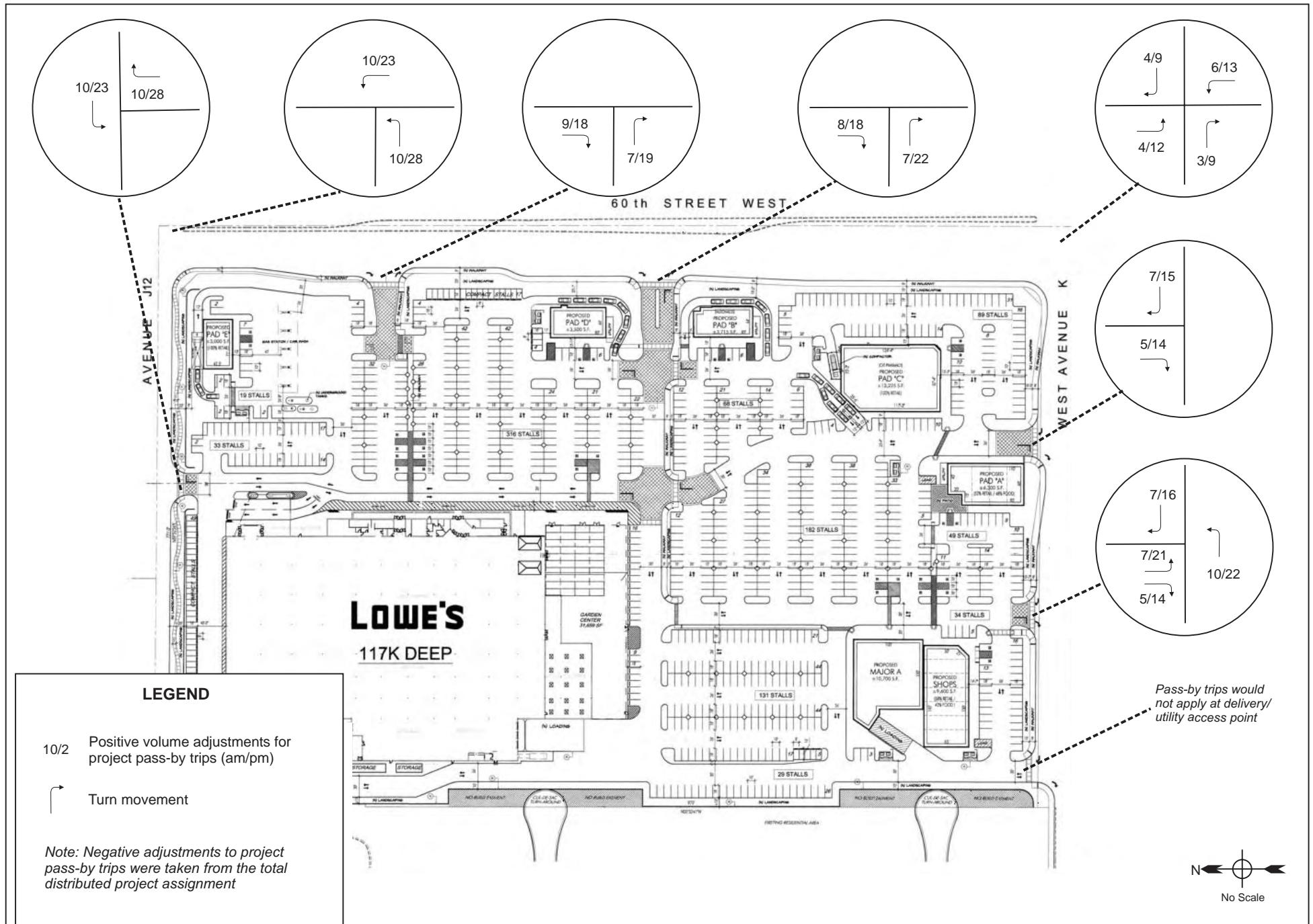
The pass-by trip “through routes” were deducted from the study area analysis, as these trips already would exist in the future pre-project period. The related turns that these existing trips would take to access the site must be added back in, to account for the additional localized turn movements that would be affected by these diverted trips.

In order to provide a conservative analysis of these turns, it was assumed that pass-by trips approaching from any direction or departing the site to any direction would create new turns at the intersection of 60<sup>th</sup> Street West and Avenue K and at the project access driveways. These pass-by trip adjustments at this intersection and the Project driveways are illustrated on Figure 13B.

Pass-by trip adjustments are included in the Project trip assignment totals and the future post-Project volume analysis.



No Scale



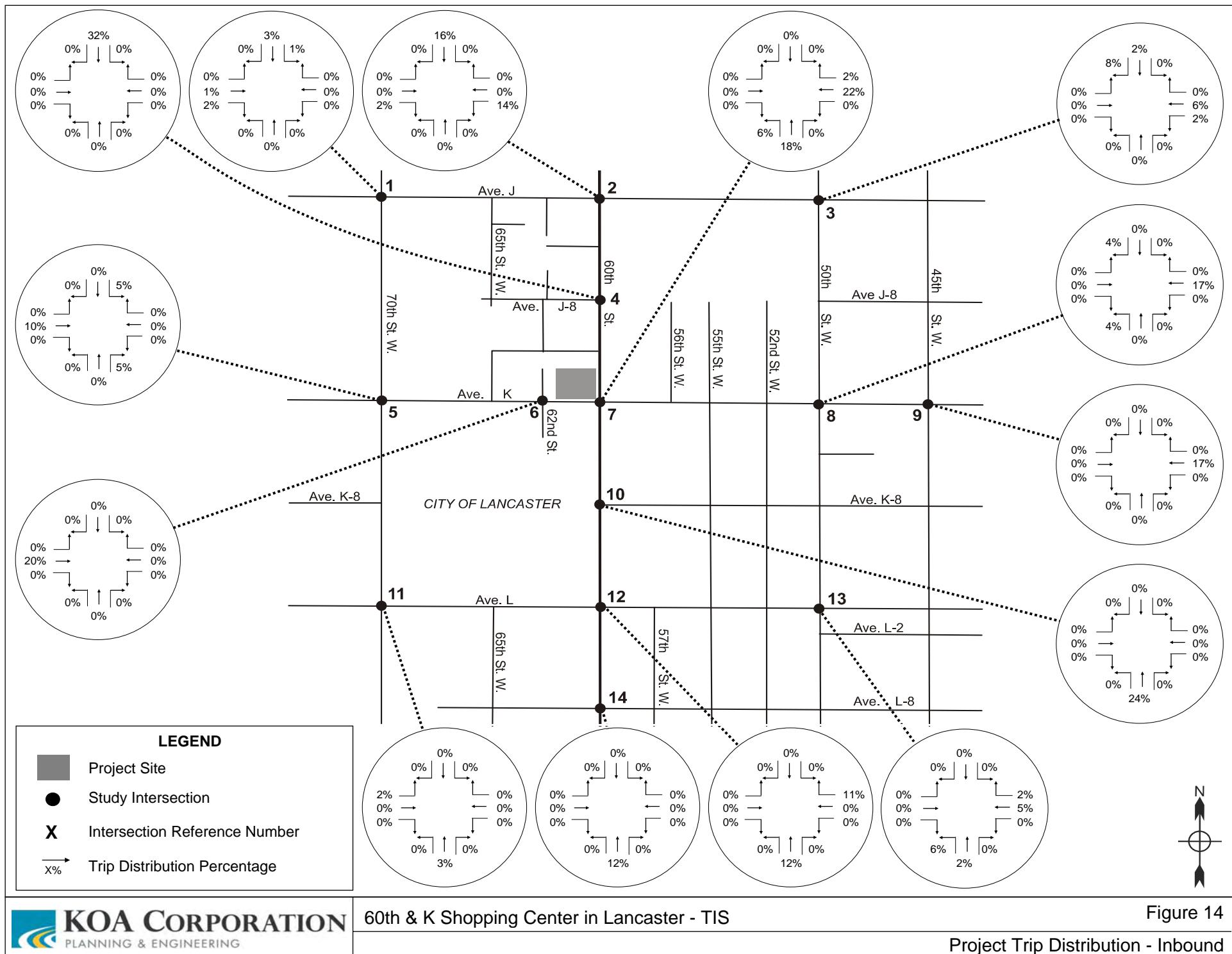
## B. Project Traffic Distribution & Assignment

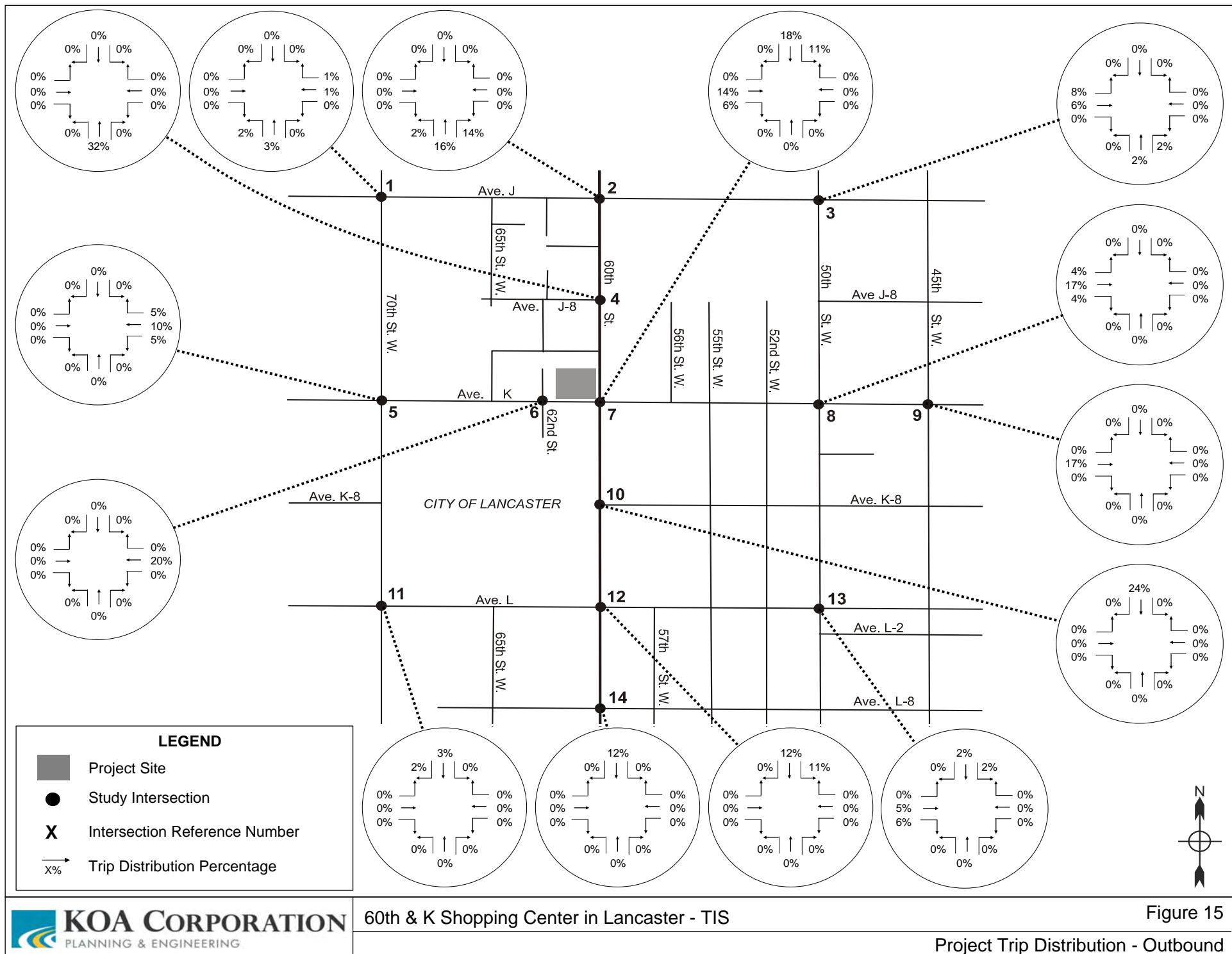
Trip distribution is the process of assigning the directions from which traffic will travel to and from a project site. Trip distribution is dependent upon the land use characteristics of the project and the general locations of other land uses to which project trips would originate or terminate. Project trip distribution was based on development trends in the area, local and sub-regional traffic routes, and regional traffic flows. For regional routes, freeway-oriented access was assumed. For routes that are local in relation to the Project site, arterial access was assumed.

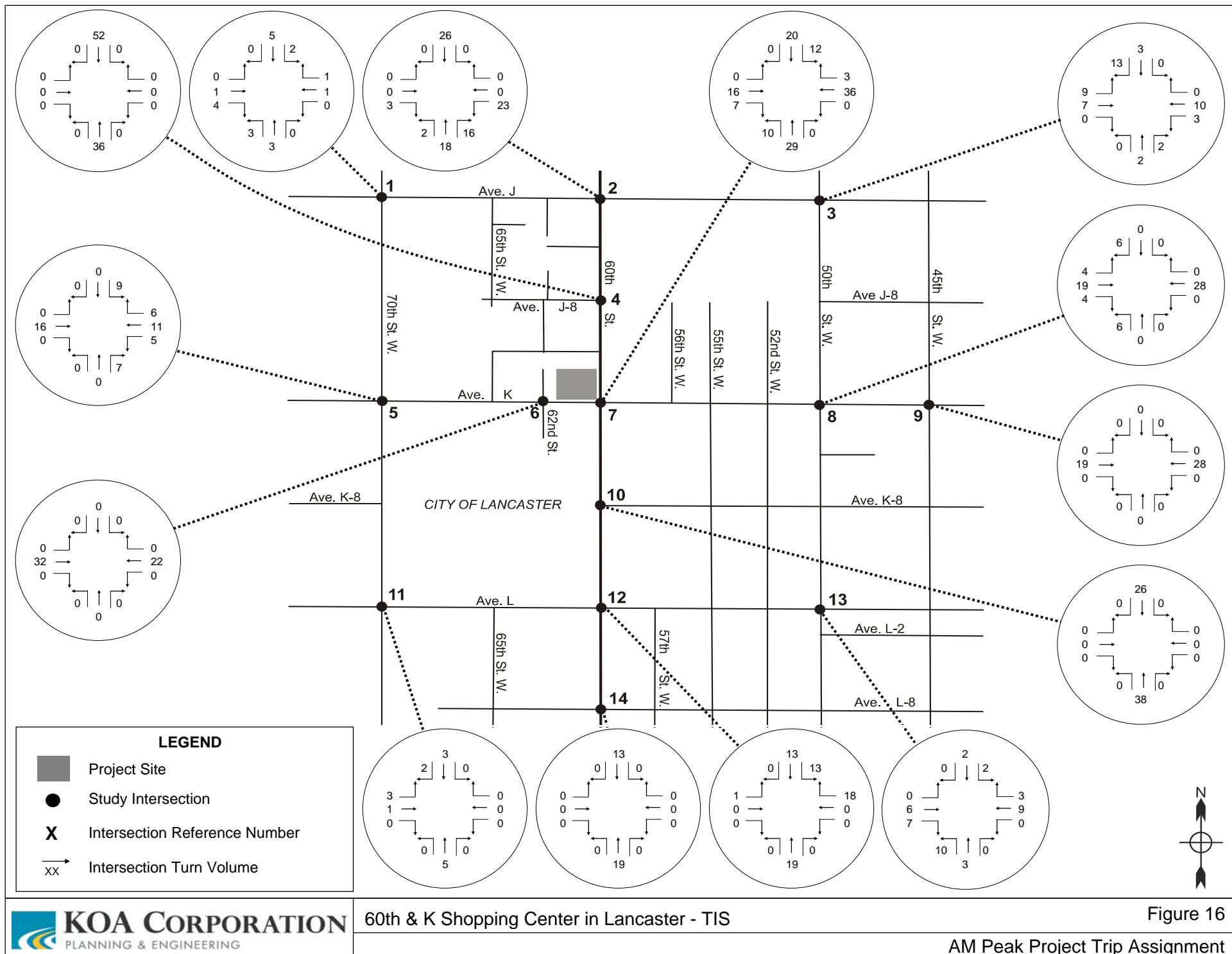
The intersection trip distribution percentages that were used for Project trips are illustrated on Figure 14 (inbound) and Figure 15 (outbound). The percentages provided by these figures are based on percentage proportions of inbound trips (as a division of a 100% total) and outbound trips (as a division of a separate 100% total).

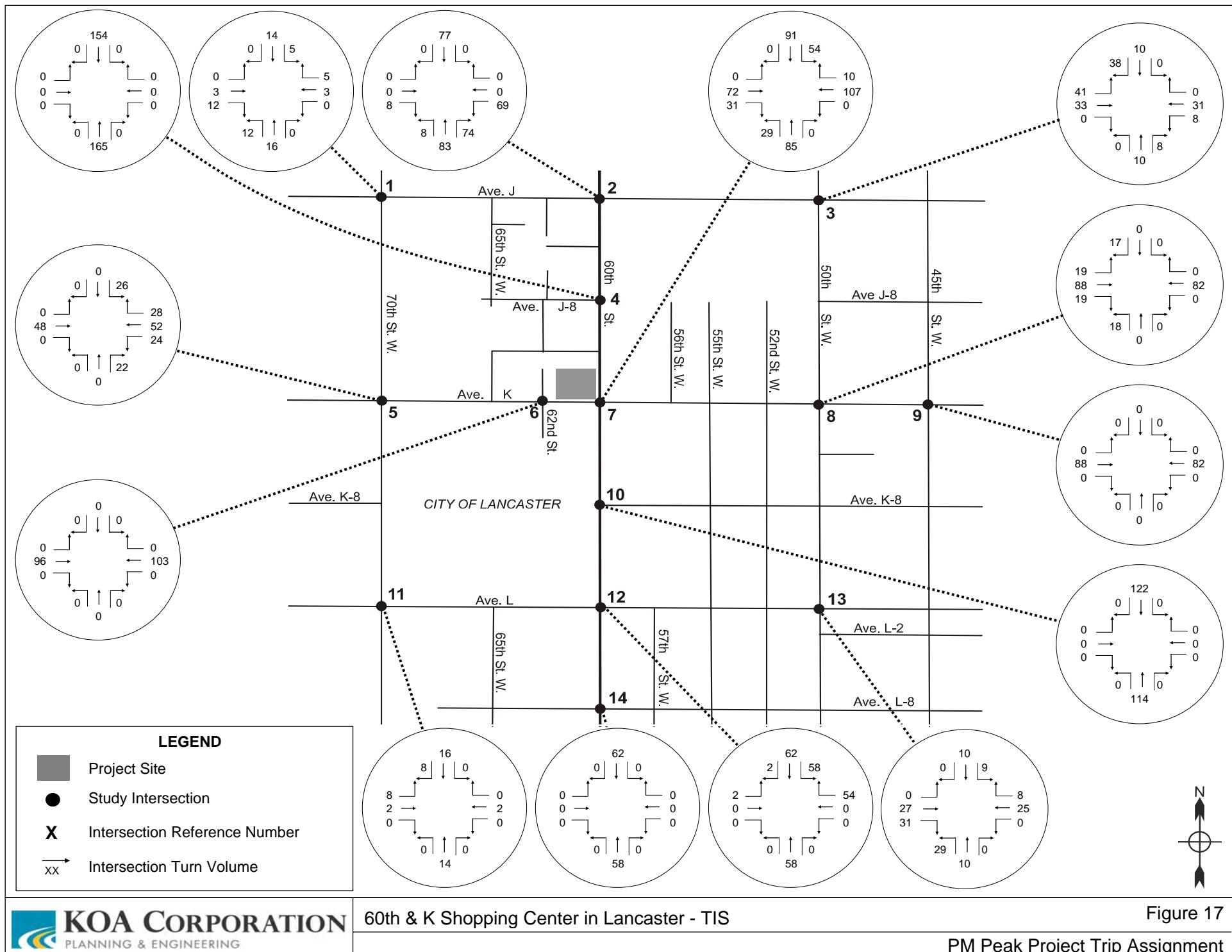
The final product of the trip assignment process is a full accounting of project trips, by direction and turning movement at the study intersections. The project trips were assigned based on distribution inputs to the TRAFFIX program.

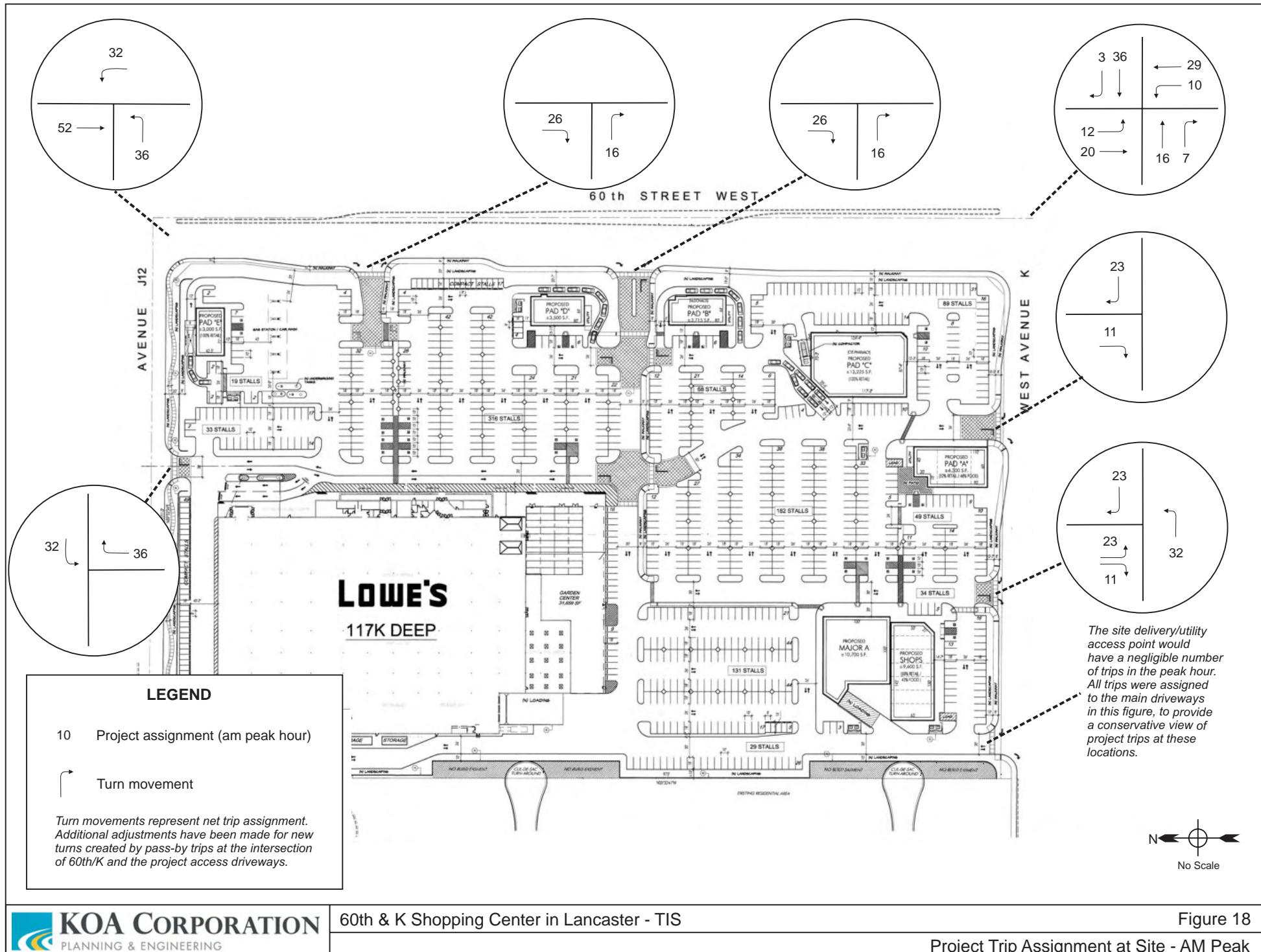
The project trip assignment is provided in Figure 16 (weekday a.m. peak) and Figure 17 (weekday p.m. peak). Project assignment in the vicinity of the site – specifically at the neighboring study intersection and the site driveways – is provided within Figure 18 (a.m. peak) and Figure 19 (p.m. peak).

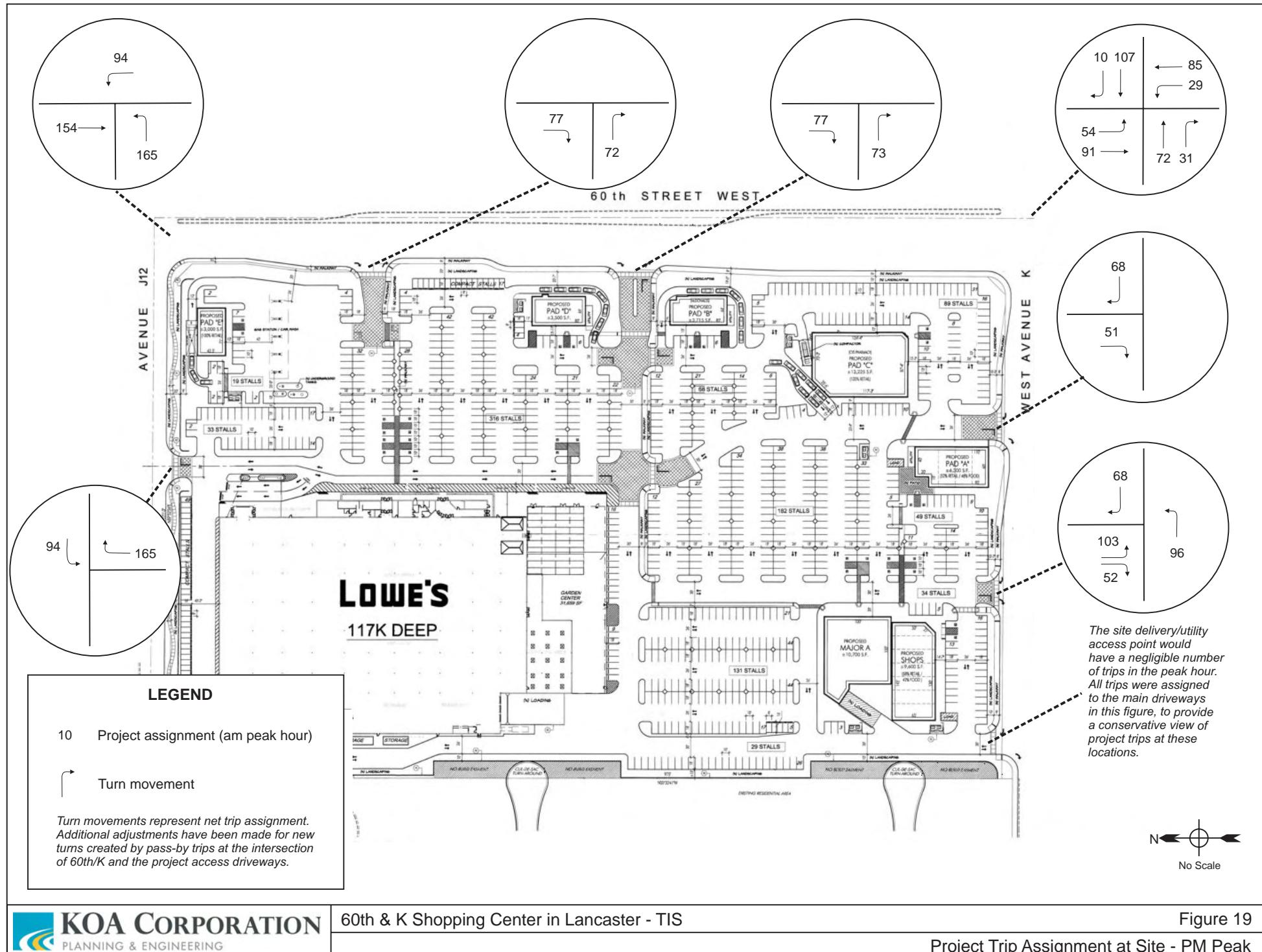












### C. Project Parking Generation

The proposed Project site plan, dated April 15, 2008, provides for an off-street parking supply of 950 spaces. The section analyzes the planned Project parking supply in terms of City Code, parking demand defined by the ITE manual entitled *Parking Generation* (3<sup>rd</sup> edition), and monthly parking demand variations defined by the Urban Land Institute manual entitled *Shared Parking* (2<sup>nd</sup> edition).

#### City Code Requirements

According to the City of Lancaster Municipal Code Zoning provisions, the following shopping center parking requirements apply per Section 17.12.220. The calculation of the total Project parking requirement is summarized within Table 9. The floor area totals are based on net leasable floor area.

**Table 9 – Total Project Parking Requirements**

Land Use	Floor Area (sq.ft.)	Number of Spaces	Municipal Code Land Use Category	Requirement
Shopping Center	139,410	697	17.12.220 - 18 - Shopping Center or Other Commercial Center of 2 Acres or More	5/1000 SF or 1/200 SF
Retail	32,769	164	17.12.220 - 18 - Shopping Center or Other Commercial Center of 2 Acres or More	5/1000 SF or 1/200 SF
Food Service	14,271	143	17.12.220 - 5 - Eating and Drinking Establishments	1/100 SF
Gas Station	3,000	15	17.12.220 - 18 - Shopping Center or Other Commercial Center of 2 Acres or More	5/1000 SF or 1/200 SF
<b>TOTAL REQUIRED SPACES:</b>		<b>1,019</b>		

Based on the floor area and applicable Code requirements, the total parking requirement would be 1,019 spaces. Based on the planned supply of 950 spaces, there would be a 69-space supply deficit during the period of highest demand (the holiday shopping season). Seasonal demand fluctuations are discussed later in this report section.

As the proposed gas station would have a separate parking field (and should be separated by necessity of function), the remainder of this analysis separates the gas station parking requirements from the remainder of the shopping center. The gas station would have 15 required spaces and would provide a parking surplus at 19 spaces.

#### Potential for Shared Parking Arrangement

As a majority of the site would be utilized for retail uses, the ability to “share” parking between uses is minimal. Different types of uses such as retail, restaurant, offices, movie theaters, and residential on the same site would peak in demand at different hours of the day. As the proposed Project site would primarily house retail uses, all of the uses would generally peak in terms of activity and parking demand at the same time.

Application of the Urban Land Institute *Shared parking* methodology to the Project retail parking requirements and the restaurant parking requirements, a weekday demand reduction of 4.27% can be expected. Overall demand defined by Code would be reduced by 43 spaces on weekdays, based on this methodology. On Saturdays, generally the peak day of the weekend for shopping centers, demand

would be reduced by as much as 7.83 percent. This equates to a demand reduction of 79 spaces. These potential demand reductions based on the project land use characteristics are incorporated into the following analysis.

A summary table for the shared parking analysis is provided within Appendix G of this report.

#### ITE Parking Generation Demand

The manual entitled *Parking Generation (3<sup>rd</sup> edition)*, published by ITE, defined peak-period parking demand rates for shopping centers, based on nation-wide data. The following December (peak month) demand rates are defined by ITE:

- Monday to Thursday, December: 3.76 spaces per 1,000 sq.ft. of floor area
- Friday, December: 4.01 spaces per 1,000 sq.ft. of floor area
- Saturday, December: 4.74 spaces per 1,000 sq.ft. of floor area
- Sunday, December: 4.45 spaces per 1,000 sq.ft. of floor area

Using these rates, the typical range of December weekend parking demand for the core commercial uses of the Project (without the gas station use) would be from 877 spaces (Monday-Thursday) to 1,104 spaces (Saturday), based on a total gross floor area of 233,109 square feet. Adding in the 15 spaces required for the proposed gas station, the total parking demand would range from 892 to 1,119 spaces.

#### Seasonal Demand Analysis

The maximum parking demand, defined by the Saturday total, was analyzed based on typical seasonal fluctuations of shopping center demand. The shared parking analysis indicated that shared demand between retail and restaurants would reduce overall visitor/customer parking demand by as much as 7.83 percent.

Based on seasonal parking demand adjustment factors defined within *Shared Parking (second edition)*, and the peak demand rates defined by ITE (a Saturday in December), the monthly demand totals provided within Table 10 were calculated. The dedicated gas station parking was excluded from this analysis.

The *Shared Parking* manual defines a “13<sup>th</sup> month”, the period between the Christmas holiday and the New Years holiday, where parking demand is markedly different than that within the first part of December. This additional period is included within the analysis table.

During the maximum demand month of demand, December, expected parking demand would be 1,029 vehicles. During the remainder of the year, the provided site parking supply would be adequate for anticipated demand.

**Table 10 – Project Seasonal Parking Demand Calculations**

Total Demand per highest ITE rate:

**1,104**

Month	CUSTOMER / VISITOR PARKING		EMPLOYEE PARKING		Total Estimated Parking Demand per Month
	Adjustment Factor for Customer/Visitor Parking	90% of Project Demand, Per ITE Rates, Shared Parking *	Adjustments for Employee Parking	10% of Project Demand, Per ITE Rates	
Jan	56%	513	80%	88	601
Feb	57%	522	80%	88	610
Mar	64%	586	80%	88	674
Apr	63%	577	80%	88	665
May	66%	604	80%	88	693
Jun	67%	614	80%	88	702
Jul	64%	586	80%	88	674
Aug	69%	632	80%	88	720
Sep	64%	586	80%	88	674
Oct	66%	604	80%	88	693
Nov	72%	659	90%	99	759
Dec	100%	916	100%	110	1,026
Late Dec. **	80%	733	90%	99	832

*Note: Percentages represent a ratio of the highest demand, encountered in December. Percentages defined with the Urban Land Institute publication "Shared Parking" (second edition). Demand rates are based on ITE rates and not Code requirements.*

\* A shared parking reduction of 4.27% was taken, based on the Shared Parking analysis conducted based on Code requirements.

\*\* An additional period is defined by "Shared Parking", which represents the less-intense period between the Christmas and New Years holidays.

The following is concluded from the Project parking demand analysis:

- The Project would not meet parking code requirements of the City of Lancaster for the planned commercial uses, but based on national demand rates, shared parking calculations (between retail areas and restaurants), and expected seasonal fluctuations, the Project parking supply would be adequate for typical demand outside of the core December shopping period.
- During the period between the Christmas holiday and the New Years holiday, the Project would likely provide an adequate number of spaces for typical demand.
- During the December period (excluding the inter-holiday period at the end of the month), the proposed Project parking supply of 950 spaces and the expected demand could result in a parking supply deficit of 90 spaces.
- If the Project can effectively manage on-site parking during the typical peak month of December, mitigation measures will not be necessary. As the proposed shopping center uses would not include department stores or discount retail centers, parking impacts during the peak holiday period would be unlikely.

## 5. Future (2012) Post-Project Conditions

### A. Peak Hour Intersection Level of Service

To analyze future post-Project conditions, intersection turn volumes with ambient growth, area projects trips, and proposed Project trips were all input into the Traffix analysis program and processed with the same LOS methodologies used for the previous scenarios.

Table 11 summarizes the weekday LOS of the study area intersections under this scenario. Intersections operating at unacceptable levels of service, LOS E or F, are indicated by bold text within the table.

**Table 11 – Intersection Level of Service –  
Future (2012) Post-Project Conditions**

#	Intersections	AM Peak		PM Peak	
		ICU or Delay (sec.)	LOS	ICU or Delay (sec.)	LOS
1	70th Street / Avenue J *	14.9 Sec.	B	14.7 Sec.	B
2	60th Street / Avenue J	0.647	B	1.102	<b>F</b>
3	50th Street / Avenue J	0.718	C	0.751	C
4	60th Street / Avenue J-8 *	> 100 Sec.	<b>F</b>	> 100 Sec.	<b>F</b>
5	70th Street / Avenue K **	69.5 Sec.	<b>F</b>	> 100 Sec.	<b>F</b>
6	62nd Street / Avenue K *	38.9 Sec.	<b>E</b>	59.8 Sec.	<b>F</b>
7	60th Street / Avenue K	0.961	<b>E</b>	1.060	<b>F</b>
8	50th Street / Avenue K **	> 100 Sec.	<b>F</b>	> 100 Sec.	<b>F</b>
9	45th Street / Avenue K *	> 100 Sec.	<b>F</b>	> 100 Sec.	<b>F</b>
10	60th Street / Avenue K-8 *	95.0 Sec.	<b>F</b>	> 100 Sec.	<b>F</b>
11	70th Street / Avenue L **	22.6 Sec.	C	31.7 Sec.	D
12	60th Street / Avenue L	1.145	<b>F</b>	1.385	<b>F</b>
13	50th Street / Avenue L	1.305	<b>F</b>	1.567	<b>F</b>
14	60th Street / Avenue L-8	0.715	C	0.900	D

Note: All level of service values are based on average delay (seconds per vehicle) for unsignalized intersections and Intersection Capacity Utilization (ICU) values for signalized intersections.

