ATTACHMENT 6

Updated Evacuation Time Estimates for Limerick Generating Station Plume Exposure Pathway and ETE Review Criteria Checklist

Limerick Generating Station
ETE Review Criteria Checklist

Table B-1 ETE Review Criteria Checklist

	Criterion Addressed in ETE Analysis (Yes/No)	Comments
1.0 Introduction		
a. The emergency planning zone (EPZ) and surrounding area should be described.	yes	Sect 1.2
b. A map should be included that identifies primary features of the site, including major roadways, significant topographical features, boundaries of counties, and population centers within the EPZ.	yes	Figure 1-1, Figure 4-1
c. A comparison of the current and previous ETE should be provided and includes similar information as identified in Table 1-1, "ETE Comparison," of NUREG/CR-7002.	yes	Table 1-3
1.1 Approach		
a. A discussion of the approach and level of detail obtained during the field survey of the roadway network should be provided.	yes	Sect 4.3
b. Sources of demographic data for schools, special facilities, large employers, and special events should be identified.	yes	Sect 2.1, 3
c. Discussion should be presented on use of traffic control plans in the analysis.	yes	Sect 2.1
d. Traffic simulation models used for the analyses should be identified by name and version.	yes	Sect 5.5
e. Methods used to address data uncertainties should be described.	yes	Sect 6.6
1.2 Assumptions		
a. The planning basis for the ETE includes the assumption that the evacuation is ordered promptly and no early protective actions have been implemented.	yes	Sect 2.1, 3, 5.4
b. Assumptions consistent with Table 1-2, "General Assumptions," of NUREG/CR-7002 should be provided and include the basis to support their use.	yes	Sect 2.1
1.3 Scenario Development		
a. The ten scenarios in Table 1-3, Evacuation Scenarios, should be developed for the ETE analysis, or a reason should be provided for use of other scenarios.	yes	Sect 2.2.1, No "Special Event" see section 2.4.4

	Criterion Addressed in ETE Analysis (Yes/No)	Comments
1.3.1 Staged Evacuation		
a. A discussion should be provided on the approach used in development of a staged evacuation.	yes	Sect 6.4
1.4 Evacuation Planning Areas		
a. A map of the EPZ with emergency response planning areas (ERPAs) should be included.	yes	Figure 1-1
b. A table should be provided identifying the ERPAs considered for each ETE calculation by downwind direction in each sector.	yes	Table 6-2 & 6-3
c. A table similar to Table 1-4, "Evacuation Areas for a Staged Evacuation Keyhole," of NUREG/CR-7002 should be provided and includes the complete evacuation of the 2, 5, and 10 mile areas and for the 2 mile area/5 mile keyhole evacuations.	yes	Table 6-2 & 6-3
2.0 Demand Estimation		
a. Demand estimation should be developed for the four population groups, including permanent residents of the EPZ, transients, special facilities, and schools.	yes	Table 3-1 thru 3-4
2.1 Permanent Residents and Transient Population		
a. The US Census should be the source of the population values, or another credible source should be provided.	yes	Sect 2.1, 3
b. Population values should be adjusted as necessary for growth to reflect population estimates to the year of the ETE.	yes	2010 Census data used for ETE
c. A sector diagram should be included, similar to Figure 2-1, "Population by Sector," of NUREG/CR-7002, showing the population distribution for permanent residents.	yes	Figure 1-2
2.1.1 Permanent Residents with Vehicles		
a. The persons per vehicle value should be between 1 and 2 or justification should be provided for other values.	yes	Sect 3.1.1
b. Major employers should be listed.	yes	Table A-1
2.1.2 Transient Population		
a. A list of facilities which attract transient populations should be included, and peak and average attendance for these facilities should be listed. The source of information used to develop attendance values should be provided.	yes	Sect 3.3, Table A-2 & A-3
b. The average population during the season should be used,	yes	Sect 3.2

	Criterion Addressed in ETE Analysis (Yes/No)	Comments
itemized and totaled for each scenario.		
c. The percent of permanent residents assumed to be at facilities should be estimated.	yes	Sect 3.3
d. The number of people per vehicle should be provided. Numbers may vary by scenario, and if so, discussion on why values vary should be provided.	yes	Sect 2.1, 3.3
e. A sector diagram should be included, similar to Figure 2-1 of NUREG/CR-7002, showing the population distribution for the transient population.	yes	Table 3-2
2.2 Transit Dependent Permanent Residents		
a. The methodology used to determine the number of transit dependent residents should be discussed.	yes	Sect 3.1.2
b. Transportation resources needed to evacuate this group should be quantified.	yes	Sect 3.1.2
c. The county/local evacuation plans for transit dependent residents should be used in the analysis.	yes	Sect 3.1.2
d. The methodology used to determine the number of people with disabilities and those with access and functional needs who may need assistance and do not reside in special facilities should be provided. Data from local/county registration programs should be used in the estimate, but should not be the only set of data.	yes	Sect 3.1.2
e. Capacities should be provided for all types of transportation resources. Bus seating capacity of 50% should be used or justification should be provided for higher values.	yes	Sect 3.1.2
f. An estimate of this population should be provided and information should be provided that the existing registration programs were used in developing the estimate.	yes	Sect 3.1.2
g. A summary table of the total number of buses, ambulances, or other transport needed to support evacuation should be provided and the quantification of resources should be detailed enough to assure double counting has not occurred.	yes	Table 3-6
2.3 Special Facility Residents		
a. A list of special facilities, including the type of facility, location, and average population should be provided. Special facility staff should be included in the total special	yes	Table A-3 thru A-6

	Criterion Addressed in ETE Analysis (Yes/No)	Comments
facility population.		
b. A discussion should be provided on how special facility data was obtained.	yes	Sect 3.4
c. The number of wheelchair and bed-bound individuals should be provided.	yes	Table A-6
d. An estimate of the number and capacity of vehicles needed to support the evacuation of the facility should be provided.	yes	Table A-6
e. The logistics for mobilizing specially trained staff (e.g., medical support or security support for prisons, jails, and other correctional facilities) should be discussed when appropriate.	yes	Sect 5.2. Part of offsite agency planning process.
2.4 Schools		
a. A list of schools including name, location, student population, and transportation resources required to support the evacuation, should be provided. The source of this information should be provided.	yes	Sect 3.4.2, Table 3-4 & A-4
b. Transportation resources for elementary and middle schools are based on 100% of the school capacity.	yes	Sect 3.4.2
c. The estimate of high school students who will use their personal vehicle to evacuate should be provided and a basis for the values used should be provided.	yes	Sect 3. POV adjustment N/A
d. The need for return trips should be identified if necessary.	yes	Sect 6.7, Table 6-6
2.5.1 Special Events		
a. A complete list of special events should be provided and includes information on the population, estimated duration, and season of the event.	no	See Sect 2.4.4
b. The special event that encompasses the peak transient population should be analyzed in the ETE.	no	See Sect 2.4.4
c. The percent of permanent residents attending the event should be estimated.	no	See Sect 2.4.4
2.5.2 Shadow Evacuation		
a. A shadow evacuation of 20 percent should be included for areas outside the evacuation area extending to 15 miles from the NPP.	yes	Figure 1-2
b. Population estimates for the shadow evacuation in the 10 to 15 mile area beyond the EPZ are provided by sector.	yes	Figure 1-2

	Criterion Addressed in ETE Analysis (Yes/No)	Comments
c. The loading of the shadow evacuation onto the roadway network should be consistent with the trip generation time generated for the permanent resident population.	yes	Sect 5
2.5.3 Background and Pass Through Traffic		
a. The volume of background traffic and pass-through traffic should be based on the average daytime traffic. Values may be reduced for nighttime scenarios.	yes	Sect 2.1, 4.3
b. Pass-through traffic should be assumed to have stopped entering the EPZ about two hours after the initial notification.	yes	Sect 2.1, 4.3
2.6 Summary of Demand Estimation		
a. A summary table should be provided that identifies the total populations and total vehicles used in the analysis for permanent residents, transients, transit dependent residents, special facilities, schools, shadow population, and pass-through demand used in each scenario.	yes	Table 3-1 thru 3-5
3.0 Roadway Capacity		
a. The method(s) used to assess roadway capacity should be discussed.	yes	Sect 4
3.1 Roadway Characteristics		
a. A field survey of key routes within the EPZ has been conducted.	yes	Sect 4.1
b. Information should be provided describing the extent of the survey, and types of information gathered and used in the analysis.	yes	Sect 4.3
c. A table similar to that in Appendix A, "Roadway Characteristics," of NUREG/CR-7002 should be provided.	yes	Appendix C
d. Calculations for a representative roadway segment should be provided.	yes	Appendix C
e. A legible map of the roadway system that identifies node numbers and segments used to develop the ETE should be provided and should be similar to Figure 3-1, "Roadway Network Identifying Nodes and Segments," of NUREG/CR-7002.	yes	Appendix C
3.2 Capacity Analysis		
a. The approach used to calculate the roadway capacity for the transportation network should be described in detail and	yes	Sect 4

	Criterion Addressed in ETE Analysis (Yes/No)	Comments
identifies factors that are expressly used in the modeling.		
b. The capacity analysis identifies where field information should be used in the ETE calculation.	yes	Sect 4.3. Field information used to verify model
3.3 Intersection Control		
a. A list of intersections should be provided that includes the total numbers of intersections modeled that are unsignalized, signalized, or manned by response personnel.	yes	Appendix C
b. Characteristics for the 10 highest volume intersections within the EPZ are provided including the location, signal cycle length, and turn lane queue capacity.	yes	Table 7-1
c. Discussion should be provided on how time signal cycle is used in the calculations.	yes	Sect 4.3
3.4 Adverse Weather		
a. The adverse weather condition should be identified and the effect of adverse weather on mobilization should be considered.	yes	Sect 2.4
b. The speed and capacity reduction factors identified in Table 3-1, "Weather Capacity Factors," of NUREG/CR-7002 should be used or a basis should be provided for other values.	yes	Sect 2.4
c. The study identifies assumptions for snow removal on streets and driveways, when applicable.	N/A	impediments are part of the PAD process
4.0 Development of Evacuation Times		
4.1 Trip Generation Time		
a. The process used to develop trip generation times should be identified.	yes	Sect 5
b. When telephone surveys are used, the scope of the survey, area of the survey, number of participants, and statistical relevance should be provided.	yes	Appendix B
c. Data obtained from telephone surveys should be summarized.	yes	Appendix B
d. The trip generation time for each population group should be developed from site specific information.	yes	Sect 5
4.1.1 Permanent Residents and Transient Population		
a. Permanent residents are assumed to evacuate from their homes but are not assumed to be at home at all times. Trip	yes	Sect 5

	Criterion Addressed in ETE Analysis (Yes/No)	Comments
generation time includes the assumption that a percentage of residents will need to return home prior to evacuating.		
b. Discussion should be provided on the time and method used to notify transients. The trip generation time discusses any difficulties notifying persons in hard to reach areas such as on lakes or in campgrounds.	yes	Sect 5
c. The trip generation time accounts for transients potentially returning to hotels prior to evacuating.	yes	Sect 5
d. Effect of public transportation resources used during special events where a large number of transients are expected should be considered.	yes	See Sect 2.4.4 No "Special Event" scenario req'd
e. The trip generation time for the transient population should be integrated and loaded onto the transportation network with the general public.	yes	Sect 5
4.1.2 Transit Dependent Residents		
a. If available, existing plans and bus routes are used in the ETE analysis. If new plans are developed with the ETE, they should have been agreed upon by the responsible authorities.	yes	Sect 5.3, 3.1.2. Transportation assistance phone numbers and pickup point information is published for the public.
b. Discussion should be included on the means of evacuating ambulatory and non-ambulatory residents.	yes	Sect 5.3
c. The number, location and availability of buses, and other resources needed to support the demand estimation are provided.	yse	Table 3-6
d. Logistical details, such as the time to obtain buses, brief drivers and initiate the bus route are provided.	yes	Sect 5.4.3, 6.7
e. Discussion should identify the time estimated for transit dependent residents to prepare and then travel to a bus pickup point, and describes the expected means of travel to the pickup point.	yes	Sect 6.7
f. The number of bus stops and time needed to load passengers should be discussed.	yes	Sect 6.7
g. A map of bus routes should be included.	N/A	Pickup points are published. Routes are not scripted.
h. The trip generation time for non-ambulatory persons includes the time to mobilize ambulances or special vehicles, time to drive to the home of residents, loading time,	yes	Sect 6.7

	Criterion Addressed in ETE Analysis (Yes/No)	Comments
and time to drive out of the EPZ should be provided.		
i. Information should be provided to support analysis of return trips, if necessary.	yes	Sect 6.7
4.1.3 Special Facilities		
a. Information on evacuation logistics and mobilization times should be provided.	yes	Sect 6.7
b. Discussion should be provided on the inbound and outbound speeds.	yes	Sect 6.7
c. The number of wheelchair and bed-bound individuals should be provided, and the logistics of evacuating these residents should be discussed.	yes	page E-2, Sect 3.4, Table A-6
d. Time for loading of residents should be provided.	yes	Sect 6.7
e. Information should be provided that indicates whether the evacuation can be completed in a single trip or if additional trips are needed.	yes	Sect 2.1, 3.1.2, 3.6
f. If return trips are needed, the destination of vehicles should be provided.	yes	Sect 3.6, 6.7
g. Discussion should be provided on whether special facility residents are expected to pass through the reception center prior to being evacuated to their final destination.	yes	Sect 5.4.3
h. Supporting information should be provided to quantify the time elements for the return trips.	yes	Sect 6.7
4.1.4 Schools		
a. Information on evacuation logistics and mobilization times should be provided.	yes	Sect 6.7
b. Discussion should be provided on the inbound and outbound speeds.	yes	Sect 6.7
c. Time for loading of students should be provided.	yes	Sect 6.7
d. Information should be provided that indicates whether the evacuation can be completed in a single trip or if additional trips are needed.	yes	Sect 6.7, Table 6-6. PA utilizes a "single-lift" strategy.
e. If return trips are needed, the destination of school buses should be provided.	yes	Sect 6.7
f. If used, reception centers should be identified. Discussion should be provided on whether students are expected to pass through the reception center prior to being evacuated	yes	Sect 5.4.3; Schools evacuate directly to host schools

	Criterion Addressed in ETE Analysis (Yes/No)	Comments
to their final destination.		
g. Supporting information should be provided to quantify the time elements for the return trips.	yes	Sect 6.7
4.2 ETE Modeling		
a. General information about the model should be provided and demonstrates its use in ETE studies.	yes	Sect 5.5
b. If a traffic simulation model is not used to conduct the ETE calculation, sufficient detail should be provided to validate the analytical approach used. All criteria elements should have been met, as appropriate.	N/A	traffic simulation used
4.2.1 Traffic Simulation Model Input		
a. Traffic simulation model assumptions and a representative set of model inputs should be provided.	yes	Sect 5.5
b. A glossary of terms should be provided for the key performance measures and parameters used in the analysis.	yes	page v
4.2.2 Traffic Simulation Model Output		
a. A discussion regarding whether the traffic simulation model used must be in equilibration prior to calculating the ETE should be provided.	yes	Sect 5.5
b. The minimum following model outputs should be provided to support review: 1. Total volume and percent by hour at each EPZ exit mode. 2. Network wide average travel time. 3. Longest Queue length for the 10 intersections with the highest traffic volume. 4. Total vehicles exiting the network. 5. A plot that provides both the mobilization curve and evacuation curve identifying the cumulative percentage of evacuees who have mobilized and exited the EPZ. 6. Average speed for each major evacuation route that exits the EPZ.	yes	Sect 6, Table 7-1
c. Color coded roadway maps should be provided for various times (i.e., at 2, 4, 6 hrs., etc.) during a full EPZ evacuation scenario, identifying areas where long queues exist including level of service (LOS) "E" and LOS "F" conditions,	yes	Appendix D

	Criterion Addressed in ETE Analysis (Yes/No)	Comments
if they occur.		
4.3 Evacuation Time Estimates for the General Public		
a. The ETE should include the time to evacuate 90% and 100% of the total permanent resident and transient population.	yes	Sect 6
b. The ETE for 100% of the general public should include all members of the general public. Any reductions or truncated data should be explained.	yes	Sect 6
c. Tables should be provided for the 90 and 100 percent ETEs similar to Table 4-3, "ETEs for Staged Evacuation Keyhole," of NUREG/CR-7002.	yes	Sect 6
d. ETEs should be provided for the 100 percent evacuation of special facilities, transit dependent, and school populations.	yes	Sect 6
5.0 Other Considerations		
5.1 Development of Traffic Control Plans		
a. Information that responsible authorities have approved the traffic control plan used in the analysis should be provided.	yes	Sect 7
b. A discussion of adjustments or additions to the traffic control plan that affect the ETE should be provided.	yes	Sect 7
5.2 Enhancements in Evacuation Time		
a. The results of assessments for improvement of evacuation time should be provided.	yes	Sect 7
b. A statement or discussion regarding presentation of enhancements to local authorities should be provided.	yes	Sect 7
5.3 State and Local Review		
a. A list of agencies contacted and the extent of interaction with these agencies should be discussed.	yes	Sect 2.2
b. Information should be provided on any unresolved issues that may affect the ETE.	yes	no unresolved issues
5.4 Reviews and Updates		
a. A discussion of when an updated ETE analysis is required to be performed and submitted to the NRC.	yes	Sect 6.5
5.5 Reception Centers and Congregate Care Center		
a. A map of congregate care centers and reception centers should be provided.	yes	Figure 4-1; Cong. Care is an event specific part of RERP
b. If return trips are required, assumptions used to estimate	N/A	not required

	Criterion Addressed in ETE Analysis (Yes/No)	Comments
return times for buses should be provided.		
c. It should be clearly stated if it is assumed that passengers are left at the reception center and are taken by separate buses to the congregate care center.	yes	Sect 3.1.2

Exelon
Technical Reviewer _____ Date 8/14/13

Supervisory Review _____ Date 8/15/13

Limerick Generating Station
Evacuation Time Estimates

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Evacuation Time Estimates for the Limerick Station Plume Exposure Pathway Emergency Planning Zone

Prepared for:
Exelon Generation
Kennett Square, Pennsylvania

Prepared by:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford
Massachusetts 01824
Tel 978.937.9999
Fax 978.937.7555

Our Ref.:
B0033739.0000

Date:
August 2013

Executive Summary

This draft report documents the Evacuation Time Estimate (ETE) study prepared by ARCADIS for the Limerick Generating Station (LGS) in Limerick Township, Montgomery County, Pennsylvania. The study reflects the current definition of the Emergency Planning Zone, which is the region within a nominal 10-mile distance of LGS. The most recent complete study of evacuation time estimates for Limerick was performed in 2003. The present study was performed using population data from the 2010 census.

PTV Vision™ software was used to perform evacuation modeling for different scenarios. The PTV Vision traffic simulation software package includes VISUM (macroscopic traffic simulation) and VISSIM (microscopic traffic simulation). VISUM is a comprehensive, flexible software system for transportation planning, travel demand modeling, and network data management. VISSIM is capable of performing detailed microscopic simulation of traffic and can model any type of traffic signal control and geometric configuration.

The road network used in the evacuation simulations consisted of designated evacuation routes plus any additional roadways needed to accurately simulate conditions during an evacuation. Roadway capacities were determined using NAVTEQ™ digital data, updated by ARCADIS based on actual road and intersection data collected in the field in 2011. Evacuees were generally assumed to proceed out of the Emergency Planning Zone (EPZ) via recommended evacuation routes and to make their way to designated reception centers after leaving the EPZ.

The EPZ for LGS includes parts of three counties in Pennsylvania (Berks, Chester, and Montgomery). The resident population of the Limerick EPZ is estimated at 292,061 permanent residents. The 2010 U.S. Census data at Block Group level was used to determine population in each EPZ Sub-Area.

The transient population, which includes large workplaces, recreational facilities and hotels/motels, was estimated at 22,485 persons for a winter weekday and 12,121 persons for a winter night. The special facilities population, including nursing homes, hospitals, and incarceration facilities was estimated at 6,224 persons for weekdays and 5,316 for nights and weekends. The estimated population of schools and day care centers for a winter weekday is 69,689, including children and staff. These population estimates include intrinsic double counting, as some persons in the transient and special facility populations are also included in the permanent resident counts. Thus, evacuation times using these population figures are considered conservative.

Vehicle demand for the resident population was developed based on estimated vehicle occupancy, using data obtained from a telephone survey of EPZ residents. The vehicle

occupancy factor estimated from survey responses is 2.28 persons per vehicle, which represents 1.19 vehicles per household. For the 2003 study, two alternative vehicle demand estimates for the residential population were evaluated, with vehicle occupancy of 1.5 to 2 persons per vehicle ("high demand" alternative) and 3.0 persons per vehicle (one vehicle per household).

Vehicle demand for the transient population was estimated using vehicle occupancy factors ranging from 1.0 person per vehicle for the workforce population up to 3.0 persons per vehicle for some recreational areas. Vehicle demand for some facilities was adjusted to reduce double-counting between shoppers, workers and residents. Vehicle demand for the school population was based on bus occupancy of 48 persons. For nursing homes, vehicle occupancy is 20 persons per bus or van for residents, and two persons per ambulance for non-ambulatory patients. For nights and weekends, all facility staff would accompany patients; during weekdays, one vehicle per person was assigned for the additional staff. Total vehicle demand for all population categories ranges from 136,660 (summer night) to 156,742 (winter weekday).