\* Unsignalized intersection with two-way stop sign control

\*\* Unsignalized intersection with all-way stop sign control

Project traffic would worsen the level of service values to E or F at the following intersections:

- 62<sup>nd</sup> Street / Avenue K – Operations would worsen from LOS to D in the a.m. peak hour and from LOS E to F in the p.m. peak hour
- 60<sup>th</sup> Street / Avenue K – Operations would worsen from LOS E to F in the p.m. peak hour

### B. Roadway Segment Level of Service Analysis

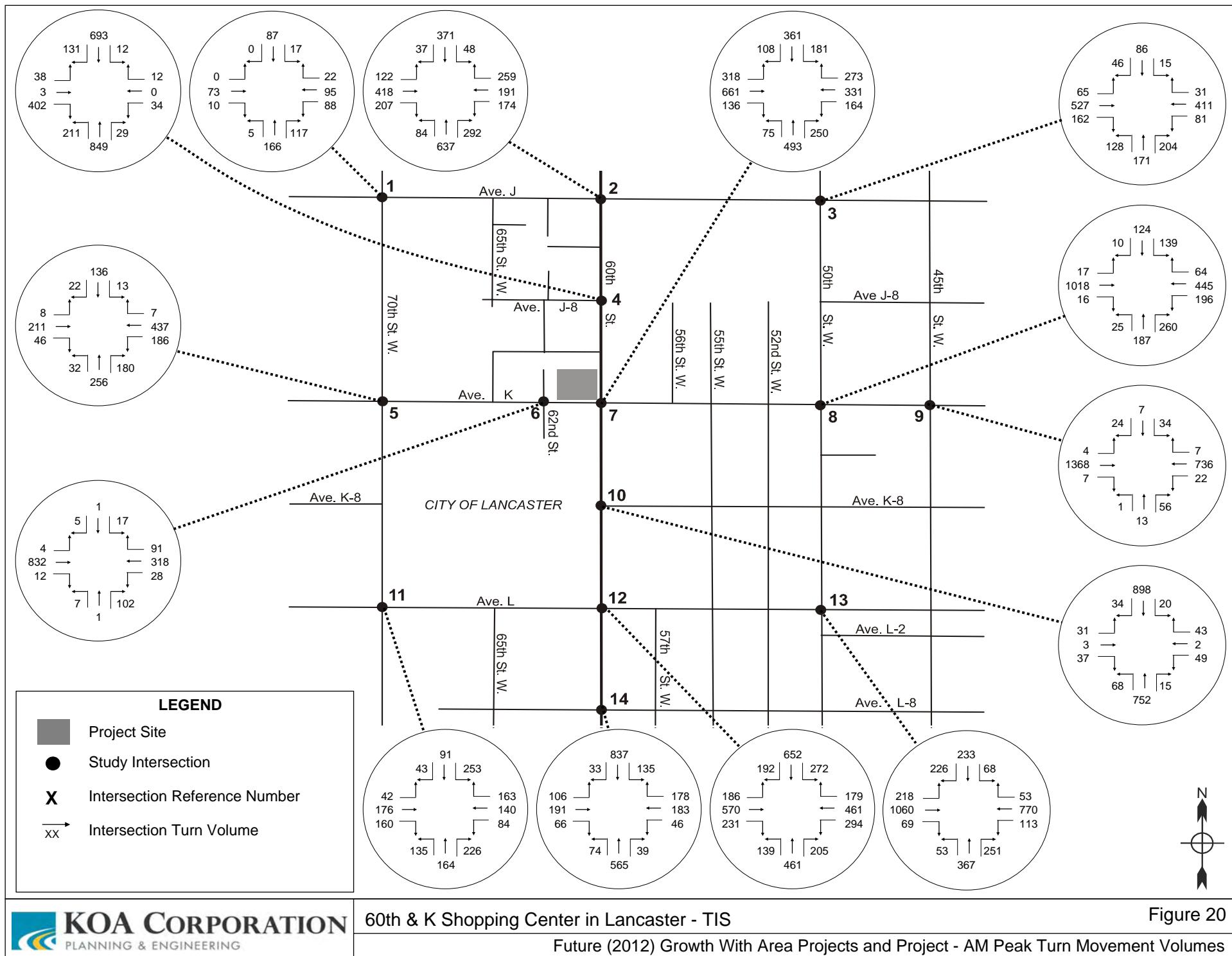
Table 12 provides a summary of future peak-hour volumes at the study area roadway segments, after the inclusion of Project-generated trips. The roadway segment of Avenue K, east of 60<sup>th</sup> Street, would continue to operate at LOS F with the addition of Project traffic.

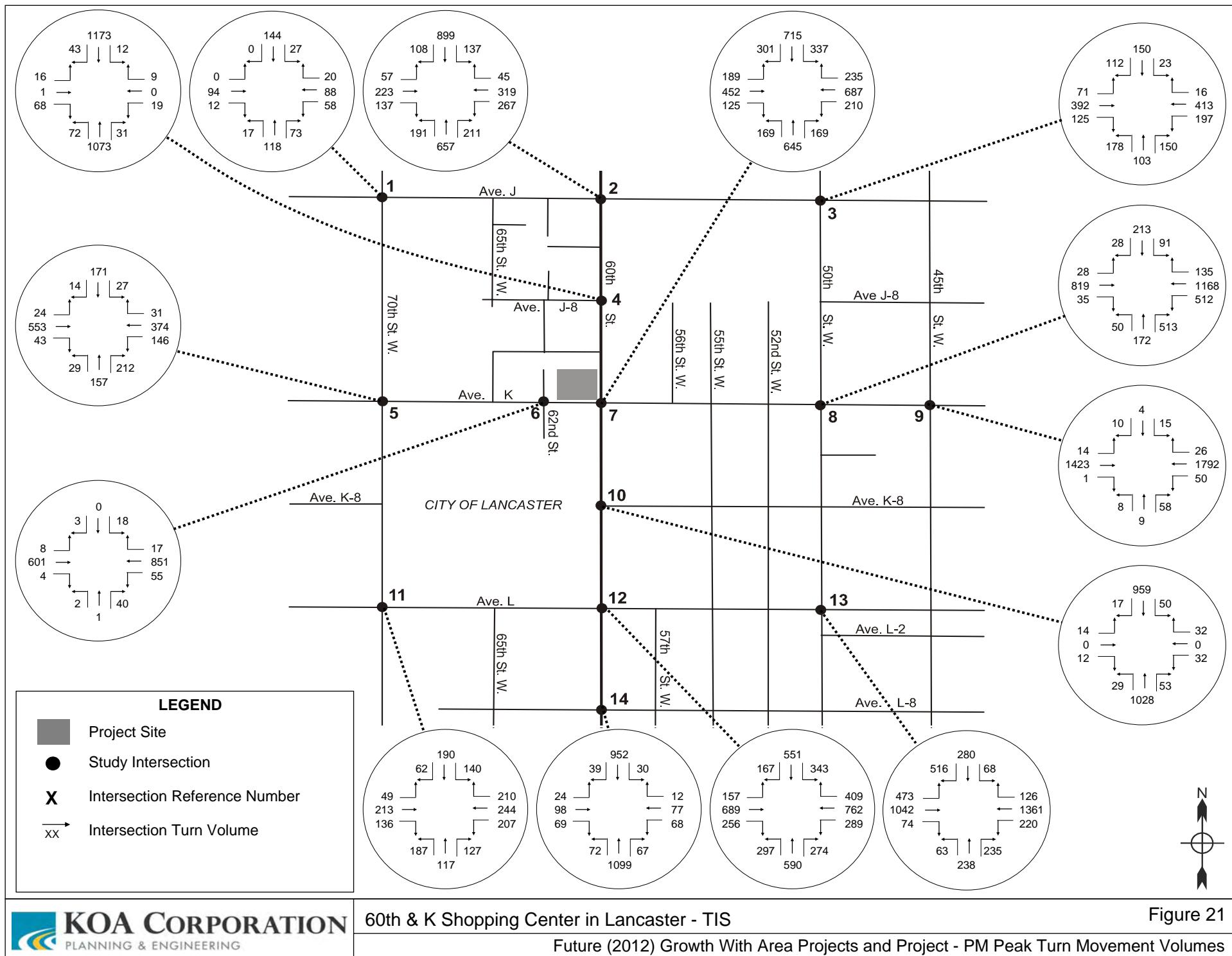
**Table 12 – Level of Service –  
Future (2012) Post-Project Roadway Segment**

Roadway Segments	Posted Speed Limit	Daily Roadway Volume Capacity	Future Pre-Project	Project Only	Future Post-Project	LOS
60th Street, south of Avenue J	45 mph	38,800	22,733	3,446	26,179	B
60th Street, north of Avenue K	45 mph	38,800	25,182	3,446	28,628	C
Avenue K, west of 60th Street	45 mph	36,800	14,764	2,154	16,918	A
Avenue K, east of 60th Street	45 mph	18,300	21,450	2,622	24,072	F
Avenue K, east of 50th Street	45 mph	18,300	12,044	1,830	13,874	C
60th Street, south of Avenue K	45 mph	36,800	21,680	2,548	24,228	B

Significant impact determinations for Project traffic at the study intersections and study roadway segments are discussed in the next section of this report.

Study intersection turn movement volumes for this scenario are provided in Figure 20 (a.m. peak) and Figure 21 (p.m. peak). Level of service calculations worksheets for this analysis scenario are provided within Appendix E of this report.





### C. Project Driveway Traffic Operations

A review was conducted of the access driveways of the proposed site plan. Most of the site driveways would have limited access, with right-turn inbound access and right-turn outbound access only. Other turn movements would be restricted due to the presence of raised roadway medians on 60<sup>th</sup> Street and Avenue K.

The restriction of movements at these locations will minimize traffic conflicts with the major roadways they would intersect with, and would likely avoid poor levels of service that would be caused by long delays at unsignalized driveway locations due to outbound left turn movement queues. Left turn movements often cause on-site delay, as those movements must cross both directions of traffic flow on the major roadway.

One of the southern driveways would be constructed with full access, due to a planned break in the raised median at the location of that driveway. A level of service analysis was conducted for the proposed southern full-access driveway, using post-project volumes and the planned geometry of the driveway intersection. It was found from this analysis that that location would operate at LOS C in the a.m. peak hour and at LOS F in the p.m. peak hour. The potential queuing of outbound traffic would create the poor LOS value in the p.m. peak hour.

In order to avoid on-site queuing that could occur at the southern full-access site driveway, which could create on-site traffic conflicts within parking aisles and other on-site roadways, it is recommended that the southern full-access driveway be signalized. With signalization, the driveway intersection with Avenue K would operate at a good LOS value of A.

## **6. Significant Traffic Impacts**

---

### **A. Methodology for Significant Impact Calculations**

Traffic impacts are identified if the proposed development will result in a significant degradation of traffic conditions at a study roadway facility. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts can also be significant if an intersection is already operating below the poorest acceptable level of service and project traffic will cause a further decline below a certain threshold.

The City of Lancaster has established specific thresholds for project-related increases in the volume-to-capacity ratio (V/C) of analyzed facilities, including roadway intersections and roadway segments, within the published traffic study guidelines. These thresholds are provided below.

#### SIGNALIZED STUDY INTERSECTION AND ROADWAY SEGMENT IMPACTS

<b>Level of Service</b>	<b>Volume/Capacity Ratio</b>	<b>Project-Related Increase in ICU (intersections) or V/C (roadways)</b>
E, F	> 0.900 or greater	Equal to or greater than 0.02

#### UN SIGNALIZED STUDY INTERSECTION IMPACTS

<b>Level of Service</b>	<b>Project-Related Increase in Delay Value</b>
E, F	Equal to or greater than 2.0 seconds

### **B. Determination of Study Intersection Impacts**

A summary of the study scenarios for the existing and future timeframes are provided in Table 13 (a.m. peak) and Table 14 (p.m. peak). Traffic impacts created by the Project are calculated by subtracting the operations values within the “Future Pre-Project Conditions (2012)” column from the values within the “Future Post-Project Conditions (2012)” column. The overall traffic impacts created by the proposed Project, and determinations of significant impact, are provided in the right two columns of the tables.

As indicated in the right-most column of Table 13, the proposed Project would create significant impacts at eight of the 14 study intersections within the a.m. peak hour.

As indicated in the right-most column of Table 14, the proposed Project would create significant impacts at ten of the 14 study intersections within the p.m. peak period.

**Table 13 – Determination of Study Intersection Impacts –  
Weekday AM Peak Period**

#	Intersections	Existing (2007) Conditions		Future Pre-Project Conditions (2012)		Future Post-Project Conditions (2012)		Diff vs. Pre-Proj.	Signif?
		ICU or Delay (sec.)	LOS	ICU or Delay (sec.)	LOS	ICU or Delay (sec.)	LOS		
1	70th Street / Avenue J *	10.7 Sec.	B	14.6 Sec.	B	14.9 Sec.	B	0.3	No
2	60th Street / Avenue J	0.425	A	0.628	B	0.647	B	0.019	No
3	50th Street / Avenue J	0.479	A	0.711	C	0.718	C	0.007	No
4	60th Street / Avenue J-8 *	42.1 Sec.	E	> 100 Sec.	F	> 100 Sec.	F	F to F	<b>Yes</b>
5	70th Street / Avenue K **	8.8 Sec.	A	57.8 Sec.	F	69.5 Sec.	F	11.7	<b>Yes</b>
6	62nd Street / Avenue K *	11.7 Sec.	B	35.0 Sec.	D	38.9 Sec.	E	3.9	<b>Yes</b>
7	60th Street / Avenue K	0.452	A	0.932	E	0.961	E	0.029	<b>Yes</b>
8	50th Street / Avenue K **	11.1 Sec.	B	> 100 Sec.	F	> 100 Sec.	F	F to F	<b>Yes</b>
9	45th Street / Avenue K *	14.1 Sec.	B	> 100 Sec.	F	> 100 Sec.	F	F to F	<b>Yes</b>
10	60th Street / Avenue K-8 *	21.3 Sec.	C	79.5 Sec.	F	95.0 Sec.	F	15.5	<b>Yes</b>
11	70th Street / Avenue L **	9.7 Sec.	A	22.1 Sec.	C	22.6 Sec.	C	0.5	No
12	60th Street / Avenue L	0.727	C	1.125	F	1.145	F	0.020	<b>Yes</b>
13	50th Street / Avenue L	0.967	E	1.295	F	1.305	F	0.010	No
14	60th Street / Avenue L-8	0.532	A	0.703	C	0.715	C	0.012	No

Note: All level of service values are based on average delay (seconds per vehicle) for unsignalized intersections and Intersection Capacity Utilization (ICU) values for signalized intersections.

\* Unsignalized intersection with two-way stop sign control

\*\* Unsignalized intersection with all-way stop sign control

**Table 14 – Determination of Study Intersection Impacts –  
Weekday PM Peak Period**

#	Intersections	Existing (2007) Conditions		Future Pre-Project Conditions (2012)		Future Post-Project Conditions (2012)		Diff vs. Pre-Proj.	Signif?
		ICU or Delay (sec.)	LOS	ICU or Delay (sec.)	LOS	ICU or Delay (sec.)	LOS		
1	70th Street / Avenue J *	10.1 Sec.	B	13.7 Sec.	B	14.7 Sec.	B	1.0	No
2	60th Street / Avenue J	0.374	A	1.032	F	1.102	F	0.070	Yes
3	50th Street / Avenue J	0.414	A	0.720	C	0.751	C	0.031	No
4	60th Street / Avenue J-8 *	15.1 Sec.	C	> 100 Sec.	F	> 100 Sec.	F	F to F	Yes
5	70th Street / Avenue K **	7.8 Sec.	A	63.9 Sec.	F	> 100 Sec.	F	F to F	Yes
6	62nd Street / Avenue K *	10.7 Sec.	B	41.4 Sec.	E	59.8 Sec.	F	18.4	Yes
7	60th Street / Avenue K	0.372	A	0.925	E	1.060	F	0.135	Yes
8	50th Street / Avenue K **	12.1 Sec.	B	> 100 Sec.	F	> 100 Sec.	F	F to F	Yes
9	45th Street / Avenue K *	15.3 Sec.	C	> 100 Sec.	F	> 100 Sec.	F	F to F	Yes
10	60th Street / Avenue K-8 *	13.6 Sec.	B	76.4 Sec.	F	> 100 Sec.	F	F to F	Yes
11	70th Street / Avenue L **	8.8 Sec.	A	29.3 Sec.	D	31.7 Sec.	D	2.4	No
12	60th Street / Avenue L	0.509	A	1.313	F	1.385	F	0.072	Yes
13	50th Street / Avenue L	0.814	D	1.520	F	1.567	F	0.047	Yes
14	60th Street / Avenue L-8	0.428	A	0.864	D	0.900	D	0.036	No

Note: All level of service values are based on average delay (seconds per vehicle) for unsignalized intersections and Intersection Capacity Utilization (ICU) values for signalized intersections.

\* Unsignalized intersection with two-way stop sign control

\*\* Unsignalized intersection with all-way stop sign control

The following study intersections would not be significantly impacted by Project traffic:

- 70<sup>th</sup> Street / Avenue J
- 50<sup>th</sup> Street / Avenue J
- 70 Street / Avenue L
- 60<sup>th</sup> Street / Avenue L-8

### C. Determination of Study Roadway Impacts

Project traffic impact calculations for the designated study area roadway segments, in terms of weekday daily volumes, are provided within Table 14. A significant roadway impact was defined on the Avenue K roadway segment located to the east of 60<sup>th</sup> Street. The segment is projected to operate at LOS F and Project traffic would increase the calculated volume-to-capacity ratio (v/c) by more than 0.02.

**Table 15 – Determination of Roadway Segment Impacts – Weekday Daily Period**

Roadway Segments	Posted Speed Limit	Daily Roadway Volume Capacity	Existing Daily Volume	Future Pre-Project	Future Post-Project	LOS	Percent Increase	Significant Impact Criteria	Significant Impact
60th Street, south of Avenue J	45 mph	38,800	7,215	22,733	26,179	B	15%	2% or higher increase at LOS E or F	No
60th Street, north of Avenue K	45 mph	38,800	8,779	25,182	28,628	C	14%		No
Avenue K, west of 60th Street	45 mph	36,800	3,530	14,764	16,918	A	15%		No
Avenue K, east of 60th Street	45 mph	18,300	7,562	21,450	24,072	F	12%		Yes
Avenue K, east of 50th Street	45 mph	18,300	10,701	12,044	13,874	C	15%		No
60th Street, south of Avenue K	45 mph	36,800	8,530	21,680	24,228	B	12%		No

## **7. Proposed Traffic Impact Mitigation Measures**

---

This report section provides a summary of recommended Project mitigation measures that would remove the identified significant traffic impacts. Study intersection mitigations and study roadway segment mitigations are discussed below. The traffic study guidelines of the City of Lancaster indicate that to mitigate a Project traffic impact, “the traffic study will propose feasible mitigation measures to reduce the impact to a level of significance”. Therefore, the goal of this report is to reduce the incremental impact of the Project to a point that falls below the established impact thresholds.

Cumulative traffic, defined by trips calculated for planned area projects, was included within the level of service and impact analysis for this report. The City traffic study guidelines, and the scoping document for this study, require that impacts be examined for the project increment only.

Feasibility of each of the mitigation measures was evaluated based on a planning-level analysis of intersection configuration and approach/roadway widths from fieldwork conducted by KOA. At all of the locations where widening has been recommended as part of intersection or roadway segment mitigation, the related roadways will be improved to the necessary width or beyond at build-out of the facilities.

Fair-share percentages for the mitigations have been calculated, as there are a significant number of planned area projects that would add a large number of trips to the roadway network. Responsibility for mitigation measures should be shared across these multiple pending projects. Discussion of the fair-share calculations is provided at the end of this report section.

### **A. Study Intersection Mitigation Measures**

The proposed Project would significantly impact 10 of the study intersection, per City-defined impact thresholds. The recommended mitigation measures for the study intersection impacts are summarized within Table 16 (a.m. peak) and Table 17 (p.m. peak). The analysis within the left half of the tables is based on signalization of significantly-impacted unsignalized study intersections.

For six of the impacted study intersections, however, residual impacts of the proposed Project would remain after signalization. At these locations, additional lane capacity was analyzed, in addition to the signalization measures. The analysis of additional lane capacity is provided within the right side of the tables. These mitigation measures were analyzed for both the a.m. peak and p.m. peak time periods, whether or not a remaining significant impact required mitigation.

At some locations, LOS E is the post-mitigation level of service. Although this represents poor operating conditions, if the Project incremental impact is removed the mitigation is adequate. If a facility would be operating at LOS F in the future pre-project period and the mitigation measure provides for LOS E operations, the project incremental impact was removed and additional operating capacity has been provided. No further mitigation measures were recommended in these cases and the impacts were considered to be fully mitigated.

**Table 16 – Summary of Intersection Mitigation Measures  
Weekday AM Peak Period**

Intx #	Signalize Mitigation Only			Additional Mitigation - Widening			
	Future (2012) Post-Project Conditions	Diff vs. Pre- Proj.	Signif?	Analyzed Widening	Future (2012) Post-Project Conditions	Diff vs. Pre-Proj.	Signif?
I							
2	0.547	LOS F to A	No	New southbound thru lane	0.469	LOS F to A	No
3							
4	0.938	LOS F to E	No	No additional mitigations needed			
5	0.799	LOS F to C	No	No additional mitigations needed			
6	0.724	LOS E to C	No	No additional mitigations needed			
7	Currently Signalized			Northbd./southbd. new thru lanes	0.885	-0.047	No
8	1.261	LOS F	Yes	Eastbd., westbd., and northbd. appr.*	0.749	LOS F to C	No
9	1.053	LOS F	Yes	Eastbd./westbd. 2nd thru lanes	0.617	LOS F to B	No
10	0.670	LOS F to B	No	No additional mitigations needed			
11							
12	Currently Signalized			Southbound new thru lane	0.937	-0.188	No
13	Currently Signalized			Eastbd./westbd. new thru lanes	0.952	-0.343	No
14							

\* Major improvements would be necessary to improve LOS beyond future pre-project conditions, including northbound left, thru and dual right turn lanes; and east-west second thru lanes and left turn lanes.

**Table 17 – Summary of Intersection Mitigation Measures  
Weekday PM Peak Period**

Signalize Mitigation Only			Additional Mitigation - Widening			
Future (2012) Post-Project Conditions	Diff vs. Pre- Proj.	Signif?	Analyzed Widening	Future (2012) Post-Project Conditions	Diff vs. Pre-Proj.	Signif?
I						
2	1.002	LOS F	Yes	New southbound thru lane	0.687	LOS F to B
3						
4	0.933	LOS F to E	No	No additional mitigations needed		
5	0.844	LOS F to D	No	No additional mitigations needed		
6	0.551	LOS F to A	No	No additional mitigations needed		
7	Currently Signalized		Northbd./southbd. new thru lanes	0.975	0.05	No
8	1.267	LOS F	Yes	Eastbd., westbd., and northbd. appr.*	0.925	LOS F TO E
9	1.308	LOS F	Yes	Eastbd./westbd. 2nd thru lanes	0.737	LOS F to C
10	0.856	LOS F to D	No	No additional mitigations needed		
11						
12	Currently Signalized		Southbound new thru lane	1.115	-0.198	No
13	Currently Signalized		Eastbd./westbd. new thru lanes	1.123	-0.397	No
14						

\* Major improvements would be necessary to improve LOS beyond future pre-project conditions, including northbound left, thru and dual right turn lanes; and east-west second thru lanes and left turn lanes.

Out of the recommended mitigation measures identified in Table 16 and Table 17, and based on the build-out configuration of the study area roadways, a majority of the mitigation measures would generally be feasible. At intersection #8 (50<sup>th</sup> Street West & Avenue K), however, the intensity of the required improvement measure would likely require purchase of right-of-way beyond the buildout configuration of the 50<sup>th</sup> Street West roadway.

With implementation of the recommended signalization and approach capacity improvements summarized above, all but one of the significant impacts of the proposed Project at the study intersections would be removed. The significant impact at the intersection of 50<sup>th</sup> Street West & Avenue K would be infeasible and the impact at that location would be significant and unavoidable.

**B. Study Roadway Segment Mitigation Measure**

The proposed Project would significantly impact Avenue K, to the east of 60<sup>th</sup> Street, in the p.m. peak period according to City-defined impact thresholds. The impacted segment is a two-lane roadway. Outside of the study area and closer to the developed area of Lancaster, the Avenue K roadway is wider. To the east of 40<sup>th</sup> Street, Avenue K is a four-lane roadway.

To mitigate the significant traffic impact of the proposed Project at this roadway segment, it is recommended that the roadway be upgraded to a four-lane cross-section. This improvement should be implemented along the Avenue K segment between the 60<sup>th</sup> Street and 45<sup>th</sup> Street intersections.

**C. Fair-Share Calculations**

The proposed Project's fair-share of impacts at the study intersections have been calculated, as multiple future area projects will generate potentially-significant traffic volumes at each impacted location. All intersection volumes are based on the total of all four approach volumes. Data from the weekday a.m. peak and p.m. peak periods were used for both the study intersection and study roadway segment calculations.

**Study Intersection Fair-Share**

The fair-share calculation summaries for the study intersections are provided in Table 18 (a.m. peak) and Table 19 (p.m. peak). The highest project share at any single intersection for one peak time period is 18 percent. It is recommended that the proposed Project pay a fair-share contribution toward the proposed mitigation measures, based on the highest calculated percentage for each intersection.

**Table 18 – Project Share of New Area Traffic  
at Impacted Intersections – AM Peak**

#	Intersection	Project Traffic	Project + Area Projects	Project % Share
2	60th Street / Avenue J	88	1,283	<b>7%</b>
4	60th Street / Avenue J-8	88	955	<b>9%</b>
5	70th Street / Avenue K	54	933	<b>6%</b>
6	62nd Street / Avenue K	54	887	<b>6%</b>
7	60th Street / Avenue K	133	1,859	<b>7%</b>
8	50th Street / Avenue K	67	1,535	<b>4%</b>
9	45th Street / Avenue K	47	1,459	<b>3%</b>
10	60th Street / Avenue K-8	64	731	<b>9%</b>
12	60th Street / Avenue L	64	1,430	<b>4%</b>

**Table 19 – Project Share of New Area Traffic  
at Impacted Intersections – PM Peak**

#	Intersection	Project Traffic	Project + Area Projects	Project % Share
2	60th Street / Avenue J	319	2,167	<b>15%</b>
4	60th Street / Avenue J-8	319	1,721	<b>19%</b>
5	70th Street / Avenue K	200	1,414	<b>14%</b>
6	62nd Street / Avenue K	199	1,326	<b>15%</b>
7	60th Street / Avenue K	479	3,046	<b>16%</b>
8	50th Street / Avenue K	243	2,708	<b>9%</b>
9	45th Street / Avenue K	170	2,555	<b>7%</b>
10	60th Street / Avenue K-8	236	1,383	<b>17%</b>
12	60th Street / Avenue L	236	3,119	<b>8%</b>
13	50th Street / Avenue L	149	2,394	<b>6%</b>
14	60th Street / Avenue L-8	120	1,237	<b>10%</b>

Study Roadway Segment Fair-Share

The Project fair-share for the mitigation at the impacted study roadway segment has been calculated to be 16.6% for the analyzed weekday daily period analyzed for this report.

It is recommended that the proposed Project pay a fair-share contribution toward the proposed mitigation measure, based on this calculated percentage.

---

## APPENDIX A

### Analysis Methodologies

---

#### **DEFINITIONS OF LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS**

##### LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

<u>Level of Service</u>	<u>Intersection Capacity Utiliz. Value (ICU)</u>	<u>Definition</u>
A	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one Red light and no approach phase is fully used.
B	0.601 - 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 – 0.800	GOOD. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 – 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 – 1.00	POOR. Represents the most vehicles that intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	Greater than 1.000	FAILURE. Backups from nearby intersections or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

## TWO-WAY STOP CONTROLLED INTERSECTIONS

Unsignalized (two-way stop controlled) intersection level of service is reported for the major street and minor street (generally, left-turn movements). The method assesses available and critical gaps in the traffic stream, which make it possible for side street traffic to enter the main street flow. The *2000 Highway Capacity Manual* describes the detailed methodology. It is not unusual for an intersection to experience Level of Service E or F conditions for the minor street left-turn movements. It should be understood that, often, a poor level of service is experienced by only a few vehicles and that the intersection as a whole operates acceptably.

Unsignalized levels of service are described in the following table.

Delay (seconds)	Level of Service
0-10	A
10-15	B
15-25	C
25-35	D
35-50	E
>50	F

Source: *2000 Highway Capacity Manual*, Transportation Research Board, Washington, D.C.

**APPENDIX B**  
**Traffic Count Data**

---

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 70th St West

DATE: 8/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave J

DAY: THURSDAY

PROJECT# 07-2392-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM													
6:15 AM													
6:30 AM	0	7	5	1	5		0	7	0	3	6	0	34
6:45 AM	0	9	17	3	11		0	8	2	6	7	1	64
7:00 AM	0	14	8	0	22		0	14	1	17	13	0	89
7:15 AM	1	35	40	2	8		0	8	2	5	18	0	119
7:30 AM	1	15	26	3	5		0	23	0	5	11	2	91
7:45 AM	0	11	6	2	7		1	14	2	5	12	2	62
8:00 AM	0	4	4	0	2		0	7	0	2	5	0	24
8:15 AM	0	8	3	0	5		0	10	1	0	5	0	32
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	2	103	109	11	65	0	1	91	8	43	77	5	515

AM Peak Hr Begins at: 645 AM

PEAK VOLUMES =	2	73	91	8	46	0	0	53	5	33	49	3	363
PEAK HR. FACTOR:		0.546			0.614			0.630			0.708		0.763

CONTROL: 2-Way Stop N & S

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 70th St West

DATE: 8/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave J

DAY: THURSDAY

PROJECT# 07-2392-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	10	1	0	7		0	4	0	0	2	0	24
4:15 PM	0	8	1	0	6		0	16	0	3	5	0	39
4:30 PM	0	10	3	0	10		0	10	1	2	11	2	49
4:45 PM	0	8	4	1	12		1	13	0	10	12	2	63
5:00 PM	1	8	5	1	5		0	14	0	8	10	1	53
5:15 PM	2	7	1	1	5		0	8	0	6	8	1	39
5:30 PM	0	12	6	0	8		0	13	0	6	11	0	56
5:45 PM	1	14	2	0	12		0	7	0	2	24	1	63
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	4	77	23	3	65	0	1	85	1	37	83	7	386

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	4	41	14	2	30	0	0	42	0	22	53	3	211
PEAK HR. FACTOR:		0.819			0.667			0.750			0.722		0.837

CONTROL: 2-Way Stop N & S

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 60th St

DATE: 5/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave J

DAY: WEDNESDAY

PROJECT# 07-2252-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL 1	NT 1.5	NR 0.5	SL 1	ST 1	SR 0	EL 1	ET 2	ER 1	WL 1	WT 1	WR 1	
6:00 AM													
6:15 AM													
6:30 AM	0	41	14	3	19	1	8	17	11	6	18	20	158
6:45 AM	1	51	27	10	29	2	10	24	7	12	27	33	233
7:00 AM	2	38	42	7	42	1	10	32	14	31	23	38	280
7:15 AM	4	49	50	8	28	5	11	46	19	40	22	57	339
7:30 AM	5	61	65	9	29	0	15	54	7	36	12	41	334
7:45 AM	3	49	46	6	34	2	11	40	4	14	9	82	300
8:00 AM	1	40	37	6	19	0	5	15	0	17	11	28	179
8:15 AM	3	26	27	4	19	3	4	22	1	13	15	12	149
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	19	355	308	53	219	14	74	250	63	169	137	311	1972

AM Peak Hr Begins at: 700 AM

PEAK VOLUMES =	14	197	203	30	133	8	47	172	44	121	66	218	1253
PEAK HR. FACTOR:		0.790			0.855			0.865			0.851		0.924

CONTROL: 4-Way Stop

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 60th St

DATE: 5/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave J

DAY: WEDNESDAY

PROJECT# 07-2252-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1	1	1.5	0.5	1	1	0	1	2	1	1	1	1	220
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	4	23	24	34	53	4	1	16	6	28	18	9	220
4:15 PM	3	32	18	12	51	4	2	26	1	35	30	12	226
4:30 PM	0	29	25	47	61	9	3	16	4	32	23	5	254
4:45 PM	2	35	28	23	47	11	4	13	10	32	31	10	246
5:00 PM	7	24	24	24	56	7	2	23	4	30	23	4	228
5:15 PM	1	16	22	16	51	1	1	21	8	30	28	5	200
5:30 PM	2	32	23	15	40	0	2	27	1	23	22	9	196
5:45 PM	3	30	22	7	26	4	3	27	7	30	25	5	189
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	22	221	186	178	385	40	18	169	41	240	200	59	1759

PM Peak Hr Begins at: 4:15 PM

PEAK VOLUMES =	12	120	95	106	215	31	11	78	19	129	107	31	954
PEAK HR. FACTOR:		0.873			0.752			0.931			0.867		0.939

CONTROL: 4-Way Stop

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-001A

Location: 60th St &amp; Avenue J

City: Lancaster

Date: 05/23/2007

Day: WEDNESDAY

## LANES:

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:30	RTOR											
	Trucks		2			1			2		1	3
	Bus					4			2			1
6:45	RTOR											
	Trucks	1	1	1		1	1		2			4
	Bus		1		1	1						1
7:00	RTOR											
	Trucks	1	1		1	1			7	1		4
	Bus					1		1	2	1		1
7:15	RTOR											
	Trucks	2	1	1	1	1	3	1	10	1	1	12
	Bus		2		1	1		1		2		1
7:30	RTOR											
	Trucks		2	1	1	2			13			5
	Bus					1			1			
7:45	RTOR											
	Trucks		1	1		1			1		1	1
	Bus											
8:00	RTOR											
	Trucks			1		1			2		1	
	Bus					1						
8:15	RTOR											
	Trucks			2			1		5		4	4
	Bus		1	1		1	1					

## MOVEMENT TOTALS

RTOR	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	4	8	7	3	8	5	1	42	2	8	33	2
Bus	0	4	1	3	9	1	2	3	5	0	4	0
TOTALS	4	12	8	6	17	6	3	45	7	8	37	2

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 715 AM

PEAK

VOLUMES =

4 8 3 | 6 8 4 | 3 35 5 | 1 28 2

PEAK HR.

FACTOR:

0.625 0.643 0.717 0.517

CONTROL:

15

45 Start Time -15 MINUTES

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-001A

Location: 60th St &amp; Avenue J

City: Lancaster

Date: 05/23/2007

Day: WEDNESDAY

## LANES:

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
16:00	RTOR											
	Trucks	1			1			2				2
	Bus											1
16:15	RTOR											
	Trucks				2			1				
	Bus		1									
16:30	RTOR											
	Trucks	1						1		3		
	Bus							1				
16:45	RTOR											
	Trucks				1							
	Bus											
17:00	RTOR											
	Trucks							3				
	Bus				1							
17:15	RTOR											
	Trucks		1			1					1	
	Bus					2						
17:30	RTOR											
	Trucks		1					1	2		1	1
	Bus			1								
17:45	RTOR											
	Trucks		2		1						1	
	Bus											

## MOVEMENT TOTALS

RTOR	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	2	4	0	1	5	0	1	9	0	5	2	2
Bus	0	2	0	0	3	0	0	1	0	0	0	1
TOTALS	2	6	0	1	8	0	1	10	0	5	2	3

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 1700 PM

PEAK

VOLUMES =

0 5 0 | 1 4 0 | 1 5 0 | 2 2 0 |

PEAK HR.

FACTOR:

0.625

0.417

0.500

0.500

CONTROL:

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 50th St

DATE: 5/22/2007

LOCATION: City of Lancaster

E-W STREET: Ave J

DAY: TUESDAY

PROJECT# 07-2252-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 0	ER 1	WL 1	WT 1	WR 0	
6:00 AM													
6:15 AM													
6:30 AM	5	11	9	0	10	0	2	40	1	9	50	1	138
6:45 AM	10	22	10	0	13	2	1	55	3	4	65	2	187
7:00 AM	5	29	22	4	8	4	5	70	3	7	78	5	240
7:15 AM	15	34	16	3	15	5	2	102	3	17	70	4	286
7:30 AM	21	32	21	4	18	4	2	112	7	13	91	1	326
7:45 AM	15	29	27	1	14	1	4	92	4	10	72	4	273
8:00 AM	5	21	28	0	9	1	0	51	2	11	43	1	172
8:15 AM	6	14	16	0	5	0	0	43	3	9	48	1	145
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	82	192	149	12	92	17	16	565	26	80	517	19	1767

AM Peak Hr Begins at: 700 AM

PEAK VOLUMES =	56	124	86	12	55	14	13	376	17	47	311	14	1125
PEAK HR. FACTOR:		0.899			0.779			0.839			0.886		0.863

CONTROL: Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 50th St

DATE: 5/22/2007

LOCATION: City of Lancaster

E-W STREET: Ave J

DAY: TUESDAY

PROJECT# 07-2252-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	4	11	16	0	16	1	0	69	4	24	58	0	203
4:15 PM	2	20	11	1	29	2	1	58	0	14	50	1	189
4:30 PM	1	10	16	2	19	3	1	85	2	18	55	2	214
4:45 PM	3	17	15	4	24	3	0	68	1	21	49	0	205
5:00 PM	3	13	15	4	27	3	2	73	1	30	66	6	243
5:15 PM	3	15	10	1	26	4	0	57	6	27	68	1	218
5:30 PM	0	19	14	2	23	3	0	61	3	27	65	0	217
5:45 PM	0	12	14	3	15	2	0	44	4	17	50	2	163
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	16	117	111	17	179	21	4	515	21	178	461	12	1652

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	9	64	54	11	100	13	2	259	11	105	248	7	883
PEAK HR. FACTOR:		0.907			0.912			0.895			0.882		0.908

CONTROL: Signalized

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-002A

Location: 50th St &amp; Avenue J

City: Lancaster

Date: 05/22/2007

Day: TUESDAY

## LANES:

		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:30	RTOR			3									
	Trucks												
	Bus												
6:45	RTOR			2						1			
	Trucks	1	1			1							
	Bus												
7:00	RTOR			4									
	Trucks		2			2					2		
	Bus												1
7:15	RTOR			2			1			1			
	Trucks		2						2			1	
	Bus			1									
7:30	RTOR			6			1						
	Trucks		2			3			2			9	1
	Bus								2				
7:45	RTOR			5			1						
	Trucks		1			2						1	
	Bus												1
8:00	RTOR			7					1				1
	Trucks		2								1	1	
	Bus		1			1							
8:15	RTOR		1	8									
	Trucks					2			4			3	1
	Bus			1					3				2

## MOVEMENT TOTALS

RTOR	0	1	37	0	0	3	0	0	3	0	0	1
Trucks	1	9	1	0	10	0	0	8	0	1	17	2
Bus	0	1	2	0	1	0	0	5	0	0	1	3
TOTALS	1	11	40	0	11	3	0	13	3	1	18	6

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 800 AM

PEAK

VOLUMES =

0 6 28 | 0 8 2 | 0 11 1 | 1 15 5 |

PEAK HR.

FACTOR:

0.850 0.625 0.429 0.525

CONTROL:

15

45 Start Time -15 MINUTES

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-002A

Location: 50th St &amp; Avenue J

City: Lancaster

Date: 05/22/2007

Day: TUESDAY

## LANES:

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
16:00	RTOR			7						1		
	Trucks		1			1			1	1	1	
	Bus			1					1		1	
16:15	RTOR			3			1					
	Trucks		2			1			2			
	Bus			1								
16:30	RTOR			7			2					
	Trucks				1							
	Bus											
16:45	RTOR			8			2					
	Trucks								2			
	Bus											
17:00	RTOR			4			2					1
	Trucks	2			1				2		5	1
	Bus											
17:15	RTOR			4			1					
	Trucks				1				3		1	
	Bus											
17:30	RTOR			5			2					
	Trucks				1	1						
	Bus											
17:45	RTOR			5			1					
	Trucks								3			
	Bus											

## MOVEMENT TOTALS

RTOR	0	0	43	0	0	11	0	0	1	0	0	1
Trucks	2	3	0	2	4	1	0	13	1	2	5	1
Bus	0	0	2	0	0	0	0	1	0	1	0	0
TOTALS	2	3	45	2	4	12	0	14	2	3	5	2

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 1630 PM

PEAK

VOLUMES =

2 2 23 | 2 1 7 | 0 7 0 | 1 5 2 |

PEAK HR.

FACTOR:

0.844

0.833

0.750

0.286

CONTROL:

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 60th St

DATE: 5/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave J-8

DAY: WEDNESDAY

PROJECT# 07-2252-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 0	ER 1	WL 0	WT 1	WR 0	
6:00 AM													
6:15 AM													
6:30 AM	4	47	0	0	20	2	0	0	14	1	0	0	88
6:45 AM	14	84	4	1	60	4	6	0	17	1	0	1	192
7:00 AM	15	65	3	3	70	11	4	0	42	2	0	0	215
7:15 AM	67	78	5	0	59	39	9	1	83	1	0	1	343
7:30 AM	84	91	3	0	41	62	7	0	157	2	0	2	449
7:45 AM	18	97	7	0	41	3	14	2	74	3	0	1	260
8:00 AM	5	55	6	0	44	2	3	0	11	2	1	0	129
8:15 AM	6	53	1	3	32	1	4	0	14	1	0	3	118
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	213	570	29	7	367	124	47	3	412	13	1	8	1794

AM Peak Hr Begins at: 700 AM

PEAK VOLUMES =	184	331	18	3	211	115	34	3	356	8	0	4	1267
PEAK HR. FACTOR:				0.749			0.799			0.599		0.750	0.705

CONTROL: 2-Way Stop E & W

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 60th St

DATE: 5/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave J-8

DAY: WEDNESDAY

PROJECT# 07-2252-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	9	45	0	0	68	5	1	0	24	1	1	154	
4:15 PM	18	46	1	0	69	4	4	0	11	0	1	154	
4:30 PM	6	45	1	1	89	7	4	0	17	0	1	171	
4:45 PM	10	36	0	0	70	8	5	0	23	0	0	152	
5:00 PM	23	43	1	2	72	7	5	0	15	0	0	168	
5:15 PM	11	47	1	0	70	13	3	1	19	1	0	166	
5:30 PM	13	58	0	0	88	11	3	0	18	0	1	192	
5:45 PM	14	78	0	0	61	7	3	0	8	2	0	173	
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	104	398	4	3	587	62	28	1	135	4	0	4	1330

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	61	226	2	2	291	38	14	1	60	3	0	1	699
PEAK HR. FACTOR:		0.785			0.836			0.815			0.500		0.910

CONTROL: 2-Way Stop E & W

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-003A

Location: 60th St &amp; Avenue J-8

City: Lancaster

Date: 05/23/2007

Day: WEDNESDAY

## LANES:

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:30	RTOR											
	Trucks											
	Bus											
6:45	RTOR											
	Trucks				1	3						
	Bus	2	1			5			1			
7:00	RTOR											
	Trucks		1			2						
	Bus	1				2			1			
7:15	RTOR											
	Trucks		4			1				1		
	Bus		2			1	2			1		
7:30	RTOR											
	Trucks	1	2			4				1		
	Bus									1		
7:45	RTOR											
	Trucks	1	1			2		1		1		
	Bus									1		
8:00	RTOR											
	Trucks	2	4			3						
	Bus					1						
8:15	RTOR											
	Trucks	1	3		1	1				1	2	
	Bus		1									2

## MOVEMENT TOTALS

RTOR	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	5	15	0	2	16	0	1	0	3	2	0	2
Bus	3	4	0	0	9	2	0	0	5	0	0	0
TOTALS	8	19	0	2	25	2	1	0	8	2	0	2

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 715 AM

PEAK

VOLUMES =

4 10 0 | 1 18 2 | 0 0 5 | 0 0 0

PEAK HR.

FACTOR:

0.583 0.583 0.625 0.000

CONTROL:

15

45 Start Time -15 MINUTES

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-003A

Location: 60th St &amp; Avenue J-8

City: Lancaster

Date: 05/23/2007

Day: WEDNESDAY

## LANES:

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
16:00	RTOR											
	Trucks					3						
	Bus											
16:15	RTOR											
	Trucks											
	Bus			2								
16:30	RTOR											
	Trucks					1						
	Bus											
16:45	RTOR											
	Trucks					2						
	Bus											
17:00	RTOR											
	Trucks		1			2						
	Bus	1	1			1						
17:15	RTOR											
	Trucks	1	1									
	Bus		1			2						
17:30	RTOR											
	Trucks		1			2						
	Bus											
17:45	RTOR											
	Trucks		2			1						
	Bus											

## MOVEMENT TOTALS

RTOR	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	1	5	0	0	11	0	0	0	0	0	0	0
Bus	1	2	2	0	3	0	0	0	0	0	0	0
TOTALS	2	7	2	0	14	0	0	0	0	0	0	0

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 1700 PM

PEAK

VOLUMES =

2 7 0 | 0 8 0 | 0 0 0 | 0 0 0 |

PEAK HR.

FACTOR:

0.750

0.667

0.000

0.000

CONTROL:

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 70th St

DATE: 5/22/2007

LOCATION: City of Lancaster

E-W STREET: Ave K

DAY: TUESDAY

PROJECT# 07-2252-004

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM													
6:15 AM													
6:30 AM	4	16	0	2	10	0	0	8	3	0	8	0	51
6:45 AM	5	21	10	1	18	0	0	8	9	3	16	0	91
7:00 AM	8	28	22	1	18	0	0	14	11	10	17	1	130
7:15 AM	5	63	40	0	17	0	1	14	10	6	9	0	165
7:30 AM	2	30	32	2	11	1	0	24	3	7	17	0	129
7:45 AM	2	15	6	0	10	0	0	19	2	5	14	0	73
8:00 AM	4	14	9	0	5	0	0	10	7	6	6	1	62
8:15 AM	5	9	15	1	5	0	0	11	2	3	14	0	65
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	35	196	134	7	94	1	1	108	47	40	101	2	766

AM Peak Hr Begins at: 645 AM

PEAK VOLUMES =	20	142	104	4	64	1	1	60	33	26	59	1	515
PEAK HR. FACTOR:		0.616			0.908			0.870			0.768		0.780

CONTROL: 4- Way Stop

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 70th St

DATE: 5/22/2007

LOCATION: City of Lancaster

E-W STREET: Ave K

DAY: TUESDAY

PROJECT# 07-2252-004

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	4	11	2	0	7		20	3	0	16	2	65	
4:15 PM	2	10	3	0	10		18	3	3	10	1	60	
4:30 PM	1	14	2	1	7		11	3	4	20	0	63	
4:45 PM	2	12	5	1	7		18	5	3	9	0	62	
5:00 PM	2	16	3	0	8		18	5	6	30	0	88	
5:15 PM	2	12	9	0	12		26	5	5	16	2	89	
5:30 PM	2	15	2	1	13		20	2	6	8	1	70	
5:45 PM	0	14	4	0	14		16	3	3	12	0	66	
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	15	104	30	3	78	0	0	147	29	30	121	6	563

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	6	57	18	1	47	0	0	80	15	20	66	3	313
PEAK HR. FACTOR:		0.880			0.857			0.766			0.618		0.879

CONTROL: 4- Way Stop

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-004A

Location: 70th St &amp; Avenue K

City: Lancaster

Date: 05/22/2007

Day: TUESDAY

## LANES:

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:30	RTOR											
	Trucks											
	Bus											
6:45	RTOR											
	Trucks					1					2	
	Bus				1				1	1		
7:00	RTOR											
	Trucks	1	1								1	
	Bus	1	1	1								
7:15	RTOR											
	Trucks				1							
	Bus			2	1							
7:30	RTOR											
	Trucks							1		1	1	
	Bus											
7:45	RTOR											
	Trucks			1		1					1	
	Bus											
8:00	RTOR											
	Trucks			1							1	
	Bus								1			
8:15	RTOR											
	Trucks			1				2		2	1	
	Bus											

## MOVEMENT TOTALS

RTOR	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	1	1	4	0	2	0	0	3	0	5	5	0
Bus	1	3	2	0	1	0	0	0	2	1	0	0
TOTALS	2	4	6	0	3	0	0	3	2	6	5	0

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 715 AM

PEAK

VOLUMES =

2 4 3 | 0 2 0 | 0 1 1 | 2 4 0 |

PEAK HR.

FACTOR:

0.450

0.250

0.500

0.500

CONTROL:

15

45 Start Time -15 MINUTES

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-004A

Location: 70th St &amp; Avenue K

City: Lancaster

Date: 05/22/2007

Day: TUESDAY

## LANES:

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
16:00	RTOR											
	Trucks											2
	Bus											
16:15	RTOR											
	Trucks		1						3			1
	Bus											
16:30	RTOR											
	Trucks		1						1			
	Bus											
16:45	RTOR											
	Trucks											
	Bus											
17:00	RTOR											
	Trucks					1				1		1
	Bus											
17:15	RTOR											
	Trucks		1						4	2		
	Bus											
17:30	RTOR											
	Trucks											
	Bus											
17:45	RTOR											
	Trucks								1			2
	Bus											

## MOVEMENT TOTALS

RTOR	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	3	0	0	1	0	0	9	3	0	5	1
Bus	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	0	3	0	0	1	0	0	9	3	0	5	1

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 1700 PM

PEAK

VOLUMES =

0 1 0 | 0 1 0 | 0 5 3 | 0 3 0 |

PEAK HR.

FACTOR:

0.250 0.250 0.333 0.375 |

CONTROL:

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 62nd St

DATE: 5/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave K

DAY: WEDNESDAY

PROJECT# 07-2252-005

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM													
6:15 AM													
6:30 AM	3	1	21	1	0		2	28	1	4	11	0	72
6:45 AM	2	0	31	0	0		0	41	2	7	12	2	97
7:00 AM	0	0	21	0	0		0	61	7	4	12	16	121
7:15 AM	1	0	20	1	1		0	43	1	8	6	13	94
7:30 AM	1	0	10	0	2		0	19	0	7	11	5	55
7:45 AM	0	0	10	2	0		0	14	0	3	10	1	40
8:00 AM	0	0	9	1	0		0	14	0	6	8	1	39
8:15 AM	0	0	7	0	0		0	21	0	7	5	3	43
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	7	1	129	5	3	0	2	241	11	46	75	41	561

AM Peak Hr Begins at: 630 AM

PEAK VOLUMES =	6	1	93	2	1	0	2	173	11	23	41	31	384
PEAK HR. FACTOR:			0.758			0.375			0.684			0.742	0.793

CONTROL: 2-Way Stop N & S

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 62nd St

DATE: 5/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave K

DAY: WEDNESDAY

PROJECT# 07-2252-005

LANES:	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL			
	0	1	0	0	1	0	1	1	0	1	2	0	52			
1:00 PM																
1:15 PM																
1:30 PM																
1:45 PM																
2:00 PM																
2:15 PM																
2:30 PM																
2:45 PM																
3:00 PM																
3:15 PM																
3:30 PM																
3:45 PM																
4:00 PM	1	1	8	0			0	13	0	13	16		52			
4:15 PM	0	0	6	0			1	17	0	11	31		66			
4:30 PM	1	1	12	1			0	12	2	13	19		61			
4:45 PM	0	0	11	1			1	15	0	13	18		59			
5:00 PM	1	0	7	0			0	20	2	13	15		58			
5:15 PM	0	0	11	0			0	20	1	16	15		63			
5:30 PM	0	0	9	0			0	15	1	18	13		56			
5:45 PM	0	0	12	0			0	21	0	11	15		59			
6:00 PM																
6:15 PM																
6:30 PM																
6:45 PM																
<b>TOTAL VOLUMES =</b>	<b>3</b>	<b>2</b>	<b>76</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>133</b>	<b>6</b>	<b>108</b>	<b>142</b>	<b>0</b>	<b>474</b>			

PM Peak Hr Begins at: 4:15 PM

PEAK VOLUMES =	2	1	36	2	0	0	2	64	4	50	83	0	244		
PEAK HR. FACTOR:			0.696			0.500			0.795			0.792		0.924	

CONTROL: 2-Way Stop N & S

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-005A

Location: 62nd St &amp; Avenue K

City: Lancaster

Date: 05/23/2007

Day: WEDNESDAY

## LANES:

		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:30	RTOR												
	Trucks								1			2	3
	Bus												
6:45	RTOR												
	Trucks								4				3
	Bus												
7:00	RTOR												
	Trucks								9			15	
	Bus												
7:15	RTOR												
	Trucks								14		1		11
	Bus												
7:30	RTOR												
	Trucks								5			2	
	Bus												
7:45	RTOR												
	Trucks										2		1
	Bus												
8:00	RTOR												
	Trucks			1									1
	Bus												
8:15	RTOR												
	Trucks								3				3
	Bus												

## MOVEMENT TOTALS

RTOR	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	0	1	0	0	0	0	36	0	1	4	39	
Bus	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	0	0	1	0	0	0	0	36	0	1	4	39	

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 715 AM

PEAK

VOLUMES =

0 0 0 | 0 0 0 | 0 32 0 | 1 0 31 |

PEAK HR.

FACTOR:

0.000 0.000 0.571 0.533 |

CONTROL:

15

45 Start Time -15 MINUTES

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-005A

Location: 62nd St &amp; Avenue K

City: Lancaster

Date: 05/23/2007

Day: WEDNESDAY

## LANES:

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
16:00	RTOR											
	Trucks											
	Bus											
16:15	RTOR											
	Trucks											1
	Bus											
16:30	RTOR											
	Trucks											
	Bus											
16:45	RTOR											
	Trucks											
	Bus											
17:00	RTOR											
	Trucks											
	Bus											
17:15	RTOR											
	Trucks						2					
	Bus											
17:30	RTOR											
	Trucks						1					
	Bus											
17:45	RTOR											
	Trucks											
	Bus											

## MOVEMENT TOTALS

RTOR	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	0	0	3	0	0	0	0	0	1	0	0
Bus	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	0	0	0	3	0	0	0	0	0	1	0	0

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 1715 PM

PEAK

VOLUMES =

0 0 0 | 3 0 0 | 0 0 0 | 0 0 0 |

PEAK HR.

FACTOR:

0.000 0.375 0.000 0.000 |

CONTROL:

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 60th St

DATE: 5/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave K

DAY: WEDNESDAY

PROJECT# 07-2252-006

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM													
6:15 AM													
6:30 AM	2	53	23	7	26	1	12	34	6	23	12	22	221
6:45 AM	5	54	31	4	32	0	16	42	16	33	16	49	298
7:00 AM	4	84	45	4	27	2	22	55	7	35	26	40	351
7:15 AM	4	100	49	6	20	4	16	48	2	8	19	62	338
7:30 AM	1	57	19	8	22	1	5	21	3	15	21	34	207
7:45 AM	2	38	21	6	14	3	3	19	4	14	9	22	155
8:00 AM	2	43	21	7	16	5	0	21	2	18	8	22	165
8:15 AM	4	36	39	7	19	5	3	22	3	10	6	27	181
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	24	465	248	49	176	21	77	262	43	156	117	278	1916

AM Peak Hr Begins at: 630 AM

PEAK VOLUMES =	15	291	148	21	105	7	66	179	31	99	73	173	1208
PEAK HR. FACTOR:		0.742			0.924			0.821			0.854		0.860

CONTROL: 4-Way Stop

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 60th St

DATE: 5/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave K

DAY: WEDNESDAY

PROJECT# 07-2252-006

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	7	38	20	48	73	1	3	12	6	21	21	8	258
4:15 PM	1	42	16	16	36	6	2	17	4	31	35	18	224
4:30 PM	5	45	22	53	97	7	4	21	0	21	20	7	302
4:45 PM	2	42	17	21	59	5	3	21	3	22	24	10	229
5:00 PM	4	34	14	17	66	6	5	18	4	26	18	8	220
5:15 PM	1	35	20	19	55	5	3	26	2	40	25	11	242
5:30 PM	5	38	25	11	61	2	1	17	6	37	24	7	234
5:45 PM	3	59	24	3	37	1	3	27	3	31	22	5	218
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	28	333	158	188	484	33	24	159	28	229	189	74	1927

PM Peak Hr Begins at: 400 PM

PEAK VOLUMES =	15	167	75	138	265	19	12	71	13	95	100	43	1013
PEAK HR. FACTOR:		0.892			0.672			0.889			0.708		0.839

CONTROL: 4-Way Stop

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-006A

Location: 60th St &amp; Avenue K

City: Lancaster

Date: 05/23/2007

Day: WEDNESDAY

## LANES:

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:30	RTOR											
	Trucks		2			2			1			5 1
	Bus					3						
6:45	RTOR											
	Trucks		1			2		1	3			3
	Bus					3						
7:00	RTOR											
	Trucks	3	1	1		2			9			11
	Bus					2						
7:15	RTOR											
	Trucks		1			1	1	1	13			11
	Bus			2		1						
7:30	RTOR											
	Trucks		2			3	1		5			2
	Bus											
7:45	RTOR											
	Trucks		1			1						2
	Bus											
8:00	RTOR											
	Trucks		3			2	1	1				1
	Bus					1						
8:15	RTOR											
	Trucks		2			1			1			2
	Bus		1									

## MOVEMENT TOTALS

RTOR	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	3	13	1	0	14	3	3	32	0	0	37	1
Bus	0	3	0	0	10	0	0	0	0	0	0	0
TOTALS	3	16	1	0	24	3	3	32	0	0	37	1

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 700 AM

PEAK

VOLUMES =

3 7 1 0 16 1 2 26 0 0 30 1

PEAK HR.

FACTOR:

0.550

0.850

0.500

0.705

CONTROL:

15

45 Start Time -15 MINUTES

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-006A

Location: 60th St &amp; Avenue K

City: Lancaster

Date: 05/23/2007

Day: WEDNESDAY

## LANES:

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
16:00	RTOR											
	Trucks			1	2						2	
	Bus											
16:15	RTOR											
	Trucks			1								
	Bus											
16:30	RTOR											
	Trucks		1									1
	Bus											
16:45	RTOR											
	Trucks			1		2						
	Bus											
17:00	RTOR											
	Trucks		1			1						
	Bus											
17:15	RTOR											
	Trucks		1			2					2	
	Bus					1						
17:30	RTOR											
	Trucks		1								1	
	Bus					1						
17:45	RTOR											
	Trucks		2			1						
	Bus											

## MOVEMENT TOTALS

RTOR	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	6	2	1	8	0	0	3	0	0	3	0
Bus	0	0	0	0	2	0	0	0	0	0	0	0
TOTALS	0	6	2	1	10	0	0	3	0	0	3	0

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 1700 PM

PEAK

VOLUMES =

0 5 1 | 0 7 0 | 0 3 0 | 0 0 0 |

PEAK HR.

FACTOR:

1.000

0.583

0.375

0.000

CONTROL:

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

N-S STREET: 50th St DATE: 3/28/2007 LOCATION: City of Lancaster

E-W STREET: Ave K DAY: WEDNESDAY PROJECT# 07-2118-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	6	36	8	2	19	1	0	40	2	5	48	2	169
7:15 AM	1	37	24	9	14	0	1	65	1	11	36	7	206
7:30 AM	7	44	27	9	8	0	1	67	3	8	37	5	216
7:45 AM	6	36	39	9	16	2	4	75	3	12	30	3	235
8:00 AM	3	28	33	11	20	1	2	63	4	10	40	7	222
8:15 AM	6	25	21	2	19	1	0	67	5	9	25	3	183
8:30 AM	1	15	10	7	10	1	1	49	4	6	30	3	137
8:45 AM	4	28	26	9	13	0	3	62	4	7	30	9	195
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	34	249	188	58	119	6	12	488	26	68	276	39	1563

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	17	145	123	38	58	3	8	270	11	41	143	22	879
PEAK HR. FACTOR:		0.880			0.773			0.881			0.904		0.935

CONTROL: Signalized

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

N-S STREET: 50th St DATE: 3/28/2007 LOCATION: City of Lancaster

E-W STREET: Ave K DAY: WEDNESDAY PROJECT# 07-2118-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	5	26	17	4	33	2	1	60	2	19	51	4	224
4:15 PM	13	26	16	1	34	1	1	61	2	19	64	6	244
4:30 PM	13	25	10	5	34	3	2	61	9	17	54	10	243
4:45 PM	8	23	19	3	37	1	1	54	4	16	55	2	223
5:00 PM	3	23	15	3	32	1	0	42	2	21	63	4	209
5:15 PM	9	25	16	6	37	2	2	65	5	15	55	5	242
5:30 PM	9	22	15	5	37	3	2	53	5	26	67	6	250
5:45 PM	8	20	21	3	43	0	2	61	2	19	72	6	257
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	68	190	129	30	287	13	11	457	31	152	481	43	1892

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	29	90	67	17	149	6	6	221	14	81	257	21	958
PEAK HR. FACTOR:		0.930			0.935			0.837			0.907		0.932

CONTROL: Signalized

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: 45th Street West

DATE: 8/3/2006

LOCATION: City of Lancaster

E-W STREET: Avenue K

DAY: THURSDAY

PROJECT# 06-2303-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL 0	NT 1	NR 0	SL 0	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 1	WR 1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	1	11	2	1	2	1	77	0	7	62	1	165
7:15 AM	0	2	14	8	3	5	0	83	1	6	76	0	198
7:30 AM	1	1	12	5	2	3	0	97	1	5	64	0	191
7:45 AM	0	5	15	3	1	5	1	91	2	3	63	2	191
8:00 AM	0	4	10	3	0	1	0	89	2	6	51	1	167
8:15 AM	1	2	14	4	0	3	1	71	1	4	47	2	153
8:30 AM	0	3	16	2	1	2	0	68	0	6	39	0	137
8:45 AM	0	2	12	2	0	1	0	61	1	5	41	1	126
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
<b>TOTAL VOLUMES =</b>	<b>2</b>	<b>20</b>	<b>104</b>	<b>29</b>	<b>8</b>	<b>22</b>	<b>3</b>	<b>640</b>	<b>8</b>	<b>42</b>	<b>443</b>	<b>7</b>	<b>1328</b>

AM Peak Hr Begins at: 7:15 AM

PEAK VOLUMES =	1	12	51	19	6	14	1	360	6	20	254	3	747
PEAK HR. FACTOR:		0.800			0.609			0.936			0.845		0.943

CONTROL: 4-Way Stop

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: 45th Street West

DATE: 8/3/2006

LOCATION: City of Lancaster

E-W STREET: Avenue K

DAY: THURSDAY

PROJECT# 06-2303-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL 0	NT 1	NR 0	SL 0	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 1	WR 1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	1	1	8	0	1	1	1	81	0	9	71	2	176
4:15 PM	2	2	13	2	2	2	0	79	0	12	84	1	199
4:30 PM	1	3	15	1	1	0	2	86	1	10	86	3	209
4:45 PM	3	2	17	3	0	1	1	71	0	14	77	5	194
5:00 PM	2	4	11	2	2	2	0	67	1	9	68	6	174
5:15 PM	3	3	8	4	3	1	1	68	0	13	74	5	183
5:30 PM	4	5	9	3	3	2	1	75	0	12	71	4	189
5:45 PM	5	7	8	6	5	4	3	84	0	15	80	6	223
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
<b>TOTAL VOLUMES =</b>	<b>21</b>	<b>27</b>	<b>89</b>	<b>21</b>	<b>17</b>	<b>13</b>	<b>9</b>	<b>611</b>	<b>2</b>	<b>94</b>	<b>611</b>	<b>32</b>	<b>1547</b>

PM Peak Hr Begins at: 400 PM

PEAK VOLUMES =	7	8	53	6	4	4	4	317	1	45	318	11	778
PEAK HR. FACTOR:			0.773			0.583			0.904			0.944	0.931

CONTROL: 4-Way Stop

**ALL TRAFFIC RESOURCES**  
**42232 WOODSTONE LN**  
**QUARTZ HILL, CA 93536**  
**(661) 718-8226 (661) 303-1564**

File Name : 60TH & K-8 '07  
Site Code : 03140712  
Start Date : 3/14/2007  
Page No : 1

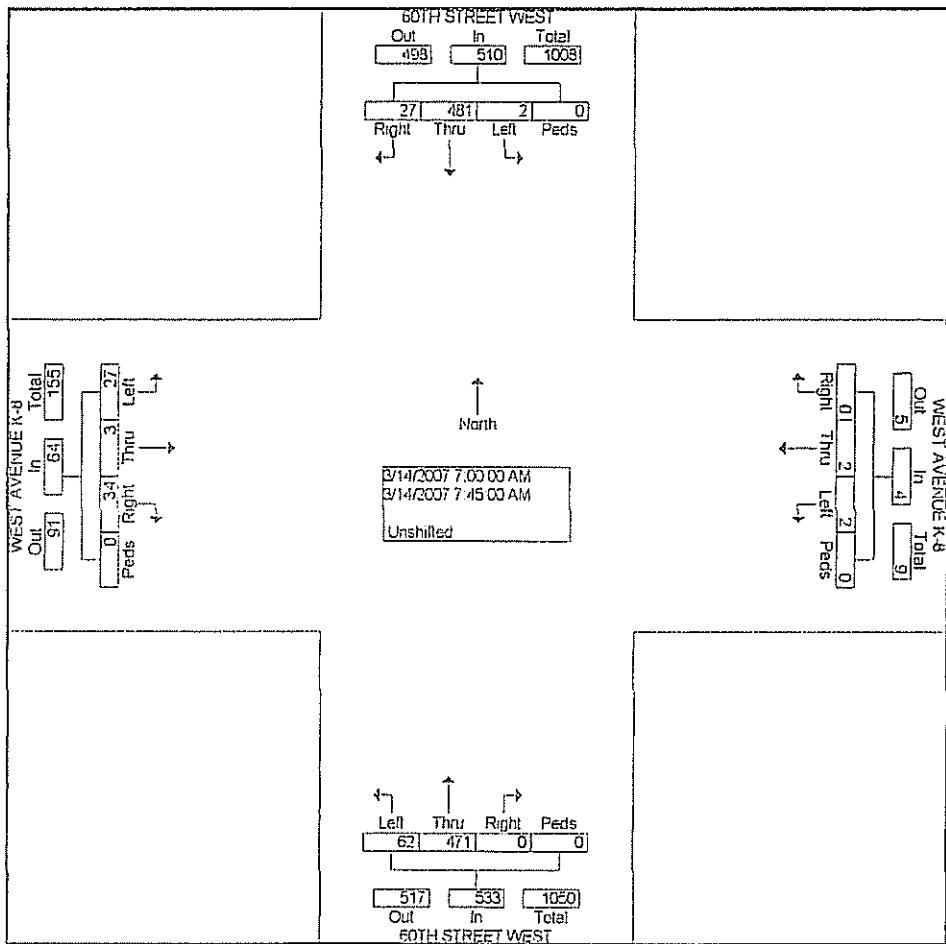
Groups Printed- Unshifted

	60TH STREET WEST				WEST AVENUE K-8				60TH STREET WEST				WEST AVENUE K-8				
	From North		From South		From East		From West		From North		From South		From East		From West		
Start Time Factor	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	7	113	1	0	0	0	0	0	0	93	18	0	5	1	2	0	240
07:15 AM	6	144	0	0	0	0	0	0	0	130	13	0	12	0	5	0	310
07:30 AM	4	107	0	0	0	0	1	0	0	157	12	0	11	2	11	0	305
07:45 AM	10	117	1	0	0	2	1	0	0	91	19	0	6	0	9	0	255
Total	27	481	2	0	0	2	2	0	0	471	62	0	34	3	27	0	1111
08:00 AM	6	67	0	0	0	0	0	0	0	92	7	0	2	0	6	0	180
08:15 AM	1	35	0	0	0	0	0	0	1	68	5	0	4	0	2	0	116
08:30 AM	2	39	2	0	2	0	0	0	1	62	7	0	5	0	1	0	121
08:45 AM	2	51	0	0	0	0	0	0	3	67	5	0	11	0	2	0	141
Total	11	192	2	0	2	0	0	0	5	289	24	0	22	0	11	0	658
<b>*** BREAK ***</b>																	
04:00 PM	2	93	0	0	1	0	0	0	0	84	6	0	9	0	7	0	202
04:15 PM	4	67	1	0	0	1	0	0	0	70	6	0	5	0	3	0	157
04:30 PM	4	83	0	0	0	0	0	0	0	84	9	0	4	0	2	0	166
04:45 PM	5	92	0	0	0	1	0	0	1	59	2	0	7	0	0	0	167
Total	15	335	1	0	1	2	0	0	1	297	23	0	25	0	12	0	712
05:00 PM	1	85	0	0	0	0	0	0	0	88	5	0	3	0	1	0	183
05:15 PM	4	101	0	0	0	0	1	0	0	76	5	0	3	0	2	0	192
05:30 PM	4	84	0	0	0	0	0	0	0	84	8	0	2	0	2	0	184
05:45 PM	4	95	0	0	0	0	0	0	0	95	8	0	3	0	3	0	205
Total	13	365	0	0	0	0	1	0	0	343	26	0	11	0	8	0	767
Grand Total	66	1373	5	0	3	4	3	0	6	1400	135	0	92	3	58	0	3148
Apprch %	4.6	95.1	0.3	0.0	30.0	40.0	30.0	0.0	0.4	90.9	8.8	0.0	60.1	2.0	37.9	0.0	
Total %	2.1	43.6	0.2	0.0	0.1	0.1	0.1	0.0	0.2	44.5	4.3	0.0	2.9	0.1	1.8	0.0	

ALL TRAFFIC RESOURCES  
 42232 WOODSTONE LN  
 QUARTZ HILL, CA 93536  
 (661) 718-8226 (661) 303-1564

File Name : 60TH & K-8 '07  
 Site Code : 03140712  
 Start Date : 3/14/2007  
 Page No : 2

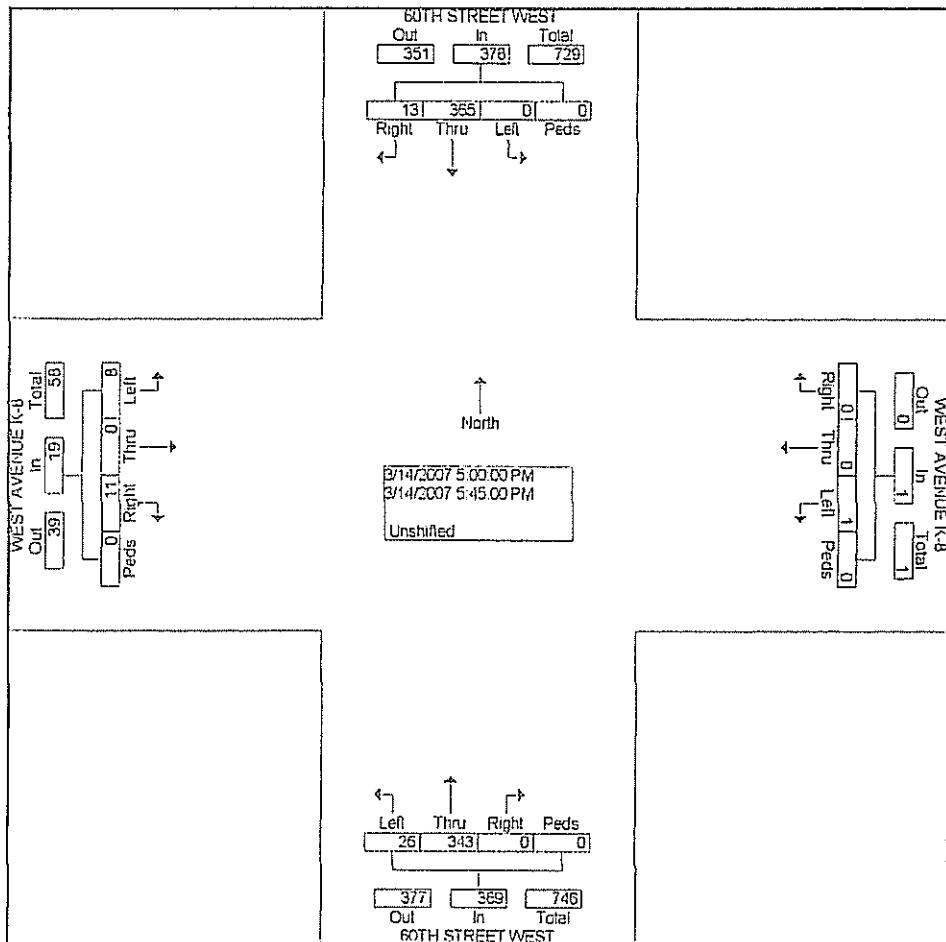
	60TH STREET WEST From North					WEST AVENUE K-8 From East					60TH STREET WEST From South					WEST AVENUE K-8 From West					
Start Time	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Int. Total
<b>Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1</b>																					
Intersection	07:00 AM																				
Volume	27	481	2	0	510	0	2	2	0	4	0	471	62	0	533	34	3	27	0	64	1111
Percent	5.3	94.3	0.4	0.0		0.0	50.0	50.0	0.0		0.0	68.4	11.6	0.0		53.1	4.7	42.2	0.0		
07:15	6	144	0	0	150	0	0	0	0	0	0	130	13	0	143	12	0	5	0	17	310
Volume																					0.896
Peak Factor																					
High Int.	07:15 AM					07:45 AM					07:30 AM					07:30 AM					
Volume	6	144	0	0	150	0	2	1	0	3	0	157	12	0	169	11	2	11	0	24	
Peak Factor						0.850				0.333					0.786						0.667



**ALL TRAFFIC RESOURCES**  
**42232 WOODSTONE LN**  
**QUARTZ HILL, CA 93536**  
**(661) 718-8226 (661) 303-1564**

File Name : 60TH & K-8 '07  
Site Code : 03140712  
Start Date : 3/14/2007  
Page No : 3

Start Time	60TH STREET WEST From North					WEST AVENUE K-8 From East					60TH STREET WEST From South					WEST AVENUE K-8 From West					
	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Int Total
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 off 1																					
Intersection 05:00 PM																					
Volume 13 355 0 0 378	0	0	1	0	1	0	343	26	0	369	11	0	8	0	19						767
Percent 3.4 95.6 0.0 0.0	0.0	0.0	100.0	0.0	0.0	0.0	93.0	7.0	0.0	57.9	0.0	42.1	0.0								
05:45 Volume 4 95 0 0 99	0	0	0	0	0	0	0	95	8	0	103	3	0	3	0	6					208
Peak Factor High Int. 05:15 PM	05:15 PM					05:15 PM				05:45 PM						05:45 PM					0.922
Volume 4 101 0 0 105	0	0	1	0	1	0	95	8	0	103	3	0	3	0	6	0.896	0.792				
Peak Factor						0.250															
High Int.																					
Total 0.900																					



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 70th St West

DATE: 8/23/2007

LOCATION: City of Lancaster

E-W STREET: Avenue L

DAY: THURSDAY

PROJECT# 07-2392-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM													
6:15 AM													
6:30 AM	7	27	11	4	7	1	0	10	0	7	7	5	86
6:45 AM	3	24	22	7	17	0	0	17	6	4	17	5	122
7:00 AM	7	26	79	39	10	7	0	33	3	17	21	8	250
7:15 AM	26	35	28	34	9	5	1	19	1	18	12	61	249
7:30 AM	11	14	17	6	14	0	0	6	12	4	8	16	108
7:45 AM	13	11	14	10	12	0	2	7	6	7	10	11	103
8:00 AM	7	18	12	7	16	3	1	3	8	3	7	13	98
8:15 AM	8	14	10	9	13	1	0	5	4	3	8	8	83
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	82	169	193	116	98	17	4	100	40	63	90	127	1099