Vehicle demand was also assigned to account for the potential "shadow evacuation" of the population residing immediately outside the EPZ, to a distance of 15 miles. The permanent resident population within this region is 278,418. It was assumed that 20% of the population in this region would evacuate. The occupancy factor for EPZ residents (2.28 persons per vehicle) was applied to estimate vehicle demand for this population. Shadow evacuees residing outside the EPZ add vehicle demand of 24,423 vehicles.

Evacuation times were estimated for evacuation of the entire EPZ for winter weekday (daytime and evening), winter weekend day, summer weekday (daytime and evening), and summer weekend cases under fair weather conditions. The weekday daytime cases were also evaluated for adverse weather conditions (snow and rain, respectively, for winter and summer).

"Staged evacuation" scenarios were also evaluated. Under these scenarios, the population within the 2-mile zones closest to LGS would evacuate initially; evacuation of surrounding zones would be initiated after most traffic from the 2-mile zones has cleared. The purpose of evaluating staged evacuations is to assess the potential reduction in evacuation times that might be achieved for the population at greatest risk.

Simulations were also performed to assess the potential impact of population growth on predicted evacuation times. This sensitivity analysis is used to define a threshold population figure that would trigger another ETE update study.

Predicted ETEs for the general population in the Limerick EPZ are summarized by scenario and distance in Table E-1 (times for 90% and 100% of vehicles to depart, for 2-mile zones, all zones to 5 miles, and all zones to 10 miles). The pattern of evacuation times is consistent with the differences in vehicle demand and travel time for different scenarios. The 2-mile zone involves the shortest travel distance and the fewest vehicles; 90% ETEs for the 2-mile zone range from 5:35 to 7:40, and 100% ETEs are 6:30 to 9:05. The times are longest for summer weekday and winter weekday scenarios with adverse weather, and shortest for night and weekend scenarios.

For all zones out to 5 miles, the 90% ETEs are 6:20 to 9:00, and the 100% ETEs are 7:30 to 10:50. For the full EPZ, the 90% ETEs are 7:30 to 10:40, while the 100% ETEs are 9:05 to 13:10.

All of these times are indicative of major delays related to traffic congestion. The differences in vehicle demand between scenarios are up to 13% of total demand, and the predicted ETEs for normal weather vary by about 15%. Adverse weather adds up to 95 minutes for the summer weekday ETEs, and up to 160 minutes for the winter weekday ETEs.

Table E-1: Evacuation Time Estimate Summary for Limerick Station EPZ

	Summer				Winter			
	Midweek Daytime		Weekend Daytime	Evening	Midweek Daytime		Weekend Daytime	Evening
Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Weather:	Normal	Adverse	Normal	Normal	Normal	Adverse	Normal	Normal
Evacuation Area	90% Evacuation Time							
2-mile Zone	6:05	7:00	5:35	5:30	6:05	7:40	5:40	5:35
5-mile Zone	7:10	8:15	6:25	6:20	7:10	9:00	6:30	6:35
10-mile EPZ	8:35	9:50	7:35	7:30	8:35	10:40	7:40	7:50
	100% Evacuation Time							
2-mile Zone	7:10	8:15	6:35	6:30	7:15	9:05	6:45	6:35
5-mile Zone	8:40	9:55	7:35	7:30	8:40	10:50	7:45	7:45
10-mile EPZ	10:30	12:05	9:10	9:05	10:30	13:10	9:20	9:30

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List of Acronyms and Abbreviations

ADT	Average daily traffic
BAO	ESRI Business Analyst Online
EAS	Emergency Alert System
EPZ	Exposure Pathway Emergency Planning Zone
ERPA	Emergency Response Protection Area
ETE	Evacuation time estimate
GIS	Geographic information system
GPS	Global Positioning System
LGS	Limerick Generating Station
LOS	Level-of-service
NRC	Nuclear Regulatory Commission
PAR	Protective Action Recommendation
PEMA	Pennsylvania Emergency Management Agency
TAR	Tone alert radios
WC	Wheelchair

1. Introduction

1.1 General

Evacuation time studies analyze the manner in which the population within the Plume Exposure Pathway Emergency Planning Zone (EPZ) surrounding a nuclear power plant site would evacuate during a radiological emergency. Evacuation time studies provide licensees and State and local governments with site-specific information helpful for protective action decision-making. The studies estimate the time necessary to evacuate the EPZ for a range of evacuation scenarios. Analysis of the evacuation simulation results also identifies locations where traffic management and control measures can facilitate the evacuation, and may identify unique evacuation constraints or conditions.

Estimates of the time required to evacuate from areas around nuclear power plant sites are required for all operating plants in the United States. Federal guidance has been prepared to outline the format and content of these evacuation time estimates (NUREG-0654, Rev. 1 (Nuclear Regulatory Commission (NRC), 1980), NUREG/CR-4831 (NRC, 1992) and NUREG/CR-7002 (NRC, 2011)).

A partial update of evacuation time estimates for the Limerick Generating Station (LGS) Plume Exposure Pathway EPZ was performed in 2008 (Earth Tech, 2008). The most recent full ETE study for LGS was performed in 2003 (Earth Tech, 2003). The guidance presented in NUREG/CR-7002 indicates that the evacuation time estimates should be updated as local conditions change, but at least once each decade, following release of the federal census. The current update study was prompted by the issuance of revised ETE guidance (CR-7002) and the availability of population data from the 2010 census. Census data indicate that the population residing within the EPZ increased by about 48,000 between 2000 and 2010, which represents a population increase of almost 20%. The estimated 2010 population residing in the EPZ is 292,061. (Population data are discussed further below in section 1.4.)

The evacuation time estimates have been developed using current population, local roadway network characteristics and the PTV Vision™ traffic simulation software package to perform evacuation modeling for different scenarios. PTV Vision includes the VISSIM (microscopic traffic simulation) and VISUM (macroscopic traffic simulation) models. Evacuation times have been estimated for various areas, times and weather conditions, as outlined in CR-7002. These evacuation times represent the times required for completing the following actions:

- Public notification;
- Preparation and mobilization; and
- Actual movement out of the EPZ (i.e., on-road travel time, including delays associated with vehicle queuing).

1.2 Site Location and Emergency Planning Zone (EPZ)

This report describes the analyses undertaken, and the results obtained, in a study to update the existing Evacuation Time Estimates for LGS. The emergency response plan is designed to protect the health and safety of the public in the event that an evacuation is ordered as a protective action in response to an accident at LGS.

The Limerick Station site is located on the north bank of the Schuylkill River in Limerick Township, Montgomery County, Pennsylvania. The location of the plant is shown in Figure 1-1.

The EPZ is the geographic area surrounding a nuclear power plant within which the NRC requires advance planning for evacuation or other short-term protective actions in the event of a radiological emergency. The Limerick EPZ consists of the area within an approximate 10-mile radius of LGS. The EPZ includes parts of three Pennsylvania counties (Berks, Chester, and Montgomery). The Limerick EPZ is subdivided into a total of 9 Sub-Areas. As a rule, such Sub-Areas are the basic units for which protective action recommendations are issued. However, it is understood that current Pennsylvania policy requires the evacuation of the entire EPZ if an evacuation is recommended. Sub-Area boundaries generally follow geographic (township and borough) boundaries, and reflect distance and direction from LGS. The distance ranges of concern are 0-2 miles, 2-5 miles, and beyond 5 miles. EPZ and Sub-Area boundaries are shown in Figure 1-1. The Sub-Areas are described in more detail in Section 3.

The population distribution within the Limerick EPZ is shown in Figure 1-1. A listing of the permanent resident population for 2000 and 2010 by county subdivision within the Limerick EPZ is shown in Table 1-1. (A breakdown by Sub-Area was not provided in the 2003 study, so the comparison in Table 1-1 is at the county level.)

Montgomery County accounts for 62% of the resident population; 29% of the EPZ population resides in Chester County, and 9% reside in Berks County. The eastern half of the EPZ is a heavily populated and rapidly growing suburban region on the western

edge of the Philadelphia metropolitan area. The southeast quadrant of the EPZ is more rural in character, with no large cities or towns. The northwest quadrant includes two small industrialized cities, Pottstown and Boyertown. The EPZ population has grown by 20% between 2000 and 2010, with significant population growth all three counties.

The Limerick plant is on the north bank of the Schuylkill River, which forms the boundary between Montgomery County and Chester County. U.S. 422 is a limited access highway that crosses the EPZ from northwest to southeast, roughly parallel to the river. The Pennsylvania Turnpike (I-76) runs east-west along the southern boundary of the EPZ, but is not accessible to local traffic at any point inside the EPZ. The river has four bridge crossings within the EPZ, one in Pottstown at Route 100, west of LGS, and three to the east of the plant. The nominal 0-2 mile zone extends almost to 5 miles north and south of the plant, with a population of 32,755. The zones extending (nominally) from 2-5 miles have a population of 69,493, while the zones beyond 5 miles have 189,813 residents.

NRC guidance requires consideration of potential "shadow evacuation" of the population residing immediately outside the EPZ, to a distance of 15 miles. The permanent resident population within this region is 278,418. Most of this population is located to the southeast and south of the EPZ, in a region extending from Norristown and King of Prussia west along I-76 and U.S. 202 to Lionville and Exton. A map showing the population by distance and direction sector within 15 miles of Limerick Station is provided in Figure 1-2. (Due to roundoff errors that propagate when sector boundaries cut across census block boundaries, the population numbers disagree slightly between Figure 1-1 and Figure 1-2. Figure 1-1 is more accurate for the EPZ population.)

1.3 Designated Reception Centers

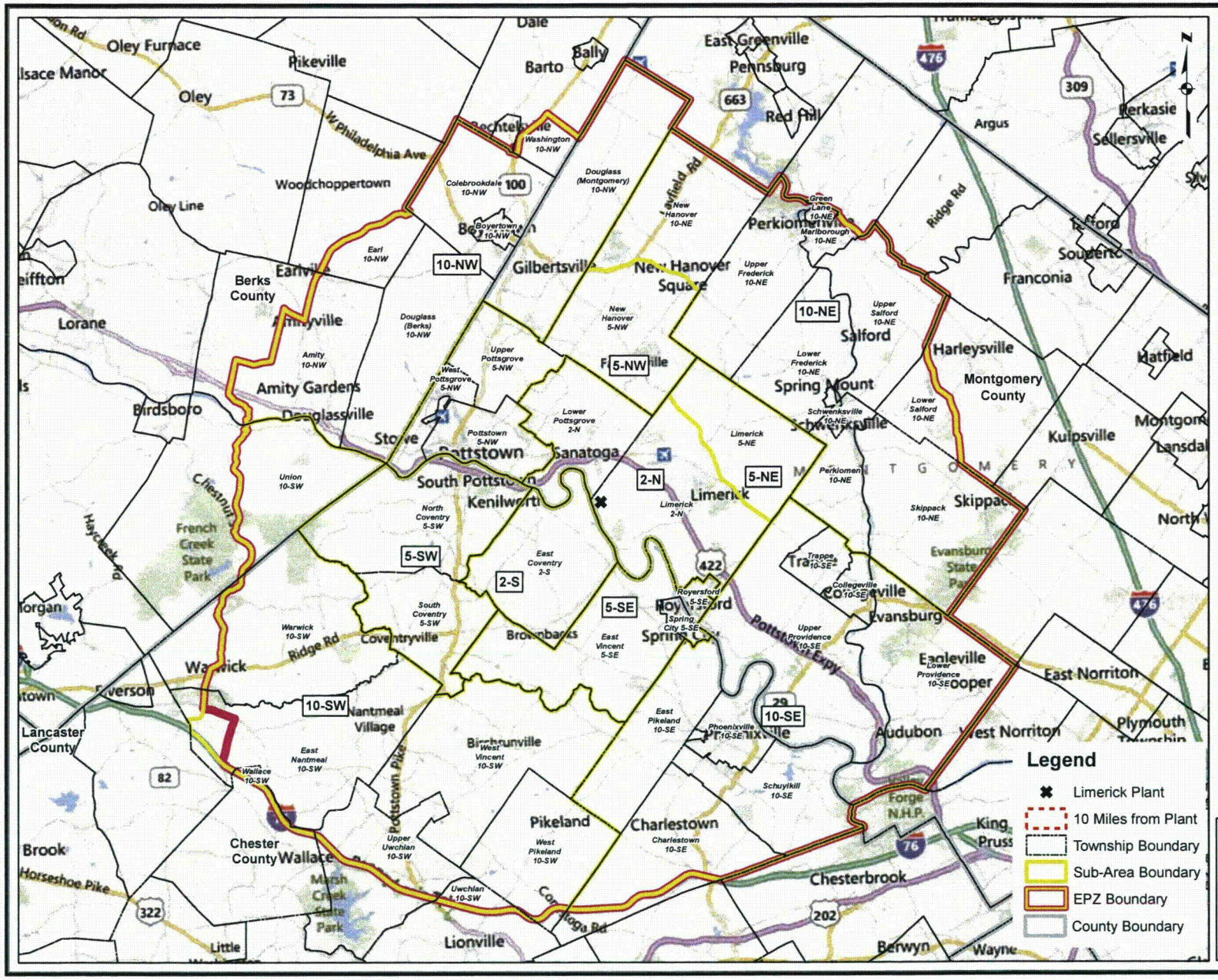
The Limerick emergency response evacuation plan directs residents of each community within the EPZ to evacuate to specified reception centers. If evacuation is initiated while schools are in session, students will be transported directly to designated Host Schools, and families are instructed to meet up with the students at those locations.

The designated reception centers for individual boroughs and townships within the Limerick EPZ are listed in Table 1-2. The roadway network used to develop evacuation time estimates includes the major roadways recommended to the public as evacuation routes from individual communities to designated reception centers. The roadway network is described in detail in Section 4.

1.4 Overview of Changes from Previous ETE Study

The changes in residential population within the EPZ are summarized in Table 1-1. The revised NRC guidance and newly acquired data led to a number of other changes in the ETE methodology and assumptions. Table 1-3 provides a summary comparing the main features and assumptions of the current study to the 2003 ETE study. The telephone survey of EPZ residents provides a new basis for estimating vehicle occupancy and departure times, while new NRC guidance has specified different assumptions regarding background and "shadow" traffic. The ETE methodology and assumptions for the current study are discussed in greater detail in following sections of the report.

The revised vehicle occupancy for residents (2.28 persons per vehicle, based on survey), revised departure times for schools and special facilities (no "early warning") and the revised departure time curves for residents (based on survey responses and estimated time for warning diffusion) are expected to have the greatest influence on estimated evacuation times. The "shadow evacuation" adds vehicle demand of more than 24,000 vehicles in the area immediately outside the EPZ. Each of these issues is discussed in detail in following sections of the report.



Zone	Population
2-mile	32,755
5-NE	4,014
5-SE	14,692
5-SW	10,470
5-NW	40,113
10-NE	40,717
10-SE	91,633
10-SW	22,786
10-NW	34,881
EPZ	292,061

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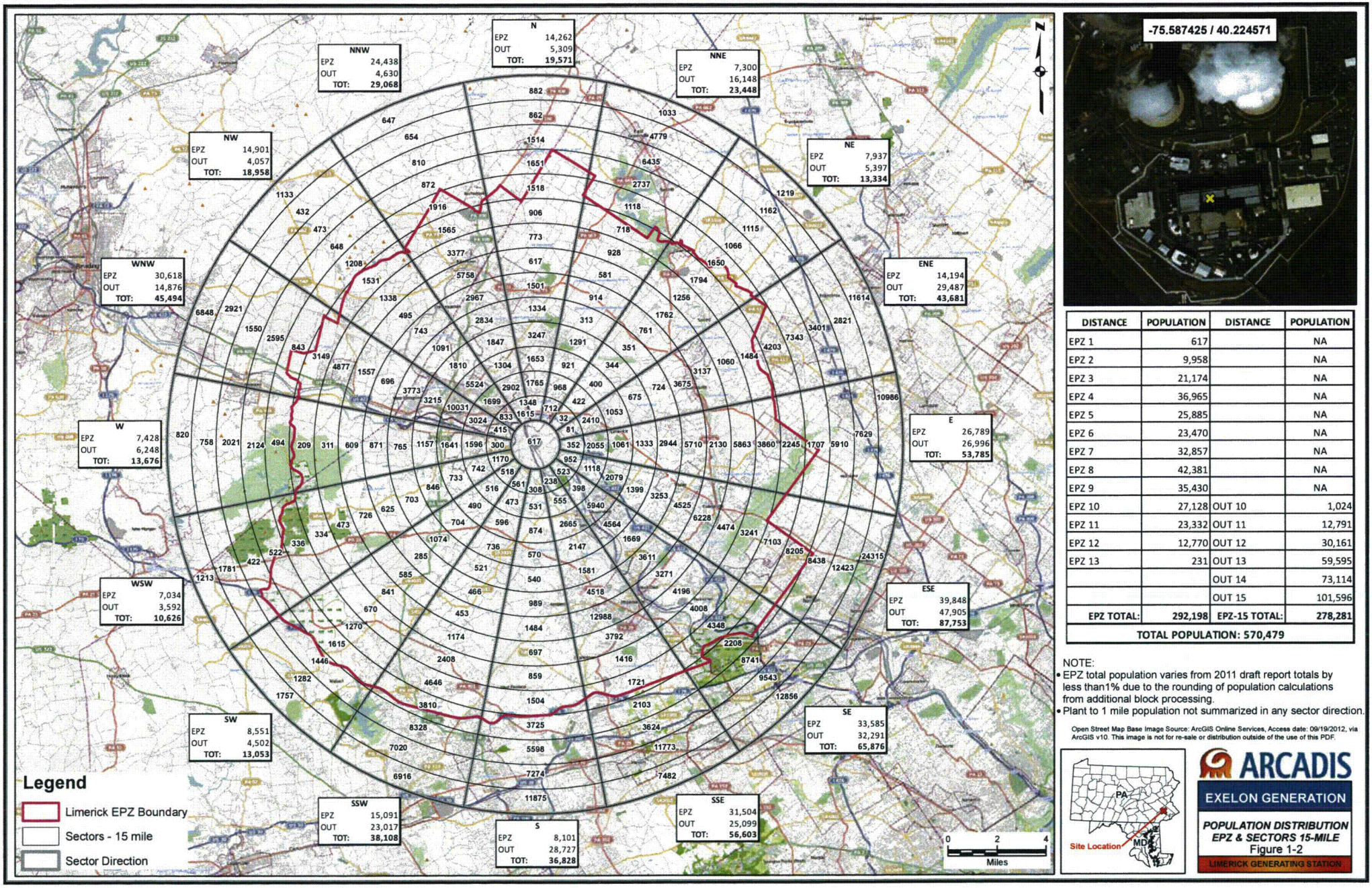
EXELON GENETRATION

LIMERICK GENERATING STATION POPULATION DISTRIBUTION - ERPA

Figure 1-1



DISTANCE	POPULATION	DISTANCE	POPULATION
EPZ 1	617		NA
EPZ 2	9,958		NA
EPZ 3	21,174		NA
EPZ 4	36,965		NA
EPZ 5	25,885		NA
EPZ 6	23,470		NA
EPZ 7	32,857		NA
EPZ 8	42,381		NA
EPZ 9	35,430		NA
EPZ 10	27,128	OUT 10	1,024
EPZ 11	23,332	OUT 11	12,791
EPZ 12	12,770	OUT 12	30,161
EPZ 13	231	OUT 13	59,595
		OUT 14	73,114
		OUT 15	101,596
EPZ TOTAL:	**292,198**	**EPZ-15 TOTAL:**	**278,281**
TOTAL POPULATION: 570,479			

NOTE:
- EPZ total population varies from 2011 draft report totals by less than1% due to the rounding of population calculations from additional block processing.
- Plant to 1 mile population not summarized in any sector direction.

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EXELON GENERATION

POPULATION DISTRIBUTION EPZ & SECTORS 15-MILE

Figure 1-2

LIMERICK GENERATING STATION

Table 1-1: Permanent Resident Population in the Limerick EPZ

County	Place	Zone	Population 2010	Population 2000
Berks	Amity township (Part)	10-NW	10,815	7,126
	Boyertown borough	10-NW	4,055	3,940
	Colebrookdale township	10-NW	5,078	5,270
	Douglass township	10-NW	3,306	3,327
	Earl township (Part)	10-NW	717	730
	Union township (Part)	10-SW	1,215	1,123
	Washington township (Part)	10-NW	715	653
Chester	Charlestown township (Part)	10-SE	4,141	3,539
	East Coventry township	2	6,636	4,566
	East Nantmeal township (Part)	10-SW	1,500	1,469
	East Pikeland township	10-SE	7,079	6,551
	East Vincent township	5-SE	6,821	5,493
	North Coventry township	5-SW	7,866	7,381
	Phoenixville borough	10-SE	16,440	14,788
	Schuylkill township	10-SE	8,516	6,960
	South Coventry township	5-SW	2,604	1,895
	Spring City borough	5-SE	3,323	3,305
	Upper Uwchlan township (Part)	10-SW	8,089	3,674
	Uwchlan township (Part)	10-SW	1,343	1,399
	Wallace township (Part)	10-SW	4	3
	Warwick township (Part)	10-SW	2,192	2,219
	West Pikeland township (Part)	10-SW	3,876	3,378
	West Vincent township	10-SW	4,567	3,170
Montgomery	Collegeville borough	10-SE	5,089	8,032
	Douglass township	10-NW	10,195	9,104
	Green Lane borough	10-NE	508	584
	Limerick township (south)	2	14,060	9,453
	Limerick township (north)	5-NE	4,014	4,081
	Lower Frederick township	10-NE	4,840	4,795
	Lower Pottsgrove township	2	12,059	11,213
	Lower Providence township	10-SE	25,436	22,390
	Lower Salford township (Part)	10-NE	1,424	801
	Marlborough township (Part)	10-NE	492	431
	New Hanover township (south)	5-NE	8,547	4,982
	New Hanover township (north)	10-NE	2,392	2,387
	Perkiomen township	10-NE	9,139	7,093
	Pottstown borough	5-NW	22,377	21,859
	Royersford borough	5-SE	4,752	4,246
	Schwenksville borough	10-NE	1,385	1,693
	Skippack township	10-SE	13,715	6,516
	Trappe borough	10-SE	3,509	3,210
	Upper Frederick township	10-NE	3,523	3,141
	Upper Pottsgrove township	5-NW	5,315	4,102
	Upper Providence township	10-SE	21,219	15,398
	Upper Salford township	10-NE	3,299	3,024
	West Pottsgrove township	5-NW	3,874	3,815
	EPZ Population		**292,061**	**244,309**

Sources: a) 2000 census data from 2003 ETE study report

b) 2010 census data (block level); matches PEMA estimate.