AM Peak Hr Begins at: 645 AM

PEAK VOLUMES =	47	99	146	86	50	12	1	75	22	43	58	90	729
PEAK HR. FACTOR:		0.652			0.661			0.681			0.525		0.729

CONTROL: 4 Way Stop

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 70th St West

DATE: 8/23/2007

LOCATION: City of Lancaster

E-W STREET: Avenue L

DAY: THURSDAY

PROJECT# 07-2392-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	10	20	6	19	0	2	11	7	35	3	3	116
4:15 PM	3	15	15	5	28	0	0	10	4	28	8	2	118
4:30 PM	9	11	28	7	17	1	1	9	5	20	6	4	118
4:45 PM	1	10	18	5	30	1	0	12	1	27	12	3	120
5:00 PM	0	15	14	3	23	1	0	4	3	34	10	2	109
5:15 PM	4	13	10	1	24	1	0	9	4	30	13	3	112
5:30 PM	11	10	20	3	26	1	2	10	4	26	16	6	135
5:45 PM	9	13	12	3	18	2	0	2	5	22	12	5	103
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	37	97	137	33	185	7	5	67	33	222	80	28	931

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	16	48	62	12	103	4	2	35	12	117	51	14	476
PEAK HR. FACTOR:		0.768			0.826			0.766			0.948		0.881

CONTROL: 4 Way Stop

**ALL TRAFFIC RESOURCES**  
**42232 WOODSTONE LN**  
**QUARTZ HILL, CA 93536**  
**(661) 718-8226 (661) 303-1564**

File Name : 60TH & L '07  
Site Code : 03140714  
Start Date : 3/14/2007  
Page No : 1

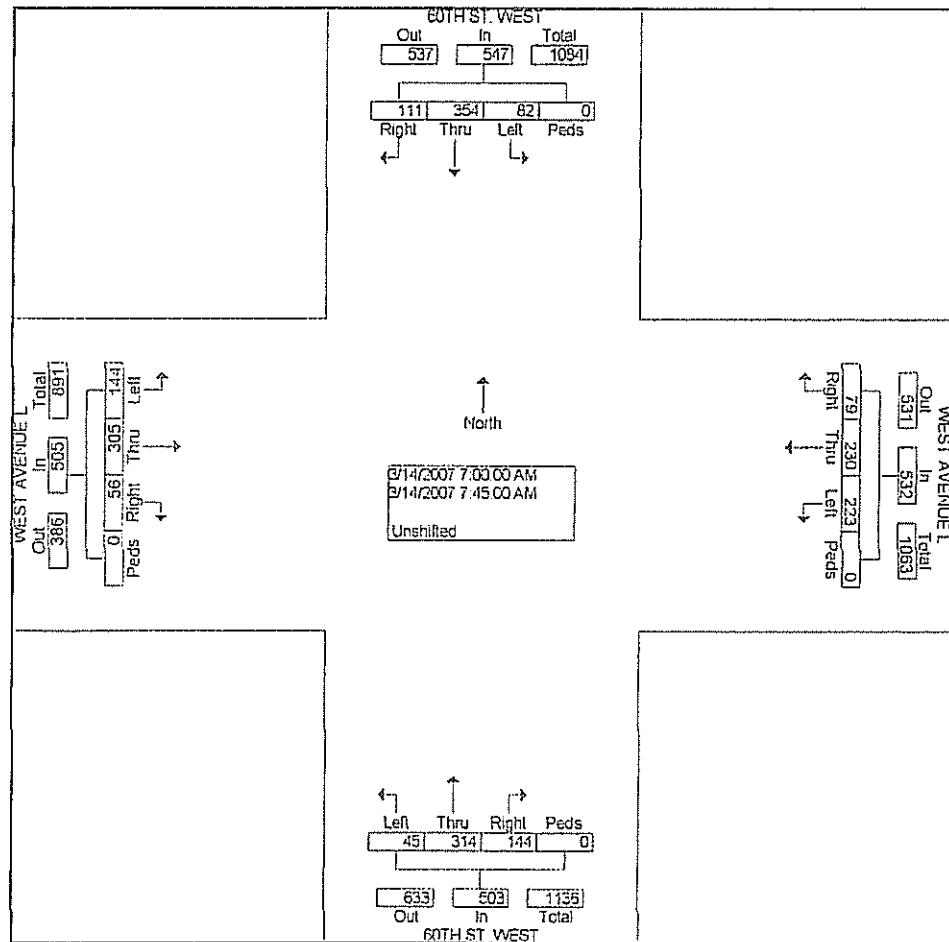
Groups Printed- Unshifted

	60TH ST WEST From North				WEST AVENUE L From East				60TH ST. WEST From South				WEST AVENUE L From West				Int. Total	
	Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	47	98	20	0		22	61	63	0	26	64	14	0	14	86	42	0	597
07:15 AM	35	102	12	0		25	90	107	0	44	71	17	0	23	109	66	0	701
07:30 AM	16	82	27	0		19	31	14	0	37	102	6	0	15	79	31	0	459
07:45 AM	13	72	23	0		13	28	19	0	37	77	8	0	4	31	5	0	330
Total	111	354	82	0		79	230	223	0	144	314	45	0	56	305	144	0	2087
08:00 AM	6	33	16	0		21	36	24	0	26	60	6	0	5	38	13	0	284
08:15 AM	2	28	16	0		13	20	21	0	20	52	4	0	1	28	7	0	212
08:30 AM	6	32	11	0		18	22	25	0	23	48	4	0	2	29	5	0	225
08:45 AM	3	49	12	0		19	16	11	0	29	38	5	0	7	34	10	0	233
Total	17	142	55	0		71	94	81	0	98	198	19	0	15	129	35	0	954
<b>*** BREAK ***</b>																		
04:00 PM	9	73	18	0		20	39	28	0	26	56	3	0	11	29	8	0	320
04:15 PM	6	43	13	0		28	35	33	0	29	56	9	0	5	29	3	0	289
04:30 PM	5	70	20	0		20	35	25	0	24	51	7	0	7	26	4	0	294
04:45 PM	8	83	11	0		22	33	27	0	29	50	8	0	9	23	3	0	306
Total	28	269	62	0		90	142	113	0	108	213	27	0	32	107	18	0	1209
05:00 PM	12	64	20	0		23	40	35	0	27	56	4	0	7	32	6	0	326
05:15 PM	2	88	19	0		28	43	32	0	22	61	9	0	12	30	5	0	351
05:30 PM	9	80	8	0		26	51	50	0	30	56	4	0	10	24	8	0	356
05:45 PM	13	58	20	0		23	37	35	0	41	63	2	0	23	41	11	0	367
Total	36	290	67	0		100	171	152	0	120	236	19	0	52	127	30	0	1400
Grand Total	192	1055	266	0		340	637	569	0	470	961	110	0	155	668	227	0	5650
Approch %	12.7	69.7	17.6	0.0		22.0	41.2	36.8	0.0	30.5	62.4	7.1	0.0	14.8	63.6	21.6	0.0	
Total %	3.4	18.7	4.7	0.0		6.0	11.3	10.1	0.0	8.3	17.0	1.9	0.0	2.7	11.8	4.0	0.0	

**ALL TRAFFIC RESOURCES**  
**42232 WOODSTONE LN**  
**QUARTZ HILL, CA 93536**  
**(661) 718-8226 (661) 303-1564**

File Name : 60TH & L '07  
Site Code : 03140714  
Start Date : 3/14/2007  
Page No : 2

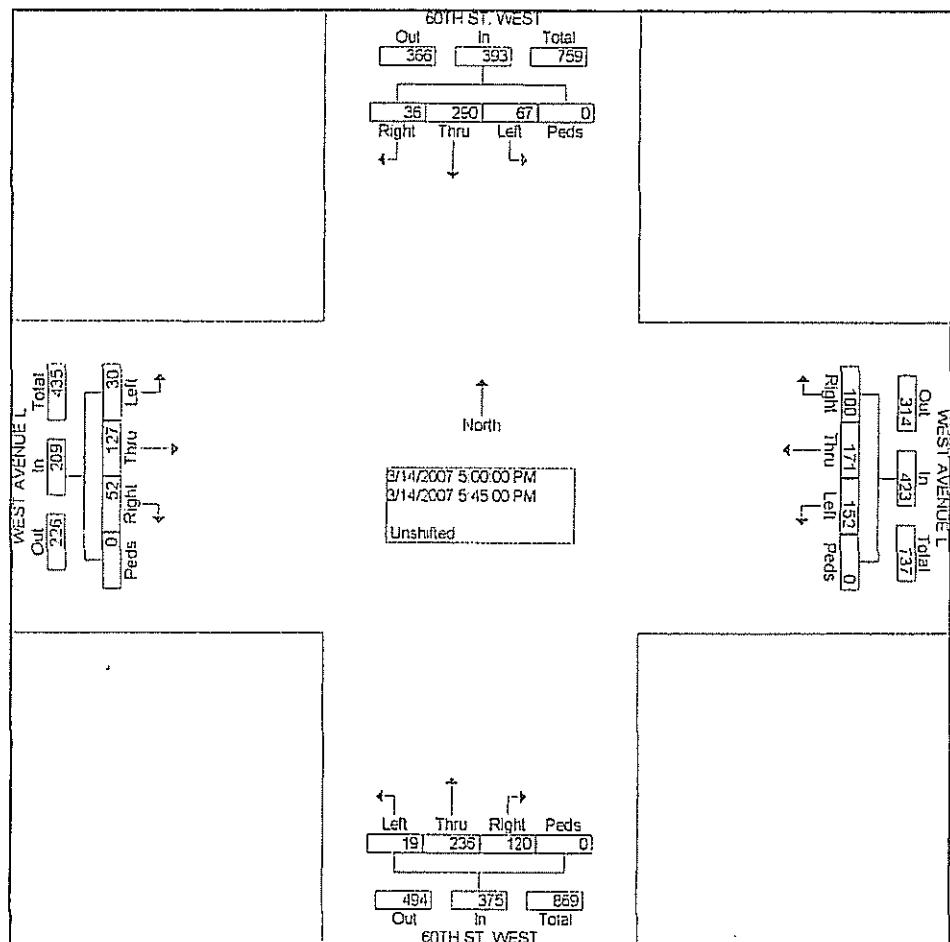
Start Time	60TH ST WEST From North					WEST AVENUE L From East					60TH ST WEST From South					WEST AVENUE L From West					
	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App. Total	Int. Total
<b>Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1</b>																					
Intersection	07:00 AM																				
Volume	111	354	82	0	547	79	230	223	0	532	144	314	45	0	503	56	305	144	0	505	2087
Percent	20.3	64.7	15.0	0.0		14.8	43.2	41.9	0.0		28.6	62.4	8.9	0.0		11.1	60.4	28.5	0.0		
07:15	35	102	12	0	149	25	90	107	0	222	44	71	17	0	132	23	109	66	0	198	701
Volume																					0.744
Peak Factor																					
High Int.	07:00 AM					07:15 AM					07:30 AM					07:15 AM					
Volume	47	98	20	0	165	25	90	107	0	222	37	102	6	0	145	23	109	66	0	198	
Peak Factor																					0.638
					0.829					0.599											



**ALL TRAFFIC RESOURCES**  
**42232 WOODSTONE LN**  
**QUARTZ HILL, CA 93536**  
**(661) 718-8226 (661) 303-1564**

File Name : 60TH & L '07  
Site Code : 03140714  
Start Date : 3/14/2007  
Page No : 3

Start Time	60TH ST. WEST From North					WEST AVENUE L From East					60TH ST. WEST From South					WEST AVENUE L From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
<b>Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1</b>																					
Intersection	05:00 PM																				
Volume	36	290	67	0	393	100	171	152	0	423	120	236	19	0	375	52	127	30	0	209	1400
Percent	9.2	73.8	17.0	0.0		23.6	40.4	35.9	0.0		32.0	62.9	5.1	0.0		24.9	60.8	14.4	0.0		
05:45	13	58	20	0	91	23	37	35	0	95	41	63	2	0	106	23	41	11	0	75	367
Volume																					0.954
Peak Factor																					
High Int.	05:15 PM					05:30 PM					05:45 PM					05:45 PM					
Volume	2	88	19	0	109	26	51	50	0	127	41	63	2	0	106	23	41	11	0	75	
Peak Factor																					0.697



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 50th St

DATE: 5/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave L

DAY: WEDNESDAY

PROJECT# 07-2252-007

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	
6:00 AM													
6:15 AM													
6:30 AM	18	56	13	11	45	21	10	138	6	18	175	8	519
6:45 AM	8	85	48	8	50	23	24	195	10	19	153	9	632
7:00 AM	4	96	41	10	41	4	21	189	10	26	55	6	503
7:15 AM	4	74	63	10	31	10	22	120	4	34	92	8	472
7:30 AM	4	54	17	16	33	7	23	123	1	22	70	10	380
7:45 AM	2	35	30	15	24	7	10	90	4	29	73	9	328
8:00 AM	6	24	25	14	23	6	7	85	3	23	67	8	291
8:15 AM	4	24	23	9	27	6	14	70	8	30	67	1	283
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	50	448	260	93	274	84	131	1010	46	201	752	59	3408

AM Peak Hr Begins at: 630 AM

PEAK VOLUMES =	34	311	165	39	167	58	77	642	30	97	475	31	2126
PEAK HR. FACTOR:		0.904			0.815			0.818			0.750		0.841

CONTROL: Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 50th St

DATE: 5/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave L

DAY: WEDNESDAY

PROJECT# 07-2252-007

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	3	61	39	15	55	16	16	94	9	53	127	21	509
4:15 PM	3	50	37	17	53	16	6	92	8	45	131	17	475
4:30 PM	3	62	41	12	58	15	16	85	6	56	118	16	488
4:45 PM	3	33	31	5	56	15	7	102	4	48	151	16	471
5:00 PM	7	45	45	3	60	18	7	101	5	49	134	13	487
5:15 PM	2	43	34	15	52	15	8	98	6	48	175	14	510
5:30 PM	1	43	35	11	52	17	10	96	5	50	157	19	496
5:45 PM	4	45	32	4	47	5	14	99	7	49	139	14	459
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	26	382	294	82	433	117	84	767	50	398	1132	130	3895

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	13	164	145	34	220	65	32	397	20	195	617	62	1964
PEAK HR. FACTOR:		0.830			0.973			0.993			0.922		0.963

CONTROL: Signalized

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-007A

Location: 50th St &amp; Avenue L

City: Lancaster

Date: 05/23/2007

Day: WEDNESDAY

## LANES:

		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:30	RTOR			7			3			1			1
	Trucks		2			2			1		2	4	1
	Bus												
6:45	RTOR			8			2			1			
	Trucks		1	1		2			4			3	
	Bus												
7:00	RTOR			8						5			
	Trucks		1			2		1	4			3	
	Bus												
7:15	RTOR			17			1						2
	Trucks		1						2		1	3	
	Bus												
7:30	RTOR			4			1						
	Trucks								2		1	2	
	Bus												
7:45	RTOR			7			2					2	
	Trucks								3		1		
	Bus												
8:00	RTOR			8			3						
	Trucks								3			3	
	Bus												
8:15	RTOR			9			2			1			
	Trucks		1	1					2		2	4	
	Bus												

## MOVEMENT TOTALS

RTOR	0	0	68	0	0	14	0	0	8	0	2	3
Trucks	0	5	2	1	6	0	1	21	0	7	22	1
Bus	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	0	5	70	1	6	14	1	21	8	7	24	4

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 700 AM

PEAK

VOLUMES =

0 5 41 | 0 6 6 | 1 11 7 | 3 13 4

PEAK HR.

FACTOR:

0.639 | 0.600 | 0.475 | 0.625

CONTROL:

15

45 Start Time -15 MINUTES

**NATIONAL DATA & SURVEYING SERVICES***Axle Count*

Project # 07-2252-007A

Location: 50th St &amp; Avenue L

City: Lancaster

Date: 05/23/2007

Day: WEDNESDAY

## LANES:

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
16:00	RTOR			4					1			
	Trucks								1		1	1
	Bus											
16:15	RTOR			5					1			1
	Trucks		1	1					1	1		
	Bus											
16:30	RTOR			9			4			2		
	Trucks		1	2		1			2			
	Bus											
16:45	RTOR			8			2					4
	Trucks		1			1					1	
	Bus											
17:00	RTOR			11			1			1		4
	Trucks								3		1	
	Bus											
17:15	RTOR			13			5			2		2
	Trucks		1	1								
	Bus											
17:30	RTOR			10			3			1		2
	Trucks			1					1		1	1
	Bus											
17:45	RTOR			5			1			1		5
	Trucks									1	1	1
	Bus											

## MOVEMENT TOTALS

RTOR	0	0	65	0	0	16	0	0	9	0	0	18
Trucks	0	4	5	0	2	0	0	8	1	4	4	1
Bus	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	0	4	70	0	2	16	0	8	10	4	4	19

NL NT NR SL ST SR EL ET ER WL WT WR

PM Peak Hr Begins at: 1630 PM

PEAK

VOLUMES =

0 3 44 | 0 2 12 | 0 5 5 | 1 1 10

PEAK HR.

FACTOR:

0.783 0.700 0.625 0.600

CONTROL:

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 60th St West

DATE: 8/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave L-8

DAY: THURSDAY

PROJECT# 07-2392-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL 1	NT 1	NR 1	SL 1	ST 2	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	
6:00 AM													
6:15 AM													
6:30 AM	2	44	1	4	27	4	13	5	3	4	3	13	123
6:45 AM	20	76	4	15	38	5	20	9	17	11	16	36	267
7:00 AM	24	96	7	36	88	5	27	44	20	10	71	75	503
7:15 AM	18	74	11	45	107	11	29	75	14	12	48	31	475
7:30 AM	5	52	13	27	47	9	20	46	9	9	31	20	288
7:45 AM	8	40	14	23	38	12	16	40	11	10	26	14	252
8:00 AM	4	34	10	20	30	8	13	32	13	7	21	14	206
8:15 AM	3	27	7	12	28	7	14	28	8	5	16	11	166
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	84	443	67	182	403	61	152	279	95	68	232	214	2280

AM Peak Hr Begins at: 645 AM

PEAK VOLUMES =	67	298	35	123	280	30	96	174	60	42	166	162	1533
PEAK HR. FACTOR:		0.787			0.664			0.699			0.593		0.762

CONTROL: Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: 60th St West

DATE: 8/23/2007

LOCATION: City of Lancaster

E-W STREET: Ave L-8

DAY: THURSDAY

PROJECT# 07-2392-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	10	72	11	5	80	10	5	17	13	15	17	3	258
4:15 PM	12	80	12	6	90	13	5	23	17	18	20	4	300
4:30 PM	14	83	22	3	86	6	6	20	12	13	18	5	288
4:45 PM	22	82	13	3	87	9	11	10	6	10	11	5	269
5:00 PM	13	102	21	12	86	10	6	16	15	11	15	4	311
5:15 PM	15	87	16	4	98	14	7	22	18	12	24	2	319
5:30 PM	18	83	10	5	89	6	5	30	17	18	17	3	301
5:45 PM	19	79	14	6	77	5	4	21	13	21	14	2	275
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	123	668	119	44	693	73	49	159	111	118	136	28	2321

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	65	351	61	27	350	35	22	89	63	62	70	11	1206
PEAK HR. FACTOR:		0.877			0.888			0.837			0.941		0.945

CONTROL: Signalized

Volumes for: Tuesday, May 22, 2007

City: Lancaster

Project #: 07-2253-001

Location: 60th St S/o Ave J

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	2	3			12:00	54	54		
00:15	2	4			12:15	49	38		
00:30	4	10			12:30	41	36		
00:45	0	8	4	21	29	12:45	45	189	38 166
01:00	2	5			13:00	46	37		
01:15	1	5			13:15	41	51		
01:30	1	2			13:30	39	61		
01:45	1	5	5	17	22	13:45	55	181	90 239
02:00	1	2			14:00	76	79		
02:15	3	2			14:15	69	61		
02:30	4	3			14:30	50	72		
02:45	3	11	0	7	18	14:45	37	232	84 296
03:00	3	5			15:00	64	88		
03:15	2	0			15:15	75	92		
03:30	6	0			15:30	56	89		
03:45	3	14	6	11	25	15:45	58	253	71 340
04:00	7	4			16:00	70	90		
04:15	7	3			16:15	47	71		
04:30	10	5			16:30	53	111		
04:45	9	33	7	19	52	16:45	47	217	65 337
05:00	16	4			17:00	52	91		
05:15	31	9			17:15	46	97		
05:30	52	13			17:30	58	75		
05:45	64	163	14	40	203	17:45	52	208	54 317
06:00	41	18			18:00	54	63		
06:15	49	23			18:15	49	61		
06:30	65	26			18:30	40	59		
06:45	92	247	55	122	369	18:45	29	172	54 237
07:00	101	76			19:00	49	54		
07:15	97	95			19:15	36	56		
07:30	144	90			19:30	31	45		
07:45	101	443	38	299	742	19:45	30	146	40 195
08:00	61	31			20:00	24	33		
08:15	67	37			20:15	31	48		
08:30	43	40			20:30	38	32		
08:45	64	235	46	154	389	20:45	36	129	29 142
09:00	51	42			21:00	13	41		
09:15	41	38			21:15	29	30		
09:30	44	34			21:30	25	28		
09:45	39	175	30	144	319	21:45	21	88	31 130
10:00	49	34			22:00	14	35		
10:15	38	30			22:15	17	31		
10:30	42	39			22:30	12	24		
10:45	31	160	28	131	291	22:45	13	56	18 108
11:00	52	37			23:00	9	11		
11:15	41	37			23:15	8	8		
11:30	42	52			23:30	7	12		
11:45	47	182	48	174	356	23:45	3	27	11 42
<b>Total Vol.</b>	1676	1139			<b>2815</b>		1898	2549	<b>4447</b>

	<b>Daily Totals</b>			
	NB	SB	EB	WB
	3574	3688		<b>7262</b>

**AM**

<b>Split %</b>	59.5%	40.5%	<b>38.8%</b>
<b>Peak Hour</b>	07:00	06:45	<b>06:45</b>
<b>Volume</b>	443	316	<b>750</b>
<b>P.H.F.</b>	0.77	0.83	<b>0.80</b>

**PM**

42.7%	57.3%	<b>61.2%</b>
15:15	16:30	<b>15:15</b>
259	364	<b>601</b>
0.82	0.82	<b>0.90</b>

Volumes for: Wednesday, May 23, 2007

City: Lancaster

Project #: 07-2253-001

Location: 60th St S/o Ave J

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	5	9			12:00	48	48		
00:15	1	14			12:15	42	73		
00:30	2	14			12:30	77	73		
00:45	2	10	3	40	50	12:45	68	235	49 243
01:00	2	4			13:00	36	18		
01:15	4	2			13:15	23	47		
01:30	2	0			13:30	50	67		
01:45	1	9	4	10	19	13:45	55	164	84 216
02:00	2	3			14:00	83	86		
02:15	1	1			14:15	58	70		
02:30	4	2			14:30	68	72		
02:45	1	8	5	11	19	14:45	44	253	76 304
03:00	4	1			15:00	72	64		
03:15	0	0			15:15	62	80		
03:30	5	0			15:30	70	102		
03:45	6	15	3	4	19	15:45	49	253	92 338
04:00	2	5			16:00	63	96		
04:15	8	7			16:15	57	106		
04:30	10	6			16:30	49	94		
04:45	8	28	4	22	50	16:45	51	220	87 383
05:00	20	2			17:00	43	96		
05:15	26	12			17:15	46	72		
05:30	42	14			17:30	38	65		
05:45	64	152	19	47	199	17:45	45	172	65 298
06:00	47	22			18:00	27	59		
06:15	63	31			18:15	38	75		
06:30	61	33			18:30	26	57		
06:45	85	256	49	135	391	18:45	37	128	48 239
07:00	82	84			19:00	36	41		
07:15	116	100			19:15	30	45		
07:30	130	84			19:30	24	43		
07:45	112	440	52	320	760	19:45	21	111	27 156
08:00	83	34			20:00	20	26		
08:15	58	37			20:15	23	35		
08:30	67	38			20:30	17	28		
08:45	71	279	44	153	432	20:45	11	71	33 122
09:00	46	43			21:00	20	33		
09:15	44	42			21:15	28	28		
09:30	47	39			21:30	18	23		
09:45	44	181	25	149	330	21:45	19	85	29 113
10:00	41	34			22:00	10	21		
10:15	32	33			22:15	13	14		
10:30	43	42			22:30	13	14		
10:45	38	154	34	143	297	22:45	6	42	16 65
11:00	30	36			23:00	7	9		
11:15	41	46			23:15	10	6		
11:30	45	42			23:30	3	5		
11:45	52	168	51	175	343	23:45	5	25	2 22
<b>Total Vol.</b>	1700	1209			<b>2909</b>		1759	2499	<b>4258</b>

	<b>Daily Totals</b>			
	NB	SB	EB	WB
	3459	3708		<b>7167</b>

<b>AM</b>				<b>PM</b>			
<b>Split %</b>	58.4%	41.6%	<b>40.6%</b>		41.3%	58.7%	<b>59.4%</b>
<b>Peak Hour</b>	07:15	07:00	<b>07:00</b>		13:45	15:30	<b>15:30</b>
<b>Volume</b>	441	320	<b>760</b>		264	396	<b>635</b>
<b>P.H.F.</b>	0.85	0.80	<b>0.88</b>		0.77	0.93	<b>0.92</b>

Volumes for: Tuesday, May 22, 2007

City: Lancaster

Project #: 07-2253-002

Location: 60th St N/o Ave K

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	10	3			12:00	56	86		
00:15	6	4			12:15	52	65		
00:30	6	7			12:30	50	50		
00:45	4	26	10	24	50	12:45	38	196	49
									250
									446
01:00	6	6			13:00	62	42		
01:15	6	4			13:15	58	68		
01:30	3	1			13:30	88	59		
01:45	4	19	2	13	32	13:45	122	330	133
									302
									632
02:00	0	5			14:00	59	146		
02:15	1	4			14:15	58	84		
02:30	8	5			14:30	45	84		
02:45	5	14	2	16	30	14:45	68	230	117
									431
									661
03:00	4	5			15:00	98	122		
03:15	2	1			15:15	80	114		
03:30	2	3			15:30	55	109		
03:45	3	11	5	14	25	15:45	73	306	74
									419
									725
04:00	6	16			16:00	67	95		
04:15	5	12			16:15	68	89		
04:30	9	19			16:30	70	122		
04:45	4	24	20	67	91	16:45	60	265	84
									390
									655
05:00	12	23			17:00	66	86		
05:15	35	26			17:15	69	90		
05:30	52	34			17:30	61	84		
05:45	62	161	26	109	270	17:45	70	266	66
									326
									592
06:00	46	35			18:00	66	79		
06:15	55	47			18:15	52	78		
06:30	85	53			18:30	53	77		
06:45	90	276	31	166	442	18:45	55	226	55
									289
									515
07:00	117	36			19:00	61	57		
07:15	159	51			19:15	54	63		
07:30	194	63			19:30	42	54		
07:45	74	544	32	182	726	19:45	48	205	49
									223
									428
08:00	59	33			20:00	37	36		
08:15	58	38			20:15	46	49		
08:30	41	39			20:30	50	35		
08:45	53	211	33	143	354	20:45	44	177	34
									154
									331
09:00	68	46			21:00	35	46		
09:15	47	56			21:15	34	32		
09:30	53	38			21:30	38	34		
09:45	65	233	35	175	408	21:45	32	139	22
									134
									273
10:00	60	42			22:00	32	27		
10:15	58	31			22:15	26	29		
10:30	47	39			22:30	26	29		
10:45	50	215	35	147	362	22:45	13	97	21
									106
									203
11:00	50	47			23:00	13	15		
11:15	58	34			23:15	12	12		
11:30	64	54			23:30	10	14		
11:45	78	250	54	189	439	23:45	7	42	11
									52
									94

Total Vol.	1984	1245	3229	2479	3076	5555
------------	------	------	------	------	------	------

		Daily Totals	
	NB	SB	EB
	4463	4321	8784

**AM**

<b>Split %</b>	61.4%	38.6%	<b>36.8%</b>
<b>Peak Hour</b>	06:45	11:30	<b>06:45</b>
<b>Volume</b>	560	259	<b>741</b>
<b>P.H.F.</b>	0.72	0.75	<b>0.72</b>

**PM**

		<b>44.6%</b>	<b>55.4%</b>	<b>63.2%</b>
	13:00	14:45	<b>14:45</b>	
	330	462	<b>763</b>	
	0.84	0.95	<b>0.87</b>	

Volumes for: Wednesday, May 23, 2007

City: Lancaster

Project #: 07-2253-002

Location: 60th St N/o Ave K

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	11	5			12:00	45	68		
00:15	2	6			12:15	46	84		
00:30	6	14			12:30	85	85		
00:45	3	22	5	30	52	12:45	76	252	65 302
01:00	3	6			13:00	50	47		
01:15	7	1			13:15	48	51		
01:30	6	2			13:30	97	56		
01:45	1	17	3	12	29	13:45	114	309	129 283
02:00	3	5			14:00	61	184		
02:15	2	2			14:15	77	100		
02:30	5	4			14:30	55	82		
02:45	4	14	6	17	31	14:45	44	237	102 468
03:00	3	3			15:00	89	78		
03:15	3	1			15:15	70	92		
03:30	5	2			15:30	75	117		
03:45	5	16	8	14	30	15:45	62	296	93 380
04:00	3	9			16:00	74	96		
04:15	9	15			16:15	70	110		
04:30	4	19			16:30	62	106		
04:45	11	27	17	60	87	16:45	52	258	93 405
05:00	15	10			17:00	52	103		
05:15	27	23			17:15	55	79		
05:30	45	29			17:30	52	71		
05:45	59	146	32	94	240	17:45	58	217	73 326
06:00	50	34			18:00	44	63		
06:15	75	45			18:15	46	69		
06:30	83	59			18:30	52	76		
06:45	92	300	76	214	514	18:45	59	201	66 274
07:00	109	43			19:00	56	52		
07:15	183	44			19:15	54	59		
07:30	203	66			19:30	34	52		
07:45	82	577	37	190	767	19:45	35	179	32 195
08:00	84	36			20:00	43	29		
08:15	64	34			20:15	36	45		
08:30	84	34			20:30	37	35		
08:45	87	319	40	144	463	20:45	35	151	34 143
09:00	69	54			21:00	33	44		
09:15	49	46			21:15	42	36		
09:30	56	54			21:30	33	19		
09:45	44	218	35	189	407	21:45	24	132	25 124
10:00	57	42			22:00	15	20		
10:15	31	37			22:15	20	14		
10:30	75	46			22:30	17	15		
10:45	51	214	42	167	381	22:45	10	62	13 62
11:00	43	38			23:00	12	11		
11:15	62	49			23:15	10	13		
11:30	73	43			23:30	9	10		
11:45	86	264	44	174	438	23:45	12	43	2 36
<b>Total Vol.</b>	2134	1305			<b>3439</b>		2337	2998	<b>5335</b>

		<b>Daily Totals</b>			
		NB	SB	EB	WB
		4471	4303		<b>8774</b>

<b>AM</b>				<b>PM</b>			
<b>Split %</b>	62.1%	37.9%	<b>39.2%</b>		43.8%	56.2%	<b>60.8%</b>
<b>Peak Hour</b>	06:45	11:45	<b>06:45</b>		13:30	13:45	<b>13:30</b>
<b>Volume</b>	587	281	<b>816</b>		349	495	<b>818</b>
<b>P.H.F.</b>	0.72	0.83	<b>0.76</b>		0.73	0.67	<b>0.83</b>

Volumes for: Tuesday, May 22, 2007

City: Lancaster

Project #: 07-2253-003

Location: Ave K W/o 60th St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			2	3		12:00			11	25	
00:15			0	4		12:15			16	16	
00:30			0	1		12:30			26	30	
00:45			2	4	0 8	12:45			34	87	23 94 181
01:00			1	0		13:00			22	25	
01:15			2	1		13:15			23	18	
01:30			2	0		13:30			19	19	
01:45			2	7	4 5	13:45			25	89	21 83 172
02:00			1	2		14:00			34	33	
02:15			0	1		14:15			22	28	
02:30			0	0		14:30			26	28	
02:45			3	4	0 3	14:45			34	116	29 118 234
03:00			1	0		15:00			43	29	
03:15			4	0		15:15			31	29	
03:30			1	0		15:30			29	43	
03:45			3	9	1 1	15:45			26	129	26 127 256
04:00			2	2		16:00			26	28	
04:15			3	4		16:15			33	31	
04:30			5	10		16:30			32	31	
04:45			7	17	10 26	16:45			37	128	32 122 250
05:00			6	16		17:00			28	26	
05:15			6	14		17:15			31	35	
05:30			9	18		17:30			26	31	
05:45			16	37	27 75	17:45			48	133	35 127 260
06:00			16	27		18:00			26	29	
06:15			15	25		18:15			28	27	
06:30			24	25		18:30			22	31	
06:45			36	91	20 97	18:45			21	97	30 117 214
07:00			45	40		19:00			21	25	
07:15			86	33		19:15			14	30	
07:30			79	28		19:30			11	22	
07:45			53	263	24 125	19:45			16	62	22 99 161
08:00			35	17		20:00			17	18	
08:15			35	20		20:15			13	19	
08:30			35	16		20:30			14	24	
08:45			36	141	18 71	20:45			9	53	23 84 137
09:00			31	16		21:00			11	14	
09:15			24	12		21:15			9	18	
09:30			19	17		21:30			5	25	
09:45			33	107	18 63	21:45			3	28	18 75 103
10:00			22	12		22:00			5	13	
10:15			24	14		22:15			3	6	
10:30			24	18		22:30			5	11	
10:45			30	100	16 60	22:45			2	15	6 36 51
11:00			20	14		23:00			3	8	
11:15			17	21		23:15			5	4	
11:30			33	16		23:30			3	2	
11:45			22	92	19 70	23:45			4	15	4 18 33

Total Vol.	872	604	1476	952	1100	2052
------------	-----	-----	------	-----	------	------

	NB	SB	EB	WB	Combined
			1824	1704	3528

**AM**

<b>Split %</b>	59.1%	40.9%	<b>41.8%</b>
<b>Peak Hour</b>	07:00	07:00	<b>07:00</b>
<b>Volume P.H.F.</b>	263	125	<b>388</b>
	0.76	0.78	<b>0.82</b>

**PM**

	46.4%	53.6%	<b>58.2%</b>
	14:45	14:45	<b>14:45</b>
	137	130	<b>267</b>
	0.80	0.76	<b>0.93</b>

Volumes for: Wednesday, May 23, 2007

City: Lancaster

Project #: 07-2253-003

Location: Ave K W/o 60th St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB			
00:00			3	1		12:00			20	27			
00:15			1	2		12:15			27	25			
00:30			2	5		12:30			31	33			
00:45			3	9	3	11	20	12:45	21	99	22	107	206
01:00			4	1		13:00			23	17			
01:15			2	1		13:15			20	17			
01:30			0	0		13:30			26	21			
01:45			1	7	1	3	10	13:45	26	95	20	75	170
02:00			4	1		14:00			29	36			
02:15			0	0		14:15			27	23			
02:30			1	1		14:30			19	37			
02:45			1	6	0	2	8	14:45	39	114	32	128	242
03:00			2	0		15:00			43	31			
03:15			2	0		15:15			24	32			
03:30			3	3		15:30			20	31			
03:45			1	8	1	4	12	15:45	29	116	21	115	231
04:00			3	1		16:00			30	35			
04:15			3	4		16:15			44	33			
04:30			9	7		16:30			26	28			
04:45			7	22	7	19	41	16:45	22	122	33	129	251
05:00			8	13		17:00			29	35			
05:15			5	17		17:15			35	45			
05:30			12	11		17:30			34	35			
05:45			12	37	31	72	109	17:45	34	132	23	138	270
06:00			13	26		18:00			26	25			
06:15			19	29		18:15			20	26			
06:30			21	26		18:30			23	36			
06:45			34	87	18	99	186	18:45	20	89	16	103	192
07:00			48	35		19:00			18	31			
07:15			72	37		19:15			10	15			
07:30			78	37		19:30			15	24			
07:45			53	251	23	132	383	19:45	14	57	24	94	151
08:00			37	21		20:00			5	25			
08:15			36	19		20:15			9	19			
08:30			41	20		20:30			13	18			
08:45			29	143	14	74	217	20:45	8	35	19	81	116
09:00			38	12		21:00			7	25			
09:15			33	17		21:15			5	17			
09:30			25	22		21:30			7	14			
09:45			37	133	16	67	200	21:45	3	22	16	72	94
10:00			24	12		22:00			4	7			
10:15			30	13		22:15			3	9			
10:30			29	11		22:30			6	9			
10:45			24	107	23	59	166	22:45	3	16	5	30	46
11:00			26	17		23:00			3	8			
11:15			24	20		23:15			1	2			
11:30			24	20		23:30			6	7			
11:45			27	101	20	77	178	23:45	3	13	3	20	33

Total Vol.	911	619	1530	910	1092	2002
------------	-----	-----	------	-----	------	------

	NB	SB	EB	WB	Combined
--	----	----	----	----	----------

1821	1711	3532
------	------	------

**AM**

Split %	59.5%	40.5%	43.3%
---------	-------	-------	-------

45.5%	54.5%	56.7%
-------	-------	-------

Peak Hour	07:00	07:00	07:00
-----------	-------	-------	-------

17:00	16:45	17:00
-------	-------	-------

Volume	251	132	383
--------	-----	-----	-----

132	148	270
-----	-----	-----

P.H.F.	0.80	0.89	0.83
--------	------	------	------

0.94	0.82	0.84
------	------	------

Volumes for: Tuesday, May 22, 2007

City: Lancaster

Project #: 07-2253-004

Location: Ave K E/o 60th St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			2	15		12:00			43	46	
00:15			2	15		12:15			54	44	
00:30			2	6		12:30			38	54	
00:45			4	10	1	37	47	12:45		42	177 45 189 366
01:00			3	11		13:00			36	48	
01:15			2	4		13:15			54	40	
01:30			2	0		13:30			54	61	
01:45			2	9	6	21	30	13:45		54	198 75 224 422
02:00			4	2		14:00			78	58	
02:15			2	2		14:15			70	54	
02:30			3	2		14:30			50	51	
02:45			5	14	2	8	22	14:45		63	261 76 239 500
03:00			2	4		15:00			100	50	
03:15			4	1		15:15			82	70	
03:30			4	2		15:30			76	56	
03:45			6	16	1	8	24	15:45		46	304 69 245 549
04:00			10	1		16:00			74	58	
04:15			10	4		16:15			60	63	
04:30			21	19		16:30			72	73	
04:45			22	63	10	34	97	16:45		62	268 73 267 535
05:00			18	25		17:00			50	61	
05:15			23	25		17:15			61	79	
05:30			22	28		17:30			60	68	
05:45			31	94	49	127	221	17:45		76	247 59 267 514
06:00			26	36		18:00			49	75	
06:15			46	54		18:15			62	58	
06:30			51	58		18:30			56	58	
06:45			60	183	104	252	435	18:45		39	206 72 263 469
07:00			60	136		19:00			42	59	
07:15			110	120		19:15			41	60	
07:30			97	84		19:30			34	51	
07:45			90	357	44	384	741	19:45		34	151 46 216 367
08:00			62	49		20:00			31	44	
08:15			62	44		20:15			27	41	
08:30			59	51		20:30			27	49	
08:45			58	241	35	179	420	20:45		19	104 46 180 284
09:00			58	46		21:00			25	37	
09:15			70	39		21:15			22	39	
09:30			45	39		21:30			14	47	
09:45			54	227	46	170	397	21:45		9	70 43 166 236
10:00			42	52		22:00			10	39	
10:15			43	36		22:15			7	26	
10:30			44	58		22:30			10	25	
10:45			56	185	48	194	379	22:45		14	41 14 104 145
11:00			46	35		23:00			8	12	
11:15			41	45		23:15			6	8	
11:30			47	41		23:30			7	7	
11:45			45	179	58	179	358	23:45		6	27 9 36 63

Total Vol.	1578	1593	3171	2054	2396	4450
------------	------	------	------	------	------	------

	NB	SB	EB	WB	Combined
--	----	----	----	----	----------

3632	3989	7621
------	------	------

**AM****PM**

Split %	49.8%	50.2%	41.6%
---------	-------	-------	-------

46.2%	53.8%	58.4%
-------	-------	-------

Peak Hour	07:15	06:45	06:45
-----------	-------	-------	-------

14:45	16:30	14:45
-------	-------	-------

Volume P.H.F.	359	444	771
---------------	-----	-----	-----

321	286	573
-----	-----	-----

P.H.F.	0.82	0.82	0.84
--------	------	------	------

0.80	0.91	0.94
------	------	------

Volumes for: Wednesday, May 23, 2007

City: Lancaster

Project #: 07-2253-004

Location: Ave K E/o 60th St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			2	12		12:00			50	35	
00:15			2	12		12:15			44	60	
00:30			3	10		12:30			72	69	
00:45			3	10	44	12:45			42	208	40
									204	412	
01:00			2	6		13:00			54	42	
01:15			2	6		13:15			40	44	
01:30			1	9		13:30			52	48	
01:45			1	6	27	13:45			50	196	70
									204	400	
02:00			4	2		14:00			90	46	
02:15			1	5		14:15			62	57	
02:30			4	2		14:30			45	53	
02:45			5	14	1	14:45			66	263	57
									213	476	
03:00			2	1		15:00			101	68	
03:15			4	1		15:15			77	64	
03:30			3	8		15:30			62	58	
03:45			7	16	2	15:45			63	303	62
									252	555	
04:00			11	2		16:00			66	59	
04:15			10	9		16:15			80	52	
04:30			24	15		16:30			56	66	
04:45			17	62	6	16:45			50	252	73
									250	502	
05:00			16	19		17:00			55	54	
05:15			25	24		17:15			62	88	
05:30			30	20		17:30			57	63	
05:45			31	102	49	17:45			69	243	59
									264	507	
06:00			35	44		18:00			47	68	
06:15			34	48		18:15			50	57	
06:30			46	54		18:30			53	59	
06:45			66	181	96	18:45			44	194	48
									232	426	
07:00			64	128		19:00			39	58	
07:15			103	110		19:15			31	39	
07:30			113	96		19:30			38	45	
07:45			84	364	51	19:45			19	127	41
									183	310	
08:00			75	42		20:00			24	47	
08:15			54	60		20:15			17	47	
08:30			58	50		20:30			18	38	
08:45			61	248	51	20:45			18	77	49
									181	258	
09:00			68	34		21:00			18	39	
09:15			61	48		21:15			14	41	
09:30			49	45		21:30			15	33	
09:45			56	234	31	21:45			13	60	25
									138	198	
10:00			42	38		22:00			14	23	
10:15			46	35		22:15			10	22	
10:30			50	48		22:30			9	17	
10:45			50	188	51	22:45			7	40	13
									75	115	
11:00			50	64		23:00			10	18	
11:15			42	59		23:15			6	13	
11:30			52	60		23:30			4	12	
11:45			54	198	66	23:45			4	24	7
									50	74	

Total Vol.	1623	1646	3269	1987	2246	4233
------------	------	------	------	------	------	------

			Daily Totals		
	NB	SB	EB	WB	Combined

3610	3892	7502
------	------	------

**AM****PM**

Split %	49.6%	50.4%	43.6%
---------	-------	-------	-------

46.9%	53.1%	56.4%
-------	-------	-------

Peak Hour	07:15	06:45	06:45
-----------	-------	-------	-------

14:45	16:30	15:00
-------	-------	-------

Volume	375	430	776
--------	-----	-----	-----

306	281	555
-----	-----	-----

P.H.F.	0.83	0.84	0.91
--------	------	------	------

0.76	0.80	0.82
------	------	------

Volumes for: Tuesday, May 22, 2007

City: Lancaster

Project #: 07-2253-005

Location: Ave K E/o 50th St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			5	18		12:00			84	73	
00:15			5	16		12:15			93	64	
00:30			5	5		12:30			65	75	
00:45			5	20	44	12:45			70	312	64
01:00			3	7		13:00			53	74	
01:15			4	2		13:15			77	67	
01:30			3	5		13:30			82	77	
01:45			3	13	5	13:45			76	288	96
02:00			7	3		14:00			122	83	
02:15			4	3		14:15			102	73	
02:30			4	5		14:30			80	81	
02:45			5	20	0	14:45			93	397	99
03:00			3	1		15:00			147	79	
03:15			6	2		15:15			106	106	
03:30			9	3		15:30			135	80	
03:45			8	26	3	15:45			81	469	99
04:00			15	3		16:00			111	82	
04:15			19	7		16:15			90	113	
04:30			31	9		16:30			111	98	
04:45			34	99	11	16:45			88	400	117
05:00			28	23		17:00			80	101	
05:15			35	23		17:15			86	120	
05:30			37	24		17:30			94	103	
05:45			51	151	43	17:45			114	374	101
06:00			46	35		18:00			81	111	
06:15			54	52		18:15			80	83	
06:30			68	59		18:30			89	87	
06:45			92	260	95	18:45			73	323	89
07:00			100	131		19:00			68	82	
07:15			127	89		19:15			53	71	
07:30			185	68		19:30			53	83	
07:45			169	581	55	19:45			53	227	54
08:00			110	57		20:00			46	66	
08:15			96	49		20:15			48	62	
08:30			77	48		20:30			40	63	
08:45			94	377	40	20:45			30	164	68
09:00			86	55		21:00			34	58	
09:15			105	61		21:15			28	56	
09:30			72	51		21:30			26	68	
09:45			78	341	57	21:45			19	107	49
10:00			75	62		22:00			21	59	
10:15			60	45		22:15			16	41	
10:30			71	65		22:30			14	33	
10:45			101	307	56	22:45			15	66	24
11:00			71	46		23:00			10	17	
11:15			68	48		23:15			8	19	
11:30			82	68		23:30			14	12	
11:45			64	285	54	23:45			5	37	16
<b>Total Vol.</b>			2480	1672	<b>4152</b>				3164	3496	<b>6660</b>

	NB	SB	<b>Daily Totals</b>		
			EB	WB	Combined
			5644	5168	<b>10812</b>
<b>AM</b>				<b>PM</b>	
<b>Split %</b>	59.7%	40.3%	<b>38.4%</b>		
<b>Peak Hour</b>	07:15	06:45	<b>07:00</b>		
<b>Volume</b>	591	383	<b>924</b>		
<b>P.H.F.</b>	0.80	0.73	<b>0.91</b>		

Volumes for: Wednesday, May 23, 2007

City: Lancaster

Project #: 07-2253-005

Location: Ave K E/o 50th St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB				
00:00			4	15		12:00			83	65				
00:15			5	12		12:15			77	99				
00:30			3	14		12:30			89	100				
00:45			4	16	8	49	65	12:45		81	330	63	327	657
01:00			2	4		13:00			81	55				
01:15			3	6		13:15			56	70				
01:30			2	8		13:30			70	85				
01:45			1	8	4	22	30	13:45		76	283	98	308	591
02:00			5	3		14:00			146	79				
02:15			2	6		14:15			99	79				
02:30			5	4		14:30			91	78				
02:45			5	17	2	15	32	14:45		85	421	92	328	749
03:00			6	1		15:00			144	107				
03:15			5	3		15:15			125	91				
03:30			6	6		15:30			90	83				
03:45			10	27	6	16	43	15:45		107	466	97	378	844
04:00			13	3		16:00			99	94				
04:15			15	11		16:15			107	90				
04:30			39	7		16:30			87	93				
04:45			26	93	9	30	123	16:45		76	369	109	386	755
05:00			22	19		17:00			80	98				
05:15			31	21		17:15			90	122				
05:30			48	25		17:30			87	99				
05:45			50	151	41	106	257	17:45		99	356	97	416	772
06:00			55	34		18:00			84	95				
06:15			56	55		18:15			76	94				
06:30			60	61		18:30			95	79				
06:45			82	253	84	234	487	18:45		84	339	71	339	678
07:00			94	100		19:00			54	79				
07:15			145	79		19:15			39	63				
07:30			171	83		19:30			58	74				
07:45			176	586	58	320	906	19:45		32	183	55	271	454
08:00			126	54		20:00			40	61				
08:15			96	50		20:15			24	74				
08:30			73	63		20:30			30	70				
08:45			94	389	53	220	609	20:45		30	124	63	268	392
09:00			100	37		21:00			34	57				
09:15			97	50		21:15			22	55				
09:30			74	49		21:30			26	49				
09:45			84	355	40	176	531	21:45		23	105	32	193	298
10:00			66	40		22:00			22	32				
10:15			78	41		22:15			18	29				
10:30			78	56		22:30			12	23				
10:45			97	319	62	199	518	22:45		11	63	21	105	168
11:00			67	55		23:00			13	22				
11:15			70	59		23:15			8	17				
11:30			87	71		23:30			6	16				
11:45			58	282	68	253	535	23:45		6	33	8	63	96

Total Vol.	2496	1640	4136	3072	3382	6454
------------	------	------	------	------	------	------

	NB	SB	EB	WB	Combined
--	----	----	----	----	----------

5568	5022	10590
------	------	-------

**AM**

Split %	60.3%	39.7%	39.1%
---------	-------	-------	-------

**PM**

47.6%	52.4%	60.9%
-------	-------	-------

Peak Hour	07:15	06:45	07:00	15:00	16:45	15:00
Volume	618	346	906	466	428	844
P.H.F.	0.88	0.87	0.89	0.81	0.88	0.84

Volumes for: Tuesday, May 22, 2007

City: Lancaster

Project #: 07-2253-006

Location: 60th St S/o Ave K

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	2	7			12:00	66	76		
00:15	4	10			12:15	65	63		
00:30	2	4			12:30	47	60		
00:45	2	10	7	28	38	12:45	42	220	62 261
01:00	3	8			13:00	59	39		
01:15	4	6			13:15	62	57		
01:30	1	3			13:30	76	63		
01:45	4	12	1	18	30	13:45	92	289	94 253
02:00	1	1			14:00	60	140		
02:15	3	3			14:15	66	77		
02:30	4	3			14:30	47	75		
02:45	4	12	2	9	21	14:45	66	239	118 410
03:00	2	5			15:00	121	128		
03:15	0	1			15:15	94	108		
03:30	3	1			15:30	83	100		
03:45	4	9	3	10	19	15:45	71	369	92 428
04:00	6	7			16:00	81	87		
04:15	4	3			16:15	72	88		
04:30	9	7			16:30	71	103		
04:45	8	27	8	25	52	16:45	50	274	94 372
05:00	11	13			17:00	66	80		
05:15	26	12			17:15	60	93		
05:30	40	22			17:30	66	92		
05:45	46	123	20	67	190	17:45	85	277	71 336
06:00	32	18			18:00	60	75		
06:15	46	21			18:15	49	80		
06:30	63	27			18:30	64	67		
06:45	78	219	63	129	348	18:45	47	220	69 291
07:00	111	86			19:00	52	52		
07:15	125	89			19:15	54	66		
07:30	159	82			19:30	39	55		
07:45	87	482	57	314	796	19:45	47	192	57 230
08:00	73	30			20:00	34	39		
08:15	73	32			20:15	42	48		
08:30	51	30			20:30	48	42		
08:45	60	257	26	118	375	20:45	42	166	44 173
09:00	59	30			21:00	26	48		
09:15	51	34			21:15	30	40		
09:30	49	28			21:30	27	35		
09:45	60	219	29	121	340	21:45	25	108	32 155
10:00	50	36			22:00	20	37		
10:15	52	26			22:15	15	35		
10:30	43	31			22:30	16	24		
10:45	48	193	26	119	312	22:45	14	65	20 116
11:00	60	38			23:00	14	10		
11:15	64	28			23:15	9	18		
11:30	58	40			23:30	7	13		
11:45	65	247	38	144	391	23:45	6	36	10 51
<b>Total Vol.</b>	1810	1102			<b>2912</b>		2455	3076	<b>5531</b>

		<b>Daily Totals</b>			
		NB	SB	EB	WB
		4265	4178		<b>8443</b>

<b>AM</b>				<b>PM</b>			
<b>Split %</b>	62.2%	37.8%	<b>34.5%</b>		44.4%	55.6%	<b>65.5%</b>
<b>Peak Hour</b>	07:00	06:45	<b>07:00</b>		15:00	14:45	<b>14:45</b>
<b>Volume</b>	482	320	<b>796</b>		369	454	<b>818</b>
<b>P.H.F.</b>	0.76	0.90	<b>0.83</b>		0.79	0.89	<b>0.82</b>

Volumes for: Wednesday, May 23, 2007

City: Lancaster

Project #: 07-2253-006

Location: 60th St S/o Ave K

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	5	9			12:00	52	64		
00:15	2	10			12:15	53	95		
00:30	1	11			12:30	113	112		
00:45	4	12	11	41	12:45	99	317	67	338
									655
01:00	2	8			13:00	54	54		
01:15	4	3			13:15	42	43		
01:30	4	2			13:30	88	52		
01:45	1	11	4	17	13:45	99	283	96	245
									528
02:00	2	4			14:00	72	158		
02:15	1	2			14:15	80	91		
02:30	4	2			14:30	56	69		
02:45	3	10	3	11	14:45	61	269	114	432
									701
03:00	2	5			15:00	127	94		
03:15	3	0			15:15	94	95		
03:30	3	1			15:30	81	106		
03:45	4	12	4	10	15:45	71	373	104	399
									772
04:00	2	2			16:00	80	90		
04:15	4	5			16:15	72	102		
04:30	5	13			16:30	56	103		
04:45	12	23	6	26	16:45	60	268	96	391
									659
05:00	14	9			17:00	57	98		
05:15	24	14			17:15	54	88		
05:30	34	22			17:30	55	84		
05:45	48	120	25	70	17:45	58	224	78	348
									572
06:00	37	18			18:00	40	65		
06:15	55	25			18:15	60	68		
06:30	64	31			18:30	55	69		
06:45	83	239	61	135	18:45	54	209	73	275
									484
07:00	96	99			19:00	50	61		
07:15	164	70			19:15	54	46		
07:30	167	74			19:30	31	57		
07:45	87	514	67	310	19:45	29	164	43	207
									371
08:00	80	31			20:00	36	26		
08:15	61	33			20:15	30	57		
08:30	63	28			20:30	29	48		
08:45	69	273	34	126	20:45	25	120	36	167
									287
09:00	72	53			21:00	35	41		
09:15	55	51			21:15	28	46		
09:30	52	60			21:30	31	22		
09:45	47	226	35	199	21:45	24	118	22	131
									249
10:00	47	40			22:00	15	25		
10:15	32	37			22:15	18	23		
10:30	52	39			22:30	13	16		
10:45	43	174	37	153	22:45	11	57	10	74
									131
11:00	42	43			23:00	12	17		
11:15	48	52			23:15	8	14		
11:30	73	50			23:30	4	10		
11:45	68	231	42	187	23:45	9	33	4	45
									78

Total Vol.	1845	1285	3130	2435	3052	5487
------------	------	------	------	------	------	------

		Daily Totals		
	NB	SB	EB	WB
	4280	4337		8617

**AM**

Split %	58.9%	41.1%	36.3%
Peak Hour	07:00	11:45	07:00
Volume	514	313	824
P.H.F.	0.77	0.70	0.85

**PM**

		44.4%	55.6%	63.7%
	NB	SB	EB	WB
	4280	4337		8617
	0.77	0.70	0.85	0.87

**APPENDIX C**  
**Analysis Worksheets for Existing (Year 2007) Conditions**

---

Existing AM

Fri Aug 22, 2008 12:00:50

Page 4-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #101 70th St / Avenue J

Average Delay (sec/veh): 7.0 Worst Case Level Of Service: B[ 10.7]

Street Name:	70th St				Avenue J															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1!	0	0

## Volume Module:

Base Vol:	2	73	91	8	46	0	0	53	5	33	49	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	73	91	8	46	0	0	53	5	33	49	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	73	91	8	46	0	0	53	5	33	49	3
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	73	91	8	46	0	0	53	5	33	49	3

## Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	xxxxxx	xxxxxx	xxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	xxxxxx	xxxxxx	xxxx	xxxxxx	2.2	xxxx	xxxxxx

## Capacity Module:

Cnflct Vol:	195	174	56	254	175	xxxxxx	xxxx	xxxx	xxxxxx	58	xxxx	xxxxxx
Potent Cap.:	769	723	1017	703	722	xxxxxx	xxxx	xxxx	xxxxxx	1559	xxxx	xxxxxx
Move Cap.:	719	708	1017	580	707	xxxxxx	xxxx	xxxx	xxxxxx	1559	xxxx	xxxxxx
Volume/Cap.:	0.00	0.10	0.09	0.01	0.07	xxxx	xxxx	xxxx	xxxxxx	0.02	xxxx	xxxxxx

## Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.1	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	7.4	xxxx	xxxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT					
Shared Cap.:	xxxx	850	xxxxxx	685	xxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	0.7	xxxxxx	0.3	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	10.3	xxxxxx	10.7	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shared LOS:	*	B	*	B	*	*	*	*	*	*	*	*
ApproachDel:		10.3			10.7		xxxxxx			xxxxxx		
ApproachLOS:		B			B			*		*		

Note: Queue reported is the number of cars per lane.

Existing AM

Fri Aug 22, 2008 12:00:50

Page 5-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #102 60th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 0.425  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 30 Level Of Service: A

Street Name: 60th St Avenue J  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R  
-----|-----|-----|-----|  
Control: Permitted Permitted Permitted Permitted  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 1 0 2 0 1 1 0 0 1 0 1 0 2 0 1 1 0 1 0 1 0 1  
-----|-----|-----|-----|

Volume Module:  
Base Vol: 20 209 208 39 145 14 52 225 52 123 108 221  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 20 209 208 39 145 14 52 225 52 123 108 221  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Volume: 20 209 208 39 145 14 52 225 52 123 108 221  
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 20 209 208 39 145 14 52 225 52 123 108 221  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Final Volume: 20 209 208 39 145 14 52 225 52 123 108 221  
-----|-----|-----|-----|

Saturation Flow Module:  
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600  
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 1.00 2.00 1.00 1.00 0.91 0.09 1.00 2.00 1.00 1.00 1.00 1.00  
Final Sat.: 1600 3200 1600 1600 1459 141 1600 3200 1600 1600 1600 1600  
-----|-----|-----|-----|

Capacity Analysis Module:  
Vol/Sat: 0.01 0.07 0.13 0.02 0.10 0.10 0.03 0.07 0.03 0.08 0.07 0.14  
Crit Moves: \*\*\*\* \* \*\*\* \*\*\* \*\*\*

## Existing AM

Fri Aug 22, 2008 12:00:51

Page 6-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

## Level Of Service Computation Report

### ICU 1 (Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #103 50th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 0.479  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxxx  
Optimal Cycle: 32 Level Of Service: A

Street Name:	50th St						Avenue J													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted			Permitted			Permitted			Permitted										
Rights:	Include			Include			Include			Include										
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0	0	1	0	1	0	0	1	0

Volume Module:												
Base Vol:	56	133	128	12	67	17	13	393	19	49	334	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	133	128	12	67	17	13	393	19	49	334	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	133	128	12	67	17	13	393	19	49	334	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	133	128	12	67	17	13	393	19	49	334	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	133	128	12	67	17	13	393	19	49	334	22

```

Saturation Flow Module:
Sat/Lane:   1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.95 0.05 1.00 0.94 0.06
Final Sat.: 1600 1600 1600 1600 1600 1600 1600 1526   74 1600 1501   99
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

```

Existing AM

Fri Aug 22, 2008 12:00:52

Page 7-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #104 60th St / Avenue J-8

Average Delay (sec/veh): 6.0 Worst Case Level Of Service: E[ 42.1]

Street Name:	60th St	Avenue J-8		
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	1 0 1 0 1	1 0 1 0 1	1 0 1 0 1	1 0 0 1 0

Volume Module:

Base Vol:	190	346	18	5	238	118	34	3	364	8	0	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	346	18	5	238	118	34	3	364	8	0	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	346	18	5	238	118	34	3	364	8	0	4
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	190	346	18	5	238	118	34	3	364	8	0	4

Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx	4.1 xxxx xxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2 xxxx xxxx	2.2 xxxx xxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	356 xxxx xxxx	364 xxxx xxxx	985	992	238	1217	1092	346
Potent Cap.:	1214 xxxx xxxx	1206 xxxx xxxx	229	248	806	159	216	702
Move Cap.:	1214 xxxx xxxx	1206 xxxx xxxx	200	208	806	76	182	702
Volume/Cap:	0.16 xxxx xxxx	0.00 xxxx xxxx	0.17	0.01	0.45	0.11	0.00	0.01

Level Of Service Module:

2Way95thQ:	0.6 xxxx xxxx	0.0 xxxx xxxx	0.6	0.0	2.4	0.3 xxxx xxxx
Control Del:	8.5 xxxx xxxx	8.0 xxxx xxxx	26.7	22.6	13.1	58.0 xxxx xxxx
LOS by Move:	A *	*	A *	*	D C B F *	*
Movement:	LT - LTR - RT					
Shared Cap.:	xxxx xxxx xxxx	702				
SharedQueue:	xxxx xxxx xxxx	0.0				
Shrd ConDel:	xxxx xxxx xxxx	10.2				
Shared LOS:	*	*	*	*	*	B
ApproachDel:	xxxxxx	xxxxxx		14.3		42.1
ApproachLOS:	*	*		B		E

Note: Queue reported is the number of cars per lane.

Existing AM

Fri Aug 22, 2008 12:00:52

Page 8-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #105 70th St / Avenue K

Cycle (sec):	100	Critical Vol./Cap.(X):	0.339
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.8
Optimal Cycle:	0	Level Of Service:	A

Street Name:	70th St	Avenue K		
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0

## Volume Module:

Base Vol:	23	148	109	4	67	1	1	62	35	29	65	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	148	109	4	67	1	1	62	35	29	65	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	148	109	4	67	1	1	62	35	29	65	1
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	148	109	4	67	1	1	62	35	29	65	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	148	109	4	67	1	1	62	35	29	65	1

## Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.08	0.53	0.39	0.06	0.93	0.01	0.01	0.63	0.36	0.31	0.68	0.01
Final Sat.:	68	437	322	41	685	10	8	466	263	213	478	7

## Capacity Analysis Module:

Vol/Sat:	0.34	0.34	0.34	0.10	0.10	0.10	0.13	0.13	0.13	0.14	0.14	0.14
Crit Moves:	****	****	****				****					****
Delay/Veh:	9.3	9.3	9.3	8.1	8.1	8.1	8.2	8.2	8.2	8.5	8.5	8.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.3	9.3	9.3	8.1	8.1	8.1	8.2	8.2	8.2	8.5	8.5	8.5
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	9.3			8.1			8.2			8.5		
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:	9.3			8.1			8.2			8.5		
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

Existing AM

Fri Aug 22, 2008 12:00:52

Page 9-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #106 62nd St / Avenue K

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: B[ 11.7]

Street Name:	62nd St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	0	1	0	0	0	1	0	1	0	1	1	0	2	0	1

## Volume Module:

Base Vol:	6	1	93	2	1	0	2	221	11	25	41	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	1	93	2	1	0	2	221	11	25	41	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	1	93	2	1	0	2	221	11	25	41	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	6	1	93	2	1	0	2	221	11	25	41	78

## Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	xxxxxx	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	xxxxxx	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx

## Capacity Module:

Cnflct Vol:	296	394	221	369	327	xxxxxx	119	xxxx	xxxxxx	232	xxxx	xxxxxx
Potent Cap.:	660	546	824	592	595	xxxxxx	1482	xxxx	xxxxxx	1348	xxxx	xxxxxx
Move Cap.:	649	535	824	516	583	xxxxxx	1482	xxxx	xxxxxx	1348	xxxx	xxxxxx
Volume/Cap.:	0.01	0.00	0.11	0.00	0.00	xxxx	0.00	xxxx	xxxx	0.02	xxxx	xxxx

## Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxxx	0.0	xxxx	xxxxxx	0.1	xxxx	xxxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxxx	7.4	xxxx	xxxxxx	7.7	xxxx	xxxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx	806	xxxxxx	537	xxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	0.4	xxxxxx	0.0	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	10.1	xxxxxx	11.7	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	B	*	B	*	*	*	*	*	*	*	*
ApproachDel:		10.1		11.7			xxxxxx			xxxxxx		
ApproachLOS:		B		B			*			*		

Note: Queue reported is the number of cars per lane.

## Existing AM

Fri Aug 22, 2008 12:00:52

Page 10-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

# Level Of Service Computation Report

### ICU 1 (Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #107 60th St / Avenue K

Cycle (sec): 100 Critical Vol./Cap.(X): 0.452  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx  
Optimal Cycle: 31 Level Of Service: A

Street Name:	60th St						Avenue K								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected			Protected			Protected			Protected					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	1	0	1	0	1	1	0	2	0	1	0	

Volume Module:												
Base Vol:	20	302	150	21	129	9	69	218	31	99	118	175
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	302	150	21	129	9	69	218	31	99	118	175
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	302	150	21	129	9	69	218	31	99	118	175
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	302	150	21	129	9	69	218	31	99	118	175
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	302	150	21	129	9	69	218	31	99	118	175

Capacity Analysis Module:  
Vol/Sat: 0.01 0.14 0.14 0.01 0.04 0.04 0.02 0.14 0.02 0.06 0.07 0.11  
Crit Moves: \*\*\*\* \* \*\*\*\* \* \*\*\*\* \*

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #108 50th St / Avenue K

Cycle (sec): 100 Critical Vol./Cap.(X): 0.437

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.1  
Optimal Cycle: 0 Level Of Service: B

Street Name:	50th St			Avenue K											
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign		Stop Sign		Stop Sign		Stop Sign								
Rights:	Include		Include		Include		Include								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	

Volume Module:												
Base Vol:	17	145	123	38	58	3	8	270	11	41	143	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	145	123	38	58	3	8	270	11	41	143	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	145	123	38	58	3	8	270	11	41	143	22
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	145	123	38	58	3	8	270	11	41	143	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	145	123	38	58	3	8	270	11	41	143	22

```

Saturation Flow Module:
Adjustment:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:        0.06 0.51 0.43 0.38 0.59 0.03 0.03 0.93 0.04 0.20 0.69 0.11
Final Sat.:   40  340  289  220  336    17    18   617    25   127  443    68

```

Capacity Analysis Module:													
Vol/Sat:	0.43	0.43	0.43	0.17	0.17	0.17	0.44	0.44	0.44	0.32	0.32	0.32	0.32
Crit Moves:	****			****			****			****			****
Delay/Veh:	11.4	11.4	11.4	9.7	9.7	9.7	11.8	11.8	11.8	10.5	10.5	10.5	10.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.4	11.4	11.4	9.7	9.7	9.7	11.8	11.8	11.8	10.5	10.5	10.5	10.5
LOS by Move:	B	B	B	A	A	A	B	B	B	B	B	B	B
ApproachDel:													10.5
Delay Adj:													1.00
ApprAdjDel:													10.5
LOS by Appr:													B
AllWayAvgQ:	0.6	0.6	0.6	0.2	0.2	0.2	0.7	0.7	0.7	0.7	0.4	0.4	0.4

Note: Queue reported is the number of cars per lane.

Existing AM

Fri Aug 22, 2008 12:00:53

Page 12-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #109 45th St / Avenue K

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: B[ 14.1]

Street Name:	45th St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1

Volume Module:

Base Vol:	1	12	51	19	6	14	1	360	6	20	254	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	12	51	19	6	14	1	360	6	20	254	3
User Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	12	52	19	6	14	1	367	6	20	259	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	12	52	19	6	14	1	367	6	20	259	3

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxxx	xxxxxx	2.2	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	681	672	367	704	675	259	262	xxxxx	xxxxxx	373	xxxx	xxxxxx
Potent Cap.:	367	380	683	354	378	784	1314	xxxxx	xxxxxx	1196	xxxx	xxxxxx
Move Cap.:	351	373	683	315	371	784	1314	xxxxx	xxxxxx	1196	xxxx	xxxxxx
Volume/Cap.:	0.00	0.03	0.08	0.06	0.02	0.02	0.00	xxxxx	xxxx	0.02	xxxx	xxxxxx

Level Of Service Module:

2Way95thQ:	xxxxx	xxxxx	xxxxx	0.2	0.1	0.1	0.0	xxxxx	xxxxxx	0.1	xxxx	xxxxxx
Control Del:	xxxxx	xxxxx	xxxxx	17.2	14.9	9.7	7.7	xxxxx	xxxxxx	8.1	xxxx	xxxxxx
LOS by Move:	*	*	*	C	B	A	A	*	*	A	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxxx	583	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	0.4	xxxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	11.9	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		11.9			14.1			xxxxxx		xxxxxx		
ApproachLOS:		B			B			*		*		

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #110 60th St / Avenue K-8

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: C[ 21.3]

Street Name:	60th St				Avenue K-8															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign							
Rights:	Include				Include				Include				Include							
Lanes:	1	0	0	1	0	1	0	2	0	1	0	1	0	1	0	0	1	0	0	0

Volume Module:

Base Vol:	62	471	0	2	481	27	27	3	34	2	2	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	471	0	2	481	27	27	3	34	2	2	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	471	0	2	481	27	27	3	34	2	2	0
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	62	471	0	2	481	27	27	3	34	2	2	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	xxxxx

Capacity Module:

Cnflct Vol:	508	xxxx	xxxxx	471	xxxx	xxxxx	1081	1080	241	841	1107	xxxxx
Potent Cap.:	1067	xxxx	xxxxx	1101	xxxx	xxxxx	197	220	803	287	212	xxxxx
Move Cap.:	1067	xxxx	xxxxx	1101	xxxx	xxxxx	187	207	803	259	199	xxxxx
Volume/Cap.:	0.06	xxxx	xxxx	0.00	xxxx	xxxx	0.14	0.01	0.04	0.01	0.01	xxxx

Level Of Service Module:

2Way95thQ:	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	8.6	xxxx	xxxxx	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	189	xxxx	651	225	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.6	xxxx	0.2	0.1	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	27.7	xxxx	10.9	21.3	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	D	*	B	C	*	*	
ApproachDel:	xxxxxx			xxxxxx					18.4			21.3			
ApproachLOS:	*			*						C		C			

Note: Queue reported is the number of cars per lane.

Existing AM

Fri Aug 22, 2008 12:00:53

Page 14-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #111 70th St / Avenue L

Cycle (sec):	100	Critical Vol./Cap.(X):	0.356
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	9.7
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Avenue L			
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 0 1 0	1 0 0 1 0	1 0 1 0 1	1 0 0 1 0

## Volume Module:

Base Vol:	47	99	146	86	50	12	1	75	22	43	58	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	99	146	86	50	12	1	75	22	43	58	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	99	146	86	50	12	1	75	22	43	58	90
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	99	146	86	50	12	1	75	22	43	58	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	47	99	146	86	50	12	1	75	22	43	58	90

Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.40	0.60	1.00	0.81	0.19	1.00	1.00	1.00	1.00	0.39	0.61
Final Sat.:	582	278	410	566	506	121	507	548	611	547	250	389

Capacity Analysis Module:												
Vol/Sat:	0.08	0.36	0.36	0.15	0.10	0.10	0.00	0.14	0.04	0.08	0.23	0.23
Crit Moves:	****	****	****				****			****		
Delay/Veh:	9.2	10.4	10.4	9.8	8.7	8.7	9.4	9.7	8.3	9.4	9.5	9.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.2	10.4	10.4	9.8	8.7	8.7	9.4	9.7	8.3	9.4	9.5	9.5
LOS by Move:	A	B	B	A	A	A	A	A	A	A	A	A
ApproachDel:		10.2			9.4			9.4			9.5	
Delay Adj:			1.00			1.00			1.00		1.00	
ApprAdjDel:			10.2			9.4			9.4		9.5	
LOS by Appr:			B		A			A			A	
AllWayAvgQ:	0.1	0.5	0.5	0.2	0.1	0.1	0.0	0.1	0.0	0.1	0.3	0.3

Note: Queue reported is the number of cars per lane.