Table 1-2: Designated Reception Centers for Evacuation

EPZ Townships and Boroughs	Reception Center
Montgomery County	
Pottstown, Upper Pottsgrove, Douglass, Washington	Emmaus High School, Emmaus, PA
Pottstown, Lower Pottsgrove, New Hanover	Southern Lehigh High School, Center Valley, PA
Green Lane, Upper Frederick, Lower Frederick, Upper Salford, Lower Salford	County Line Plaza, Hilltown, PA
Perkiomen, Skippack, Trappe	Montgomery Mall, North Wales, PA
Limerick, Royersford, Collegeville, Lower Providence	Plymouth Meeting Metroplex, Plymouth Meeting, PA
Limerick, Royersford, Lower Providence, Upper Providence	Neshaminy Mall, Bensalem, PA
Chester County	
Phoenixville, Schuylkill, Charlestown Spring City, East Vincent, East Pikeland, West Pikeland, Uwchlan	Stetson Middle School, West Chester, PA West Whiteland (PA) Township Building
East Nantmeal, West Vincent, Upper Uwchlan	Downingtown High School, Downingtown, PA
East Coventry, South Coventry, North Coventry, East Nantmeal, Warwick	Morgantown Crossings, Morgantown, PA
North Coventry, Union	Robeson (PA) Township Building
Berks County	
Douglass, Amity, Earl, Boyertown, Colebrookdale	Oley Valley High School, Oley, PA
Montgomery and Berks	
Pottstown, West Pottsgrove, Douglass, Amity	Exeter Township Building, Reading, PA

Table 1-3: ETE Comparison

ETE Element	2003 ETE	Current study
Permanent Residents - Total population - Vehicle occupancy (persons per vehicle)	 - 244,309 - Two options (1.75 and 3.0)	 - 292,061 - 2.28
Transit-dependent - Population estimate - Number of buses - Number of ambulances	Evacuation of transit-dependent population was not addressed in 2003 study	 - 6,200 (242 non-ambulatory) - 200 buses - 11 ambulance, 25 wheelchair bus (2 trips each)
Transient facilities - Estimated population - vehicle demand - Adjust for double-count	(winter day/winter night) - 22,769/6,337 - 21,059/4,595 - No adjustment	(summer day/winter night) - 23,882/12,121 - 16,555/7,087 - Adjusted shoppers , workers
Special facilities - Estimated population - Number bus, van - Ambulance, other	(winter weekday) - 4,973 - Not tabulated - Not identified	(winter weekday) - 4,356 (1,245 non-ambulatory) - 159 bus or van - 78 ambulance, 136 wheelchair bus (2 trips for larger facilities)
Schools - Student population - Number of buses	(winter weekday) - 43,122 (staff included) - 900 buses	(winter weekday) - 57,793 (staff included) - 1,224 buses
Background traffic	None	Average traffic by time of day
Shadow evacuation (assumed basis)	None	20% of resident population outside designated zones
Special event(s)	None	None
Scenarios	- Winter weekday - Winter weeknight - Summer weekend - Both normal and adverse weather for all three cases	- Weekday (winter, summer) - Weeknight (winter, summer) - Weekend (winter, summer) - Adverse weather weekday only - Staged evacuation (weekday)
Adverse weather	Snow for winter, rain for summer	Snow for winter, rain for summer
Evacuation model name and version	NetVac2	PTV Vision VISUM, VISSIM
Departure times	- Residential based on literature - Transient based on literature - Specials based on notification at alert	- Warning based on literature - Residential based on survey - Transient based on survey - Specials notified with public
Evacuation times	Estimates provided for 100%	Estimates provided for 90 and 100%

2. Methodology and Assumptions

2.1 Sources of Data and General Assumptions

The following data sources were reviewed and assumptions made in order to develop the appropriate population and roadway databases used for the evacuation analysis:

- Population estimates for permanent residents were developed from 2010 U.S. Census Bureau data.

- 2010 United States Census Bureau data on housing units indicate that seasonal residents are not significant in the Limerick EPZ. Census data identify the number of seasonal housing units (vacant housing units for "seasonal or occasional use") at different geographic levels (e.g., by township, census tract, block group, block).

- Population estimates for major employers were developed from ESRI list and the facility list from the 2003 study report. ARCADIS conducted internet searches and telephone surveys to estimate facility employment and staffing levels for different scenarios. Only facilities with potential staffing level of at least 50 persons per work shift were pursued.

- Information relating to hotels, motels and recreational facilities was obtained from tourism websites, 2011 AAA TourBook listings, and the 2003 study report, with telephone surveys to verify data and to assess seasonal occupancy. For parks, visitation information was obtained from state park agencies.

- Current population estimates for schools were obtained from county emergency response agencies, plus enrollment information available on the internet. Some private schools and colleges were contacted by phone, using facility lists provided by county emergency management agencies.

- Lists of hospitals, rest homes and incarceration facilities were obtained from each county emergency management agency.

- The staffing levels at LGS reflect estimated peak personnel onsite during outage conditions. These data were provided by Exelon Generation.

- Initial estimates of roadway characteristics were obtained from the NAVTEQ database. Roadway geometric and operational data were compiled based on field surveys performed by ARCADIS in 2011.

- Average traffic volumes by time of day for weekday and weekend for designated evacuation routes were obtained from state and county transportation agencies. These data were used to assign background traffic volumes for the roadway network. It was assumed that access control would be established within 2 hours following the public notice to evacuate.

- Preparation and mobilization times for the permanent resident population were developed based on the results of a telephone survey, combined with published time estimates for warning diffusion. The survey provided estimates of the time to depart from home following notification, and commuting times for household members who would return from work before departing. Median departure times for residents are longer than the times assumed in the previous study.

- Departure times for transient facilities were estimated assuming relatively prompt evacuation of most workplaces and recreational facilities once notification is received. The distribution of departure times also reflects information gathered from the telephone survey of EPZ residents, as discussed in Section 3.

- The evacuation time estimates represent the time required to evacuate the Limerick EPZ and designated analysis areas and include the time required for initial notification.

- Evacuation time estimates are presented for 90% and 100% of evacuating vehicles. It is assumed that all persons within the EPZ area will evacuate. For the 100% evacuation time, evacuation of the EPZ will be considered complete after all evacuating vehicles are outside of the EPZ or analysis area.

- The general public will evacuate using designated evacuation routes and will proceed to the reception centers listed in Table 1-2 after leaving the EPZ. When schools are in session, children attending school will be transported directly to designated Host Schools.

- It is assumed that existing lane utilization will prevail during the course of the evacuation. Traffic control signals will be over-ridden or converted to flashing mode as necessary to give preference to flow on all major outbound roadways. It

is also assumed that State and municipal personnel will restrict unauthorized access into the EPZ, consistent with existing traffic management plans.

- The evacuation analysis cases are described in Section 2.3 and represent a range of conditions, per guidance presented in CR-7002. These cases have been chosen to provide information for an appropriate range of conditions (i.e., low, typical and high population; fair and adverse weather) to guide the protective action decision-making process. Potential "special events" such as holiday parades and sporting events occurring within the EPZ were considered, based on input from state and county agencies. None of these events was judged to represent a major departure from the peak traffic assumptions reflected in the "standard" scenarios, so a Special Event scenario was not included in this study.

- Vehicle occupancy rates used for the various population categories are as follows:

  - Permanent residents – 2.28 persons per vehicle, based on telephone survey results

  - Major places of employment – 1 vehicle per employee. Assumed that 50% of those working for major employers also reside in the EPZ, and that half of those will return home before departing to evacuate. With these assumptions, 0.75 vehicles per worker were assigned. (1 vehicle per worker was assigned for staff at LGS.)

  - Hotels/Motels – 1 vehicle (1 to 2 persons) per occupied room.

  - Recreational areas – 1 vehicle (3 persons) per campsite; 1.5 persons per vehicle at visitor centers and museums.

  - Schools – 45 students and 3 staff per bus; one vehicle per additional staff person.

  - Hospitals/Nursing Homes/Correctional Facilities – 2 persons per ambulance, 4 persons per wheelchair (WC) bus or van for non-ambulatory patients, and 20 people per bus or van for ambulatory residents.

  - Transit-dependent public – for non-ambulatory, 2 persons per ambulance, 4 per wheelchair bus; 30 per bus for ambulatory residents.

- The transit-dependent general population will be evacuated by bus or van through efforts coordinated by state and municipal emergency preparedness officials.

- A two-wave evacuation was assumed for non-ambulatory residents of larger health facilities (20 or more non-ambulatory).

- Adverse weather refers to moderate to heavy rainstorms for summer conditions, and a moderate snowstorm for winter conditions.

2.2 Interaction with Agencies

Emergency management agencies responsible for planning and implementing the emergency response procedures during a radiological emergency were consulted during the development of this ETE study. The Pennsylvania Emergency Management Agency (PEMA) and emergency agencies for Montgomery, Chester, and Berks Counties were contacted to obtain information regarding special and transient facilities in the EPZ, transportation resources available to evacuate special facilities, and the transit-dependent general public. Those agencies were also consulted to identify any major events that take place within the EPZ that should be considered for a Special Event scenario. PEMA provided their own estimates of residential population for the EPZ based on 2010 census data and a map of designated evacuation routes and reception centers. PEMA and the county agencies reviewed the draft report and the facility databases used in this study.

Representative background traffic volumes for the EPZ roadway network were obtained from state and county transportation agencies.

2.3 Summary of Methodology for Traffic Simulation

The evacuation time estimates developed for the Limerick EPZ are based upon a time distribution of evacuation events as opposed to a summation of sequential events. This methodology assumes that the various time components in an evacuation (i.e., the time associated with preparation, mobilization, etc.) overlap and occur within certain time ranges. The time distribution approach is based upon assumptions consistent with the NRC guidance of CR-7002.

Trip generation times are used to develop vehicle loading curves for different population types within the permanent, transient, and special facility populations. A trip generation time consists of two main components: warning diffusion time and

mobilization time. Warning diffusion time is the time it takes for people to receive an emergency notification. The type of warning systems employed in the EPZ, such as emergency alert system (EAS), sirens, and tone alert radios (TARs) affects the distribution of warning times. Availability of more warning systems leads to faster warning diffusion to the public.

Mobilization time is the time between the receipt of notification and when individuals leave for evacuation. Mobilization time depends on the type of population and activity. Warning diffusion time and mobilization time distributions are used to develop composite loading distribution or trip generation curves for different population segments. Trip generation times for transit-dependent facilities, special facilities and schools were developed separately from those for the general public.

2.4 Conditions Modeled

Pursuant to the guidance in CR-7002 and NUREG-0654, Rev. 1, evacuation time estimates have been prepared for a range of temporal, seasonal and weather conditions. Estimates have been prepared for weekday, weeknight and weekend scenarios during winter and summer. All scenarios are simulated with fair weather conditions; weekday scenarios are also simulated assuming adverse weather. Fair weather refers to conditions where roadways are clear and dry, and visibility is not impaired. Adverse weather during summer periods is defined as heavy rain, with impaired visibility; roadway capacities are reduced by 10% and speeds are reduced by 15%. Adverse weather during winter periods is defined as a snowstorm condition where roadway capacities and speeds are reduced by 15%.

The various population components which have been incorporated in the evacuation scenarios are summarized below:

2.4.1 Week Day

This situation represents a typical weekday period with the work force is at a full daytime level. During winter, schools are in session. Vehicle demand estimates for weekday scenarios reflect the following conditions:

- Most permanent residents within the EPZ will evacuate from their places of residence;
- Major work places are fully staffed at typical daytime levels;

- LGS employment is at an estimated peak daytime level, representative of operation during outage conditions;
- Schools and daycares are at current enrollment;
- Hospitals and nursing homes are at current enrollment or typical occupancy;
- Hotel/motel facilities are occupied at peak (winter or summer) levels; and
- Recreational facilities are at winter or summer weekday levels.

2.4.2 Week Night

This situation reflects a typical night period when most permanent residents are home and the work force is at evening shift level. Assumptions on the population levels for this condition include the following:

- Permanent residents within the EPZ will evacuate from their places of residence;
- Major work places are at typical evening levels;
- LGS employment is at an estimated peak night-time level;
- Day schools and daycares are closed;
- Hospitals and nursing homes are at current enrollment or typical occupancy, and staffing is at typical night-time levels;
- Hotel and motel facilities are occupied at (winter or summer) weekday levels; and
- Recreational facilities are at typical (winter or summer) evening levels.

2.4.3 Weekend

The weekend scenario represents a daytime period when most residents are at home and major work places are at typical weekend levels. Assumptions on the population levels for this condition include the following:

- Residents within the EPZ will evacuate from their places of residence;
- Major work places are at typical weekend levels;
- Day schools and daycares are closed;
- Hospitals and nursing homes are occupied and staffed at weekend levels;
- Hotel and motel facilities are occupied at weekend (winter or summer) levels; and
- Recreational facilities are at (winter or summer) weekend levels.

2.4.4 Special Event Consideration

County agencies and PEMA were asked to identify events such as a county fair or Fourth of July observance that would bring a large number of visitors into the EPZ. No events were identified that are large enough to pose a significant challenge for an emergency evacuation, so a Special Event scenario was not developed for the Limerick EPZ. (The same decision was made for the 2003 update study.)

2.4.5 Sensitivity to Population Growth and Roadway Impact

Additional scenarios were evaluated to assess the sensitivity of ETEs to population growth and roadway impact. These sensitivity cases used the Summer Weekday, Normal Weather case for the full EPZ as the base case. The population growth analysis is used to determine how rapidly the ETE would increase as the resident population in the EPZ is increased.

For the roadway impact scenario, a major evacuation route is removed or reduced in capacity. Specifically, one of the five highest volume roadways is removed from service or capacity is reduced by one lane (for a multi-lane, limited-access roadway such as an interstate highway). A more detailed description of the sensitivity analysis is provided in Section 6.5.

3. Population and Vehicle Demand Estimation

The development of vehicle demand estimates for the Limerick EPZ consisted of two primary steps. The first step was the determination of the number and distribution of the population to be evacuated. The second step was the determination of the appropriate number of vehicles for each of the population categories. Federal guidance (CR-7002) indicates that three population categories should be considered: permanent residents, transients, and persons in schools and special facilities (such as medical facilities/ nursing homes, and day care facilities).

The methodology used to develop the total population and vehicle demand estimates within the Limerick EPZ incorporates intrinsic double counting. For example, a portion of the identified employees and visitors to recreational areas are also permanent residents within the EPZ. In addition, school children are counted in the resident population, but are also counted in the special facility population. While population and vehicle demand estimates incorporate some adjustments for double-counting, the estimates are considered to be conservative (i.e., they over-estimate actual population and vehicle levels which may be in the area at any given time). Population and vehicle demand estimates for each of the population categories are summarized below.

3.1 Permanent Residents

Permanent residents are those persons identified by the census as having a permanent residence within the EPZ. The Census 2010 population data for census tracts, block groups and blocks were used to determine the permanent resident population within the EPZ and within each municipality and Sub-Area. The allocation of the resident population to entry nodes on the roadway network was based on detailed census block maps.

An estimated 292,061 persons reside permanently within the Limerick EPZ. Table 3-1 presents the resident population and vehicle demand by Sub-Area. The ten EPZ Sub-Areas ("zones") are defined based on distance and direction from LGS. All of the zones follow geographic (township and borough) boundaries. The "2-mile" zones 2-N and 2-S extend up to 5 miles from LGS. In Montgomery County, zone 2-N includes Lower Pottsgrove Township, plus Limerick Township south of Swamp Pike and Ridge Pike. In Chester County, zone 2-S consists of East Coventry Township. The four 5-mile zones include townships and boroughs in Montgomery County and Chester County. The largest zone in the "5-mile" ring is 5-NW, with 40,113 residents; 5-NW includes Pottstown Borough (22,377) and the southern part of New Hanover Township (8,547). Zone 10-SE has the largest population, 91,633; this zone includes Lower

Providence (25,436) and Upper Providence (21,291) in Montgomery County, plus Phoenixville (16,440) in Chester County.

In total, 181,363 EPZ residents live in Montgomery County, 86,212 live in Chester County, and 24,686 live in Berks County.

A telephone survey of EPZ residents was conducted to obtain information relating to how many vehicles residents would use to evacuate and how long it would take them to depart following notification. The survey questionnaire and a summary of survey results are provided in Appendix B.

3.1.1 Auto-Owning Permanent Population

Vehicle demand associated with the permanent resident population was estimated based on telephone survey responses. After adjustments to reflect the age distribution of the EPZ, the vehicle occupancy factor is 2.28 persons per vehicle, which corresponds to roughly 1.2 vehicles per household. Total vehicle demand for EPZ residents for all scenarios is 128,097. "Shadow evacuation" of 20% of the population residing outside the EPZ within 15 miles of LGS adds vehicle demand of another 24,423 vehicles.

For the 2003 ETE study, evacuation times were determined for two vehicle demand assumptions for permanent residents: 1.75 persons per vehicle and 3.0 persons per vehicle.

3.1.2 Transit-Dependent Permanent Population

Emergency response plans specify that the transit-dependent population will receive transportation assistance. Provisions for evacuating transit-dependent members of the general population in Pennsylvania do not rely on published pickup points and bus routes. County emergency response planners maintain lists of residences (self-identified) requiring transportation assistance. For ETE analysis, the estimated size of the transit-dependent population in each EPZ was based on NRC guidance and results of the telephone survey. %.) That population size is much higher than the number who have self-identified in advance. Based on census data and telephone survey results, 4.2% of households (with phones) have either no vehicle or no licensed driver. NRC guidance (CR-7002) indicates that roughly half of households without vehicles available would evacuate with neighbors, friends or relatives, which would leave about 2.1% needing assistance from the county agencies. NRC guidance also indicates that between 1.5 and 5% of residents may require transportation. For this study, ETE

estimates were based on 6,200 transit-dependent residents, slightly more than 2.1%. An estimated 242 of these individuals are non-ambulatory and would require a WC bus or van or ambulance to evacuate, based on data provided by county agencies. Using a bus capacity of 30 passengers (for persons with luggage), 199 bus trips would be required to evacuate 5,958 transit-dependent (ambulatory) residents, plus 11 ambulances and 25 WC buses (each making two trips) for non-ambulatory residents requiring transport assistance.

Individuals requiring transit from reception centers to congregate care centers will be transported in a separate set of vehicles from those designated to transport the transit-dependent and special facilities out of the EPZ.

3.2 Seasonal Residents

The seasonal population category includes those who reside in the area on a temporary basis, particularly during the summer period. Seasonal residences are typically not insulated and are suitable for occupancy for only a portion of the year. These residences may include vacation homes and migrant workforce housing. The 2010 U.S. Census of Population and Housing indicates very little housing of this nature within the Limerick EPZ. The number of seasonal housing units in the Limerick EPZ is less than 200, and less than 1% of households in any borough or township. This population category was therefore determined not to be a significant contributor to vehicle demand for the current study.

3.3 Transient Population

The transient population segment includes persons in the work force, hotels/motels, and recreational and shopping areas. Regional maps and mapping software were used to determine facility locations and assign entry nodes. Significant employers within the EPZ were identified using ESRI Business Analyst Online (BAO). BAO is a web-based analytical and mapping tool that facilitates location-specific queries about business and demographic data. Data available on BAO includes information on business location and number of employees. ESRI extracts business data from a comprehensive list of businesses (over 12 million U.S. businesses) licensed from Infogroup. ARCADIS used BAO to search for all employers with 50 or more employees located within an 11-mile radius of LGS. CR-7002 recommends consideration of "large employers" with 50 or more employees on a single shift.

The list from BAO was screened to eliminate businesses where workers do not remain on-site (e.g., transportation and trucking companies, construction, realtors, home

health care). Employment at schools and special facilities (e.g., hospitals, nursing homes) is generally tracked as part of the special facilities database. Similarly, grocery or retail establishments are tracked along with the "shopping" population at large commercial establishments (e.g., shopping malls). The reduced list was then reviewed to exclude facilities located outside the EPZ, and to determine the ERPA for those located in the EPZ. The new list of employers was compared to the lists from the 2003 and 2008 studies.

Telephone calls were made to selected large employers to verify employment numbers and to estimate staffing levels during weekday, weeknight and weekend periods. The results from those calls confirmed that BAO listings provided accurate locations and current, reliable employment numbers for most establishments. Workforce numbers for LGS were provided by Exelon Generation and reflect the peak work force during outage conditions.

Data for hotels, motels and recreational areas were obtained from the TripAdvisor website, the 2011 AAA TourBook for Pennsylvania, and from state and county tourism websites. Seasonal occupancy was estimated based on capacity figures (e.g., number of campsites) and a telephone survey of selected facilities. State and local parks agencies also provided visitation numbers for parks and campgrounds. Several shopping malls and large shopping centers are located in the EPZ. Vehicle demand at these facilities was estimated based on parking capacity.

For purposes of estimating the total number of vehicles associated with the transient population segment, an occupancy factor of 1.0 employee per vehicle was used for most work places. For the hotel/motel and recreational populations, it was assumed that there would be 1.0 vehicle (1.5 or 2 persons) per hotel/motel unit and 1.0 vehicle (3 persons) per campsite. For parks, visitation numbers were generally obtained as numbers of vehicles, and an occupancy factor of 3.0 persons per vehicle was assumed. For museums and visitor centers, occupancy of 1.5 persons per vehicle was assumed. Campgrounds were assumed to be fully occupied during summer weekends, and 80% on summer weekdays. Hotels and motels were assumed to be fully occupied for all scenarios.

For shopping malls, big-box stores and shopping districts, vehicle occupancy was estimated at 1.4 persons per vehicle, assuming 80% of vehicles represent shoppers (1.5 persons per vehicle) and 20% are workers (1 person per vehicle).

Population data and vehicle demand estimates for the transient population segment, including the work force, hotels and motels, and recreational areas are presented by

facility in Appendix A. Table 3-2 presents a summary of the transient population by Sub-Area for each scenario. A breakdown of population by distance and direction sectors was not developed for transient and special facilities, since state and county agencies rely on population by ERPAs for emergency response planning.

3.4 Special Facilities Population

The special facility population segment includes persons in schools, hospitals, nursing homes and correctional facilities who will require transportation assistance during an evacuation.

3.4.1 Medical, Nursing Care and Correctional Facilities

Twenty-one health care facilities (nursing homes, assisted living, hospitals) and one correctional facility are located within the EPZ, as identified in Appendix A. A second correctional facility in the EPZ, the State Correctional Institution at Graterford, was not addressed in this study. Plans call for this prison population to shelter-in-place. Vehicle occupancy for nursing home patients is two non-ambulatory patients and one staff per ambulance, 4 non-ambulatory patients and one staff per WC bus or van, and 20 residents or patients per vehicle (bus or van) for ambulatory patients. During weekday (peak staff) periods, staff who do not evacuate with patients will depart in their own vehicles.

Table 3-3 summarizes the special facility population by Sub-Area and by scenario. A detailed listing of the population and associated vehicle demand for all identified special facilities within the Limerick EPZ is presented in Appendix A.

3.4.2 Schools and Day Care

Ninety-two school facilities and two colleges have been identified within the Limerick EPZ, with a total population of 57,793 students and staff. None of the identified schools is residential, so students are only present on weekdays during the school year. Vehicle occupancy for public schools is based on 48 persons (45 students, 3 staff) per bus, plus one vehicle per additional school staff. Current enrollment numbers for most schools were provided by the county agencies; any gaps were filled using state-published enrollment information or calls to individual schools.

One hundred licensed pre-school and daycare facilities were identified in the EPZ, with an estimated daytime population of 11,896. Facilities were identified from the database of licensed day care establishments maintained by the state Department of

Public Welfare and from internet listings at *childcarecenter.us*. The population estimates represent the licensed capacity of each facility. For smaller day care facilities (up to 20 children), it was assumed that evacuation would be accomplished by private vehicles (staff). Larger facilities would evacuate via bus or van. Smaller home-based daycare facilities (capacity 10 or less) were not tabulated; those facilities contribute little vehicle demand beyond that assigned to EPZ residents. Extended day programs (often based at schools) were not tabulated, because those programs represent a subset of the school population that has already been counted.

Table 3-4 summarizes the school and daycare population by Sub-Area and scenario. A detailed listing of the population and associated vehicle demand for all identified facilities within the Limerick EPZ is presented in Appendix A.

3.5 Emergency Response Planning Area Population Totals

Population and vehicle demand totals for each Sub-Area are summarized in Table 3-5. The totals listed in the table represent the peak number of people to be evacuated for each analysis case discussed in Section 6 of this report.

The largest population and vehicle demand in the Limerick EPZ are located in Sub-Area 10-SE for all cases. The winter weekday population is highest, reflecting higher numbers for schools and employment, but variations in vehicle demand between scenarios are relatively small, reflecting the dominant role of the permanent resident population, and the absence of any major tourist attractions in the EPZ. The vehicle demand listed in Tables 3-2 through 3-5 reflects the data used as input for the ETE traffic simulations.

3.6 Transportation Resources

The estimated inventory of transportation resources available to support evacuation of special facilities and residents requiring transport assistance for the Limerick EPZ was determined from information provided by county agencies, plus data developed by surveying school systems, transportation companies and EMS providers in the surrounding region. Identified transportation resources are summarized and compared to estimated vehicle demand in Table 3-6. Based on an initial comparison, the number of available vehicles for non-ambulatory individuals (WC bus or van) would not be sufficient to evacuate facilities and EPZ residents in a single wave; a two-wave evacuation was therefore assumed for facilities with non-ambulatory population of 50 or more.

Table 3-1: Resident Population and Vehicle Demand by EPZ Subarea

Sub-Area	Permanent Resident Population	Vehicle Demand
2-mile	32,755	14,366
5-NE	4,014	1,761
5-SE	14,692	6,444
5-SW	10,470	4,592
5-NW	40,113	17,593
10-NE	40,717	17,858
10-SE	91,633	40,190
10-SW	22,786	9,994
10-NW	34,881	15,299
EPZ total	**292,061**	**128,097**

Table 3-2: Transient Population and Vehicle Demand within the Limerick EPZ

Sub-Area County	Population						Vehicles					
	Winter			Summer			Winter			Summer		
	Day	Night	Weekend	Day	Night	Weekend	Day	Night	Weekend	Day	Night	Weekend
2	1,355	1,160	3,780	1,355	1,160	2,280	1,085	620	1,905	1,085	620	1,155
5-NE	40	40	100	40	40	100	40	40	65	40	40	65
5-SE	1,122	876	1,409	1,241	876	1,575	754	480	792	753	480	855
5-SW	1,250	3,000	3,000	1,250	3,000	3,000	640	1,500	1,500	640	1,500	1,500
5-NW	4,189	2,387	2,720	4,204	2,387	2,840	3,111	1,439	1,389	3,111	1,439	1434
10-NE	738	54	97	738	54	97	577	44	42	577	44	42
10-SE	10,906	3,893	3,528	11,284	3,893	4,379	8,364	2,591	1,946	8,364	2,591	2,288
10-SW	485	360	485	725	600	840	183	120	183	263	200	310
10-NW	2,400	351	1,378	3,045	575	2,039	1,647	253	551	1,722	328	799
EPZ total	**22,485**	**12,121**	**16,497**	**23,882**	**12,585**	**17,150**	**16,401**	**7,087**	**8,373**	**16,555**	**7,242**	**8,448**

Table 3-3: Population and Vehicle Demand for Health and Correctional Special Facilities in the Limerick EPZ

Sub-Area County	Population						Vehicles					
	Winter			Summer			Winter			Summer		
	Day	Night	Weekend	Day	Night	Weekend	Day	Night	Weekend	Day	Night	Weekend
2	0	0	0	0	0	0	0	0	0	0	0	0
5-NE	0	0	0	0	0	0	0	0	0	0	0	0
5-SE	1,281	1,036	1,036	1,281	1,036	1,036	240	118	118	240	118	118
5-SW	0	0	0	0	0	0	0	0	0	0	0	0
5-NW	2,450	2,129	2,129	2,450	2,129	2,129	902	738	738	902	738	738
10-NE	0	0	0	0	0	0	0	0	0	0	0	0
10-SE	1,992	1,758	1,758	1,992	1,758	1,758	326	179	179	326	179	179
10-SW	0	0	0	0	0	0	0	0	0	0	0	0
10-NW	501	393	393	501	393	393	110	54	54	110	54	54
EPZ total	**6,224**	**5,316**	**5,316**	**6,224**	**5,316**	**5,316**	**1,578**	**1,089**	**1,089**	**1,578**	**1,089**	**1,089**

Table 3-4: Population and Vehicle Demand for Schools and Daycares in the Limerick EPZ

Sub-Area County	Population						Vehicles					
	Winter			Summer			Winter			Summer		
	Day	Night	Weekend	Day	Night	Weekend	Day	Night	Weekend	Day	Night	Weekend
2	4,218	0	0	145	0	0	571	0	0	27	0	0
5-NE	673	0	0	0	0	0	90	0	0	0	0	0
5-SE	7,844	0	0	1,645	0	0	1,091	0	0	275	0	0
5-SW	4,953	0	0	412	0	0	669	0	0	69	0	0
5-NW	9,064	516	82	1,272	160	82	1,244	44	12	204	16	12
10-NE	7,860	55	55	948	55	55	1,031	8	8	152	8	8
10-SE	22,734	2,250	1,640	3,800	530	380	4,226	1,032	562	825	208	128
10-SW	822	0	0	0	0	0	109	0	0	0	0	0
10-NW	11,521	0	0	1,678	0	0	1,636	0	0	273	0	0
EPZ total	**69,689**	**2,821**	**1,777**	**9,899**	**745**	**517**	**10,666**	**1,084**	**582**	**1,826**	**232**	**148**

Table 3-5: Summary of Population and Vehicle Demand within the Limerick EPZ

Sub-Area County	Population						Vehicles					
	Winter			Summer			Winter			Summer		
	Day	Night	Weekend	Day	Night	Weekend	Day	Night	Weekend	Day	Night	Weekend
2	38,328	33,915	36,535	34,255	33,915	35,035	16,022	14,986	16,271	15,478	14,986	15,521
5-NE	4,727	4,054	4,114	4,054	4,054	4,114	1,891	1,801	1,826	1,801	1,801	1,826
5-SE	24,939	16,604	17,137	18,859	16,604	17,303	8,529	7,042	7,354	7,712	7,042	7,417
5-SW	16,673	13,470	13,470	12,132	13,470	13,470	5,901	6,092	6,092	5,301	6,092	6,092
5-NW	55,816	45,145	45,044	48,039	44,789	45,164	22,850	19,814	19,732	21,810	19,786	19,777
10-NE	49,315	40,826	40,869	42,403	40,826	40,869	19,466	17,910	17,908	18,587	17,910	17,908
10-SE	127,265	99,534	98,559	108,709	97,814	98,150	53,106	43,992	42,877	49,705	43,168	42,785
10-SW	24,093	23,146	23,271	23,511	23,386	23,626	10,286	10,114	10,177	10,257	10,194	10,304
10-NW	49,303	35,625	36,652	40,105	35,849	37,313	18,692	15,606	15,904	17,404	15,681	16,152
EPZ total	**390,459**	**312,319**	**315,651**	**332,066**	**310,707**	**315,044**	**156,742**	**137,357**	**138,141**	**148,056**	**136,660**	**137,782**

* Population totals reflect some double-counting between categories (residents, workforce, schools, etc.)

Table 3-6: Summary of Transportation Resources

County	Bus	Van	WC Bus/Van	Ambulance
Montgomery	566	313	46	90
Chester	1079	150	80	60
Berks	265	200	36	75
Total Available	**1910**	**663**	**162**	**225**
Identified Vehicle Need				
Schools and Day Care	1224	580		
Special Facilities*	159		136*	78*
Transit-Dependent Public	200		25*	11*
Total Identified Need	**1583**	**580**	**161**	**89**

*Vehicle demand with two-wave evacuation for larger special facilities and for non-ambulatory transit-dependent.

4. Evacuation Roadway Network

4.1 Network Definition

In order to estimate evacuation times for the Limerick EPZ, an evaluation of the roadway network likely to be used by departing vehicles was undertaken. ARCADIS relied on several sources of information to define the evacuation roadway network:

- Evacuation routes described in the existing State emergency response plan;
- Maps of highways and local roadways for the EPZ area; and
- A field survey of the roadways in the Limerick EPZ.

The primary evacuation routings used in the modeling are indicated in Figure 4.1.

4.2 Evacuation Route Descriptions

The evacuation routings were developed to simulate travel out of the EPZ using available roadways. For the Pennsylvania portion of the EPZ, the network relies primarily on the evacuation routings depicted in the Limerick Generating Station Evacuation Plan Map (PEMA 2006). Descriptions of the primary evacuation routes for different geographic areas within the EPZ are outlined in Table 4-1.

4.3 Characterizing the Evacuation Network

Roadway characteristics such as roadway class, number of lanes, lane and shoulder width, speed limit, lane configuration near intersections, and traffic control are key factors in determining how fast an evacuation can be completed. These roadway attributes control roadway capacity, which in turn governs operating traffic conditions measured in terms of level-of-service (LOS). LOS is measured from A to F for roadway segments and intersections. LOS A represents free-flow conditions, and LOS F represents force or breakdown flow conditions.

ARCADIS used NAVTEQ™ roadway data with detailed information, including local streets, to build the evacuation roadway network for the study. NAVTEQ data was imported into geographic information system (GIS) software (ESRI ArcGIS™) for conducting field surveys to verify evacuation roadway segment attributes. The information provided in the public information brochure for the site was used to

highlight evacuation routes in GIS. ARCADIS has developed an integrated GIS-Global Positioning System (GPS) tool that allows field personnel to record observations in an efficient and effective manner. The evacuation network, including traffic controls, was verified to a 15-mile radius from the plant, and along designated routes to the receptions centers. Once the NAVTEQ data was verified through the field survey, the evacuation roadway network was transferred to the traffic simulation software VISUM for modeling different evacuation scenarios.

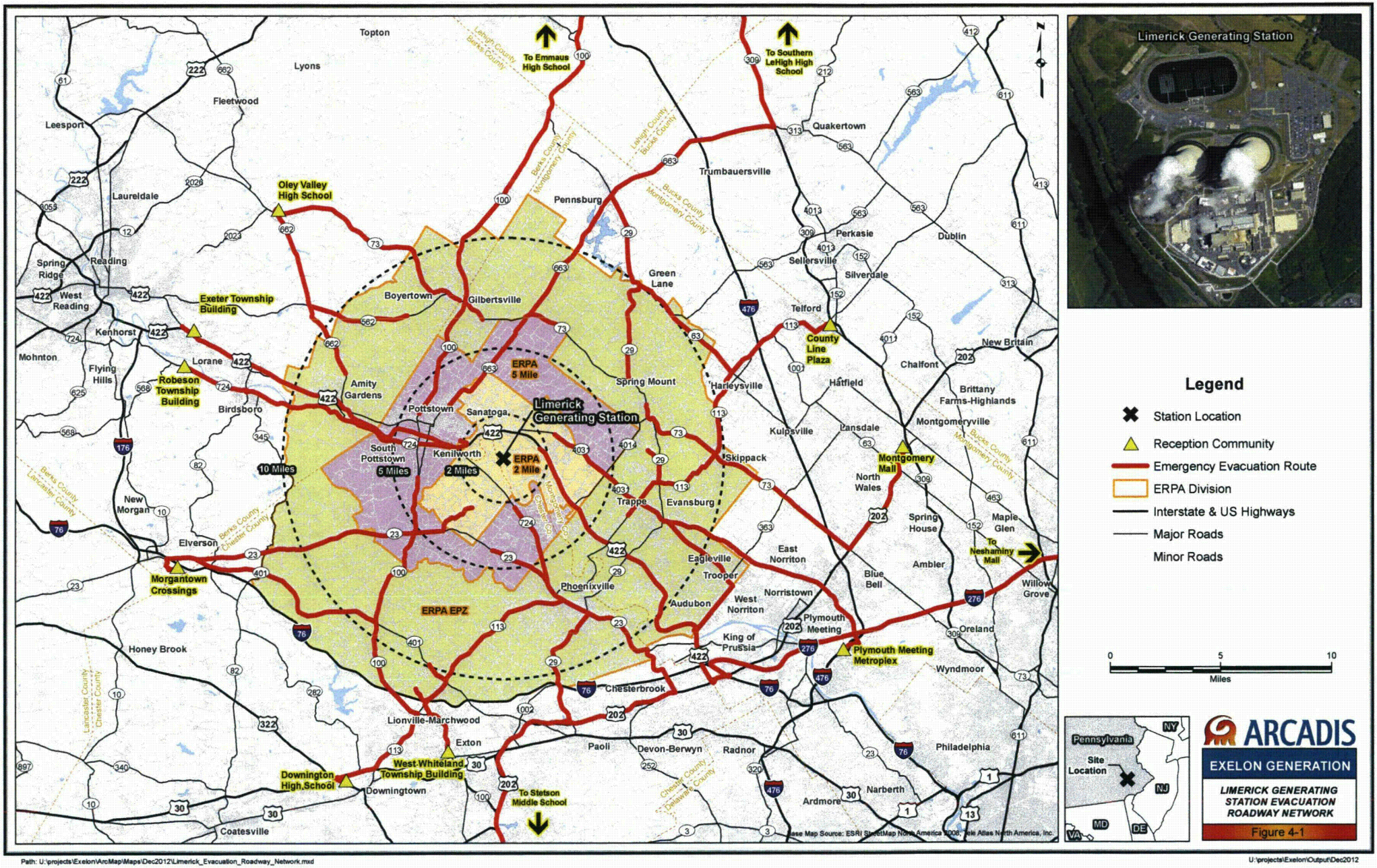
Having accurate traffic control information is important to accurately estimate evacuation times because intersections have potential to create bottleneck points. During an evacuation scenario, intersections might be manually controlled by officials, operated with existing traffic signal timing plans, or adjusted according to changing vehicular demand. In general, the emergency response plans for Limerick call for signal override, i.e., signals set to flashing to give priority to outbound travel on designated evacuation routes. Traffic control information is coded as part of the evacuation network database.

Background and pass-through traffic in the EPZ could account for significant number of vehicles and could influence evacuation depending on the direction of travel. As recommended in CR-7002, average daily traffic (ADT) volumes, representative of typical background levels, were obtained from state and county transportation agencies. During the simulations, background traffic will be included during the initial 2 hours of the evacuation scenario, up to the time when access control is established to prevent vehicles from entering the EPZ.

A map of the evacuation network showing node numbers and links, as recommended by the latest guidance, is provided in Appendix C. Detailed attributes of each roadway segment, such as link number, number of lanes, speed limit, length, and roadway type are also tabulated in Appendix C, and traffic controls are listed for each intersection.

Table 4-1: Limerick EPZ Primary Evacuation Routes

Township or Municipality	Evacuation Routes
Montgomery County	
Pottstown, Upper Pottsgrove, Douglass	Rte 100 N
New Hanover, Lower Pottsgrove	Rte 663 N
Upper Frederick, Lower Frederick, Green Lane, Upper Salford	Rte 63 east to Rte 113 north
Lower Salford, Perkiomen	Rte 113 north
Skippack	Rte 73 east
Limerick, Trappe, Collegeville, Lower Providence	Germantown Pike, Ridge Pike
Limerick, Royersford, Lower and Upper Providence	US 422 east
Chester County	
Phoenixville, Schuylkill	Rte 23 east
Phoenixville, Charlestown	Rte 29 south
East Vincent, Spring City, East and West Pikeland, Uwchlan	Rte 113 south
East Coventry, West Vincent, Upper Uwchlan	Rte100 south
East Nantmeal	Rte 401 west
South Coventry, Warwick	Rte 23 west
North Coventry, Union	Rte 724 west
Berks County	
Pottstown, West Pottsgrove, Amity	US 422 west
Douglass, Earl	Rte 662 northwest
Boyertown, Colebrookdale	Rte 73 west



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5. Evacuation Time Estimate Methodology

5.1 Evacuation Analysis Cases

Time estimates have been prepared for a general evacuation scenario for each of these analysis cases:

- Winter Weekday, Fair Weather and Adverse Weather Conditions
- Winter Weeknight, Fair Weather Conditions
- Winter Weekend, Fair Weather Conditions
- Summer Weekday, Fair Weather and Adverse Weather Conditions
- Summer Weeknight, Fair Weather Conditions
- Summer Weekend, Fair Weather Conditions

During a general evacuation, all permanent residents, visitors and seasonal residents will be instructed to leave the EPZ. The primary means of transportation for evacuation will be the privately owned vehicles of the evacuees. Since most residents within the EPZ have access to private vehicles, and since there is little dependence on public transportation, primary reliance on private vehicles is reasonable.

Scenarios were evaluated for evacuation of the 2-mile zone, all zones out to 5 miles, and for the full EPZ. Partial-EPZ cases were also assessed to evacuate "keyhole" zones within 5 miles (2-mile zone plus downwind 5 mile zones) and keyhole zones to 10 miles (all 2- and 5-mile zones, plus downwind 10-mile zone). The keyhole zones that were evaluated are summarized in Table 5-1. Staged evacuation scenarios were assessed for the keyhole zones within 5 miles.

For all partial-EPZ evacuation cases, "shadow" vehicle demand (20% of residents) was assigned to all Sub-Areas which are not included in the evacuation region, in addition to the region outside of the EPZ.