Existing AM

Fri Aug 22, 2008 12:00:54

Page 15-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

## Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #112 60th St / Avenue L

Cycle (sec):	100	Critical Vol./Cap.(X):	0.727
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Street Name:	60th St				Avenue L											
Approach:	North Bound		South Bound		East Bound		West Bound									
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	0	1	0	1	0	1	2	0	1	

## Volume Module:

Base Vol:	45	331	144	82	374	111	144	322	56	223	243	79
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	45	331	144	82	374	111	144	322	56	223	243	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	331	144	82	374	111	144	322	56	223	243	79
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	331	144	82	374	111	144	322	56	223	243	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	45	331	144	82	374	111	144	322	56	223	243	79

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	0.70	0.30	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1600	1115	485	1600	1600	1600	2880	1600	1600	2880	1600	1600

## Capacity Analysis Module:

Vol/Sat:	0.03	0.30	0.30	0.05	0.23	0.07	0.05	0.20	0.04	0.08	0.15	0.05
Crit Moves:	***	***	***				***		***			

## Existing AM

Fri Aug 22, 2008 12:00:54

Page 16-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

# Level Of Service Computation Report

### ICU 1 (Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #113 50th St / Avenue L

Cycle (sec): 100 Critical Vol./Cap.(X): 0.967  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxxx  
Optimal Cycle: 150 Level Of Service: E

Street Name:	50th St			Avenue L											
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted			Permitted			Permitted				Prot+Permit				
Rights:	Include			Include			Include				Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	1	0	0	1	0	0	1	0	0	1

Volume Module:													
Base Vol:	34	319	227	39	176	67	79	659	41	102	495	37	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	319	227	39	176	67	79	659	41	102	495	37	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	319	227	39	176	67	79	659	41	102	495	37	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	319	227	39	176	67	79	659	41	102	495	37	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	319	227	39	176	67	79	659	41	102	495	37	

```

-----|-----|-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:   1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:      1.00 0.58 0.42 1.00 0.72 0.28 1.00 0.94 0.06 1.00 0.93 0.07
Final Sat.: 1600  935  665 1600 1159  441 1600 1506   94 1600 1489  111
-----|-----|-----|-----|-----|-----|

```

Capacity Analysis Module:  
Vol/Sat: 0.02 0.34 0.34 0.02 0.15 0.15 0.05 0.44 0.44 0.06 0.33 0.33  
Crit Moves: \*\*\*\* \* \*\*\*\* \* \*\*\*\* \*

Existing AM

Fri Aug 22, 2008 12:00:54

Page 17-1

60th & K Shopping Center Lancaster  
Existing (2007)  
AM Peak Hour

## Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #114 60th St / Avenue L-8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.532	
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	35	Level Of Service:	A	
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R
<b>Control:</b>	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit
<b>Rights:</b>	Include	Include	Include	Include
<b>Min. Green:</b>	0 0 0	0 0 0	0 0 0	0 0 0
<b>Lanes:</b>	1 0 1 0 1	1 0 2 0 1	1 0 1 1 0	1 0 2 0 1
<b>Volume Module:</b>				
Base Vol:	67 310 35	123 344	30 96 174	60 42 166 162
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	67 310 35	123 344	30 96 174	60 42 166 162
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	67 310 35	123 344	30 96 174	60 42 166 162
Reduc Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	67 310 35	123 344	30 96 174	60 42 166 162
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	67 310 35	123 344	30 96 174	60 42 166 162
<b>Saturation Flow Module:</b>				
Sat/Lane:	1600 1600 1600	1600 1600 1600	1600 1600 1600	1600 1600 1600
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 1.00 1.00	1.00 2.00 1.00	1.00 1.49 1.00	0.51 1.00 2.00
Final Sat.:	1600 1600 1600	3200 1600 1600	2379 821 1600	3200 1600 1600
<b>Capacity Analysis Module:</b>				
Vol/Sat:	0.04 0.19 0.02	0.08 0.11 0.02	0.06 0.07 0.07	0.07 0.03 0.05 0.10
Crit Moves:	****	****	****	****

Existing PM

Fri Aug 22, 2008 12:01:47

Page 4-1

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #101 70th St / Avenue J

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: B[ 10.1]

Street Name:	70th St				Avenue J															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	0	1	0	0	0	0	1	0	0	0	0	1!	0	0	

## Volume Module:

Base Vol:	4	41	14	2	30	0	0	42	0	22	53	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	41	14	2	30	0	0	42	0	22	53	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	41	14	2	30	0	0	42	0	22	53	3
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	41	14	2	30	0	0	42	0	22	53	3

## Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx

## Capacity Module:

Cnflct Vol:	156	142	42	168	141	xxxxx	xxxx	xxxx	xxxxx	42	xxxx	xxxxx
Potent Cap.:	816	753	1034	800	754	xxxxx	xxxx	xxxx	xxxxx	1580	xxxx	xxxxx
Move Cap.:	782	742	1034	748	744	xxxxx	xxxx	xxxx	xxxxx	1580	xxxx	xxxxx
Volume/Cap.:	0.01	0.06	0.01	0.00	0.04	xxxx	xxxx	xxxx	xxxxx	0.01	xxxx	xxxx

## Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT					
Shared Cap.:	xxxx	799	xxxxx	744	xxxx	xxxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	0.1	xxxx	xxxxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	9.9	xxxxx	10.1	xxxx	xxxxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx
Shared LOS:	*	A	*	B	*	*	*	*	*	*	*	*
ApproachDel:		9.9			10.1		xxxxxx			xxxxxx		
ApproachLOS:		A			B			*		*		

Note: Queue reported is the number of cars per lane.

### Existing PM

Fri Aug 22, 2008 12:01:47

Page 5-1

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

# Level Of Service Computation Report

### ICU 1 (Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #102 60th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 0.374  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 28 Level Of Service: A

Street Name:	60th St						Avenue J								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted			Permitted			Permitted			Permitted					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	2	0	1	1	0	0	1	0	2	0	1	1	

Volume Module:												
Base Vol:	12	128	95	108	221	31	13	86	19	132	110	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	128	95	108	221	31	13	86	19	132	110	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	128	95	108	221	31	13	86	19	132	110	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	128	95	108	221	31	13	86	19	132	110	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	128	95	108	221	31	13	86	19	132	110	31

```

-----|-----|-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:   1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:      1.00 2.00 1.00 1.00 0.88 0.12 1.00 2.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 1600 3200 1600 1600 1403 197 1600 3200 1600 1600 1600 1600 1600
-----|-----|-----|-----|-----|-----|

```

Existing PM

Fri Aug 22, 2008 12:01:48

Page 6-1

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #103 50th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 0.414  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 29 Level Of Service: A

Street Name: 50th St Avenue J  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R  
-----|-----|-----|-----|  
Control: Permitted Permitted Permitted Permitted  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 1 0 1 0 1 0 1 0 1 0 0 1 0 1 0 0 1 0  
-----|-----|-----|-----|

Volume Module:  
Base Vol: 12 67 89 14 102 24 2 270 11 107 256 10  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 12 67 89 14 102 24 2 270 11 107 256 10  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Volume: 12 67 89 14 102 24 2 270 11 107 256 10  
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 12 67 89 14 102 24 2 270 11 107 256 10  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Final Volume: 12 67 89 14 102 24 2 270 11 107 256 10  
-----|-----|-----|-----|

Saturation Flow Module:  
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600  
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.96 0.04 1.00 0.96 0.04  
Final Sat.: 1600 1600 1600 1600 1600 1600 1600 1537 63 1600 1540 60  
-----|-----|-----|-----|

Capacity Analysis Module:  
Vol/Sat: 0.01 0.04 0.06 0.01 0.06 0.02 0.00 0.18 0.18 0.07 0.17 0.17  
Crit Moves: \*\*\*\* \*\*\* \*\*\* \*\*\*  
\*\*\*\*\*

Existing PM

Fri Aug 22, 2008 12:01:48

Page 7-1

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #104 60th St / Avenue J-8

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: C[ 15.1]

Street Name:	60th St	Avenue J-8		
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	1 0 1 0 1	1 0 1 0 1	1 0 1 0 1	1 0 0 1 0

Volume Module:

Base Vol:	64	237	2	2	303	38	14	1	60	3	0	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	64	237	2	2	303	38	14	1	60	3	0	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	237	2	2	303	38	14	1	60	3	0	1
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	64	237	2	2	303	38	14	1	60	3	0	1

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:

Cnflict Vol:	341	xxxx	xxxxx	239	xxxx	xxxxx	674	674	303	722	710	237
Potent Cap.:	1229	xxxx	xxxxx	1340	xxxx	xxxxx	371	379	741	345	361	807
Move Cap.:	1229	xxxx	xxxxx	1340	xxxx	xxxxx	356	358	741	303	342	807
Volume/Cap:	0.05	xxxx	xxxx	0.00	xxxx	xxxx	0.04	0.00	0.08	0.01	0.00	0.00

Level Of Service Module:

2Way95thQ:	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	0.0	0.3	0.0	xxxx	xxxxx
Control Del:	8.1	xxxx	xxxxx	7.7	xxxx	xxxxx	15.5	15.1	10.3	17.0	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	C	C	B	C	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	807
SharedQueue:	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	0.0
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	9.5
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	A
ApproachDel:	xxxxxx		xxxxxx				11.3			15.1		
ApproachLOS:	*		*		*			B		C		

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #105 70th St / Avenue K

Cycle (sec): 100 Critical Vol./Cap.(X): 0.129  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 7.8  
Optimal Cycle: 0 Level Of Service: A

Street Name:	70th St				Avenue K				
Approach:	North Bound		South Bound		East Bound		West Bound		
Movement:	L	T	R	L	T	R	L	T	R
Control:	Stop Sign		Stop Sign		Stop Sign		Stop Sign		
Rights:	Include		Include		Include		Include		
Min. Green:	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1!	0	0	0	0	0	0

Volume Module:

Base Vol:	6	59	18	1	49	0	0	88	20	20	71	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	59	18	1	49	0	0	88	20	20	71	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	59	18	1	49	0	0	88	20	20	71	3
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	59	18	1	49	0	0	88	20	20	71	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	59	18	1	49	0	0	88	20	20	71	3

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.07	0.71	0.22	0.02	0.98	0.00	0.00	0.81	0.19	0.21	0.76	0.03
Final Sat.:	58	574	175	16	763	0	0	681	155	172	611	26

Capacity Analysis Module:

Vol/Sat:	0.10	0.10	0.10	0.06	0.06	xxxx	xxxx	0.13	0.13	0.12	0.12	0.12
Crit Moves:	****			****					****			****
Delay/Veh:	7.7	7.7	7.7	7.7	7.7	0.0	0.0	7.8	7.8	7.9	7.9	7.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.7	7.7	7.7	7.7	7.7	0.0	0.0	7.8	7.8	7.9	7.9	7.9
LOS by Move:	A	A	A	A	A	*	*	A	A	A	A	A
ApproachDel:		7.7			7.7			7.8			7.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.7			7.7			7.8			7.9	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

Existing PM

Fri Aug 22, 2008 12:01:49

Page 9-1

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #106 62nd St / Avenue K

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: B[ 10.7]

Street Name:	62nd St				Avenue K														
Approach:	North Bound		South Bound		East Bound		West Bound												
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R				
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled						
Rights:	Include				Include				Include				Include						
Lanes:	0	0	1!	0	0	1	0	0	0	1	0	1	0	1	1	0	2	0	1

Volume Module:

Base Vol:	2	1	36	7	0	0	2	64	4	50	83	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	1	36	7	0	0	2	64	4	50	83	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	1	36	7	0	0	2	64	4	50	83	0
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	2	1	36	7	0	0	2	64	4	50	83	0

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	xxxxx	xxxxxx	4.1	xxxxx	xxxxxx	4.1	xxxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	xxxxx	xxxxxx	2.2	xxxxx	xxxxxx	2.2	xxxxx	xxxxxx

Capacity Module:

Cnflct Vol:	210	251	64	272	xxxxx	xxxxxx	83	xxxxx	xxxxxx	68	xxxxx	xxxxxx
Potent Cap.:	752	656	1006	685	xxxxx	xxxxxx	1527	xxxxx	xxxxxx	1546	xxxxx	xxxxxx
Move Cap.:	733	633	1006	643	xxxxx	xxxxxx	1527	xxxxx	xxxxxx	1546	xxxxx	xxxxxx
Volume/Cap.:	0.00	0.00	0.04	0.01	xxxxx	xxxxxx	0.00	xxxxx	xxxxxx	0.03	xxxxx	xxxxxx

Level Of Service Module:

2Way95thQ:	xxxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxxx	0.0	xxxxx	xxxxxx	0.1	xxxxx	xxxxxx			
Control Del:	xxxxx	xxxxx	xxxxx	10.7	xxxxx	xxxxxx	7.4	xxxxx	xxxxxx	7.4	xxxxx	xxxxxx			
LOS by Move:	*	*	*	B	*	*	A	*	*	A	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxxx	973	xxxxx	xxxxx	xxxxx	xxxxxx	xxxx	xxxxx	xxxxxx	xxxx	xxxxx	xxxxxx			
SharedQueue:	xxxxxx	0.1	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx			
Shrd ConDel:	xxxxx	8.9	xxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx			
Shared LOS:	*	A	*	*	*	*	*	*	*	*	*	*			
ApproachDel:	8.9			10.7			xxxxxx			xxxxxx					
ApproachLOS:	A			B			*			*					

Note: Queue reported is the number of cars per lane.

Existing PM

Fri Aug 22, 2008 12:01:50

Page 10-1

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

## Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #107 60th St / Avenue K

Cycle (sec):	100	Critical Vol./Cap.(X):	0.372
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Street Name:	60th St	Avenue K		
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 1 0	1 0 1 1 0	2 0 1 0 1	1 0 1 0 1

## Volume Module:

Base Vol:	15 175 77 138 276 19 12 76 13 95 100 43
Growth Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:	15 175 77 138 276 19 12 76 13 95 100 43
User Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:	15 175 77 138 276 19 12 76 13 95 100 43
Reduc Vol:	0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:	15 175 77 138 276 19 12 76 13 95 100 43
PCE Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:	15 175 77 138 276 19 12 76 13 95 100 43

Saturation Flow Module:	
Sat/Lane:	1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 0.90 1.00 1.00 1.00 1.00 1.00
Lanes:	1.00 1.39 0.61 1.00 1.87 0.13 2.00 1.00 1.00 1.00 1.00 1.00
Final Sat.:	1600 2222 978 1600 2994 206 2880 1600 1600 1600 1600 1600

Capacity Analysis Module:	
Vol/Sat:	0.01 0.08 0.08 0.09 0.09 0.09 0.00 0.05 0.01 0.06 0.06 0.03
Crit Moves:	**** * * * * * * * * * * * *

## Existing PM

Fri Aug 22, 2008 12:01:50

Page 11-1

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #108 50th St / Avenue K

Cycle (sec): 100 Critical Vol./Cap.(X): 0.547

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 12.1  
Optimal Cycle: 0 Level Of Service: B

Street Name:	50th St			Avenue K												
Approach:	North Bound		South Bound		East Bound		West Bound									
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include		Include		Include		Include		Include		Include		Include		Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1!	0	0	0	0	0	1!	0	0	0	0	1!	0	0

Volume Module:												
Base Vol:	29	90	67	17	149	6	6	221	14	81	257	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	90	67	17	149	6	6	221	14	81	257	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	90	67	17	149	6	6	221	14	81	257	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	90	67	17	149	6	6	221	14	81	257	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	90	67	17	149	6	6	221	14	81	257	21

```

Capacity Analysis Module:
Vol/Sat:    0.32 0.32 0.32 0.30 0.30 0.30 0.38 0.38 0.38 0.38 0.55 0.55 0.55
Crit Moves: ****   ****   ****   ****   ****   ****   ****   ****   ****   ****
Delay/Veh:   10.8 10.8 10.8 10.9 10.9 10.9 11.4 11.4 11.4 13.9 13.9 13.9
Delay Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  10.8 10.8 10.8 10.9 10.9 10.9 11.4 11.4 11.4 13.9 13.9 13.9
LOS by Move: B     B     B     B     B     B     B     B     B     B     B     B
ApproachDel: 10.8           10.9           11.4           13.9
Delay Adj:   1.00           1.00           1.00           1.00
ApprAdjDel:  10.8           10.9           11.4           13.9
LOS by Appr: B               B               B               B
AllWayAvgQ:  0.4   0.4   0.4   0.3   0.3   0.3   0.5   0.5   0.5   1.0   1.0   1.0

```

Note: Queue reported is the number of cars per lane.

Existing PM

Fri Aug 22, 2008 12:01:50

Page 12-1

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #109 45th St / Avenue K

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: C[ 15.3]

Street Name:	45th St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1

## Volume Module:

Base Vol:	7	8	53	6	4	4	4	317	1	45	318	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	8	53	6	4	4	4	317	1	45	318	11
User Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	8	54	6	4	4	4	323	1	46	324	11
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	8	54	6	4	4	4	323	1	46	324	11

## Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx

## Capacity Module:

Cnflict Vol:	757	759	323	779	749	324	336	xxxx	xxxxx	324	xxxx	xxxxx
Potent Cap.:	326	338	722	315	343	721	1235	xxxx	xxxxx	1247	xxxx	xxxxx
Move Cap.:	312	325	722	278	329	721	1235	xxxx	xxxxx	1247	xxxx	xxxxx
Volume/Cap.:	0.02	0.03	0.07	0.02	0.01	0.01	0.00	xxxx	xxxx	0.04	xxxx	xxxx

## Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxx	0.1	0.0	0.0	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxx	xxxx	xxxx	18.3	16.1	10.0	7.9	xxxx	xxxxx	8.0	xxxx	xxxxx
LOS by Move:	*	*	*	C	C	B	A	*	*	A	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	564	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
SharedQueue:	xxxx	0.4	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shrd ConDel:	xxxx	12.3	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		12.3			15.3		xxxxxx			xxxxxx		
ApproachLOS:		B			C		*			*		

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #110 60th St / Avenue K-8

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[ 13.6]

Street Name:	60th St	Avenue K-8		
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Uncontrolled	Uncontrolled	Stop Sign	
Rights:	Include	Include	Include	
Lanes:	1 0 0 1 0	1 0 2 0 1	1 0 0 0 1	1 0 0 0 0

Volume Module:

Base Vol:	26 343	0 0	365 13	8 0	11 1	0 0	0 0
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Initial Bse:	26 343	0 0	365 13	8 0	11 1	0 0	0 0
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Volume:	26 343	0 0	365 13	8 0	11 1	0 0	0 0
Reduc Vol:	0 0	0 0	0 0	0 0	0 0	0 0	0 0
FinalVolume:	26 343	0 0	365 13	8 0	11 1	0 0	0 0

Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx xxxx xxxx xxxx	7.1 xxxx	6.2	7.1 xxxx xxxx
FollowUpTim:	2.2 xxxx xxxx xxxx xxxx xxxx	3.5 xxxx	3.3	3.5 xxxx xxxx

Capacity Module:

Cnflct Vol:	378 xxxx xxxx xxxx xxxx xxxx	760 xxxx	183	578 xxxx xxxx
Potent Cap.:	1192 xxxx xxxx xxxx xxxx xxxx	325 xxxx	865	430 xxxx xxxx
Move Cap.:	1192 xxxx xxxx xxxx xxxx xxxx	320 xxxx	865	418 xxxx xxxx
Volume/Cap:	0.02 xxxx xxxx xxxx xxxx xxxx	0.03 xxxx	0.01	0.00 xxxx xxxx

Level Of Service Module:

2Way95thQ:	0.1 xxxx xxxx xxxx xxxx xxxx	0.1 xxxx	0.0	0.0 xxxx xxxx
Control Del:	8.1 xxxx xxxx xxxx xxxx xxxx	16.6 xxxx	9.2	13.6 xxxx xxxx
LOS by Move:	A * * * * *	C * A B *	*	*
Movement:	LT - LTR - RT			
Shared Cap.:	xxxx xxxx xxxx xxxx xxxx xxxx			
SharedQueue:	xxxx xxxx xxxx xxxx xxxx xxxx			
Shrd ConDel:	xxxx xxxx xxxx xxxx xxxx xxxx			
Shared LOS:	* * * * *	* * * * *	* * * * *	* * * * *
ApproachDel:	xxxxxx	xxxxxx	12.3	13.6
ApproachLOS:	*	*	B	B

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #111 70th St / Avenue L

Cycle (sec):	100	Critical Vol./Cap.(X):	0.190
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.8
Optimal Cycle:	0	Level Of Service:	A

Street Name:	70th St	Avenue L		
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 0 1 0	1 0 0 1 0	1 0 1 0 1	1 0 0 1 0

Volume Module:

Base Vol:	16	48	62	12	103	4	2	35	12	117	51	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	48	62	12	103	4	2	35	12	117	51	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	16	48	62	12	103	4	2	35	12	117	51	14
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	48	62	12	103	4	2	35	12	117	51	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	16	48	62	12	103	4	2	35	12	117	51	14

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.44	0.56	1.00	0.96	0.04	1.00	1.00	1.00	1.00	0.78	0.22
Final Sat.:	607	313	404	607	642	25	566	616	698	616	543	149

Capacity Analysis Module:

Vol/Sat:	0.03	0.15	0.15	0.02	0.16	0.16	0.00	0.06	0.02	0.19	0.09	0.09
Crit Moves:	****			****		****	****		****	****		
Delay/Veh:	8.6	8.4	8.4	8.5	8.8	8.8	8.8	8.6	7.6	9.6	8.2	8.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.6	8.4	8.4	8.5	8.8	8.8	8.8	8.6	7.6	9.6	8.2	8.2
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		8.4			8.8			8.4			9.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.4			8.8			8.4			9.1	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.1	0.0	0.2	0.1	0.1

Note: Queue reported is the number of cars per lane.

Existing PM

Fri Aug 22, 2008 12:01:50

Page 15-1

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #112 60th St / Avenue L

Cycle (sec): 100 Critical Vol./Cap.(X): 0.509  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 34 Level Of Service: A

Street Name:	Avenue L			
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 0 1 0	1 0 1 0 1	2 0 1 0 1	2 0 1 0 1

Volume Module:

Base Vol:	19	249	120	67	306	36	30	134	52	152	181	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	249	120	67	306	36	30	134	52	152	181	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	249	120	67	306	36	30	134	52	152	181	100
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	249	120	67	306	36	30	134	52	152	181	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	19	249	120	67	306	36	30	134	52	152	181	100

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	0.67	0.33	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1600	1080	520	1600	1600	1600	2880	1600	1600	2880	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.01	0.23	0.23	0.04	0.19	0.02	0.01	0.08	0.03	0.05	0.11	0.06
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***

Existing PM

Fri Aug 22, 2008 12:01:51

Page 16-1

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

## Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #113 50th St / Avenue L

Cycle (sec):	100	Critical Vol./Cap.(X):	0.814
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Street Name:	50th St				Avenue L											
Approach:	North Bound		South Bound		East Bound		West Bound									
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Permitted				Permitted				Permitted				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	

## Volume Module:

Base Vol:	13	169	211	34	223	83	32	405	28	197	619	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	169	211	34	223	83	32	405	28	197	619	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	169	211	34	223	83	32	405	28	197	619	77
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	169	211	34	223	83	32	405	28	197	619	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	13	169	211	34	223	83	32	405	28	197	619	77

## Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.44	0.56	1.00	0.73	0.27	1.00	0.94	0.06	1.00	0.89	0.11
Final Sat.:	1600	712	888	1600	1166	434	1600	1497	103	1600	1423	177

## Capacity Analysis Module:

Vol/Sat:	0.01	0.24	0.24	0.02	0.19	0.19	0.02	0.27	0.27	0.12	0.43	0.44
Crit Moves:	***	***	***				***			***		

Existing PM

Fri Aug 22, 2008 12:01:51

Page 17-1

60th & K Shopping Center Lancaster  
Existing (2007)  
PM Peak Hour

## Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #114 60th St / Avenue L-8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.428	
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	30	Level Of Service:	A	
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 1	1 0 2 0 1	1 0 1 1 0	1 0 2 0 1
Volume Module:				
Base Vol:	65 360	61 27 380	35 22 89	63 62 70 11
Growth Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
Initial Bse:	65 360	61 27 380	35 22 89	63 62 70 11
User Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
PHF Volume:	65 360	61 27 380	35 22 89	63 62 70 11
Reduc Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	65 360	61 27 380	35 22 89	63 62 70 11
PCE Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
MLF Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
FinalVolume:	65 360	61 27 380	35 22 89	63 62 70 11
Saturation Flow Module:				
Sat/Lane:	1600 1600	1600 1600 1600	1600 1600 1600	1600 1600 1600
Adjustment:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
Lanes:	1.00 1.00	1.00 1.00 2.00	1.00 1.00 1.17	0.83 1.00 2.00 1.00
Final Sat.:	1600 1600	1600 1600 3200	1600 1600 1874	1326 1600 3200 1600
Capacity Analysis Module:				
Vol/Sat:	0.04 0.23	0.04 0.02 0.12	0.02 0.01 0.05	0.05 0.04 0.02 0.01
Crit Moves:	****	****	****	****

**APPENDIX D**  
**Analysis Worksheets for Future (Year 2012)**  
**Pre-Project Conditions**

---

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #101 70th St / Avenue J

Average Delay (sec/veh): 9.3 Worst Case Level Of Service: B[ 14.6]

Street Name:	70th St				Avenue J															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1!	0	0

Volume Module:

Base Vol:	2	73	91	8	46	0	0	53	5	33	49	3
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	2	80	100	9	51	0	0	58	6	36	54	3
Added Vol:	0	83	17	6	32	0	0	14	0	52	40	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	163	117	15	83	0	0	72	6	88	94	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	163	117	15	83	0	0	72	6	88	94	21
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	163	117	15	83	0	0	72	6	88	94	21

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	xxxxxx	xxxxxx	xxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	xxxxxx	xxxxxx	xxxx	xxxxxx	2.2	xxxx	xxxxxx

Capacity Module:

Cnflict Vol:	398	367	75	496	359	xxxxxx	xxxx	xxxx	xxxxxx	78	xxxx	xxxxxx
Potent Cap.:	566	565	992	487	571	xxxxxx	xxxx	xxxx	xxxxxx	1533	xxxx	xxxxxx
Move Cap.:	477	531	992	313	536	xxxxxx	xxxx	xxxx	xxxxxx	1533	xxxx	xxxxxx
Volume/Cap.:	0.00	0.31	0.12	0.05	0.15	xxxx	xxxx	xxxx	xxxxxx	0.06	xxxx	xxxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.2	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	7.5	xxxx	xxxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT			
Shared Cap.:	xxxx	657	xxxxxx	484	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	2.2	xxxxxx	0.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	14.6	xxxxxx	14.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shared LOS:	*	B	*	B	*	*	*	*	*	*	*	*
ApproachDel:		14.6			14.3			xxxxxx		xxxxxx		
ApproachLOS:		B			B			*		*		

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #102 60th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 0.628  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 42 Level Of Service: B

Street Name:	60th St				Avenue J															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:	Permitted				Permitted				Permitted				Permitted							
Rights:	Include				Include				Include				Include							
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	2	0	1	1	0	0	1	0	1	0	2	0	1	1	0	1	0	1

Volume Module:

Base Vol:	20	209	208	39	145	14	52	225	52	123	108	221
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	22	230	229	43	160	15	57	248	57	135	119	243
Added Vol:	60	389	47	5	185	22	65	171	147	16	72	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	619	276	48	345	37	122	419	204	151	191	259
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	82	619	276	48	345	37	122	419	204	151	191	259
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	619	276	48	345	37	122	419	204	151	191	259
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	82	619	276	48	345	37	122	419	204	151	191	259

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	0.90	0.10	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	1443	157	1600	3200	1600	1600	1600	1600

Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.17	0.03	0.24	0.24	0.08	0.13	0.13	0.09	0.12	0.16
Crit Moves:	****			****		****				****		

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #103 50th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 0.711  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 51 Level Of Service: C

Street Name:	50th St				Avenue J														
Approach:	North Bound		South Bound		East Bound		West Bound												
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R				
Control:	Permitted				Permitted				Permitted				Permitted						
Rights:	Include				Include				Include				Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	1	0	1	0	1	1	0	1	0	1	0	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	56	133	128	12	67	17	13	393	19	49	334	22
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	62	146	141	13	74	19	14	432	21	54	367	24
Added Vol:	66	23	62	2	9	14	42	88	141	24	33	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	128	169	203	15	83	33	56	520	162	78	400	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	169	203	15	83	33	56	520	162	78	400	31
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	169	203	15	83	33	56	520	162	78	400	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	169	203	15	83	33	56	520	162	78	400	31

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.24	1.00	0.93	0.07
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	1220	380	1600	1484	116

Capacity Analysis Module:

Vol/Sat:	0.08	0.11	0.13	0.01	0.05	0.02	0.04	0.43	0.43	0.05	0.27	0.27
Crit Moves:	****	****					****		****			

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #104 60th St / Avenue J-8

Average Delay (sec/veh): 84.5 Worst Case Level Of Service: F[3602.7]

Street Name:	60th St				Avenue J-8											
Approach:	North Bound		South Bound		East Bound		West Bound									
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0	0	1	0	

Volume Module:

Base Vol:	190	346	18	5	238	118	34	3	364	8	0	4
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	209	381	20	6	262	130	37	3	400	9	0	4
Added Vol:	2	433	9	6	380	1	1	0	2	25	0	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	211	814	29	12	642	131	38	3	402	34	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	211	814	29	12	642	131	38	3	402	34	0	12
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	211	814	29	12	642	131	38	3	402	34	0	12

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:

Cnflict Vol:	773	xxxx	xxxxx	842	xxxx	xxxxx	1921	1929	642	2169	2031	814
Potent Cap.:	852	xxxx	xxxxx	802	xxxx	xxxxx	51	67	478	34	58	381
Move Cap.:	852	xxxx	xxxxx	802	xxxx	xxxxx	40	50	478	4	43	381
Volume/Cap.:	0.25	xxxx	xxxx	0.01	xxxx	xxxx	0.96	0.07	0.84	8.20	0.00	0.03

Level Of Service Module:

2Way95thQ:	1.0	xxxx	xxxxx	0.0	xxxx	xxxxx	3.7	0.2	8.4	5.9	xxxx	xxxxx			
Control Del:	10.6	xxxx	xxxxx	9.6	xxxx	xxxxx	285.8	82.4	41.2	4919	xxxx	xxxxx			
LOS by Move:	B	*	*	A	*	*	F	F	E	F	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	381		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	0.1		
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	14.8		
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	B
ApproachDel:	xxxxxx			xxxxxx					62.6		3602.7				
ApproachLOS:	*			*						F		F			

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #105 70th St / Avenue K  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.123

Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 57.8

Optimal Cycle: 0 Level Of Service: F

\*\*\*\*\*  
Street Name: 70th St Avenue K  
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|-----|-----|-----|

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0

-----|-----|-----|-----|-----|-----|-----|-----|

Volume Module:

Base Vol:	23	148	109	4	67	1	1	62	35	29	65	1
-----------	----	-----	-----	---	----	---	---	----	----	----	----	---

Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
-------------	------	------	------	------	------	------	------	------	------	------	------	------

Initial Bse:	25	163	120	4	74	1	1	68	39	32	72	1
--------------	----	-----	-----	---	----	---	---	----	----	----	----	---

Added Vol:	7	93	53	0	62	21	7	126	7	149	354	0
------------	---	----	----	---	----	----	---	-----	---	-----	-----	---

PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
--------------	---	---	---	---	---	---	---	---	---	---	---	---

Initial Fut:	32	256	173	4	136	22	8	194	46	181	426	1
--------------	----	-----	-----	---	-----	----	---	-----	----	-----	-----	---

User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
-----------	------	------	------	------	------	------	------	------	------	------	------	------

PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
----------	------	------	------	------	------	------	------	------	------	------	------	------

PHF Volume:	32	256	173	4	136	22	8	194	46	181	426	1
-------------	----	-----	-----	---	-----	----	---	-----	----	-----	-----	---

Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
--------------	---	---	---	---	---	---	---	---	---	---	---	---

Reduced Vol:	32	256	173	4	136	22	8	194	46	181	426	1
--------------	----	-----	-----	---	-----	----	---	-----	----	-----	-----	---

PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
----------	------	------	------	------	------	------	------	------	------	------	------	------

MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
----------	------	------	------	------	------	------	------	------	------	------	------	------

FinalVolume:	32	256	173	4	136	22	8	194	46	181	426	1
--------------	----	-----	-----	---	-----	----	---	-----	----	-----	-----	---

-----|-----|-----|-----|-----|-----|-----|-----|

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
-------------	------	------	------	------	------	------	------	------	------	------	------	------

Lanes:	0.07	0.55	0.38	0.03	0.84	0.13	0.03	0.79	0.18	0.29	0.70	0.01
--------	------	------	------	------	------	------	------	------	------	------	------	------

Final Sat.:	38	297	201	12	368	60	15	371	87	161	379	1
-------------	----	-----	-----	----	-----	----	----	-----	----	-----	-----	---

-----|-----|-----|-----|-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat:	0.86	0.86	0.86	0.37	0.37	0.37	0.52	0.52	0.52	1.12	1.12	1.12
----------	------	------	------	------	------	------	------	------	------	------	------	------

Crit Moves:	****	****	****				****	****	****	****	****	****
-------------	------	------	------	--	--	--	------	------	------	------	------	------

Delay/Veh:	37.1	37.1	37.1	14.6	14.6	14.6	17.1	17.1	17.1	101.6	102	101.6
------------	------	------	------	------	------	------	------	------	------	-------	-----	-------

Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
------------	------	------	------	------	------	------	------	------	------	------	------	------

AdjDel/Veh:	37.1	37.1	37.1	14.6	14.6	14.6	17.1	17.1	17.1	101.6	102	101.6
-------------	------	------	------	------	------	------	------	------	------	-------	-----	-------

LOS by Move:	E	E	E	B	B	B	C	C	C	F	F	F
--------------	---	---	---	---	---	---	---	---	---	---	---	---

ApproachDel:	37.1			14.6			17.1			101.6		
--------------	------	--	--	------	--	--	------	--	--	-------	--	--

Delay Adj:	1.00			1.00			1.00			1.00		
------------	------	--	--	------	--	--	------	--	--	------	--	--

ApprAdjDel:	37.1			14.6			17.1			101.6		
-------------	------	--	--	------	--	--	------	--	--	-------	--	--

LOS by Appr:	E			B			C			F		
--------------	---	--	--	---	--	--	---	--	--	---	--	--

AllWayAvgQ:	4.1	4.1	4.1	0.5	0.5	0.5	0.9	0.9	0.9	13.8	13.8	13.8
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------

\*\*\*\*\*  
\*\*\*\*\*  
\*\*\*\*\*

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #106 62nd St / Avenue K

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: D[ 35.0]

Street Name:	62nd St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	2	0	1

Volume Module:

Base Vol:	6	1	93	2	1	0	2	221	11	25	41	78
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	7	1	102	2	1	0	2	243	12	28	45	86
Added Vol:	0	0	0	15	0	5	2	556	0	0	250	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	1	102	17	1	5	4	799	12	28	295	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	1	102	17	1	5	4	799	12	28	295	91
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	1	102	17	1	5	4	799	12	28	295	91

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	1011	1248	799	1215	1170	148	386	xxxx	xxxxx	811	xxxx	xxxxx
Potent Cap.:	220	175	389	160	195	905	1184	xxxx	xxxxx	824	xxxx	xxxxx
Move Cap.:	212	168	389	114	187	905	1184	xxxx	xxxxx	824	xxxx	xxxxx
Volume/Cap.:	0.03	0.01	0.26	0.15	0.01	0.01	0.00	xxxx	xxxx	0.03	xxxx	xxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	9.5	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	*	A	*	*	A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	366	xxxxx	xxxx	143	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
SharedQueue:	xxxxx	1.2	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shrd ConDel:	xxxxx	19.0	xxxxx	xxxxx	35.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shared LOS:	*	C	*	*	D	*	*	*	*	*	*	*	*	*	*
ApproachDel:		19.0			35.0			xxxxxx			xxxxxx				
ApproachLOS:		C			D			*			*				

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #107 60th St / Avenue K

Cycle (sec): 100 Critical Vol./Cap.(X): 0.932  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 119 Level Of Service: E

Street Name:	60th St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:	Protected				Protected				Protected				Protected							
Rights:	Include				Include				Include				Include							
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	1	1	0	1	0	1	1	0	2	0	1	0	1	1	0	1	0	1

Volume Module:

Base Vol:	20	302	150	21	129	9	69	218	31	99	118	175
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	22	332	165	23	142	10	76	240	34	109	130	193
Added Vol:	37	132	85	142	199	98	242	406	92	55	165	73
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	464	250	165	341	108	318	646	126	164	295	266
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	464	250	165	341	108	318	646	126	164	295	266
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	464	250	165	341	108	318	646	126	164	295	266
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	59	464	250	165	341	108	318	646	126	164	295	266

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.30	0.70	1.00	1.52	0.48	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2080	1120	1600	2431	769	2880	1600	1600	1600	1600	1600

Capacity Analysis Module:												
Vol/Sat:	0.04	0.22	0.22	0.10	0.14	0.14	0.11	0.40	0.08	0.10	0.18	0.17
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #108 50th St / Avenue K

Cycle (sec):	100	Critical Vol./Cap.(X):	2.389
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	375.1
Optimal Cycle:	0	Level Of Service:	F
<hr/>			<hr/>
Street Name:	50th St	Avenue K	
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
<hr/>			<hr/>
Volume Module:			
Base Vol:	17 145 123	38 58 3	8 270 11
Growth Adj:	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10
Initial Bse:	19 160 135	42 64 3	9 297 12
Added Vol:	0 27 125	97 60 1	4 702 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	19 187 260	139 124 4	13 999 12
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	19 187 260	139 124 4	13 999 12
Reducet Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	19 187 260	139 124 4	13 999 12
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	19 187 260	139 124 4	13 999 12
<hr/>			<hr/>
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.04 0.40 0.56	0.52 0.46 0.02	0.01 0.98 0.01
Final Sat.:	18 179 249	203 181 6	5 418 5
<hr/>			<hr/>
Capacity Analysis Module:			
Vol/Sat:	1.04 1.04 1.04	0.68 0.68 0.68	0.68 2.39 2.39
Crit Moves:	****	****	****
Delay/Veh:	83.4 83.4 83.4	29.9 29.9 29.9	29.9 650.4 650
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	83.4 83.4 83.4	29.9 29.9 29.9	29.9 650.4 650
LOS by Move:	F F F	D D D	F F F
ApproachDel:	83.4	29.9	650.4
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	83.4	29.9	650.4
LOS by Appr:	F	D	F
AllWayAvgQ:	9.0 9.0 9.0	1.9 1.9 1.9	76.1 76.1 76.1
<hr/>			<hr/>

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #109 45th St / Avenue K

Average Delay (sec/veh): 17.9 Worst Case Level Of Service: F[520.2]

Street Name:	45th St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1

Volume Module:

Base Vol:	1	12	51	19	6	14	1	360	6	20	254	3
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	1	13	56	21	7	15	1	396	7	22	279	3
Added Vol:	0	0	0	13	0	9	3	953	0	0	430	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	13	56	34	7	24	4	1349	7	22	709	7
User Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	13	57	35	7	25	4	1376	7	22	724	7
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	13	57	35	7	25	4	1376	7	22	724	7

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxxx	xxxxx	4.1	xxxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxxx	xxxxx	2.2	xxxxx	xxxxx

Capacity Module:

Cnflct Vol:	2172	2160	1376	2192	2160	724	731	xxxxx	xxxxx	1383	xxxxx	xxxxx
Potent Cap.:	34	48	180	33	48	429	882	xxxxx	xxxxx	502	xxxxx	xxxxx
Move Cap.:	27	46	180	17	46	429	882	xxxxx	xxxxx	502	xxxxx	xxxxx
Volume/Cap.:	0.04	0.29	0.32	2.07	0.15	0.06	0.00	xxxxx	xxxxx	0.04	xxxxx	xxxxx

Level Of Service Module:

2Way95thQ:	xxxxx	xxxxx	xxxxx	4.9	0.5	0.2	0.0	xxxxx	xxxxx	0.1	xxxxx	xxxxx			
Control Del:	xxxxx	xxxxx	xxxxx	967.1	96.8	13.9	9.1	xxxxx	xxxxx	12.5	xxxxx	xxxxx			
LOS by Move:	*	*	*	F	F	B	A	*	*	B	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxxx	110	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxx			
SharedQueue:	xxxxxx	3.3	xxxxxx	xxxx	xxxx										
Shrd ConDel:	xxxxxx	85.4	xxxxxx	xxxx	xxxx										
Shared LOS:	*	F	*	*	*	*	*	*	*	*	*	*			
ApproachDel:		85.4			520.2			xxxxxx		xxxxxx					
ApproachLOS:		F			F			*		*					

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #110 60th St / Avenue K-8

Average Delay (sec/veh): 6.1 Worst Case Level Of Service: F[ 79.5]

Street Name:	60th St				Avenue K-8															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign							
Rights:	Include				Include				Include				Include							
Lanes:	1	0	0	1	0	1	0	2	0	1	0	1	0	1	0	0	0	1!	0	0

Volume Module:

Base Vol:	62	471	0	2	481	27	27	3	34	2	2	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	68	518	0	2	529	30	30	3	37	2	2	0
Added Vol:	0	196	15	18	343	4	1	0	0	47	0	43
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	714	15	20	872	34	31	3	37	49	2	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	68	714	15	20	872	34	31	3	37	49	2	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	68	714	15	20	872	34	31	3	37	49	2	43

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:

Cnflict Vol:	906	xxxx	xxxxxx	729	xxxx	xxxxxx	1793	1778	436	1336	1804	722
Potent Cap.:	760	xxxx	xxxxxx	884	xxxx	xxxxxx	63	83	625	132	80	430
Move Cap.:	760	xxxx	xxxxxx	884	xxxx	xxxxxx	51	74	625	110	71	430
Volume/Cap.:	0.09	xxxx	xxxx	0.02	xxxx	xxxx	0.60	0.04	0.06	0.45	0.03	0.10

Level Of Service Module:

2Way95thQ:	0.3	xxxx	xxxxxx	0.1	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	10.2	xxxx	xxxxxx	9.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	53	xxxx	390	xxxx	163	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	2.6	xxxx	0.3	xxxxxx	3.1	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	156.2	xxxx	15.3	xxxxxx	53.8	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	C	*	F	*
ApproachDel:	xxxxxx			xxxxxx				79.5			53.8	
ApproachLOS:	*			*					F		F	

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #111 70th St / Avenue L

Cycle (sec): 100 Critical Vol./Cap.(X): 0.804  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 22.1  
Optimal Cycle: 0 Level Of Service: C

Street Name:	70th St				Avenue L				
Approach:	North Bound		South Bound		East Bound		West Bound		
Movement:	L	T	R	L	T	R	L	T	R
Control:	Stop Sign		Stop Sign		Stop Sign		Stop Sign		
Rights:	Include		Include		Include		Include		
Min. Green:	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	1

Volume Module:

Base Vol:	47	99	146	86	50	12	1	75	22	43	58	90
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	52	109	161	95	55	13	1	83	24	47	64	99
Added Vol:	83	50	65	158	33	28	39	92	136	37	76	64
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	159	226	253	88	41	40	175	160	84	140	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	135	159	226	253	88	41	40	175	160	84	140	163
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	159	226	253	88	41	40	175	160	84	140	163
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	135	159	226	253	88	41	40	175	160	84	140	163

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.41	0.59	1.00	0.68	0.32	1.00	1.00	1.00	1.00	0.46	0.54
Final Sat.:	420	198	280	409	301	141	366	390	422	402	208	243

Capacity Analysis Module:

Vol/Sat:	0.32	0.80	0.80	0.62	0.29	0.29	0.11	0.45	0.38	0.21	0.67	0.67
Crit Moves:	****	****	****				****			****		
Delay/Veh:	14.8	32.9	32.9	23.3	13.6	13.6	13.1	18.0	15.4	13.5	23.7	23.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.8	32.9	32.9	23.3	13.6	13.6	13.1	18.0	15.4	13.5	23.7	23.7
LOS by Move:	B	D	D	C	B	B	B	C	C	B	C	C
ApproachDel:		28.2			20.0			16.3			21.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		28.2			20.0			16.3			21.5	
LOS by Appr:		D			C			C			C	
AllWayAvgQ:	0.4	3.0	3.0	1.4	0.4	0.4	0.1	0.7	0.5	0.2	1.7	1.7

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #112 60th St / Avenue L

Cycle (sec): 100 Critical Vol./Cap.(X): 1.125  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

Street Name:	60th St				Avenue L													
Approach:	North Bound		South Bound		East Bound		West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Protected				Protected				Protected				Protected					
Rights:	Include				Include				Include				Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	0	1	0	1	0	1	2	0	1	0	1	2	0	1	0	1

Volume Module:

Base Vol:	45	331	144	82	374	111	144	322	56	223	243	79
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	50	364	158	90	411	122	158	354	62	245	267	87
Added Vol:	84	78	42	152	228	53	27	216	169	49	194	74
PasserByVol:	5	0	5	17	0	17	0	0	0	0	0	0
Initial Fut:	139	442	205	259	639	192	185	570	231	294	461	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	139	442	205	259	639	192	185	570	231	294	461	161
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	442	205	259	639	192	185	570	231	294	461	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	139	442	205	259	639	192	185	570	231	294	461	161

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	0.68	0.32	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1600	1092	508	1600	1600	1600	2880	1600	1600	2880	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.09	0.40	0.40	0.16	0.40	0.12	0.06	0.36	0.14	0.10	0.29	0.10
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #113 50th St / Avenue L

Cycle (sec): 100 Critical Vol./Cap.(X): 1.295  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

Street Name:	50th St				Avenue L													
Approach:	North Bound		South Bound		East Bound		West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Permitted				Permitted				Permitted				Prot+Permit					
Rights:	Include				Include				Include				Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	0	1	0	1	0	0	1	0	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	34	319	227	39	176	67	79	659	41	102	495	37
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	37	351	250	43	194	74	87	725	45	112	545	41
Added Vol:	6	13	1	23	37	152	131	330	18	1	217	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	364	251	66	231	226	218	1055	63	113	762	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	364	251	66	231	226	218	1055	63	113	762	50
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	364	251	66	231	226	218	1055	63	113	762	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	364	251	66	231	226	218	1055	63	113	762	50

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.59	0.41	1.00	0.51	0.49	1.00	0.94	0.06	1.00	0.94	0.06
Final Sat.:	1600	947	653	1600	809	791	1600	1510	90	1600	1502	98

Capacity Analysis Module:												
Vol/Sat:	0.03	0.38	0.38	0.04	0.29	0.29	0.14	0.70	0.70	0.07	0.51	0.51
Crit Moves:	***	***	***				***	***				

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #114 60th St / Avenue L-8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.703
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Prot+Permit	Prot+Permit	Prot+Permit
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 1	1 0 2 0 1	1 0 1 1 0
Volume Module:			
Base Vol:	67 310 35	123 344 30	96 174 60
Growth Adj:	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10
Initial Bse:	74 341 39	135 378 33	106 191 66
Added Vol:	0 205 0	0 445 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	74 546 39	135 823 33	106 191 66
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	74 546 39	135 823 33	106 191 66
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	74 546 39	135 823 33	106 191 66
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	74 546 39	135 823 33	106 191 66
Saturation Flow Module:			
Sat/Lane:	1600 1600 1600	1600 1600 1600	1600 1600 1600
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 1.00 1.00	2.00 1.00 1.00	1.49 0.51 1.00
Final Sat.:	1600 1600 1600	3200 1600 1600	2379 821 1600
Capacity Analysis Module:			
Vol/Sat:	0.05 0.34 0.02	0.08 0.26 0.02	0.07 0.08 0.08
Crit Moves:	****	****	****

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #101 70th St / Avenue J

Average Delay (sec/veh): 8.0 Worst Case Level Of Service: B[ 13.7]

Street Name:	70th St				Avenue J											
Approach:	North Bound		South Bound		East Bound		West Bound									
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0	0	0	1	0	0	0	0	1	0	0	0	0

Volume Module:

Base Vol:	4	41	14	2	30	0	0	42	0	22	53	3
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	4	45	15	2	33	0	0	46	0	24	58	3
Added Vol:	0	57	58	20	96	0	0	45	0	34	26	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	102	73	22	129	0	0	91	0	58	84	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	102	73	22	129	0	0	91	0	58	84	15
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	102	73	22	129	0	0	91	0	58	84	15

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	xxxxxx	xxxxxx	xxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	xxxxxx	xxxxxx	xxxx	xxxxxx	2.2	xxxx	xxxxxx

Capacity Module:

Cnflict Vol:	364	307	91	387	300	xxxxxx	xxxx	xxxx	xxxxxx	91	xxxx	xxxxxx
Potent Cap.:	596	610	972	575	616	xxxxxx	xxxx	xxxx	xxxxxx	1516	xxxx	xxxxxx
Move Cap.:	481	586	972	447	592	xxxxxx	xxxx	xxxx	xxxxxx	1516	xxxx	xxxxxx
Volume/Cap.:	0.01	0.17	0.08	0.05	0.22	xxxx	xxxx	xxxx	xxxxxx	0.04	xxxx	xxxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.1	xxxx	xxxxxx			
Control Del:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	7.5	xxxx	xxxxxx			
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	695	xxxxxx	565	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx			
SharedQueue:	xxxxxx	1.0	xxxxxx	1.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx			
Shrd ConDel:	xxxxxx	12.0	xxxxxx	13.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx			
Shared LOS:	*	B	*	B	*	*	*	*	*	*	*	*			
ApproachDel:		12.0			13.7			xxxxxx		xxxxxx					
ApproachLOS:		B			B			*		*					

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #102 60th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 1.032  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

Street Name:	60th St				Avenue J											
Approach:	North Bound		South Bound		East Bound		West Bound									
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	2	0	1	1	0	0	1	0	1	0	2	0	1	

Volume Module:

Base Vol:	12	128	95	108	221	31	13	86	19	132	110	31
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	13	141	105	119	243	34	14	95	21	145	121	34
Added Vol:	170	433	31	18	580	74	43	128	109	53	198	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	183	574	136	137	823	108	57	223	130	198	319	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	574	136	137	823	108	57	223	130	198	319	45
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	574	136	137	823	108	57	223	130	198	319	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	183	574	136	137	823	108	57	223	130	198	319	45

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	0.88	0.12	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	1414	186	1600	3200	1600	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.11	0.18	0.08	0.09	0.58	0.58	0.04	0.07	0.08	0.12	0.20	0.03
Crit Moves:	****			****		****				****		

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #103 50th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 0.720  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 53 Level Of Service: C

Street Name:	50th St Avenue J			
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 1	1 0 1 0 1	1 0 0 1 0	1 0 0 1 0

Volume Module:

Base Vol:	12	67	89	14	102	24	2	270	11	107	256	10
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	13	74	98	15	112	26	2	297	12	118	282	11
Added Vol:	165	18	44	8	28	47	28	62	113	72	100	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	178	92	142	23	140	73	30	359	125	190	382	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	178	92	142	23	140	73	30	359	125	190	382	16
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	92	142	23	140	73	30	359	125	190	382	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	178	92	142	23	140	73	30	359	125	190	382	16

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.74	0.26	1.00	0.96	0.04
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	1187	413	1600	1536	64

Capacity Analysis Module:

Vol/Sat:	0.11	0.06	0.09	0.01	0.09	0.05	0.02	0.30	0.30	0.12	0.25	0.25
Crit Moves:	****		****			****		****		****		****

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #104 60th St / Avenue J-8

Average Delay (sec/veh): 5.7 Worst Case Level Of Service: F[242.6]

Street Name:	60th St				Avenue J-8															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign							
Rights:	Include				Include				Include				Include							
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0	0	1	0

Volume Module:

Base Vol:	64	237	2	2	303	38	14	1	60	3	0	1
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	70	261	2	2	333	42	15	1	66	3	0	1
Added Vol:	2	646	29	10	687	1	1	0	2	16	0	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	72	907	31	12	1020	43	16	1	68	19	0	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	72	907	31	12	1020	43	16	1	68	19	0	9
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	72	907	31	12	1020	43	16	1	68	19	0	9

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:

Cnflict Vol:	1063	xxxx	xxxxx	938	xxxx	xxxxx	2116	2127	1020	2152	2139	907
Potent Cap.:	663	xxxx	xxxxx	739	xxxx	xxxxx	37	50	290	35	50	337
Move Cap.:	663	xxxx	xxxxx	739	xxxx	xxxxx	33	44	290	24	43	337
Volume/Cap.:	0.11	xxxx	xxxx	0.02	xxxx	xxxx	0.50	0.02	0.23	0.81	0.00	0.03

Level Of Service Module:

2Way95thQ:	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx	1.7	0.1	0.9	2.4	xxxx	xxxxx			
Control Del:	11.1	xxxx	xxxxx	10.0	xxxx	xxxxx	194.8	88.6	21.2	349.5	xxxx	xxxxx			
LOS by Move:	B	*	*	A	*	*	F	F	C	F	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	337		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	0.1		
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	16.0		
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	C
ApproachDel:	xxxxxx			xxxxxx					55.4		242.6				
ApproachLOS:	*			*					F		F				

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #105 70th St / Avenue K

Cycle (sec):	100	Critical Vol./Cap.(X):	1.141
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	63.9
Optimal Cycle:	0	Level Of Service:	F

Street Name:	70th St Avenue K			
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0

Volume Module:

Base Vol:	6	59	18	1	49	0	0	88	20	20	71	3
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	7	65	20	1	54	0	0	97	22	22	78	3
Added Vol:	22	92	170	0	117	14	24	408	21	101	245	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	157	190	1	171	14	24	505	43	123	323	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	157	190	1	171	14	24	505	43	123	323	3
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	157	190	1	171	14	24	505	43	123	323	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	29	157	190	1	171	14	24	505	43	123	323	3

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.08	0.42	0.50	0.01	0.92	0.07	0.04	0.88	0.08	0.27	0.72	0.01
Final Sat.:	36	198	239	2	372	30	21	442	38	132	348	4

Capacity Analysis Module:

Vol/Sat:	0.79	0.79	0.79	0.46	0.46	0.46	1.14	1.14	1.14	0.93	0.93	0.93
Crit Moves:	****			****			****			****		
Delay/Veh:	31.4	31.4	31.4	17.7	17.7	17.7	110.5	110	110.5	50.9	50.9	50.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.4	31.4	31.4	17.7	17.7	17.7	110.5	110	110.5	50.9	50.9	50.9
LOS by Move:	D	D	D	C	C	C	F	F	F	F	F	F
ApproachDel:	31.4			17.7			110.5			50.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	31.4			17.7			110.5			50.9		
LOS by Appr:	D			C			F			F		
AllWayAvgQ:	2.8	2.8	2.8	0.7	0.7	0.7	14.0	14.0	14.0	5.4	5.4	5.4

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #106 62nd St / Avenue K

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: E[ 41.4]

Street Name:	62nd St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	2	0	1

Volume Module:

Base Vol:	2	1	36	7	0	0	2	64	4	50	83	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	2	1	40	8	0	0	2	70	4	55	91	0
Added Vol:	0	0	0	10	0	3	6	435	0	0	656	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	1	40	18	0	3	8	505	4	55	747	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	1	40	18	0	3	8	505	4	55	747	17
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	1	40	18	0	3	8	505	4	55	747	17

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	1005	1396	505	1402	1384	374	764	xxxx	xxxxx	510	xxxx	xxxxx
Potent Cap.:	222	142	571	119	145	677	858	xxxx	xxxxx	1066	xxxx	xxxxx
Move Cap.:	211	134	571	105	136	677	858	xxxx	xxxxx	1066	xxxx	xxxxx
Volume/Cap.:	0.01	0.01	0.07	0.17	0.00	0.00	0.01	xxxx	xxxx	0.05	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.2	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	9.2	xxxx	xxxxx	8.6	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	*	A	*	*	A	*	*		
Movement:	LT	-	LT	-	RT	LT	-	LT	-	RT	LT	-	LT	-	RT
Shared Cap.:	xxxx	487	xxxxx	xxxx	119	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx			
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx			
Shrd ConDel:	xxxxx	13.1	xxxxx	xxxxx	41.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx			
Shared LOS:	*	B	*	*	E	*	*	*	*	*	*	*			
ApproachDel:		13.1			41.4			xxxxxx			xxxxxx				
ApproachLOS:		B			E			*			*				

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #107 60th St / Avenue K

Cycle (sec): 100 Critical Vol./Cap.(X): 0.925  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 114 Level Of Service: E

Street Name:	60th St				Avenue K											
Approach:	North Bound		South Bound		East Bound		West Bound									
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	1	0	1	0	1	1	0	2	0	1	0	1	

Volume Module:

Base Vol:	15	175	77	138	276	19	12	76	13	95	100	43
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	17	193	85	152	304	21	13	84	14	105	110	47
Added Vol:	110	367	84	119	320	280	176	296	71	105	470	169
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	127	560	169	271	624	301	189	380	85	210	580	216
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	127	560	169	271	624	301	189	380	85	210	580	216
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	560	169	271	624	301	189	380	85	210	580	216
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	127	560	169	271	624	301	189	380	85	210	580	216

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.54	0.46	1.00	1.35	0.65	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2459	741	1600	2158	1042	2880	1600	1600	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.08	0.23	0.23	0.17	0.29	0.29	0.07	0.24	0.05	0.13	0.36	0.14
Crit Moves:	****	****					****			****		

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #108 50th St / Avenue K

Cycle (sec):	100	Critical Vol./Cap.(X):	4.178
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	869.5
Optimal Cycle:	0	Level Of Service:	F
<hr/>			<hr/>
Street Name:	50th St	Avenue K	
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
<hr/>			<hr/>
Volume Module:			
Base Vol:	29 90 67	17 149 6	6 221 14
Growth Adj:	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10
Initial Bse:	32 99 74	19 164 7	7 243 15
Added Vol:	0 73 439	72 49 4	2 488 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	32 172 513	91 213 11	9 731 15
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	32 172 513	91 213 11	9 731 15
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	32 172 513	91 213 11	9 731 15
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Volume:	32 172 513	91 213 11	9 731 15
<hr/>			<hr/>
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.04 0.24 0.72	0.29 0.68 0.03	0.01 0.97 0.02
Final Sat.:	19 105 312	113 266 13	5 403 8
<hr/>			<hr/>
Capacity Analysis Module:			
Vol/Sat:	1.64 1.64 1.64	0.80 0.80 0.80	1.82 1.82 1.82
Crit Moves:	****	****	****
Delay/Veh:	319.7 320 319.7	40.1 40.1 40.1	397.1 397 397.1
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	319.7 320 319.7	40.1 40.1 40.1	397.1 397 397.1
LOS by Move:	F F F	E E E	F F F
ApproachDel:	319.7	40.1	397.1
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	319.7	40.1	397.1
LOS by Appr:	F	E	F
AllWayAvgQ:	37.4 37.4 37.4	3.0 3.0 3.0	44.5 44.5 44.5
<hr/>			<hr/>

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #109 45th St / Avenue K

Average Delay (sec/veh): OVERFLOW      Worst Case Level Of Service: F[xxxxx]

Street Name:	45th St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1

Volume Module:

Base Vol:	7	8	53	6	4	4	4	317	1	45	318	11
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	8	9	58	7	4	4	4	349	1	50	350	12
Added Vol:	0	0	0	8	0	6	10	986	0	0	1361	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	9	58	15	4	10	14	1335	1	50	1711	26
User Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	9	59	15	4	11	15	1361	1	50	1745	27
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	8	9	59	15	4	11	15	1361	1	50	1745	27

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxxx	xxxxx	4.1	xxxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxxx	xxxxx	2.2	xxxxx	xxxxx

Capacity Module:

Cnflict Vol:	3258	3263	1361	3272	3238	1745	1772	xxxxx	xxxxx	1363	xxxxx	xxxxx
Potent Cap.:	6	9	183	5	10	108	356	xxxxx	xxxxx	511	xxxxx	xxxxx
Move Cap.:	3	8	183	0	8	108	356	xxxxx	xxxxx	511	xxxxx	xxxxx
Volume/Cap.:	3.04	1.12	0.32	xxxxx	0.54	0.10	0.04	xxxxx	xxxxx	0.10	xxxxx	xxxxx

Level Of Service Module:

2Way95thQ:	xxxxx	xxxxx	xxxxx	xxxxx	1.1	0.3	0.1	xxxxx	xxxxx	0.3	xxxxx	xxxxx			
Control Del:	xxxxx	xxxxx	xxxxx	xxxxx	675	41.8	15.5	xxxxx	xxxxx	12.8	xxxxx	xxxxx			
LOS by Move:	*	*	*	*	F	E	C	*	*	B	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxxx	17	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx			
SharedQueue:	xxxxx	10.2	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx			
Shrd ConDel:	xxxxx	2022	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx			
Shared LOS:	*	F	*	*	*	*	*	*	*	*	*	*			
ApproachDel:	2021.9		xxxxxx				xxxxxx			xxxxxx					
ApproachLOS:	F			F				*		*					

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #110 60th St / Avenue K-8

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: F[ 76.4]

Street Name:	60th St				Avenue K-8													
Approach:	North Bound		South Bound		East Bound		West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign					
Rights:	Include				Include				Include				Include					
Lanes:	1	0	0	1	0	1	0	2	0	1	1	0	0	0	1	1	0	0

Volume Module:

Base Vol:	26	343	0	0	365	13	8	0	11	1	0	0						
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	29	377	0	0	402	14	9	0	12	1	0	0						
Added Vol:	0	538	53	50	435	3	5	0	0	31	0	32						
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0						
Initial Fut:	29	915	53	50	837	17	14	0	12	32	0	32						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	915	53	50	837	17	14	0	12	32	0	32						
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	29	915	53	50	837	17	14	0	12	32	0	32						

Critical Gap Module:

Critical Gp:	4.1	xxxxx	xxxxxx	4.1	xxxxx	xxxxxx	7.1	xxxxx	6.2	7.1	6.5	6.2						
FollowUpTim:	2.2	xxxxx	xxxxxx	2.2	xxxxx	xxxxxx	3.5	xxxxx	3.3	3.5	4.0	3.3						

Capacity Module:

Cnflict Vol:	854	xxxxx	xxxxxx	968	xxxxx	xxxxxx	1952	xxxxx	418	1517	1953	942						
Potent Cap.:	794	xxxxx	xxxxxx	720	xxxxx	xxxxxx	49	xxxxx	639	99	65	322						
Move Cap.:	794	xxxxx	xxxxxx	720	xxxxx	xxxxxx	41	xxxxx	639	89	58	322						
Volume/Cap.:	0.04	xxxxx	xxxxx	0.07	xxxxx	xxxxx	0.34	xxxxx	0.02	0.36	0.00	0.10						

Level Of Service Module:

2Way95thQ:	0.1	xxxxx	xxxxxx	0.2	xxxxx	xxxxxx	1.2	xxxxx	0.1	xxxxx	xxxxx	xxxxxx						
Control Del:	9.7	xxxxx	xxxxxx	10.4	xxxxx	xxxxxx	134.0	xxxxx	10.7	xxxxxx	xxxxx	xxxxxx						
LOS by Move:	A	*	*	B	*	*	F	*	B	*	*	*						
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT			
Shared Cap.:	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	140	xxxxxx						
SharedQueue:	xxxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	2.1	xxxxxx						
Shrd ConDel:	xxxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	51.0	xxxxxx						
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx					76.4		51.0							
ApproachLOS:	*			*						F		F						

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #111 70th St / Avenue L

Cycle (sec):	100	Critical Vol./Cap.(X):	0.966
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	29.3
Optimal Cycle:	0	Level Of Service:	D
<hr/>			
Street Name:	70th St	Avenue L	
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	1 0 0 1 0	1 0 0 1 0	1 0 1 0 1
<hr/>			
Volume Module:			
Base Vol:	16 48 62	12 103 4	2 35 12
Growth Adj:	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10
Initial Bse:	18 53 68	13 113 4	2 39 13
Added Vol:	169 49 59	127 62 49	39 172 123
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	187 102 127	140 175 53	41 211 136
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	187 102 127	140 175 53	41 211 136
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	187 102 127	140 175 53	41 211 136
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	187 102 127	140 175 53	41 211 136
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 0.44 0.56	1.00 0.77 0.23	1.00 1.00 1.00
Final Sat.:	392 193 242	388 321 98	356 378 406
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.48 0.53 0.53	0.36 0.55 0.55	0.12 0.56 0.34
Crit Moves:	****	****	****
Delay/Veh:	19.2 19.0 19.0	16.6 20.3 20.3	13.7 22.5 15.4
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	19.2 19.0 19.0	16.6 20.3 20.3	13.7 22.5 15.4
LOS by Move:	C C C	C C C	B C C C F F
ApproachDel:	19.1	18.9	19.1 47.4
Delay Adj:	1.00	1.00	1.00 1.00
ApprAdjDel:	19.1	18.9	19.1 47.4
LOS by Appr:	C	C	C E
AllWayAvgQ:	0.8 1.0 1.0	0.5 1.1 1.1	0.1 1.1 0.5 0.9 6.5 6.5
<hr/>			

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #112 60th St / Avenue L

Cycle (sec): 100 Critical Vol./Cap.(X): 1.313

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Street Name:	60th St				Avenue L													
Approach:	North Bound		South Bound		East Bound		West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Protected				Protected				Protected				Protected					
Rights:	Include				Include				Include				Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	0	1	0	1	0	1	2	0	1	0	1	2	0	1	0	1

Volume Module:

Base Vol:	19	249	120	67	306	36	30	134	52	152	181	100
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	21	274	132	74	337	40	33	147	57	167	199	110
Added Vol:	260	258	126	190	152	104	122	542	199	122	563	245
PasserByVol:	16	0	16	21	0	21	0	0	0	0	0	0
Initial Fut:	297	532	274	285	489	165	155	689	256	289	762	355
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	297	532	274	285	489	165	155	689	256	289	762	355
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	297	532	274	285	489	165	155	689	256	289	762	355
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	297	532	274	285	489	165	155	689	256	289	762	355

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	0.66	0.34	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1600	1056	544	1600	1600	1600	2880	1600	1600	2880	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.19	0.50	0.50	0.18	0.31	0.10	0.05	0.43	0.16	0.10	0.48	0.22
Crit Moves:	****	****	****				****	****				

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #113 50th St / Avenue L

Cycle (sec): 100 Critical Vol./Cap.(X): 1.520  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

Street Name:	50th St				Avenue L													
Approach:	North Bound		South Bound		East Bound		West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Permitted				Permitted				Permitted				Prot+Permit					
Rights:	Include				Include				Include				Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	0	1	0	1	0	0	1	0	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	13	169	211	34	223	83	32	405	28	197	619	77
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	14	186	232	37	245	91	35	446	31	217	681	85
Added Vol:	20	42	3	22	25	425	438	569	12	3	654	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	228	235	59	270	516	473	1015	43	220	1335	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	228	235	59	270	516	473	1015	43	220	1335	117
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	228	235	59	270	516	473	1015	43	220	1335	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	34	228	235	59	270	516	473	1015	43	220	1335	117

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.49	0.51	1.00	0.34	0.66	1.00	0.96	0.04	1.00	0.92	0.08
Final Sat.:	1600	788	812	1600	550	1050	1600	1535	65	1600	1471	129

Capacity Analysis Module:

Vol/Sat:	0.02	0.29	0.29	0.04	0.49	0.49	0.30	0.66	0.66	0.14	0.91	0.91
Crit Moves:	****			****						****		

60th & K Shopping Center Lancaster  
Future (2012) Related Projects  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #114 60th St / Avenue L-8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.864	
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	85	Level Of Service:	D	
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R
<b>Control:</b>	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit
<b>Rights:</b>	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 1	1 0 2 0 1	1 0 1 1 0	1 0 2 0 1
<b>Volume Module:</b>				
Base Vol:	65 360	61 27 380	35 22 89	63 62 70 11
Growth Adj:	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10
Initial Bse:	72 396	67 30 418	39 24 98	69 68 77 12
Added Vol:	0 645	0 0 472	0 0 0	0 0 0
PasserByVol:	0 0	0 0	0 0	0 0
Initial Fut:	72 1041	67 30 890	39 24 98	69 68 77 12
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	72 1041	67 30 890	39 24 98	69 68 77 12
Reducet Vol:	0 0	0 0	0 0	0 0
Reduced Vol:	72 1041	67 30 890	39 24 98	69 68 77 12
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	72 1041	67 30 890	39 24 98	69 68 77 12
<b>Saturation Flow Module:</b>				
Sat/Lane:	1600 1600	1600 1600 1600	1600 1600 1600	1600 1600 1600
Adjustment:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 1.00	1.00 1.00 2.00	1.00 1.00 1.17	0.83 1.00 2.00 1.00
Final Sat.:	1600 1600	1600 3200	1600 1600 1874	1326 1600 3200 1600
<b>Capacity Analysis Module:</b>				
Vol/Sat:	0.04 0.65 0.04	0.02 0.28 0.02	0.02 0.05 0.05	0.05 0.04 0.02 0.01
Crit Moves:	****	****	****	****

**APPENDIX E**  
**Analysis Worksheets for Future (Year 2012)**  
**Post-Project Conditions**

---

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #101 70th St / Avenue J

Average Delay (sec/veh): 9.5 Worst Case Level Of Service: B[ 14.9]

Street Name:	70th St				Avenue J											
Approach:	North Bound		South Bound		East Bound		West Bound									
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0	0	0	1	0	0	0	0	0	1!	0	0	

Volume Module:

Base Vol:	2	73	91	8	46	0	0	53	5	33	49	3
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	2	80	100	9	51	0	0	58	6	36	54	3
Added Vol:	3	86	17	8	36	0	0	15	4	52	41	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	166	117	17	87	0	0	73	10	88	95	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	166	117	17	87	0	0	73	10	88	95	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	166	117	17	87	0	0	73	10	88	95	22

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	xxxxxx	xxxxxx	xxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	xxxxxx	xxxxxx	xxxx	xxxxxx	2.2	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	404	372	78	502	365	xxxxxx	xxxx	xxxx	xxxxxx	83	xxxx	xxxxxx
Potent Cap.:	561	561	988	483	566	xxxxxx	xxxx	xxxx	xxxxxx	1527	xxxx	xxxxxx
Move Cap.:	468	527	988	307	532	xxxxxx	xxxx	xxxx	xxxxxx	1527	xxxx	xxxxxx
Volume/Cap.:	0.01	0.32	0.12	0.05	0.16	xxxx	xxxx	xxxx	xxxxxx	0.06	xxxx	xxxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.2	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	7.5	xxxx	xxxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LT	-	RT	LT -	LT	-	RT	LT -	LT	-	RT
Shared Cap.:	xxxx	649	xxxxxx	475	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	2.3	xxxxxx	0.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	14.9	xxxxxx	14.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shared LOS:	*	B	*	B	*	*	*	*	*	*	*	*
ApproachDel:		14.9			14.7		xxxxxx		xxxxxx			
ApproachLOS:		B			B			*		*		

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #102 60th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 0.647  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 44 Level Of Service: B

Street Name:	60th St Avenue J			
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Lanes:	1 0 2 0 1	1 0 0 1 0	1 0 2 0 1	1 0 1 0 1

Volume Module:

Base Vol:	20	209	208	39	145	14	52	225	52	123	108	221
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	22	230	229	43	160	15	57	248	57	135	119	243
Added Vol:	62	407	63	5	211	22	65	171	150	39	72	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	637	292	48	371	37	122	419	207	174	191	259
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	637	292	48	371	37	122	419	207	174	191	259
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	637	292	48	371	37	122	419	207	174	191	259
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	84	637	292	48	371	37	122	419	207	174	191	259

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	0.91	0.09	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	1453	147	1600	3200	1600	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.05	0.20	0.18	0.03	0.25	0.25	0.08	0.13	0.13	0.11	0.12	0.16
Crit Moves:	****		****			****		****		****		****

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #103 50th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 0.718  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 52 Level Of Service: C

Street Name:	50th St Avenue J			
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 1	1 0 1 0 1	1 0 0 1 0	1 0 0 1 0

Volume Module:

Base Vol:	56	133	128	12	67	17	13	393	19	49	334	22
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	62	146	141	13	74	19	14	432	21	54	367	24
Added Vol:	66	25	63	2	12	27	51	95	141	27	44	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	128	171	204	15	86	46	65	527	162	81	411	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	171	204	15	86	46	65	527	162	81	411	31
Reducut Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	171	204	15	86	46	65	527	162	81	411	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	171	204	15	86	46	65	527	162	81	411	31

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.77	0.23	1.00	0.93	0.07
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	1224	376	1600	1487	113

Capacity Analysis Module:

Vol/Sat:	0.08	0.11	0.13	0.01	0.05	0.03	0.04	0.43	0.43	0.05	0.28	0.28
Crit Moves:	****	****					****		****			

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #104 60th St / Avenue J-8

Average Delay (sec/veh): 148.4 Worst Case Level Of Service: F[6931.5]

Street Name:	60th St				Avenue J-8												
Approach:	North Bound		South Bound		East Bound		West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R		
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign				
Rights:	Include				Include				Include				Include				
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0	1	0	0	1	0

Volume Module:

Base Vol:	190	346	18	5	238	118	34	3	364	8	0	0	4
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	209	381	20	6	262	130	37	3	400	9	0	0	4
Added Vol:	2	468	9	6	431	1	1	0	2	25	0	0	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	211	849	29	12	693	131	38	3	402	34	0	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	211	849	29	12	693	131	38	3	402	34	0	0	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	211	849	29	12	693	131	38	3	402	34	0	0	12

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:

Cnflict Vol:	824	xxxx	xxxxxx	877	xxxx	xxxxxx	2007	2015	693	2255	2117	849
Potent Cap.:	815	xxxx	xxxxxx	778	xxxx	xxxxxx	45	59	447	30	51	364
Move Cap.:	815	xxxx	xxxxxx	778	xxxx	xxxxxx	34	43	447	2	37	364
Volume/Cap.:	0.26	xxxx	xxxx	0.01	xxxx	xxxx	1.12	0.08	0.90	15.26	0.00	0.03

Level Of Service Module:

2Way95thQ:	1.0	xxxx	xxxxxx	0.0	xxxx	xxxxxx	4.1	0.2	9.8	6.0	xxxx	xxxxxx
Control Del:	11.0	xxxx	xxxxxx	9.7	xxxx	xxxxxx	370.9	94.9	52.0	9469	xxxx	xxxxxx
LOS by Move:	B	*	*	A	*	*	F	F	F	F	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	364
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxx	0.1
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxx	15.2
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx					79.9		6931.5	
ApproachLOS:	*			*						F		F

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #105 70th St / Avenue K  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.190  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 69.5  
Optimal Cycle: 0 Level Of Service: F  
\*\*\*\*\*

Street Name:	70th St				Avenue K											
Approach:	North Bound		South Bound		East Bound		West Bound									
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	1!	0	0	0	0	0	0	0	1!	0	0	0	0	

Volume Module:

Base Vol:	23	148	109	4	67	1	1	62	35	29	65	1
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	25	163	120	4	74	1	1	68	39	32	72	1
Added Vol:	7	93	60	9	62	21	7	143	7	154	365	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	256	180	13	136	22	8	211	46	186	437	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	256	180	13	136	22	8	211	46	186	437	7
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	256	180	13	136	22	8	211	46	186	437	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	256	180	13	136	22	8	211	46	186	437	7

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.07	0.55	0.38	0.08	0.79	0.13	0.03	0.80	0.17	0.30	0.69	0.01
Final Sat.:	36	289	203	34	344	56	14	373	80	156	367	6

Capacity Analysis Module:

Vol/Sat:	0.89	0.89	0.89	0.39	0.39	0.39	0.57	0.57	0.57	1.19	1.19	1.19
Crit Moves:	****	****	****				****			****		
Delay/Veh:	41.1	41.1	41.1	15.3	15.3	15.3	18.6	18.6	18.6	126.6	127	126.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.1	41.1	41.1	15.3	15.3	15.3	18.6	18.6	18.6	126.6	127	126.6
LOS by Move:	E	E	E	C	C	C	C	C	C	F	F	F
ApproachDel:		41.1			15.3			18.6			126.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		41.1			15.3			18.6			126.6	
LOS by Appr:		E			C			C			F	
AllWayAvgQ:	4.6	4.6	4.6	0.5	0.5	0.5	1.1	1.1	1.1	17.2	17.2	17.2

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #106 62nd St / Avenue K

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: E[ 38.9]

Street Name:	62nd St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	2	0	1

Volume Module:

Base Vol:	6	1	93	2	1	0	2	221	11	25	41	78
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	7	1	102	2	1	0	2	243	12	28	45	86
Added Vol:	0	0	0	15	0	5	2	589	0	0	273	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	1	102	17	1	5	4	832	12	28	318	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	1	102	17	1	5	4	832	12	28	318	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	1	102	17	1	5	4	832	12	28	318	91

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxxx	xxxxxx	4.1	xxxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxxx	xxxxxx	2.2	xxxxx	xxxxxx

Capacity Module:

Cnflct Vol:	1055	1304	832	1271	1226	159	409	xxxxx	xxxxxx	844	xxxxx	xxxxxx
Potent Cap.:	205	162	372	146	180	891	1161	xxxxx	xxxxxx	801	xxxxx	xxxxxx
Move Cap.:	197	156	372	102	173	891	1161	xxxxx	xxxxxx	801	xxxxx	xxxxxx
Volume/Cap.:	0.03	0.01	0.27	0.17	0.01	0.01	0.00	xxxxx	xxxxx	0.03	xxxxx	xxxxx