Table 5-1: Limerick EPZ Keyhole Zones by Wind Direction Sector

Wind From	Zones in Evacuation Area
(a) 2-mile zone plus downwind 5-mile zones	
SE, SSE, S	2, 5-NW
SSW, SW	2, 5-NW, 5-NE
WSW	2, 5-NE
W, WNW	2, 5-NE, 5-SE
NW, NNW	2, 5-SE
N, NNE	2, 5-SE, 5-SW
NE, ENE	2, 5-SW
E, ESE	2, 5-SW, 5-NW
(b) 5-mile zone plus downwind 10-mile zones	
SE	2, all 5-mile, 10-NW
SSE, S	2, all 5-mile, 10-NW, 10-NE
SSW, SW, WSW	2, all 5-mile, 10-NE
W, WNW	2, all 5-mile, 10-NE, 10-SE
NW	2, all 5-mile, 10-SE
NNW, N	2, all 5-mile, 10-SE, 10-SW
NNE, NE, ENE	2, all 5-mile, 10-SW
E, ESE	2, all 5-mile, 10-SW, 10-NW

5.2 Initial Notification and Warning Diffusion

The EPZ surrounding LGS has an outdoor siren notification system consistent with the requirements of NUREG-0654, Rev. 1/FEMA-REP-1 Appendix 3. This system will be used by state and local officials to alert the population to turn on their radios and television sets. Pursuant to NUREG 0654, Rev. 1 guidance, notification messages will commence on the designated television and Emergency Alert System (EAS) radio stations concurrent with sounding of the sirens. Published warning diffusion curves for sirens plus EAS were used to estimate the time distribution for public notification. Within 15 minutes of alert notification, the majority of the population within the EPZ will begin to receive an informational or instructional message. If evacuation is deemed necessary, the timing of the order to evacuate and notification measures will be controlled by the state and local emergency preparedness officials. Those officials may choose to alert and mobilize an emergency response work force to control and expedite

evacuation prior to the evacuation order. A minority of the population will not hear the sirens, will not respond by checking for the radio message, and will not be alerted immediately by a neighbor or relative. The "warning diffusion" process reflects the timing for the last 10 to 20% of the population to learn that an evacuation order has been given. The departure time curves incorporate recommended assumptions for warning diffusion.

5.3 Transportation Dependent Population

The transportation dependent population includes individuals without access to transportation, as well as those requiring special transportation assistance. Transportation dependent persons will be notified of a protective action recommendation in the same manner as the general public. If evacuation is recommended, persons needing transportation assistance will be informed through the EAS to contact the appropriate officials for assistance. Evacuees who do not have access to transportation and confined persons who require special transportation assistance will be provided transportation by the appropriate agency.

5.4 Evacuation Preparation Times and Departure Distributions

It is assumed that no vehicles will begin to evacuate during the 15-minute initial notification period. Accordingly, in the model simulations, vehicles will begin to evacuate at 15 minutes following the initial notification. After the initial 15-minute time period, vehicles are loaded at a linear rate over each 5-minute time interval, in accordance with the network loading distributions for each population type. For example, if 2% of 2500 vehicles (50 vehicles) are to be loaded at a specific location over a 5-minute period, PTV Vision will load 10 vehicles per minute at that location during the specified interval. Network loading distribution assumptions for the permanent population, transient population, and special facilities are based on the anticipated response of different population sectors to an evacuation order. Mobilization times for residents and workers reflect the data acquired by the telephone survey of EPZ residents, and are consistent with published data from actual historical events (ORNL, 1990). Loading distributions are explained below, and summarized in Figure 5-1.

5.4.1 Permanent and Seasonal Population

Permanent and seasonal residents with access to automobiles will take varying amounts of time to begin evacuating. Some persons will leave as quickly as possible;

most will take some time to prepare, pack valuables and clothes and then depart; some will take added time to secure property before departing; and some may require transportation assistance. In addition, actual departure and preparation times may vary according to the perceived severity of a particular evacuation order.

A survey of EPZ residents provided time estimates for mobilization following initial notification, including times for household members to travel home from work. Based upon these time estimates, plus warning diffusion, two departure curves were developed: one for daytime, with a higher percentage of household members at work, and a second for night and weekend periods. The curves indicate that permanent residents would begin to evacuate over a 3-hour period. That is, permanent resident households would begin to evacuate between 15 and 190 minutes after the decision to notify the population to evacuate is made. This time profile is generally consistent with the distribution of journey-to-work travel times and with observed behavior during evacuations for chemical releases.

5.4.2 Transient Population

The survey of EPZ residents also gathered information on how quickly workers would leave to return home. The calculated departure curves (taking warning diffusion into account) reflect distribution of mobilization times from that survey. The departure curve indicates that workers will depart over a period of 1 hour 45 minutes; over 90% will depart within the first hour. Previous discussions with emergency preparedness officials indicated that the same time distribution is also reasonable for the other transient population categories within the EPZ, including shopping malls, hotels, motels and recreation areas.

5.4.3 Special Facilities

It was assumed that special facilities (i.e., schools, nursing homes) within the EPZ would also receive initial notification promptly. Based upon data obtained from previous studies, vehicle departure times were developed that reflect a distribution of notification, preparation and mobilization times.

Consistent with the current off-site emergency response plans, it was assumed that schools will be evacuated via bus to the designated host schools. For school facilities, it was assumed that 1 to 2 hours may be required to assemble buses and drivers, transport vehicles to schools and to load students onto buses. Vehicles stationed at the facilities at the time of the ordered evacuation could be loaded in as little as 15

minutes following notification, if drivers were also present. Accordingly, school buses were loaded onto the evacuation network from the period between 15 and 160 minutes following the decision to evacuate. 50% of buses would depart within the first hour, and 90% within 2 hours. The school time profile was also applied for daycare facilities.

Evacuation special facilities (hospitals, nursing homes, jails) would also require additional time associated with preparation and transport of vehicles to the respective facilities. Those special facilities will also evacuate directly to designated host facilities. Based upon previous studies, it was assumed that these facilities would begin to evacuate between 30 minutes and 3 hours following notification.

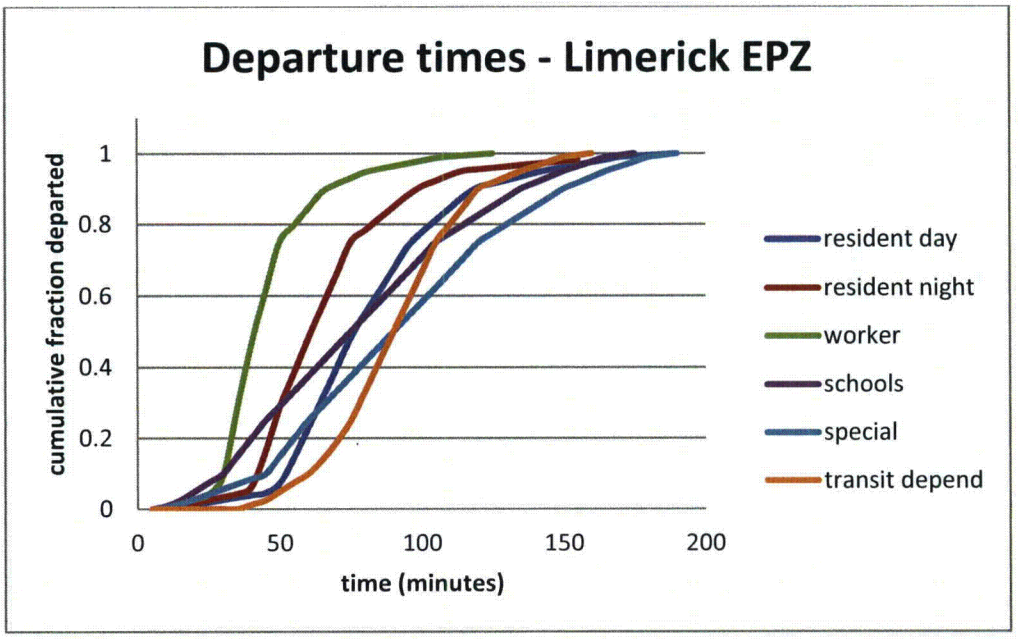

Figure 5-1. Departure Time Distributions for the Limerick EPZ

5.5 Evacuation Simulation

Traffic simulation provides the ability to analyze evacuation of an area in great detail. In most traffic simulation models, there are two main inputs: supply (roadway) network data and demand (population and vehicular) data. Traffic models use different types of algorithms to predict traffic flow and provide measures of effectiveness (MOEs) such as average travel times, total number of vehicles exiting the system, and queue lengths at various times and points.

5.5.1 General Structure

ARCADIS used PTV Vision to perform evacuation modeling for different scenarios. The PTV Vision traffic simulation software package includes VISSIM (microscopic traffic simulation) and VISUM (macroscopic traffic simulation). VISUM is a comprehensive, flexible software system for transportation planning, travel demand modeling, and network data management. VISSIM is capable of performing detailed microscopic simulation of traffic, public transport, and pedestrian simulations, and can model any type of traffic control and geometric configuration. Both VISUM and VISSIM are capable of performing multi-modal analysis including car, commercial vehicle, bus, train, motorcycles, bicycles, and pedestrians. The two programs work together seamlessly, saving valuable time and resources.

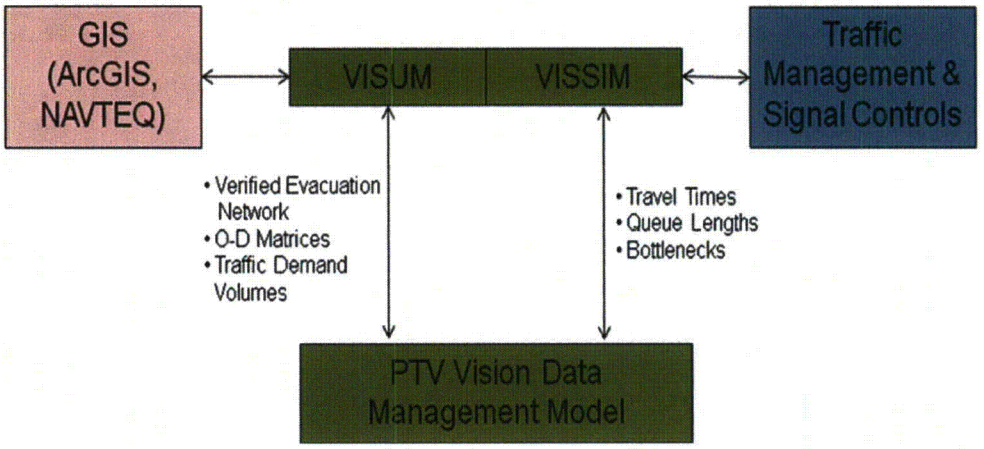

Figure 5-2. Evacuation Modeling and Simulation using PTV Vision Suite

VISUM was used to develop the evacuation network and population entry nodes (centroids). One of the key features of VISUM is its ability to interact seamlessly with GIS-data such as ESRI ArcGIS database. The field verified evacuation network data and demand data developed in ArcGIS were imported directly into VISUM. Origin-Destination trip tables were developed for the evacuation and imported into VISUM. VISUM software was then used to route the Origin-Destination information on the network using a dynamic equilibrium algorithm. This algorithm ensured that traffic levels on the network were realistic given the capacities available on individual links. Once an initial solution was found in VISUM, the information was exported into VISSIM

for microsimulation. A microsimulation was deemed a necessary step in order to obtain detailed and realistic results on queuing and average travel times. VISSIM can model intersection with different type of traffic control such as yield signs, stop signs, and signals. VISSIM also provides a better understating of critical and congested part of the network.

5.5.2 Simulation Process

The ETE results include the time to evacuate 90% and 100% of the total permanent and transient population. Based on the current guidance, ETEs for special facilities, schools, and the transit-dependent population are developed separately; only the time to evacuate 100% of these population groups was needed.

Consistent with current guidance, vehicle demand for each scenario was based on 100% of the population residing in areas designated for evacuation, plus 20% of the population residing in Sub-Areas outside the designated evacuation area, and 20% of the population residing outside of the EPZ, out to a distance of 15 miles. Vehicle demand outside of the designated evacuation area is intended to account for the impact of "shadow evacuees". A sensitivity analysis was performed to evaluate the impact of changes different input parameters and assumptions such as changes in lane closures, trip generation times, vehicular demand, evacuation routes, and background traffic.

The simulation process can be summarized as follows:

VISUM

1. Create every scenario based on
    a. Background traffic
    b. Time of day
    c. Day of week
    d. Weather condition
    e. Season
    f. Wind Direction
    g. Shadow traffic
2. Run Dynamic Traffic Assign to and calculate Permanent and Transient, Shadow, Special Needs/Schools volumes

3. Assignment process will last until suitable convergence is reached. VISUM provides output on the goodness of convergence after assignment. The convergence fit is not as critical because this is an evacuation model of a no-notice event, therefore full user equilibrium cannot be expected.
4. Export to VISSIM.

VISSIM

1. Warm-up time built into background/pass-through traffic generation.
2. Check for any local calibration parameters.
3. Run the final multimodal Dynamic Traffic Assignment in VISSIM to consider queues and intersection delays
4. Sensitivity analysis and count evacuees at 2, 5, and 10 miles
5. Prepare ETE times

MOEs

1. 90% evacuation time (for all wind directions and scenarios, staged and normal evacuations)
    a. This applies to evacuation of the PUBLIC only
2. 100% evacuation time (for all wind directions and scenarios, stage and normal evacuations)
3. Color-coded roadway map at various times (2, 4, 6 hrs) which identifies where long queues exist, including LOS E and F conditions.

6. Analysis of Evacuation Times

6.1 Evacuation Time Estimate Summary

Predicted ETEs for the general population in the EPZ are summarized by scenario and distance in Table 6-1 (times for 90% and 100% of vehicles to depart, for 2-mile zones, all zones to 5 miles, and all zones to 10 miles). The pattern of evacuation times is consistent with the differences in vehicle demand and travel time for different scenarios. The 2-mile zone involves the shortest travel distance and the fewest vehicles; 90% ETEs for the 2-mile zone range from 5:35 to 7:40, and 100% ETEs are 6:30 to 9:05. The times are longest for summer weekday and winter weekday scenarios with adverse weather, and shortest for night and weekend scenarios.

For all zones out to 5 miles, the 90% ETEs are 6:20 to 9:00, and the 100% ETEs are 7:30 to 10:50. For the full EPZ, the 90% ETEs are 7:30 to 10:40, while the 100% ETEs are 9:05 to 13:10.

All of these times are indicative of major delays related to traffic congestion. The differences in vehicle demand between scenarios are up to 13% of total demand, and the predicted ETEs for normal weather vary by about 15%. Adverse weather adds up to 95 minutes for the summer weekday ETEs, and up to 160 minutes for the winter weekday ETEs.

6.2 Comparison with Previous Study

The ETEs for the current study are very similar to the ETEs for the "high demand" case from the 2003 study, but 2 to 4 hours longer than previous ETEs for the "traditional demand" case. Vehicle demand for the full EPZ for the current study (156,742 for Winter Weekday) is about 9% higher than the "high demand" estimate from 2003 (143,599). The 100% ETE from the current study (with normal weather) is 10:30, compared to 10:23 in 2003.

6.3 Keyhole Evacuation Scenarios

ETEs for scenarios that reflect a range of scenarios to evacuate the near-field population and selected downwind zones are summarized in Table 6-2. These results indicate that differences between scenarios based on direction sector are relatively minor. All of the keyhole scenarios for each distance have very similar ETEs. These results reflect the high population within the 2-mile zone (common to all keyhole

scenarios) and the high population in the northwest, northeast and southeast quadrants.

6.4 Staged Evacuation Scenarios

A series of staged evacuation scenarios were evaluated based on NRC guidance (CR-7002). In a staged evacuation, the 2-mile zone evacuates first, while surrounding zones shelter in place; after the population has evacuated the 2-mile zone, the outer zones would be instructed to evacuate. The "stage 1" time is determined by simulating evacuation of the 2-mile zone for the Winter Weekday, Normal Weather scenario, with only background and shadow traffic in other parts of the EPZ. Once the Stage 1 time (6:05) was determined, a revised set of departure curves was developed for the outer (Stage 2) zones. The Stage 2 departure curves for Limerick are shown in Figure 6-1. The departure curves are much steeper for Stage 2, because residents and all categories of facilities are able to prepare to depart during Stage 1. It was assumed that 20% of residents outside the 2-mile zone would evacuate during Stage 1, consistent with "shadow evacuation" assumptions for "unstaged" scenarios.

Results for staged evacuation scenarios are summarized in Table 6-3. The ETEs for the staged scenarios are basically the same as the corresponding "unstaged" ETEs, plus or minus 5 or 10 minutes. The modeled results indicate that staged evacuation for Limerick would result in little or no benefit, in terms of the time required to evacuate the 2-mile zone.

6.5 Sensitivity to Population Growth and Roadway Impact

6.5.1 Population Growth

NRC guidance (CR-7002) for updating ETE studies more frequently than the 10-year federal census includes criteria based on population growth. Specifically, if the residential population growth in the EPZ since the last ETE update is sufficient to cause an increase in the ETE by 25% or by 30 minutes, whichever is less, then a full ETE update study must be performed.

A sensitivity analysis was performed by determining the 90% ETEs for increases of 5, 8, 10 and 20% of the EPZ residential population for the Winter Weekday, Normal Weather scenario. This scenario produced the longest ETE by season or time of day. The population was increased in the same manner in the surrounding region, out to 15 miles. Results are illustrated in Figure 6-2. With a 10% increase in residential

population above the 2010 census values, the 90% ETE for the full EPZ increased to 8:11, an increase of 16 minutes. With a 20% increase in population, the 90% ETE increased to 8:27, an increase of 32 minutes. These results demonstrate that a population increase of more than 10% above the 2010 census values would be required to cause the ETE to increase by 30 minutes. (Linear extrapolation indicates that a population increase of 19% would produce an ETE increase of approximately 30 minutes.) Since the EPZ residential population for Limerick changed by 20% between 2000 and 2010, it appears possible that an increase of 19% will occur before 2020.

The 100% ETEs increased more rapidly than the 90% ETEs, consistent with the general pattern of all ETE results. With a 10% increase in population, the 100% ETE for the full EPZ increased by 33 minutes, from 10:30 to 11:03. NRC guidance (CR-7002) indicates that emergency planning decisions should be based on the 90% ETEs. The recommended "update threshold" for the Limerick EPZ, based on population growth, is therefore 10%.

6.5.2 Roadway Impact

NRC guidance (CR-7002) also requires analysis of a "roadway impact" scenario. For this scenario, a major evacuation route is removed or reduced in capacity. Specifically, one of the 5 highest volume roadways is removed from service, or capacity is reduced by one lane (for a multi-lane, limited-access roadway such as an interstate highway). This scenario is specified as Summer Weekday, Normal Weather for the Full EPZ. For Limerick, the five highest-volume roadways for this scenario are listed below:

- Rte 363 S – 15,133 vehicles
- US 422 SE – 14,249 vehicles
- Germantown Pike SE – 13,984 vehicles
- Rte 663 N – 13,426 vehicles
- Rte 113 S – 11,561 vehicles

Predicted traffic volumes by link for the "base case" simulation with the full roadway network are shown in Figure 6-3.

One lane of the highest-volume roadways, US 422 SE east of Oaks, was removed for the roadway impact scenario. The impact location is shown in Figure 6-4. With this lane unavailable, the ETEs increased from 8:35 (90%) and 10:30 (100%) to 9:05 (90%) and 10:40 (100%). The traffic flow by link for the roadway impact scenario is shown in Figure 6-4. With one lane unavailable, traffic flow will not change on any link since evacuees are not supposed to reroute to other roads.

6.6 Performance Metrics for Simulation Model

The performance of VISSIM is assessed using standard metrics, consistent with the guidance provided in CR-7002. Table 6-4 provides a summary of simulation parameters for Winter Day Normal Weather scenario for the full EPZ. Figure 6-5 illustrates the number of vehicles on the network over the course of the simulation, while Figure 6-6 compares the rate of vehicles loading onto the network to the frequency of departures.

The parameters in Table 6-4 include an average travel speed for evacuating vehicles of 14.3 miles per hour, which indicates that traffic is encountering major congestion during much of the simulation. The average travel time of 172 minutes reflects travel to the designated reception centers, rather than the travel time to exit the EPZ. This time, however, does not include the "delays" encountered by evacuating traffic, which average 222 minutes (13,322 seconds) for each evacuating vehicle.

6.7 ETE for Transit-Dependent, Special Facilities and Schools

The ETE for transit-dependent members of the general public is estimated based on the assumption of a series of multiple single-wave bus runs from Limerick (4 routes), Pottstown (6 routes), Boyertown (1 route), Collegeville (2 routes), Spring City (2 routes), Upper Providence (3 routes), and Lower Providence (2 routes). The first runs would begin 90 minutes after the evacuation notice, allowing time for evacuees to prepare and to travel to designated pickup points. Succeeding runs would start at 10-minute intervals, continuing until evacuation of these residents is complete. The time sequence after start for each run would proceed in the following steps:

- **52 minutes** for the bus to traverse up to ten pickup points (4 miles @ 20 mph = 12 minutes) and load passengers (4 minutes per stop = 40 minutes)
- **12 minutes** to travel out of EPZ (6 miles @ 30 mph)

- Elapsed time after start = **64 minutes**.

Ten rounds of runs (200 buses) would be completed in 90 + 64 + 90 = 244 minutes.

Non-ambulatory residents. Evacuation of non-ambulatory residents via ambulance or WC bus/van would be accomplished in two rounds of trips: **Round 1**: (1) 120 to 150 minutes for mobilization; (2) two to four pickups at 15 minutes each, plus 15 to 30 minutes for travel between stops; (3) up to 10 miles travel out of the EPZ at 40 mph. (4) 60 minutes for travel to host facility, unload passengers, receive new assignment, return to EPZ; (5) begin Round 2, which repeats steps 2 and 3. **Total elapsed time: 5:00 to 5:45.**

Estimated evacuation times for special facilities, schools and daycares located in the EPZ are summarized in Tables 6-5 and 6-6. These times are shorter than the 100% ETEs for the general population. Facility-specific estimates are based on a three-step time sequence: (1) mobilization, (2) loading, and (3) travel out of the EPZ. Mobilization and loading times are generally the largest components. At eight health facilities with over 20 non-ambulatory patients, ETEs are based on a two-wave evacuation, based on the number of identified WC buses and ambulances. Each vehicle will require about 30 minutes to load, with up to four vehicles loading simultaneously. The first vehicles will mobilize at 90 minutes, load in 30 minutes, and travel out of the EPZ. The WC bus will then travel to the reception center, unload (15 minutes), take a 10-minute break for driver, followed by a return trip to the start of run #2 (estimated "turnaround time" 60 minutes). Two facilities in Pottstown (Pottstown Memorial Medical Center and Montgomery County Geriatric and Rehabilitation Center) with a large non-ambulatory population may encounter delays of up to 2 hours for loading patients onto vehicles. During an actual evacuation event, the number of vehicles assigned to a specific location will depend on the needs of the current patient population. Times shown are for ambulance or WC bus; times for the ambulatory population are shorter, since (a) only a single wave is needed, and (b) loading times are shorter.

While some school buses may mobilize more quickly depending on specific local circumstances, it will generally require on the order of 120 minutes to contact drivers, provide them with instructions and deploy them to assigned schools. For travel time, average speeds were estimated for the anticipated evacuation route, based on the traffic simulation for the Winter Day scenario. The simplified stepwise methodology used to determine these estimates provides a typical evacuation time, rather than an upper bound 90% or 100% value.

Table 6-1: Evacuation Time Estimate Summary for Limerick EPZ

	Summer				Winter			
	Midweek Daytime		Weekend	Evening	Midweek Daytime		Weekend	Evening
Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Weather:	Normal	Adverse	Normal	Normal	Normal	Adverse	Normal	Normal
	90% Evacuation Time							
2-mile Zone	6:05	7:00	5:35	5:30	6:05	7:40	5:40	5:35
5-mile Zone	7:10	8:15	6:25	6:20	7:10	9:00	6:30	6:35
10-mile EPZ	8:35	9:50	7:35	7:30	8:35	10:40	7:40	7:50
	100% Evacuation Time							
2-mile Zone	7:10	8:15	6:35	6:30	7:15	9:05	6:45	6:35
5-mile Zone	8:40	9:55	7:35	7:30	8:40	10:50	7:45	7:45
10-mile EPZ	10:30	12:05	9:10	9:05	10:30	13:10	9:20	9:30

Table 6-2: Evacuation Time Estimates for Partial EPZ Scenarios (unstaged)

(a) 2-mile Zone plus 5 Miles downwind

		Summer				Winter			
		Midweek Daytime		Weekend Daytime	Evening	Midweek Daytime		Weekend Daytime	Evening
Affected ERPAs	Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Weather:	Normal	Adverse	Normal	Normal	Normal	Adverse	Normal	Normal
90% Evacuation of 2-mile Zone and 5 Miles Downwind									
2, 5-SE, 5-SW	N, NNE	6:45	7:45	6:05	6:00	6:45	8:30	6:10	6:05
2, 5-SW	NE, ENE	6:15	7:10	5:35	5:30	6:15	7:45	5:40	5:35
2, 5-SW, 5-NW	E, ESE	7:00	8:00	6:10	6:05	6:55	8:40	6:15	6:15
2, 5-NW	SE, SSE, S	7:10	8:15	6:25	6:20	7:10	9:00	6:30	6:35
2, 5-NW, 5-NE	SSW, SW	7:10	8:15	6:25	6:20	7:10	9:00	6:30	6:35
2, 5-NE	WSW	7:00	8:05	6:25	6:20	7:00	8:45	6:30	6:25
2, 5-NE, 5-SE	W, WNW	7:00	8:05	6:25	6:20	7:00	8:45	6:30	6:25
2, 5-SE	NW, NNW	7:00	8:05	6:25	6:20	7:00	8:45	6:30	6:25
100% Evacuation of 2-mile Zone and 5 Miles Downwind									
2, 5-SE, 5-SW	N, NNE	8:15	9:30	7:35	7:30	8:15	10:20	7:45	7:40
2, 5-SW	NE, ENE	8:15	9:30	7:35	7:30	8:15	10:20	7:45	7:40
2, 5-SW, 5-NW	E, ESE	8:40	9:55	7:35	7:30	8:40	10:50	7:45	7:45
2, 5-NW	SE, SSE, S	8:40	9:55	7:35	7:30	8:40	10:50	7:45	7:45
2, 5-NW, 5-NE	SSW, SW	8:40	9:55	7:35	7:30	8:40	10:50	7:45	7:45
2, 5-NE	WSW	8:15	9:30	7:35	7:30	8:15	10:20	7:45	7:40
2, 5-NE, 5-SE	W, WNW	8:15	9:30	7:35	7:30	8:15	10:20	7:45	7:40
2, 5-SE	NW, NNW	8:15	9:30	7:35	7:30	8:15	10:20	7:45	7:40

(b) 5-mile Zone plus 10 Miles downwind (all cases include 2-mile zone and all 5-mile zones)

		Summer				Winter			
		Midweek Daytime		Weekend Daytime	Evening	Midweek Daytime		Weekend Daytime	Evening
Affected 10-mile Zones	Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Weather:	Normal	Adverse	Normal	Normal	Normal	Adverse	Normal	Normal
90% Evacuation of 5-mile Zone and 10 Miles Downwind									
10-SE, 10-SW	NNW, N	8:25	9:40	7:25	7:15	8:20	10:30	7:25	7:40
10-SW	NNE, NE, ENE	7:55	9:05	7:00	6:45	8:00	10:00	6:55	7:25
10-SW, 10-NW	E, ESE	7:55	9:05	7:00	6:45	8:00	10:00	6:55	7:25
10-NW	SE	7:55	9:05	7:00	6:45	8:00	10:00	6:55	7:25
10-NW, 10-NE	SSE, S	7:55	9:05	7:00	6:45	8:00	10:00	6:55	7:25
10-NE	SSW, SW, WSW	8:35	9:50	7:25	7:20	8:35	10:45	7:25	7:40
10-NE, 10-SE	W, WNW	8:35	9:50	7:30	7:25	8:35	10:40	7:35	7:45
10-SE	NW	8:35	9:50	7:35	7:30	8:30	10:40	7:40	7:50
100% Evacuation of 5-mile Zone and 10 Miles Downwind									
10-SE, 10-SW	NNW, N	10:00	11:30	9:10	9:05	10:00	12:30	9:20	9:20
10-SW	NNE, NE, ENE	9:45	11:15	8:45	8:30	9:50	12:15	8:45	9:15
10-SW, 10-NW	E, ESE	9:45	11:15	8:45	8:30	9:50	12:15	8:45	9:15
10-NW	SE	9:45	11:15	8:45	8:30	9:50	12:15	8:45	9:15
10-NW, 10-NE	SSE, S	10:30	12:05	9:05	9:05	10:30	13:10	9:05	9:30
10-NE	SSW, SW, WSW	10:30	12:05	9:05	9:05	10:30	13:10	9:05	9:30
10-NE, 10-SE	W, WNW	10:30	12:05	9:10	9:05	10:30	13:10	9:20	9:30
10-SE	NW	10:00	11:30	9:10	9:05	10:00	12:30	9:20	9:20

Table 6-3: Evacuation Time Estimates for Partial EPZ Scenarios (staged)

		Summer				Winter			
		Midweek Daytime		Weekend Daytime	Evening	Midweek Daytime		Weekend Daytime	Evening
Affected ERPAs	Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Weather:	Normal	Adverse	Normal	Normal	Normal	Adverse	Normal	Normal
90% Evacuation of 2-mile Zone and 5 Miles Downwind (STAGED)									
2, 5-SE, 5-SW	N, NNE	6:30	7:25	5:45	5:45	6:25	8:05	5:50	5:45
2, 5-SW	NE, ENE	6:45	7:45	6:00	5:55	6:45	8:25	6:05	6:05
2, 5-SW, 5-NW	E, ESE	6:50	7:50	6:05	6:00	6:50	8:30	6:05	6:10
2, 5-NW	SE, SSE, S	6:55	8:00	6:10	6:10	6:55	8:40	6:15	6:15
2, 5-NW, 5-NE	SSW, SW	6:55	8:00	6:10	6:10	6:55	8:40	6:15	6:15
2, 5-NE	WSW	7:10	8:10	6:25	6:20	7:05	8:55	6:30	6:30
2, 5-NE, 5-SE	W, WNW	6:50	7:55	6:10	6:05	6:50	8:35	6:15	6:15
2, 5-SE	NW, NNW	6:50	7:55	6:10	6:05	6:50	8:35	6:15	6:15
100% Evacuation of 2-mile Zone and 5 Miles Downwind (STAGED)									
2, 5-SE, 5-SW	N, NNE	8:30	9:45	7:35	7:30	8:30	10:35	7:45	7:45
2, 5-SW	NE, ENE	8:30	9:45	7:35	7:30	8:30	10:35	7:45	7:45
2, 5-SW, 5-NW	E, ESE	8:40	9:55	7:35	7:35	8:40	10:50	7:45	7:50
2, 5-NW	SE, SSE, S	8:40	9:55	7:35	7:35	8:40	10:50	7:45	7:50
2, 5-NW, 5-NE	SSW, SW	8:40	9:55	7:35	7:35	8:40	10:50	7:45	7:50
2, 5-NE	WSW	8:30	9:45	7:35	7:30	8:30	10:35	7:45	7:45
2, 5-NE, 5-SE	W, WNW	8:30	9:45	7:35	7:30	8:30	10:35	7:45	7:45
2, 5-SE	NW, NNW	8:30	9:45	7:35	7:30	8:30	10:35	7:45	7:45

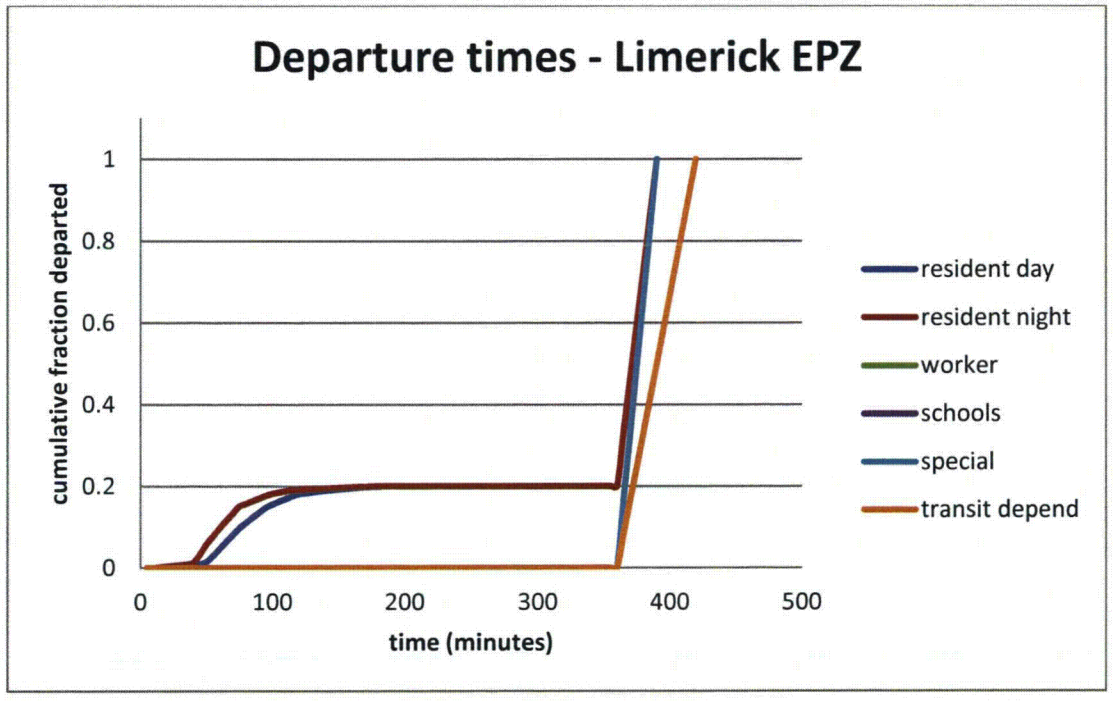

Figure 6-1. Departure Curves for Stage 2 Zones, Limerick Station EPZ

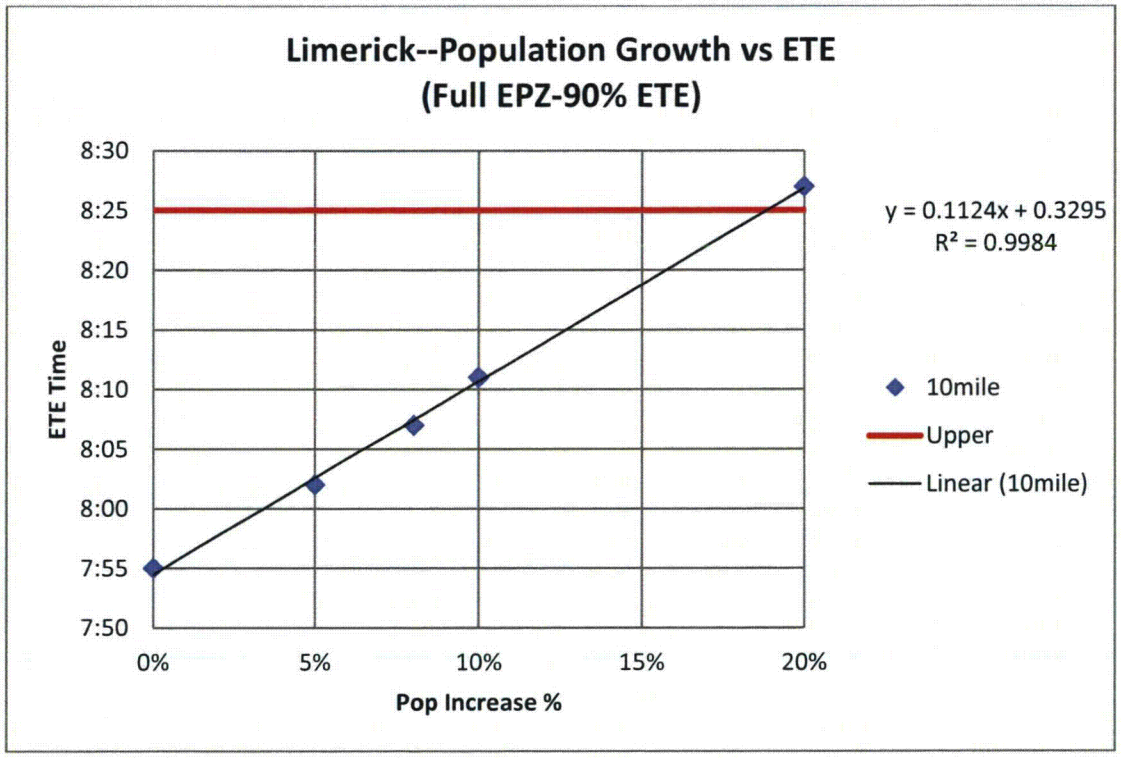

Figure 6-2. Limerick Sensitivity of ETE to Population Growth (Winter Weekday, Normal Weather, Full EPZ)

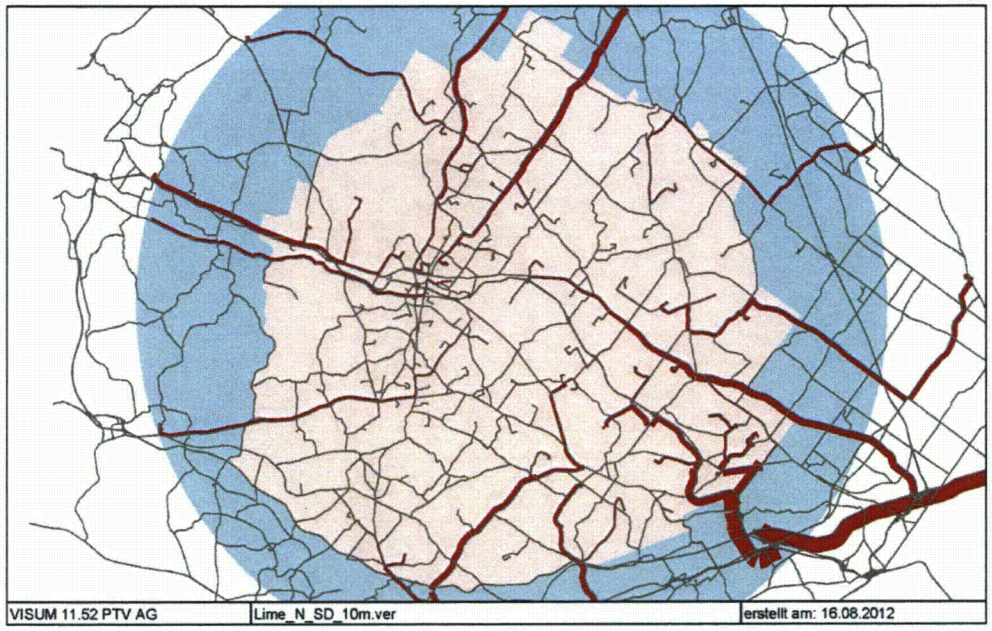

Figure 6-3. Limerick Predicted Traffic Volume by Link with Full Network (Summer Weekday, Normal Weather, Full EPZ)

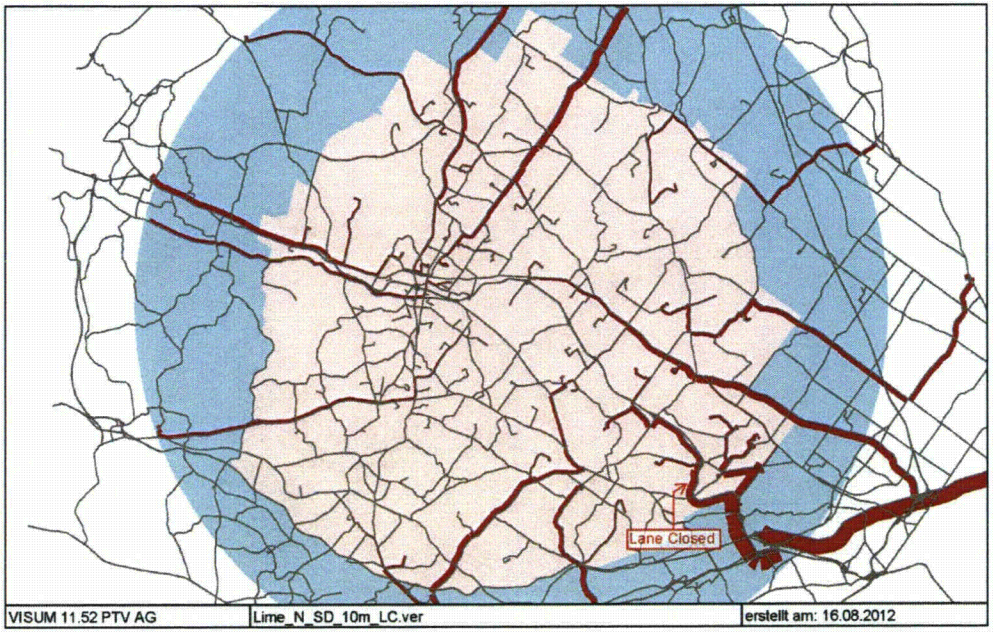

Figure 6-4. Limerick Predicted Traffic Volume by Link with US 422 SE east of Oaks Link Removed (Summer Weekday, Normal Weather, Full EPZ)