Level Of Service Module:

2Way95thQ:	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	0.0	xxxxx	xxxxxx	0.1	xxxxx	xxxxxx			
Control Del:	xxxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	8.1	xxxxx	xxxxxx	9.7	xxxxx	xxxxxx			
LOS by Move:	*	*	*	*	*	*	*	A	*	*	A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxxx	349	xxxxxx	xxxxx	129	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx			
SharedQueue:	xxxxxx	1.3	xxxxxx	xxxxxx	0.6	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx			
Shrd ConDel:	xxxxxx	20.0	xxxxxx	xxxxxx	38.9	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx			
Shared LOS:	*	C	*	*	E	*	*	*	*	*	*	*			
ApproachDel:		20.0			38.9			xxxxxx			xxxxxx				
ApproachLOS:		C			E			*			*				

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #107 60th St / Avenue K

Cycle (sec): 100 Critical Vol./Cap.(X): 0.961  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 144 Level Of Service: E

Street Name:	60th St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:	Protected				Protected				Protected				Protected							
Rights:	Include				Include				Include				Include							
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	1	1	0	1	0	1	1	0	2	0	1	0	1	1	0	1	0	1

Volume Module:

Base Vol:	20	302	150	21	129	9	69	218	31	99	118	175
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	22	332	165	23	142	10	76	240	34	109	130	193
Added Vol:	47	161	85	154	219	98	242	421	99	55	201	76
PasserByVol:	6	0	0	4	0	0	0	0	3	0	0	4
Initial Fut:	75	493	250	181	361	108	318	661	136	164	331	273
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	75	493	250	181	361	108	318	661	136	164	331	273
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	493	250	181	361	108	318	661	136	164	331	273
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	75	493	250	181	361	108	318	661	136	164	331	273

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.33	0.67	1.00	1.54	0.46	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2124	1076	1600	2463	737	2880	1600	1600	1600	1600	1600

Capacity Analysis Module:												
Vol/Sat:	0.05	0.23	0.23	0.11	0.15	0.15	0.11	0.41	0.09	0.10	0.21	0.17
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #108 50th St / Avenue K

Cycle (sec):	100	Critical Vol./Cap.(X):	2.461
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	398.9
Optimal Cycle:	0	Level Of Service:	F
<hr/>			<hr/>
Street Name:	50th St	Avenue K	
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
<hr/>			<hr/>
Volume Module:			
Base Vol:	17 145 123	38 58 3	8 270 11
Growth Adj:	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10
Initial Bse:	19 160 135	42 64 3	9 297 12
Added Vol:	6 27 125	97 60 7	8 721 4
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	25 187 260	139 124 10	17 1018 16
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	25 187 260	139 124 10	17 1018 16
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	25 187 260	139 124 10	17 1018 16
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Volume:	25 187 260	139 124 10	17 1018 16
<hr/>			<hr/>
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.05 0.40 0.55	0.51 0.45 0.04	0.02 0.97 0.01
Final Sat.:	23 175 245	199 177 15	7 414 7
<hr/>			<hr/>
Capacity Analysis Module:			
Vol/Sat:	1.06 1.06 1.06	0.70 0.70 0.70	2.46 2.46 2.46
Crit Moves:	****	****	****
Delay/Veh:	89.1 89.1 89.1	30.9 30.9 30.9	682.6 682.6 682.6
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	89.1 89.1 89.1	30.9 30.9 30.9	682.6 682.6 682.6
LOS by Move:	F F F	D D D	F F F F F F
ApproachDel:	89.1	30.9	682.6 325.5
Delay Adj:	1.00	1.00	1.00 1.00
ApprAdjDel:	89.1	30.9	682.6 325.5
LOS by Appr:	F	D	F F
AllWayAvgQ:	9.6 9.6 9.6	2.0 2.0 2.0	79.6 79.6 79.6 37.2 37.2 37.2
<hr/>			<hr/>

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #109 45th St / Avenue K

Average Delay (sec/veh): 20.2 Worst Case Level Of Service: F[601.6]

Street Name:	45th St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1

Volume Module:

Base Vol:	1	12	51	19	6	14	1	360	6	20	254	3
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	1	13	56	21	7	15	1	396	7	22	279	3
Added Vol:	0	0	0	13	0	9	3	972	0	0	457	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	13	56	34	7	24	4	1368	7	22	736	7
User Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	13	57	35	7	25	4	1395	7	22	751	7
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	13	57	35	7	25	4	1395	7	22	751	7

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	2219	2207	1395	2238	2206	751	759	xxxx	xxxxx	1402	xxxx	xxxxx
Potent Cap.:	32	45	175	31	45	414	862	xxxx	xxxxx	493	xxxx	xxxxx
Move Cap.:	25	43	175	15	43	414	862	xxxx	xxxxx	493	xxxx	xxxxx
Volume/Cap.:	0.04	0.32	0.33	2.31	0.16	0.06	0.00	xxxx	xxxx	0.05	xxxx	xxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	5.0	0.5	0.2	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	1121	105	14.3	9.2	xxxx	xxxxx	12.6	xxxx	xxxxx			
LOS by Move:	*	*	*	F	F	B	A	*	*	B	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	104	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx			
SharedQueue:	xxxxx	3.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx			
Shrd ConDel:	xxxxx	94.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx			
Shared LOS:	*	F	*	*	*	*	*	*	*	*	*	*			
ApproachDel:		94.1			601.6			xxxxxx		xxxxxx					
ApproachLOS:		F			F			*		*					

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #110 60th St / Avenue K-8

Average Delay (sec/veh): 7.0 Worst Case Level Of Service: F[ 95.0]

Street Name:	60th St				Avenue K-8															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign							
Rights:	Include				Include				Include				Include							
Lanes:	1	0	0	1	0	1	0	2	0	1	0	1	0	1	0	0	0	1!	0	0

Volume Module:

Base Vol:	62	471	0	2	481	27	27	3	34	2	2	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	68	518	0	2	529	30	30	3	37	2	2	0
Added Vol:	0	234	15	18	369	4	1	0	0	47	0	43
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	752	15	20	898	34	31	3	37	49	2	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	68	752	15	20	898	34	31	3	37	49	2	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	68	752	15	20	898	34	31	3	37	49	2	43

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	932	xxxx	xxxxxx	767	xxxx	xxxxxx	1857	1842	449	1387	1868	760
Potent Cap.:	743	xxxx	xxxxxx	856	xxxx	xxxxxx	57	76	614	121	73	409
Move Cap.:	743	xxxx	xxxxxx	856	xxxx	xxxxxx	45	67	614	100	65	409
Volume/Cap.:	0.09	xxxx	xxxx	0.02	xxxx	xxxx	0.68	0.05	0.06	0.49	0.03	0.11

Level Of Service Module:

2Way95thQ:	0.3	xxxx	xxxxxx	0.1	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	10.3	xxxx	xxxxxx	9.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	47	xxxx	370	xxxx	150	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	2.9	xxxx	0.4	xxxxxx	3.4	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	189.6	xxxx	15.9	xxxxxx	62.8	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	C	*	F	*
ApproachDel:	xxxxxx			xxxxxx					95.0		62.8	
ApproachLOS:	*			*					F		F	

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #111 70th St / Avenue L

Cycle (sec):	100	Critical Vol./Cap.(X):	0.818
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	22.6
Optimal Cycle:	0	Level Of Service:	C

Street Name:	Avenue L			
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 0 1 0	1 0 0 1 0	1 0 1 0 1	1 0 0 1 0

Volume Module:

Base Vol:	47	99	146	86	50	12	1	75	22	43	58	90
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	52	109	161	95	55	13	1	83	24	47	64	99
Added Vol:	83	55	65	158	36	30	41	93	136	37	76	64
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	164	226	253	91	43	42	176	160	84	140	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	135	164	226	253	91	43	42	176	160	84	140	163
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	164	226	253	91	43	42	176	160	84	140	163
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	135	164	226	253	91	43	42	176	160	84	140	163

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.42	0.58	1.00	0.68	0.32	1.00	1.00	1.00	1.00	0.46	0.54
Final Sat.:	419	200	276	408	298	142	365	389	420	400	207	242

Capacity Analysis Module:

Vol/Sat:	0.32	0.82	0.82	0.62	0.31	0.31	0.12	0.45	0.38	0.21	0.67	0.67
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Delay/Veh:	14.8	34.5	34.5	23.4	13.8	13.8	13.2	18.2	15.5	13.5	24.0	24.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.8	34.5	34.5	23.4	13.8	13.8	13.2	18.2	15.5	13.5	24.0	24.0
LOS by Move:	B	D	D	C	B	B	B	C	C	B	C	C
ApproachDel:	29.4			20.1			16.5			21.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	29.4			20.1			16.5			21.7		
LOS by Appr:	D			C			C			C		
AllWayAvgQ:	0.4	3.2	3.2	1.4	0.4	0.4	0.1	0.7	0.5	0.2	1.7	1.7

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #112 60th St / Avenue L

Cycle (sec): 100 Critical Vol./Cap.(X): 1.145  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

Street Name:	60th St				Avenue L													
Approach:	North Bound		South Bound		East Bound		West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Protected				Protected				Protected				Protected					
Rights:	Include				Include				Include				Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	0	1	0	1	0	1	2	0	1	0	1	2	0	1	0	1

Volume Module:

Base Vol:	45	331	144	82	374	111	144	322	56	223	243	79
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	50	364	158	90	411	122	158	354	62	245	267	87
Added Vol:	84	97	42	165	241	53	28	216	169	49	194	92
PasserByVol:	5	0	5	17	0	17	0	0	0	0	0	0
Initial Fut:	139	461	205	272	652	192	186	570	231	294	461	179
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	139	461	205	272	652	192	186	570	231	294	461	179
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	461	205	272	652	192	186	570	231	294	461	179
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	461	205	272	652	192	186	570	231	294	461	179

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	0.69	0.31	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1600	1107	493	1600	1600	1600	2880	1600	1600	2880	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.09	0.42	0.42	0.17	0.41	0.12	0.06	0.36	0.14	0.10	0.29	0.11
Crit Moves:	****	****	****				****	****				

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #113 50th St / Avenue L

Cycle (sec): 100 Critical Vol./Cap.(X): 1.305  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

Street Name:	50th St				Avenue L												
Approach:	North Bound		South Bound		East Bound		West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R		
Control:	Permitted				Permitted				Permitted				Prot+Permit				
Rights:	Include				Include				Include				Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	34	319	227	39	176	67	79	659	41	102	495	37
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	37	351	250	43	194	74	87	725	45	112	545	41
Added Vol:	16	16	1	25	39	152	131	335	24	1	225	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	367	251	68	233	226	218	1060	69	113	770	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	53	367	251	68	233	226	218	1060	69	113	770	53
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	367	251	68	233	226	218	1060	69	113	770	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	53	367	251	68	233	226	218	1060	69	113	770	53

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.59	0.41	1.00	0.51	0.49	1.00	0.94	0.06	1.00	0.94	0.06
Final Sat.:	1600	951	649	1600	812	788	1600	1502	98	1600	1497	103

Capacity Analysis Module:

Vol/Sat:	0.03	0.39	0.39	0.04	0.29	0.29	0.14	0.71	0.71	0.07	0.51	0.51
Crit Moves:	****	****	****				****	****				

60th & K Shopping Center Lancaster  
Future All Projects  
AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #114 60th St / Avenue L-8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.715
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Prot+Permit	Prot+Permit	Prot+Permit
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 1	1 0 2 0 1	1 0 1 1 0
Volume Module:			
Base Vol:	67 310 35	123 344 30	96 174 60
Growth Adj:	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10
Initial Bse:	74 341 39	135 378 33	106 191 66
Added Vol:	0 224 0	0 459 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	74 565 39	135 837 33	106 191 66
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	74 565 39	135 837 33	106 191 66
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	74 565 39	135 837 33	106 191 66
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	74 565 39	135 837 33	106 191 66
Saturation Flow Module:			
Sat/Lane:	1600 1600 1600	1600 1600 1600	1600 1600 1600
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 1.00 1.00	2.00 1.00 1.00	1.49 0.51 1.00
Final Sat.:	1600 1600 1600	3200 1600 1600	2379 821 1600
Capacity Analysis Module:			
Vol/Sat:	0.05 0.35 0.02	0.08 0.26 0.02	0.07 0.08 0.08
Crit Moves:	****	****	****

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #101 70th St / Avenue J

Average Delay (sec/veh): 8.7 Worst Case Level Of Service: B[ 14.7]

Street Name:	70th St				Avenue J															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1!	0	0

Volume Module:

Base Vol:	4	41	14	2	30	0	0	42	0	22	53	3
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	4	45	15	2	33	0	0	46	0	24	58	3
Added Vol:	13	73	58	25	111	0	0	48	12	34	30	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	118	73	27	144	0	0	94	12	58	88	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	118	73	27	144	0	0	94	12	58	88	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	17	118	73	27	144	0	0	94	12	58	88	20

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	xxxxxx	xxxxxx	xxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	xxxxxx	xxxxxx	xxxx	xxxxxx	2.2	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	387	325	100	411	321	xxxxxx	xxxx	xxxx	xxxxxx	106	xxxx	xxxxxx
Potent Cap.:	575	596	961	555	599	xxxxxx	xxxx	xxxx	xxxxxx	1498	xxxx	xxxxxx
Move Cap.:	451	572	961	418	575	xxxxxx	xxxx	xxxx	xxxxxx	1498	xxxx	xxxxxx
Volume/Cap.:	0.04	0.21	0.08	0.07	0.25	xxxx	xxxx	xxxx	xxxxxx	0.04	xxxx	xxxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.1	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	7.5	xxxx	xxxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LT	-	RT	LT -	LT	-	RT	LT -	LT	-	RT
Shared Cap.:	xxxx	650	xxxxxx	543	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	1.4	xxxxxx	1.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	13.1	xxxxxx	14.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shared LOS:	*	B	*	B	*	*	*	*	*	*	*	*
ApproachDel:		13.1		14.7		xxxxxx			xxxxxx			
ApproachLOS:		B		B				*		*		

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #102 60th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 1.102  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

Street Name:	60th St				Avenue J												
Approach:	North Bound		South Bound		East Bound		West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R		
Control:	Permitted				Permitted				Permitted				Permitted				
Rights:	Include				Include				Include				Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	2	0	1	1	0	0	1	0	2	0	1	1	0	1	0

Volume Module:

Base Vol:	12	128	95	108	221	31	13	86	19	132	110	31
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	13	141	105	119	243	34	14	95	21	145	121	34
Added Vol:	178	516	106	18	656	74	43	128	116	122	198	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	191	657	211	137	899	108	57	223	137	267	319	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	657	211	137	899	108	57	223	137	267	319	45
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	657	211	137	899	108	57	223	137	267	319	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	191	657	211	137	899	108	57	223	137	267	319	45

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	0.89	0.11	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	1428	172	1600	3200	1600	1600	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.12	0.21	0.13	0.09	0.63	0.63	0.04	0.07	0.09	0.17	0.20	0.03
Crit Moves:	****		****				****	****				

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #103 50th St / Avenue J

Cycle (sec): 100 Critical Vol./Cap.(X): 0.751  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 57 Level Of Service: C

Street Name:	50th St Avenue J			
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 1	1 0 1 0 1	1 0 0 1 0	1 0 0 1 0

Volume Module:

Base Vol:	12	67	89	14	102	24	2	270	11	107	256	10
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	13	74	98	15	112	26	2	297	12	118	282	11
Added Vol:	165	29	52	8	38	86	69	95	113	79	131	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	178	103	150	23	150	112	71	392	125	197	413	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	178	103	150	23	150	112	71	392	125	197	413	16
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	103	150	23	150	112	71	392	125	197	413	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	178	103	150	23	150	112	71	392	125	197	413	16

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.24	1.00	0.96	0.04
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	1213	387	1600	1540	60

Capacity Analysis Module:

Vol/Sat:	0.11	0.06	0.09	0.01	0.09	0.07	0.04	0.32	0.32	0.12	0.27	0.27
Crit Moves:	****		****			****		****		****		****

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #104 60th St / Avenue J-8

Average Delay (sec/veh): 10.6 Worst Case Level Of Service: F[585.9]

Street Name:	60th St				Avenue J-8															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign							
Rights:	Include				Include				Include				Include							
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0	0	1	0

Volume Module:

Base Vol:	64	237	2	2	303	38	14	1	60	3	0	1
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	70	261	2	2	333	42	15	1	66	3	0	1
Added Vol:	2	812	29	10	840	1	1	0	2	16	0	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	72	1073	31	12	1173	43	16	1	68	19	0	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	72	1073	31	12	1173	43	16	1	68	19	0	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	72	1073	31	12	1173	43	16	1	68	19	0	9

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:

Cnflict Vol:	1216	xxxx	xxxxx	1104	xxxx	xxxxx	2435	2446	1173	2471	2458	1073
Potent Cap.:	581	xxxx	xxxxx	640	xxxx	xxxxx	22	32	236	21	31	270
Move Cap.:	581	xxxx	xxxxx	640	xxxx	xxxxx	19	27	236	13	27	270
Volume/Cap.:	0.12	xxxx	xxxx	0.02	xxxx	xxxx	0.86	0.04	0.29	1.51	0.00	0.03

Level Of Service Module:

2Way95thQ:	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx	2.3	0.1	1.2	3.1	xxxx	xxxxx			
Control Del:	12.1	xxxx	xxxxx	10.7	xxxx	xxxxx	436.9	143	26.3	853.2	xxxx	xxxxx			
LOS by Move:	B	*	*	B	*	*	F	F	D	F	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	270			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	18.8			
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx					106.6		585.9				
ApproachLOS:	*			*					F		F				

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #105 70th St / Avenue K

Cycle (sec):	100	Critical Vol./Cap.(X):	1.319
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	114.0
Optimal Cycle:	0	Level Of Service:	F
<hr/>			<hr/>
Street Name:	70th St	Avenue K	
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
<hr/>			<hr/>
Volume Module:			
Base Vol:	6 59 18	1 49	0 0 88 20 20 71 3
Growth Adj:	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10 1.10 1.10 1.10 1.10
Initial Bse:	7 65 20	1 54	0 0 97 22 22 78 3
Added Vol:	22 92 192	26 117	14 24 456 21 124 296 28
PasserByVol:	0 0 0	0 0 0	0 0 0 0 0 0 0
Initial Fut:	29 157 212	27 171	14 24 553 43 146 374 31
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:	29 157 212	27 171	14 24 553 43 146 374 31
Reduced Vol:	0 0 0	0 0 0	0 0 0 0 0 0 0
Reduced Vol:	29 157 212	27 171	14 24 553 43 146 374 31
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume:	29 157 212	27 171	14 24 553 43 146 374 31
<hr/>			<hr/>
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:	0.07 0.39 0.54	0.13 0.81 0.06	0.04 0.89 0.07 0.26 0.68 0.06
Final Sat.:	33 183 247	51 321 26	18 419 33 124 317 26
<hr/>			<hr/>
Capacity Analysis Module:			
Vol/Sat:	0.86 0.86 0.86	0.53 0.53 0.53	0.53 1.32 1.32 1.32 1.18 1.18 1.18
Crit Moves:	****	****	****
Delay/Veh:	41.2 41.2 41.2	20.8 20.8 20.8	20.8 180.8 181 180.8 127.4 127 127.4
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:	41.2 41.2 41.2	20.8 20.8 20.8	20.8 180.8 181 180.8 127.4 127 127.4
LOS by Move:	E E E	C C C	C F F F F F F
ApproachDel:	41.2	20.8	180.8 127.4
Delay Adj:	1.00	1.00	1.00 1.00
ApprAdjDel:	41.2	20.8	180.8 127.4
LOS by Appr:	E	C	F F
AllWayAvgQ:	3.9 3.9 3.9	1.0 1.0 1.0	22.2 22.2 22.2 15.1 15.1 15.1
<hr/>			<hr/>

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #106 62nd St / Avenue K

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: F[ 59.8]

Street Name:	62nd St				Avenue K												
Approach:	North Bound		South Bound		East Bound		West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R		
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled				
Rights:	Include				Include				Include				Include				
Lanes:	0	0	1!	0	0	0	0	1	0	1	0	1	1	0	2	0	1

Volume Module:

Base Vol:	2	1	36	7	0	0	2	64	4	50	83	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	2	1	40	8	0	0	2	70	4	55	91	0
Added Vol:	0	0	0	10	0	3	6	531	0	0	760	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	1	40	18	0	3	8	601	4	55	851	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	1	40	18	0	3	8	601	4	55	851	17
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	1	40	18	0	3	8	601	4	55	851	17

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	1153	1596	601	1602	1584	426	868	xxxx	xxxxx	606	xxxx	xxxxx
Potent Cap.:	176	108	504	86	110	633	784	xxxx	xxxxx	982	xxxx	xxxxx
Move Cap.:	166	101	504	75	102	633	784	xxxx	xxxxx	982	xxxx	xxxxx
Volume/Cap.:	0.01	0.01	0.08	0.24	0.00	0.00	0.01	xxxx	xxxx	0.06	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.2	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	9.6	xxxx	xxxxx	8.9	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	*	A	*	*	A	*	*		
Movement:	LT	-	LT	-	RT	LT	-	LT	-	RT	LT	-	LT	-	RT
Shared Cap.:	xxxx	417	xxxxx	xxxx	86	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx			
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx			
Shrd ConDel:	xxxxx	14.6	xxxxx	xxxxx	59.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx			
Shared LOS:	*	B	*	*	F	*	*	*	*	*	*	*			
ApproachDel:		14.6			59.8			xxxxxx			xxxxxx				
ApproachLOS:		B			F			*			*				

Note: Queue reported is the number of cars per lane.



60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #108 50th St / Avenue K

Cycle (sec):	100	Critical Vol./Cap.(X):	4.421
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	952.4
Optimal Cycle:	0	Level Of Service:	F
<hr/>			<hr/>
Street Name:	50th St	Avenue K	
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
<hr/>			<hr/>
Volume Module:			
Base Vol:	29 90 67	17 149 6	6 221 14
Growth Adj:	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10
Initial Bse:	32 99 74	19 164 7	7 243 15
Added Vol:	18 73 439	72 49 21	21 576 20
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	50 172 513	91 213 28	28 819 35
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	50 172 513	91 213 28	28 819 35
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	50 172 513	91 213 28	28 819 35
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Volume:	50 172 513	91 213 28	28 819 35
<hr/>			<hr/>
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.07 0.23 0.70	0.27 0.65 0.08	0.03 0.93 0.04
Final Sat.:	29 101 301	108 254 33	13 382 17
<hr/>			<hr/>
Capacity Analysis Module:			
Vol/Sat:	1.70 1.70 1.70	0.84 0.84 0.84	0.84 2.14 2.14
Crit Moves:	****	****	****
Delay/Veh:	347.5 347 347.5	45.0 45.0	45.0 541.4 541
Delay Adj:	1.00 1.00 1.00	1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	347.5 347 347.5	45.0 45.0	45.0 541.4 541
LOS by Move:	F F F	E E E	F F F
ApproachDel:	347.5	45.0	541.4
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	347.5	45.0	541.4
LOS by Appr:	F	E	F
AllWayAvgQ:	40.2 40.2 40.2	3.6 3.6 3.6	60.6 60.6 60.6

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #109 45th St / Avenue K

Average Delay (sec/veh): OVERFLOW      Worst Case Level Of Service: F[xxxxx]

Street Name:	45th St				Avenue K															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Rights:	Include				Include				Include				Include							
Lanes:	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1

Volume Module:

Base Vol:	7	8	53	6	4	4	4	317	1	45	318	11
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	8	9	58	7	4	4	4	349	1	50	350	12
Added Vol:	0	0	0	8	0	6	10	1074	0	0	1442	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	9	58	15	4	10	14	1423	1	50	1792	26
User Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	9	59	15	4	11	15	1451	1	50	1828	27
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	8	9	59	15	4	11	15	1451	1	50	1828	27

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxxx	xxxxx	4.1	xxxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxxx	xxxxx	2.2	xxxxx	xxxxx

Capacity Module:

Cnflict Vol:	3430	3436	1451	3444	3410	1828	1854	xxxxx	xxxxx	1452	xxxxx	xxxxx
Potent Cap.:	4	7	162	4	7	97	331	xxxxx	xxxxx	472	xxxxx	xxxxx
Move Cap.:	1	6	162	0	6	97	331	xxxxx	xxxxx	472	xxxxx	xxxxx
Volume/Cap.:	5.63	1.48	0.37	xxxxx	0.71	0.11	0.04	xxxxx	xxxxx	0.11	xxxxx	xxxxx

Level Of Service Module:

2Way95thQ:	xxxxx	xxxxx	xxxxxx	xxxx	1.2	0.4	0.1	xxxxx	xxxxx	0.4	xxxxx	xxxxxx			
Control Del:	xxxxx	xxxx	xxxxxx	xxxxxx	943	46.8	16.4	xxxxx	xxxxx	13.5	xxxx	xxxxxx			
LOS by Move:	*	*	*	*	F	E	C	*	*	B	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxxx	10	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxx	xxxxxx	xxxxx	xxxx	xxxxxx			
SharedQueue:	xxxxxx	10.9	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx			
Shrd ConDel:	xxxxxx	3636	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx			
Shared LOS:	*	F	*	*	*	*	*	*	*	*	*	*			
ApproachDel:	3635.9			xxxxxx			xxxxxx			xxxxxx					
ApproachLOS:	F			F			*			*					

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #110 60th St / Avenue K-8

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: F[131.4]

Street Name:	60th St				Avenue K-8															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign							
Rights:	Include				Include				Include				Include							
Lanes:	1	0	0	1	0	1	0	2	0	1	1	0	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	26	343	0	0	365	13	8	0	11	1	0	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	29	377	0	0	402	14	9	0	12	1	0	0
Added Vol:	0	651	53	50	557	3	5	0	0	31	0	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	1028	53	50	959	17	14	0	12	32	0	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	1028	53	50	959	17	14	0	12	32	0	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	29	1028	53	50	959	17	14	0	12	32	0	32

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	xxxx	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	3.3	3.5	4.0	3.3

Capacity Module:

Cnflict Vol:	976	xxxx	xxxxx	1081	xxxx	xxxxx	2187	xxxx	479	1691	2188	1055
Potent Cap.:	715	xxxx	xxxxx	653	xxxx	xxxxx	33	xxxx	591	75	46	277
Move Cap.:	715	xxxx	xxxxx	653	xxxx	xxxxx	27	xxxx	591	67	41	277
Volume/Cap.:	0.04	xxxx	xxxx	0.08	xxxx	xxxx	0.51	xxxx	0.02	0.48	0.00	0.12

Level Of Service Module:

2Way95thQ:	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx	1.6	xxxx	0.1	xxxx	xxxx	xxxxx			
Control Del:	10.2	xxxx	xxxxx	11.0	xxxx	xxxxx	236.8	xxxx	11.2	xxxxx	xxxx	xxxxx			
LOS by Move:	B	*	*	B	*	*	F	*	B	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	107	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.9	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	79.0	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx					131.4			79.0			
ApproachLOS:	*			*						F		F			

Note: Queue reported is the number of cars per lane.

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #111 70th St / Avenue L

Cycle (sec):	100	Critical Vol./Cap.(X):	0.990	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	31.7	
Optimal Cycle:	0	Level Of Service:	D	
<hr/>				
Street Name:	70th St	Avenue L		
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Stop Sign	
Rights:	Include	Include	Include	
Min. Green:	0 0 0	0 0 0	0 0 0	
Lanes:	1 0 0 1 0	1 0 0 1 0	1 0 1 0 1	1 0 0 1 0
<hr/>				
Volume Module:				
Base Vol:	16 48 62	12 103 4	2 35 12	117 51 14
Growth Adj:	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10
Initial Bse:	18 53 68	13 113 4	2 39 13	129 56 15
Added Vol:	169 64 59	127 77 58	47 174 123	78 188 195
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	187 117 127	140 190 62	49 213 136	207 244 210
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	187 117 127	140 190 62	49 213 136	207 244 210
Reduced Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	187 117 127	140 190 62	49 213 136	207 244 210
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Volume:	187 117 127	140 190 62	49 213 136	207 244 210
<hr/>				
Saturation Flow Module:				
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 0.48 0.52	1.00 0.75 0.25	1.00 1.00 1.00	1.00 0.54 0.46
Final Sat.:	387 205 223	384 313 103	349 371 398	410 247 212
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.48 0.57 0.57	0.37 0.61 0.61	0.14 0.57 0.34	0.50 0.99 0.99
Crit Moves:	****	****	****	****
Delay/Veh:	19.7 20.9 20.9	16.9 23.0 23.0	14.3 23.6 15.8	19.6 67.5 67.5
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	19.7 20.9 20.9	16.9 23.0 23.0	14.3 23.6 15.8	19.6 67.5 67.5
LOS by Move:	C C C	C C C	B C C	C F F
ApproachDel:	20.4	20.8	19.8	52.5
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	20.4	20.8	19.8	52.5
LOS by Appr:	C	C	C	F
AllWayAvgQ:	0.9 1.2 1.2	0.5 1.4 1.4	0.2 1.2 0.5	0.9 7.3 7.3
<hr/>				

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #112 60th St / Avenue L

Cycle (sec): 100 Critical Vol./Cap.(X): 1.385  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

Street Name:	60th St				Avenue L													
Approach:	North Bound		South Bound		East Bound		West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Protected				Protected				Protected				Protected					
Rights:	Include				Include				Include				Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	0	1	0	1	0	1	2	0	1	0	1	2	0	1	0	1

Volume Module:

Base Vol:	19	249	120	67	306	36	30	134	52	152	181	100
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	21	274	132	74	337	40	33	147	57	167	199	110
Added Vol:	260	316	126	248	214	106	124	542	199	122	563	299
PasserByVol:	16	0	16	21	0	21	0	0	0	0	0	0
Initial Fut:	297	590	274	343	551	167	157	689	256	289	762	409
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	297	590	274	343	551	167	157	689	256	289	762	409
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	297	590	274	343	551	167	157	689	256	289	762	409
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	297	590	274	343	551	167	157	689	256	289	762	409

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	0.68	0.32	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1600	1093	507	1600	1600	1600	2880	1600	1600	2880	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.19	0.54	0.54	0.21	0.34	0.10	0.05	0.43	0.16	0.10	0.48	0.26
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #113 50th St / Avenue L

Cycle (sec): 100 Critical Vol./Cap.(X): 1.567  
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

Street Name:	50th St				Avenue L													
Approach:	North Bound		South Bound		East Bound		West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Permitted				Permitted				Permitted				Prot+Permit					
Rights:	Include				Include				Include				Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	0	1	0	1	0	0	1	0	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	13	169	211	34	223	83	32	405	28	197	619	77
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	14	186	232	37	245	91	35	446	31	217	681	85
Added Vol:	49	52	3	31	35	425	438	596	43	3	680	41
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	238	235	68	280	516	473	1042	74	220	1361	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	238	235	68	280	516	473	1042	74	220	1361	126
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	238	235	68	280	516	473	1042	74	220	1361	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	63	238	235	68	280	516	473	1042	74	220	1361	126

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.50	0.50	1.00	0.35	0.65	1.00	0.93	0.07	1.00	0.92	0.08
Final Sat.:	1600	805	795	1600	563	1037	1600	1494	106	1600	1465	135

Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.30	0.04	0.50	0.50	0.30	0.70	0.70	0.14	0.93	0.93
Crit Moves:	****			****						****		

60th & K Shopping Center Lancaster  
Future All Projects  
PM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #114 60th St / Avenue L-8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.900	
Loss Time (sec):	10 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	100	Level Of Service:	E	
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R
<b>Control:</b>	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit
<b>Rights:</b>	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 1	1 0 2 0 1	1 0 1 1 0	1 0 2 0 1
<b>Volume Module:</b>				
Base Vol:	65 360	61 27 380	35 22 89	63 62 70 11
Growth Adj:	1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10	1.10 1.10 1.10 1.10
Initial Bse:	72 396	67 30 418	39 24 98	69 68 77 12
Added Vol:	0 703	0 0 534	0 0 0	0 0 0
PasserByVol:	0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	72 1099	67 30 952	39 24 98	69 68 77 12
User Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
PHF Volume:	72 1099	67 30 952	39 24 98	69 68 77 12
Reducet Vol:	0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	72 1099	67 30 952	39 24 98	69 68 77 12
PCE Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
MLF Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
FinalVolume:	72 1099	67 30 952	39 24 98	69 68 77 12
<b>Saturation Flow Module:</b>				
Sat/Lane:	1600 1600	1600 1600 1600	1600 1600 1600	1600 1600 1600 1600
Adjustment:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
Lanes:	1.00 1.00	1.00 1.00 2.00	1.00 1.00 1.17	0.83 1.00 2.00 1.00
Final Sat.:	1600 1600	1600 3200	1600 1600 1874	1326 1600 3200 1600
<b>Capacity Analysis Module:</b>				
Vol/Sat:	0.04 0.69	0.04 0.02 0.30	0.02 0.02 0.05	0.05 0.04 0.02 0.01
Crit Moves:	****	****	****	****

**APPENDIX F**  
**Scoping Document (IS Form) –**  
**Traffic Impact Study**

---

## TRAFFIC - CEQA INITIAL STUDY

Tracking Number: GPA 05-01; ZC 05-01 (Revised)

Project Location: 60th St West and Ave K (NWC)

Project Buildout Date: 2012

Existing Land Use: (Vacant)

Date existing use last occupied: \_\_\_\_\_

Project Trip Generation:

Land Use (ITE Code)	Size (du/gsf/etc)	Trip Rate*			Trips		
		Daily	AM	PM	Daily	AM	PM
Shopping Center (820)	234,788 sf	*	*	*	11,827	261	1,100

\* ITE Trip Generation 7<sup>th</sup> Edition, fitted curve equations

- Intersection Analysis: 1) 70<sup>th</sup> St W & Ave K      8) 50<sup>th</sup> St W & Ave J  
2) 60<sup>th</sup> St W & Ave J      9) 50<sup>th</sup> St W & Ave K  
3) 60<sup>th</sup> St W & Ave J-8      10) 50<sup>th</sup> St W & Ave L  
4) 60<sup>th</sup> St W & Ave K      11) 45<sup>th</sup> St W & Ave K  
5) 60<sup>th</sup> St W & Ave K-8      12) 70<sup>th</sup> St W & Ave J  
6) 60th St W & Ave L      13) 70<sup>th</sup> St W & Ave K  
7) 62<sup>nd</sup> St W & Ave K      14) 60<sup>th</sup> St W & Ave M

- Roadway Segments: 1) 60<sup>th</sup> St W, south of Ave J      4) Ave K, west of 60<sup>th</sup> St  
2) 60<sup>th</sup> St W, north of Ave K      5) Ave K, east of 60<sup>th</sup> St  
3) 60<sup>th</sup> St W, south of Ave K      6) Ave K, east of 50<sup>th</sup> St

Capacity Analysis Scenarios (AM & PM Peak Hours):

- A. Existing
- B. Scenario A plus Ambient Growth (compounded over 5 years at 2% per year)
- C. Scenario B plus Related Projects (include all approved projects within 1 mile of Project site)
- D. Scenario C plus Project traffic
- E. If any significant impacts, Scenario D plus Mitigations (for impacted intersections only)

Traffic Study Required. Submit project trip distribution and assignment at study intersections for approval before proceeding with capacity analyses.

Signed: Mario Enriquez

Date: 7/02/2007

**APPENDIX G**  
**Shared Parking Analysis**

---

## Lancaster 60th & K - Shared Parking Analysis

Retail to Restaurant - August, 2008

Hour of Day - Rate & Trips	Retail Uses		Restaurant		Wkdy Total	Saturday Total
	Wkdy.	Sat.	Wkdy.	Sat.		
6:00 a.m. rate	0%	0%	0%	0%		
trips	0	0	0	0	0	0
7:00 a.m. rate	8%	3%	2%	2%		
trips	69	26	3	3	72	29
8:00 a.m. rate	18%	10%	5%	3%		
trips	155	86	7	4	162	90
9:00 a.m. rate	42%	30%	10%	6%		
trips	362	258	14	9	376	267
10:00 a.m. rate	68%	45%	20%	8%		
trips	585	387	29	11	614	399
11:00 a.m. rate	87%	73%	30%	10%		
trips	749	629	43	14	792	643
12:00 p.m. rate	97%	85%	50%	30%		
trips	835	732	72	43	907	775
1:00 p.m. rate	100%	95%	70%	45%		
trips	861	818	100	64	961	882
2:00 p.m. rate	97%	100%	60%	45%		
trips	835	861	86	64	921	925
3:00 p.m. rate	95%	100%	60%	45%		
trips	818	861	86	64	904	925
4:00 p.m. rate	87%	90%	50%	45%		
trips	749	775	72	64	821	839
5:00 p.m. rate	79%	75%	70%	60%		
trips	680	646	100	86	780	732
6:00 p.m. rate	82%	65%	90%	90%		
trips	706	560	129	129	835	688
7:00 p.m. rate	89%	60%	100%	95%		
trips	766	517	143	136	909	652
8:00 p.m. rate	87%	55%	100%	100%		
trips	749	474	143	143	892	617
9:00 p.m. rate	61%	40%	100%	100%		
trips	525	344	143	143	668	487
10:00 p.m. rate	32%	38%	90%	95%		
trips	276	327	129	136	404	463
11:00 p.m. rate	13%	13%	70%	85%		
trips	112	112	100	122	212	233
12:00 p.m. rate	0%	0%	50%	70%		
trips	0	0	72	100	72	100