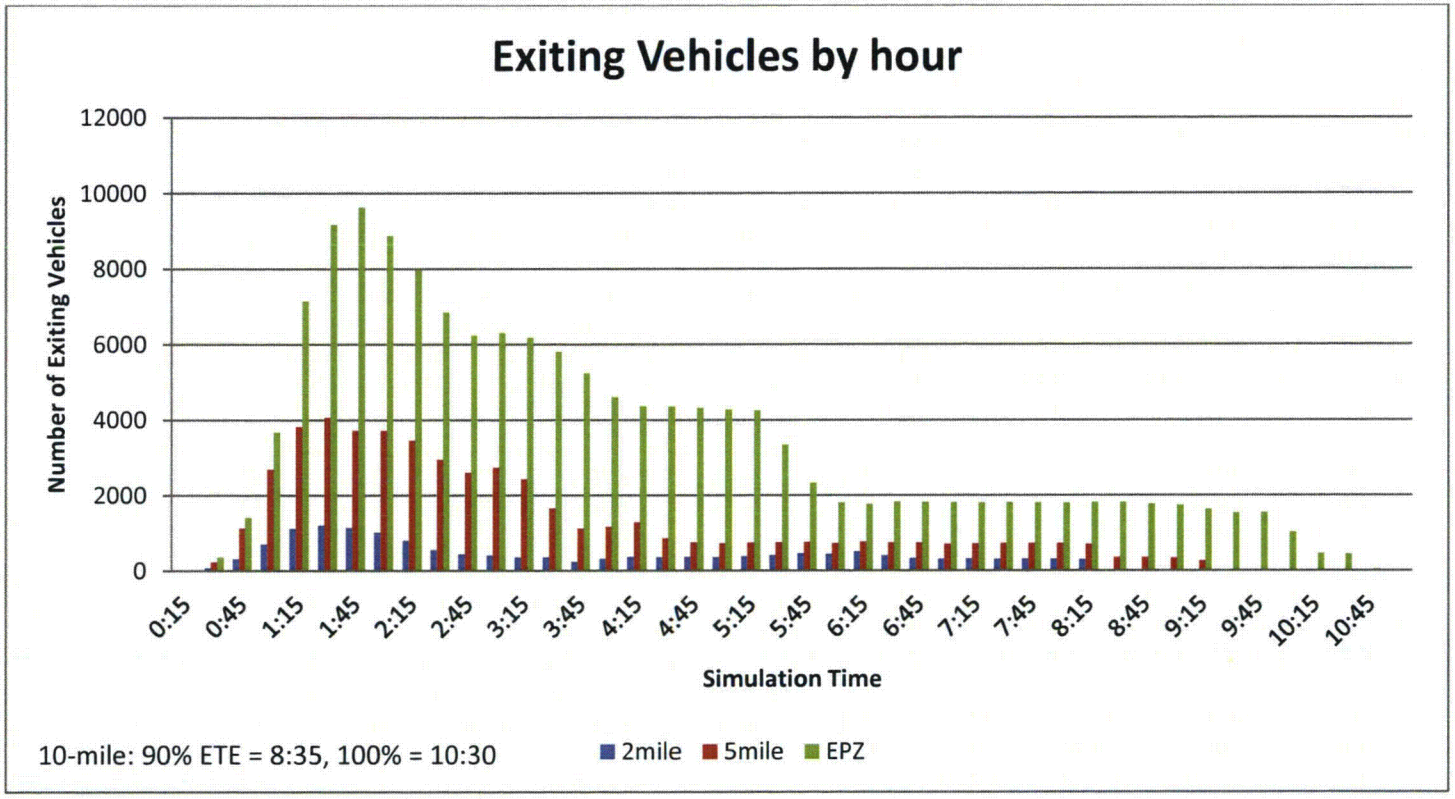

Figure 6-5. Time Distribution of Vehicles on the Network (Full 10-mile EPZ, Winter Weekday, Normal Weather)

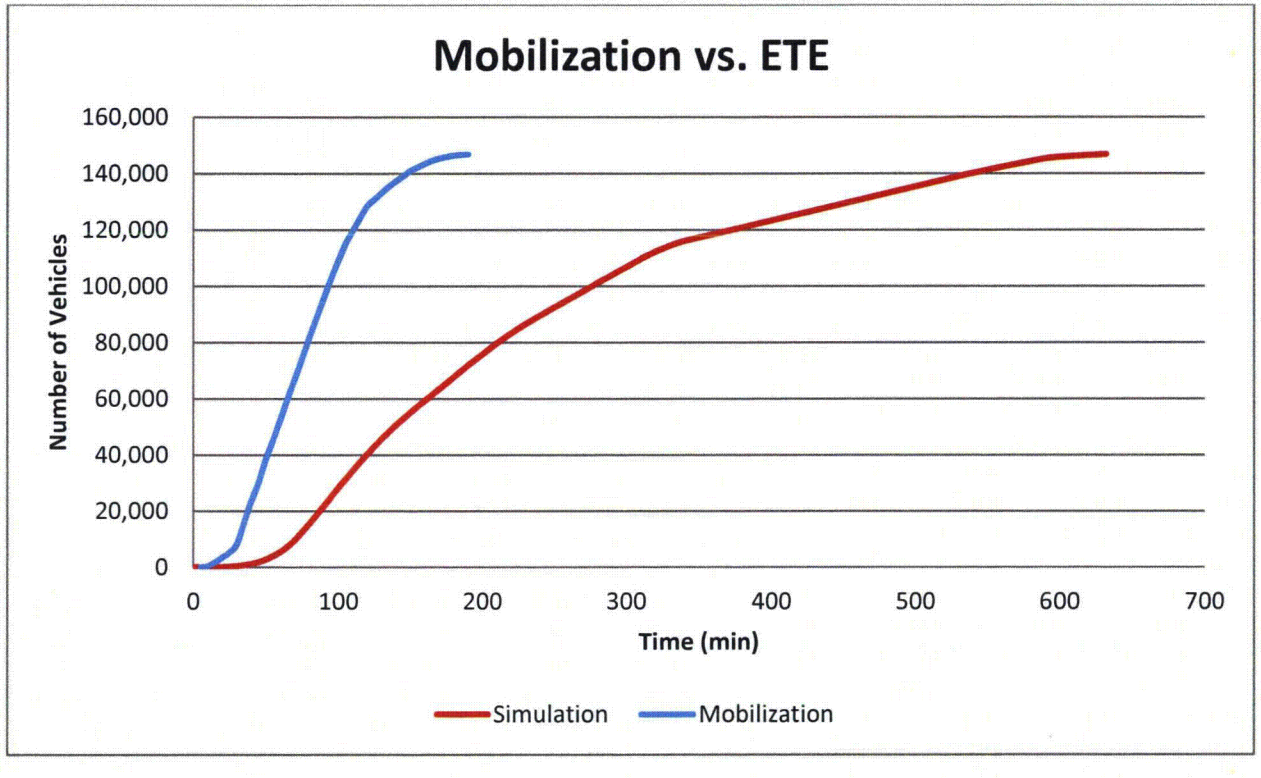

Figure 6-6. Comparison of Vehicle Mobilization and Departure Rates (total vehicles 155,462)

Table 6-4: Summary of Network Performance (Full 10-mile EPZ, Winter Weekday, Normal Weather)

Network Parameter	All Vehicles	Background and Shadow Traffic	Evacuation
Avg Delay (s)	8,069	1,439	10,271
Avg Stop Delay (s)	2,367	306	3,051
Avg # of Stops	1,436	254	1,829
Avg Speed (mph)	16.1	30.8	14.3
Avg Travel Time (min)	157	90	172
Vehicle Hours Traveled	472,494	51,469	42,1024
# of Completed Trips	126,612	31,573	95,039

Table 6-5: ETE for Special Facilities, Limerick Station EPZ (Full 10-mile EPZ, Winter Weekday, Normal Weather)

Facility	Population	Vehicles*		Mobilization Time (min)	Loading Time (min)	Distance to EPZ Boundary (mi)	Outbound Travel Speed (mph)	Travel Time to EPZ Boundary (min)	ETE (min)
		#	Type*						
Phoenixville Hospital.	227	5/5	Amb, WC Bus	90	30-60	4	38.4	6	126-156
	Trip 2	5/5		186-216	30	4	38.4	6	222-252
Phoenixville Convalescent Manor	93	5/4	Amb, WC Bus	90	30-60	4	38.4	6	126-156
	Trip 2	5/4		186-216	30	4	38.4	6	222-252
SE Pennsylvania Veterans Ctr	289	2/4	Amb, WC Bus	90	30	12	18.6	39	159
The Woodbridge	150	1/2	Amb, WC Bus	90	30	6.5	20.8	19	139
Golden Living Center	205	1/2	Amb, WC Bus	90	30	4	38.4	6	126
Genesis Health at Spring Mill	36	1	Ambulance	90	15	4	38.4	6	106
Parkhouse, Providence Pointe	601	3/5	Amb, WC Bus	90	30-60	11	41.7	16	136-166
	Trip 2	3/5		196-226	30	11	41.7	16	242-272
Eagleville Hospital	372	3/5	Amb, WC Bus	90	30-60	2	15.7	8	128-158
	Trip 2	3/5		188-218	30	2	15.7	8	226-256
Montgomery Co Correctional	1,200	49	Van/Bus	120	45-165	2	15.7	8	173-293
Meadows at Shannondell	100	1/2	Amb, WC Bus	90	30	1	18.9	3	123
Coventry Manor	53	2	WC Bus	90	15	9	48.0	11	116
Frederick Mennonite Home	158	3/6	Amb, WC Bus	90	30-60	9	48.0	11	131-161
Manor Care Health Services	258	5/10	Amb, WC Bus	90	30-90	9	48.0	11	161-221
	Trip 2	5/10		221-281	30	9	48.0	11	262-322
Manatawny Manor	150	4/8	Amb, WC Bus	90	30-60	9	48.0	11	131-161
	Trip 2	4/8		191-221	30	9	48.0	11	232-262
Montgomery Co Rehab Ctr	778	24/47	Amb, WC Bus	90	30-180	9	48.0	11	131-281
	Trip 2	24/47		191-341	30	9	48.0	11	232-382

Table 6-5: ETE for Special Facilities, Limerick Station EPZ (Full 10-mile EPZ, Winter Weekday, Normal Weather)

Facility	Population	Vehicles*		Mobilization Time (min)	Loading Time (min)	Distance to EPZ Boundary (mi)	Outbound Travel Speed (mph)	Travel Time to EPZ Boundary (min)	ETE (min)
		#	Type*						
Pottstown Memorial	775	12/17	Amb, WC Bus	120	30-120	9	48.0	11	161-251
	Trip 2	12/17		221-311	30	9	48.0	11	262-352
Sanatoga Center	143	2/4	Amb, WC Bus	90	30	9	48.0	11	131
Park Lane Commons	135	1/2	Amb, WC Bus	90	30	9	48.0	11	131
Chestnut Knoll	140	1/2	Amb, WC Bus	90	30	3	48.0	4	124
Colonial Manor	32	1	WC Bus	90	15	3	48.0	4	109
Keystone Villa	159	1/2	Amb, WC Bus	90	30	3	48.0	4	124
Hearthstone at Amity	170	1/2	Amb, WC Bus	90	30	3	48.0	4	124

*Number of vehicles and ETE are given for type(s) with longest evacuation time. For complete vehicle data by facility, see Appendix A.

Table 6-6: ETE for Schools in Limerick Station EPZ (Full 10-mile EPZ, Winter Weekday, Normal Weather)

Facility	Population	Vehicles		Mobilization Time (min)	Loading Time (min)	Distance to EPZ Boundary (mi)	Outbound Travel Speed (mph)	Travel Time to EPZ Boundary (min)	ETE (min)
		#	Type						
Boyertown Area Junior High School – East	1,013	22	Bus	120	45	4	38.5	6	171
Boyertown Area Junior High School – West	903	18	Bus	120	45	4	38.5	6	171
Boyertown Area High School	1,905	38	Bus	120	45	4	38.5	6	171
Boyertown Elementary School	777	16	Bus	120	45	4	38.5	6	171
Colebrookdale Elementary School	359	8	Bus	120	45	4	38.5	6	171
Earl Elementary School	360	8	Bus	120	45	4	38.5	6	171
Gilbertsville Elementary School	777	16	Bus	120	45	4	38.5	6	171
New Hanover-Upper Frederick Elementary School	808	18	Bus	120	45	4	38.5	6	171
Pine Forge Elementary School	330	8	Bus	90	30	4	38.5	6	126
Washington Elementary School	750	16	Bus	120	45	4	38.5	6	171
Jesse Wagner Adventist Elem	26	0	Bus	60	15	4	38.5	6	81
Amity Primary Center	515	10	Bus	120	45	0.5	48.0	1	166
Monocacy Elementary Center	761	16	Bus	120	45	1.5	48.0	2	167
Montgomery School	302	8	Bus	90	30	7	20.8	20	140
Pickering Valley Elementary School	773	16	Bus	120	45	1	20.8	3	168
Upattinas Open Community School	49	2	Bus	60	15	1.5	37.0	2	77
St. Basil the Great School	226	6	Bus	90	30	6.5	20.8	19	139
Charlestown Elementary School	353	8	Bus	120	45	0.5	37.8	1	166
East Coventry Elementary School	652	14	Bus	120	45	13	27.1	29	194
French Creek Elementary School	593	12	Bus	120	45	7.5	27.1	17	182

Table 6-6: ETE for Schools in Limerick Station EPZ (Full 10-mile EPZ, Winter Weekday, Normal Weather)

Facility	Population	Vehicles		Mobilization Time (min)	Loading Time (min)	Distance to EPZ Boundary (mi)	Outbound Travel Speed (mph)	Travel Time to EPZ Boundary (min)	ETE (min)
		#	Type						
Kimberton-Waldorf School	331	8	Bus	90	30	7.5	20.8	22	142
North Coventry Elementary School	691	14	Bus	120	45	10	26.4	23	188
Owen J. Roberts High School	1,671	34	Bus	120	45	7.5	27.1	17	182
Owen J. Roberts Middle School	879	18	Bus	120	45	7.5	27.1	17	182
East Vincent Elementary School	604	12	Bus	120	45	10	27.1	22	187
West Vincent Elementary School	570	12	Bus	120	45	10	27.1	22	187
Barkley Elementary School	402	8	Bus	120	45	4	38.4	6	171
Center for Arts and Technology-Pickering Campus	583	12	Bus	120	45	4	38.4	6	171
East Pikeland Elementary School	369	8	Bus	120	45	4	38.4	6	171
Holy Family School	396	8	Bus	120	45	4	38.4	6	171
Phoenixville Area High School	1,012	20	Bus	120	45	4	38.4	6	171
Phoenixville Area Middle School	844	18	Bus	120	45	4	38.4	6	171
Renaissance Academy	1,060	22	Bus	120	45	4	38.4	6	171
Schuylkill Elementary School	781	16	Bus	120	45	4	38.4	6	171
Valley Forge Christian College	880	18	Bus	120	45	4	38.4	6	171
Arrowhead Elementary School	368	8	Bus	120	45	7.5	41.7	11	176
Collegeville Montessori Academy	45	2	Bus	60	15	4.5	15.7	17	92
St. Eleanor School	564	12	Bus	120	45	4.5	15.7	17	182
Eagleville Elementary School	382	8	Bus	120	45	2	15.7	8	173
Limerick Elementary School	446	10	Bus	120	45	12	41.7	17	182
Western Center for Technical Studies	517	12	Bus	120	45	11	15.7	42	207
Arcola Intermediate School	948	20	Bus	120	45	3.5	15.7	13	178

Table 6-6: ETE for Schools in Limerick Station EPZ (Full 10-mile EPZ, Winter Weekday, Normal Weather)

Facility	Population	Vehicles		Mobilization Time (min)	Loading Time (min)	Distance to EPZ Boundary (mi)	Outbound Travel Speed (mph)	Travel Time to EPZ Boundary (min)	ETE (min)
		#	Type						
Woodland Elementary	329	8	Bus	90	30	2	18.9	6	126
Audubon Elementary	453	10	Bus	120	45	2	18.9	6	171
Skyview Upper Elementary School	885	18	Bus	120	45	4	15.7	15	180
St. Gabriels Hall	238	6	Bus	90	30	3	18.9	10	130
Oaks Elementary School	586	12	Bus	120	45	4.5	41.7	6	171
Evergreen Elementary School	771	16	Bus	120	45	4.5	15.7	17	182
Collegeville Montessori Academy	45	2	Bus	60	15	4.5	15.7	17	92
St. Eleanor School	564	12	Bus	120	45	4.5	15.7	17	182
Eagleville Elementary School	382	8	Bus	120	45	2	15.7	8	173
Limerick Elementary School	446	10	Bus	120	45	12	41.7	17	182
Western Center for Technical Studies	517	12	Bus	120	45	11	15.7	42	207
Arcola Intermediate School	948	20	Bus	120	45	3.5	15.7	13	178
Woodland Elementary	329	8	Bus	90	30	2	18.9	6	126
Audubon Elementary	453	10	Bus	120	45	2	18.9	6	171
Skyview Upper Elementary School	885	18	Bus	120	45	4	15.7	15	180
St. Gabriels Hall	238	6	Bus	90	30	3	18.9	10	130
Oaks Elementary School	586	12	Bus	120	45	4.5	41.7	6	171
Evergreen Elementary School	771	16	Bus	120	45	4.5	15.7	17	182
Perkiomen Valley South Elementary School	707	14	Bus	120	45	4.5	15.7	17	182
Schwenksville Elementary School	609	14	Bus	120	45	5	41.8	7	172
Perkiomen Valley High School	2,034	42	Bus	120	45	5	15.7	19	184
Perkiomen Valley Middle School - East	880	18	Bus	120	45	5	15.7	19	184

Table 6-6: ETE for Schools in Limerick Station EPZ (Full 10-mile EPZ, Winter Weekday, Normal Weather)

Facility	Population	Vehicles		Mobilization Time (min)	Loading Time (min)	Distance to EPZ Boundary (mi)	Outbound Travel Speed (mph)	Travel Time to EPZ Boundary (min)	ETE (min)
		#	Type						
Perkiomen Valley Middle School - West	681	14	Bus	120	45	5	15.7	19	184
Skippack Elementary School	880	18	Bus	120	45	5	15.7	19	184
Valley Forge Baptist Temple Academy	209	6	Bus	90	30	5	15.7	19	139
New Life Youth & Family Services	61	2	Bus	60	15	5	15.7	19	94
Perkiomen Valley Academy	21	2	Bus	60	15	5	15.7	19	94
Bright Spot Child Care	148	4	Bus	90	30	5	15.7	19	139
West-Mont Christian Academy	355	8	Bus	120	45	9	48.0	11	176
Elizabeth B. Barth Elementary School	475	10	Bus	120	45	9	48.0	11	176
Edgewood Elementary School	324	8	Bus	90	30	9	48.0	11	131
Franklin Elementary School	339	8	Bus	90	30	9	48.0	11	131
The Hill School	558	12	Bus	120	45	9	48.0	11	176
Lincoln Elementary School	426	10	Bus	120	45	9	48.0	11	176
Pottstown Middle School	676	14	Bus	120	45	9	48.0	11	176
Pottstown High School	927	20	Bus	120	45	9	48.0	11	176
Coventry Christian School	474	10	Bus	120	45	9	8.4	65	230
Mount Calvary Academy	375	8	Bus	120	45	9	8.4	65	230
Ringing Rocks Elementary	388	8	Bus	120	45	9	8.4	65	230
West Pottsgrove Elementary School	519	12	Bus	120	45	9	8.4	65	230
Lower Pottsgrove Elementary School	737	16	Bus	120	45	9	8.4	65	230
Pottsgrove Middle School	858	18	Bus	120	45	9	8.4	65	230
Pottsgrove High School	1,199	24	Bus	120	45	9	8.4	65	230
Rupert Elementary School	304	6	Bus	90	30	9	48.0	11	131
St. Aloysius	588	12	Bus	120	45	9	48.0	11	176

Table 6-6: ETE for Schools in Limerick Station EPZ (Full 10-mile EPZ, Winter Weekday, Normal Weather)

Facility	Population	Vehicles		Mobilization Time (min)	Loading Time (min)	Distance to EPZ Boundary (mi)	Outbound Travel Speed (mph)	Travel Time to EPZ Boundary (min)	ETE (min)
		#	Type						
St. Peter's School	206	6	Bus	90	30	9	48.0	11	131
Wyndcroft School	263	6	Bus	90	30	9	48.0	11	131
Royersford Elementary School	485	10	Bus	120	45	11	41.7	16	181
Sacred Heart	129	4	Bus	90	30	11	41.7	16	136
Salford Hills Elementary	372	8	Bus	120	45	5	15.7	19	184
St. Mary's	389	8	Bus	120	45	5	15.7	19	184
Brooke Elementary School	475	10	Bus	120	45	11	41.7	16	181
Spring City Elementary School	178	4	Bus	90	30	11	41.7	16	136
Ursinus College	1,950	40	Bus	120	45	5	15.7	19	184
Evans Elementary School	673	14	Bus	120	45	11	41.7	16	181
Upper Providence Elementary School	600	12	Bus	120	45	11	41.7	16	181
UProv 5th - 6th Grade Center	1,416	28	Bus	120	45	11	41.7	16	181
UProv 7th Grade Center	663	14	Bus	120	45	11	41.7	16	181
UProv 8th Grade Center	687	14	Bus	120	45	11	41.7	16	181
UProv 10th & 12th Grade Center	1,714	34	Bus	120	45	11	41.7	16	181
UProv 9th Grade Center	653	14	Bus	120	45	11	41.7	16	181
Pope John Paul II	956	20	Bus	120	45	11	41.7	16	181
Blessed Theresa of Calcutta	255	6	Bus	90	30	11	41.7	16	136
Chesterbrook Academy	140	4	Bus	90	30	11	41.7	16	136

7. Traffic Control and Evacuation Confirmation

7.1 General

Evacuation simulation results have been reviewed to assess access control locations, traffic management locations and recommendations for the Limerick Station EPZ. Traffic control plans for each county were reviewed to confirm that traffic management will be implemented at key intersections on all designated evacuation routes. Predicted queuing at high-volume intersections is summarized in Table 7-1. Five of those intersections are located inside the EPZ. The average queue length exceeds 1,000 feet at all ten intersections. The most severe congestion occurs for routes in the southeast quadrant (Route 422 eastbound and related access roads, both inside just outside the EPZ) and proceeding north from Pottstown (Rte 633 and Route 100).

7.2 Evacuation Access Control Locations

Access control measures were not specifically addressed in the conduct of this study. Background traffic within the EPZ was not found to be a significant contributor to traffic congestion during the early stages of evacuation. Access control is likely to be an important challenge in the area southeast of the EPZ, where shadow traffic is predicted to interfere with vehicles evacuating from the EPZ. Measures to maintain priority for traffic exiting the EPZ would help to maintain traffic flow and reduce congestion.

7.3 Traffic Management Locations and Tactics to Facilitate Evacuation

The traffic simulation results for Limerick indicate that traffic flow will encounter major congestion in Limerick, Upper and Lower Providence, and north of Pottstown. The traffic flow maps provided in Appendix D and the data in Table 7-1 help to pinpoint locations where traffic management can be deployed to best effect. Congestion develops during the first hour and persists for more than 10 hours. Route 422 eastbound and Route 633 northbound are predicted to take the longest to clear.

Table 7-1: Predicted Queuing at Major Intersections (Full 10-mile EPZ, Winter Weekday, Normal Weather)

Intersection Name	County or City	Location	Control Type	Average Queue (feet)	Volume
US422 SB Exit ramp to US 202 EB	King of Prussia, PA	15 miles	Ramp	1,528	24,948
US 422 SB / SR 363 SB Merge	West Norriton, PA	Within EPZ	Merge Ramp	1,403	7,384
SR 29 SB to US 202 WB	Malvern, PA	15 miles	Exit Ramp	1,353	8,108
Swamp Creek Rd Exit ramp to SR 100 NB	New Berlinville, PA	Within EPZ	Ramp	1,300	1,236
SR 113 SB left turn to Gordon Dr	Exton, PA	EPZ Border	4 leg	1,218	18,428
W Germantown Pike (Plymouth Mtg Metroplex)	Plymouth Meeting, PA	Outside 15 miles	4 leg	1,174	13,180
SR 663 NB / Wilson St	Pottstown, PA	Within EPZ	4 leg	1,162	2,008
Egypt Rd Ramp to US 422 SB	Phoenixville, PA	Within EPZ	4 leg	1,128	4,408
SR 663 NB / Mervine St	Pottstown, PA	Within EPZ	4 leg	1,028	6,450
US 422 WB Exit (Exeter Twp)	Reading, PA	Outside 15 miles	Ramp	1,000	11,790
US422 SB Exit ramp to US 202 EB	King of Prussia, PA	15 miles	Ramp	1,528	24,948

8. References

Earth Tech, 2003: *Evacuation Time Estimates for the Limerick Station Plume Exposure Pathway Emergency Planning Zone,* prepared by Earth Tech, Inc. for Exelon Nuclear, May 2003.

Earth Tech, 2008: *Evacuation Time Estimates for the Limerick Station Plume Exposure Pathway Emergency Planning Zone,* prepared by Earth Tech, Inc. for Exelon Nuclear, November 2008

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NRC, 1992: *State of the Art in Evacuation Time Estimate Studies for Nuclear Power Plants*, NUREG/CR-4831, T. E. Urbanik and J. D. Jamison, Pacific Northwest Laboratory, U.S. Nuclear Regulatory Commission, March 1992.

NRC, 2011: *Criteria for Development of Evacuation Time Estimate Studies*, NUREG/CR-7002, J. Jones and F. Walton, Sandia National Laboratories, and B. Wolshon, Louisiana State University, November 2011.

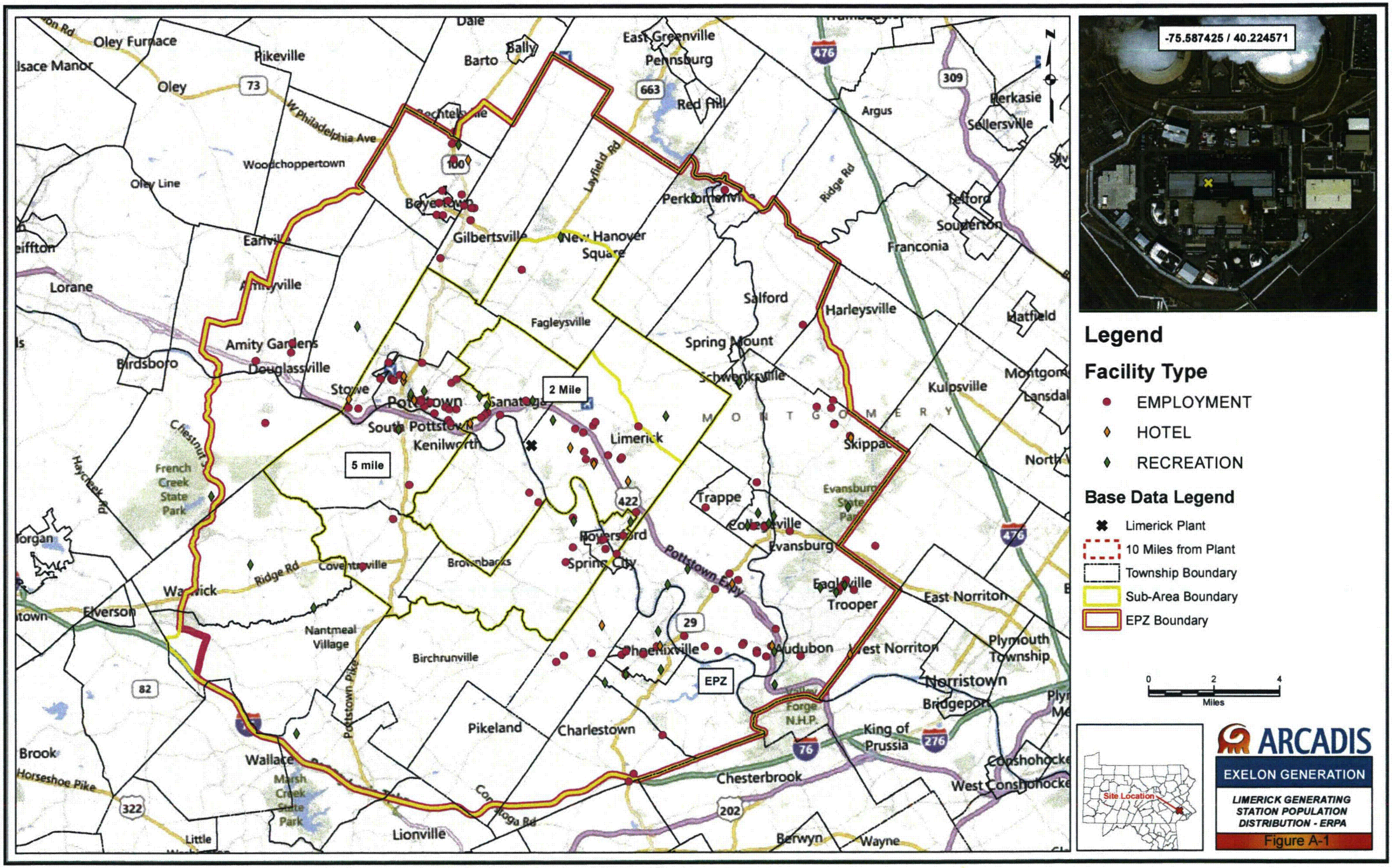
ORNL, 1990: *Evaluating Protective Actions for Chemical Agent Emergencies,* ORNL-6615, G.O. Rogers, et al., Oak Ridge National Laboratory, prepared for U.S. Department of the Army and Federal Emergency Management Agency, April 1990.

PEMA, 2006: *Limerick Generating Station Evacuation Plan Map* prepared by Pennsylvania Emergency Management Agency, revised February 2006.

ARCADIS

Appendix A

Transient and Special Facility Population Data


-75.587425 / 40.224571
Legend
Facility Type
EMPLOYMENT
HOTEL
RECREATION
Base Data Legend
Limerick Plant
10 Miles from Plant
Township Boundary
Sub-Area Boundary
EPZ Boundary
0 2 4
Miles
Site Location
ARCADIS
EXELON GENERATION
LIMERICK GENERATING STATION POPULATION DISTRIBUTION - ERPA
Figure A-1
2 Mile
5 mile
EPZ
M O N T G O M E R Y
Pottstown
Limerick
Phoenixville
Royersford
Spring City
Collegeville
Gilbertsville
Boyertown
Harleysville
Skippack
Norristown
King of Prussia
Chesterbrook
Pikeland
Charlestown
Birchrunville
Fagleysville
Salford
Spring Mount
Trappe
Evansburg
Eagleville
Trooper
Audubon
East Norriton
West Norriton
Lionville
Kenilworth
South Pottstown
Stowe
Douglassville
Amity Gardens
Birdsboro
Elverson
Warwick
Coventryville
Nantmeal Village
Wallace
Franconia
Souderton
Telford
Sellersville
Perkasie
Kulpsville
Hatfield
Pennsburg
East Greenville
Red Hill
Oley
Pikeville
Barto
Bally
Earlville
Lorane
Woodchoppertown

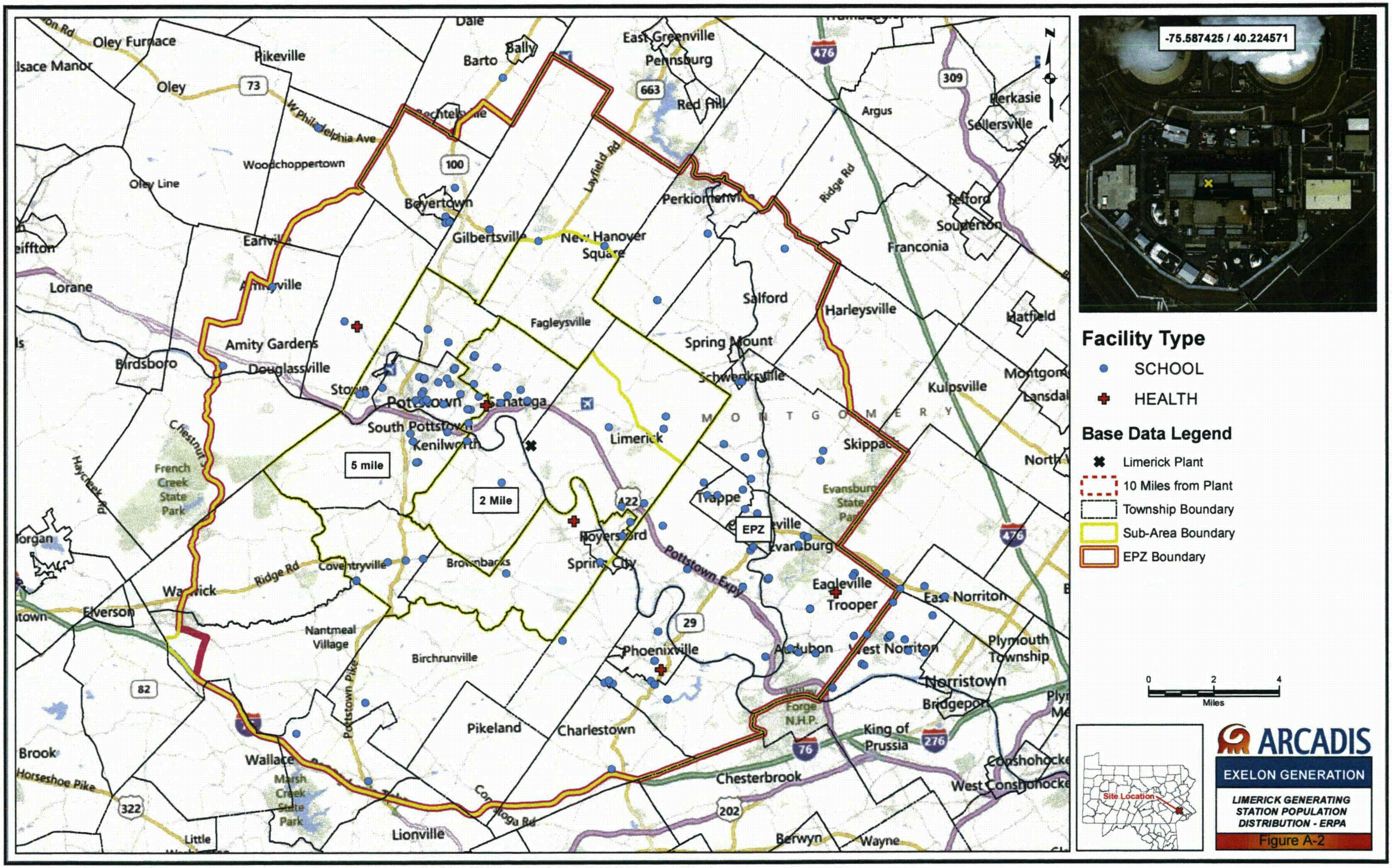

-75.587425 / 40.224571
Facility Type
SCHOOL
HEALTH
Base Data Legend
Limerick Plant
10 Miles from Plant
Township Boundary
Sub-Area Boundary
EPZ Boundary
0
2
4
Miles
Site Location
ARCADIS
EXELON GENERATION
LIMERICK GENERATING STATION POPULATION DISTRIBUTION - ERPA
Figure A-2
5 mile
2 Mile
EPZ
M O N T G O M E R Y
Pottstown
South Pottstown
Kenilworth
Sanatoga
Limerick
Royersford
Spring City
Phoenixville
Trappe
Collegeville
Evansburg
Eagleville
Trooper
Audubon
West Norriton
Norristown
Bridgeport
King of Prussia
Valley Forge N.H.P.
Chesterbrook
Boyertown
Gilbertsville
New Hanover Square
Fagleysville
Schwenksville
Spring Mount
Salford
Harleysville
Skippack
Kulpsville
Franconia
Souderton
Telford
Perkiomenville
Pennsburg
East Greenville
Red Hill
Bally
Barto
Bechtelsville
Oley Furnace
Pikeville
Oley
Oley Line
Woodchoppertown
Earlville
Amityville
Amity Gardens
Douglassville
Birdsboro
Lorane
Stowe
Coventryville
Brownbacks
Nantmeal Village
Birchrunville
Pikeland
Charlestown
Wallace
Lionville
Warwick
Elverson
French Creek State Park
Marsh Creek State Park
Evansburg State Park
Berwyn
Wayne
Plymouth Township
East Norriton
Sellersville
Perkasie
Argus
Hatfield
Layfield Rd
Ridge Rd
Pottstown Expy
Conestoga Rd
Horseshoe Pike
Pottstown Pike
W Philadelphia Ave
Haycreek Rd
Chestnut
73
100
663
476
309
422
29
82
322
76
276
202

Table A-1. Major Employers in Limerick EPZ

		population						vehicles					
		Winter			Summer			Winter			Summer		
Major Employer	Zone	week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end
Dairy Express	2-S	50	0	0	50	0	0	50	0	0	50	0	0
MAC KISSIC INC	2-S	55	0	0	55	0	0	55	0	0	55	0	0
SERMATECH INTERNATIONAL INC	2-N	105	20	0	105	20	0	105	20	0	105	20	0
TELEFLEX INC	2-N	60	10	0	60	10	0	60	10	0	60	10	0
TELEFLEX MARINE	2-N	95	20	0	95	20	0	95	20	0	95	20	0
IRON MOUNTAIN	2-N	300	30	30	300	30	30	300	30	30	300	30	30
VAL SPEC	2-N	120	0	0	120	0	0	120	0	0	120	0	0
WENDT USA DUNNINGTON DIV	2-N	85	0	0	85	0	0	85	0	0	85	0	0
AMERICAN MACHINE & TOOL CO INC	5-SE	60	0	0	60	0	0	60	0	0	60	0	0
A C MILLER CONCRETE PRODUCTS	5-SE	100	0	0	100	0	0	100	0	0	100	0	0
CREATIVE HEALTH SVC	5-SE	50	0	0	50	0	0	50	0	0	50	0	0
DAVLYN MANUFACTURING CO INC	5-SE	85	0	0	85	0	0	85	0	0	85	0	0
HYDROMOTION INC	5-SE	50	0	0	50	0	0	50	0	0	50	0	0
MILITARY AFFAIRS DEPT	5-SE	20	0	320	20	0	320	20	0	320	20	0	320
PENNSYLVANIA INSERT	5-SE	50	0	0	50	0	0	50	0	0	50	0	0
SPRING CITY ELECTRICAL	5-SE	100	0	0	100	0	0	100	0	0	100	0	0
FRENCH CREEK VETERINARY HOSP	5-SW	50	0	0	50	0	0	50	0	0	50	0	0
A & L HANDLES INC	5-NW	90	0	0	90	0	0	90	0	0	90	0	0
BASSETT INDUSTRIES INC	5-NW	50	0	0	50	0	0	50	0	0	50	0	0
BESTWELD INC	5-NW	50	0	0	50	0	0	50	0	0	50	0	0
CREATIVE HEALTH SVC INC	5-NW	50	25	25	50	25	25	50	25	25	50	25	25
DANA DRIVE SHAFT PRODUCTS	5-NW	175	75	0	175	75	0	175	75	0	175	75	0
DIAMOND CREDIT UNION	5-NW	90	0	0	90	0	0	90	0	0	90	0	0
E PLUS TECHNOLOGY INC	5-NW	60	0	0	60	0	0	60	0	0	60	0	0
EASTWOOD CO	5-NW	60	0	0	60	0	0	60	0	0	60	0	0
HARRIS CORP	5-NW	167	0	0	167	0	0	167	0	0	167	0	0
J L MACHINE & TOOL INC	5-NW	75	15	0	75	15	0	75	15	0	75	15	0
KEMCORP	5-NW	80	0	0	80	0	0	80	0	0	80	0	0
MAYER POLLOCK STEEL CORPORATIO	5-NW	50	10	0	50	10	0	50	10	0	50	10	0
MERCURY	5-NW	116	0	0	116	0	0	116	0	0	116	0	0
MERIT MANUFACTURING CORP	5-NW	60	0	0	60	0	0	60	0	0	60	0	0
MICRO-COAX INC	5-NW	160	0	0	160	0	0	160	0	0	160	0	0

Table A-1. Major Employers in Limerick EPZ

		population						vehicles					
		Winter			Summer			Winter			Summer		
Major Employer	Zone	week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end
MRS SMITH'S FOIL	5-NW	50	0	0	50	0	0	50	0	0	50	0	0
NEAPCO LLC	5-NW	350	0	0	350	0	0	350	0	0	350	0	0
PHILADELPHIA NATIONAL CANDY	5-NW	50	0	0	50	0	0	50	0	0	50	0	0
POTTSTOWN BORO CITY HALL	5-NW	200	0	0	200	0	0	200	0	0	200	0	0
POTTSTOWN PLATING WORKS INC	5-NW	60	0	0	60	0	0	60	0	0	60	0	0
PRECISION POLYMER PRODUCTS	5-NW	90	0	0	90	0	0	90	0	0	90	0	0
SUPERIOR METAL PRODUCTS CO INC	5-NW	60	10	0	60	10	0	60	10	0	60	10	0
SUPERIOR PRECAST INC	5-NW	50	0	0	50	0	0	50	0	0	50	0	0
SUSQUEHANNA BANK	5-NW	64	10	0	64	10	0	64	10	0	64	10	0
TRAFFIC PLANNING & DESIGN INC	5-NW	100	0	0	100	0	0	100	0	0	100	0	0
UNIVERSAL CONCRETE PRODUCTS	5-NW	85	15	0	85	15	0	85	15	0	85	15	0
UNIVERSAL MACHINE CO	5-NW	75	0	0	75	0	0	75	0	0	75	0	0
US AXLE INC	5-NW	90	0	0	90	0	0	90	0	0	90	0	0
WATSON MC DANIEL CO	5-NW	50	0	0	50	0	0	50	0	0	50	0	0
YMCA	5-NW	75	15	10	75	15	10	75	15	10	75	15	10
COOK SPECIALTY CO	10-NE	81	20	0	81	20	0	81	20	0	81	20	0
FREEDOM LIFT CORP	10-NE	60	15	0	60	15	0	60	15	0	60	15	0
HAINES & KIBBLEHOUSE INC	10-NE	334	0	0	334	0	0	334	0	0	334	0	0
CHOWNS FABRICATION & RIGGING	10-NE	75	0	0	75	0	0	75	0	0	75	0	0
FETTEROLF CORP	10-NE	85	0	0	85	0	0	85	0	0	85	0	0
MAR COR PURIFICATION INC	10-NE	50	0	0	50	0	0	50	0	0	50	0	0
FAMILY SERVICES COUNSELING CTR	10-SE	70	0	0	70	0	0	70	0	0	70	0	0
LOWER PROVIDENCE TWP BUILDING	10-SE	71	0	0	71	0	0	71	0	0	71	0	0
MONTGOMERY CNTY COMMUNICATIONS	10-SE	100	0	0	100	0	0	100	0	0	100	0	0
STREAMLIGHT INC	10-SE	180	0	0	180	0	0	180	0	0	180	0	0
ACCELLENT	10-SE	275	75	0	275	75	0	275	75	0	275	75	0
ALLIED WIRE & CABLE	10-SE	50	10	0	50	10	0	50	10	0	50	10	0
EYE DESIGN	10-SE	50	0	0	50	0	0	50	0	0	50	0	0
MAIN LINE HEALTH CTR UPPER	10-SE	50	0	0	50	0	0	50	0	0	50	0	0
QUEST DIAGNOSTICS	10-SE	750	150	0	750	150	0	750	150	0	750	150	0
GlaxoSmithKline Pharmaceutical	10-SE	1600	100	100	1600	100	100	1600	100	100	1600	100	100
REES INDUSTRIAL INC	10-SE	85	0	0	85	0	0	85	0	0	85	0	0

Table A-1. Major Employers in Limerick EPZ

		population						vehicles					
		Winter			Summer			Winter			Summer		
Major Employer	Zone	week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end
RISK MANAGEMENT INTL	10-SE	110	11	0	110	11	0	110	11	0	110	11	0
SUPERIOR TUBE CO INC	10-SE	300	0	0	300	0	0	300	0	0	300	0	0
WYETH PHARMACEUTICALS	10-SE	2800	800	400	2800	800	400	2800	800	400	2800	800	400
DEVAULT FOODS	10-SE	125	25	0	125	25	0	125	25	0	125	25	0
INDEPENDENCE CONSTRUCTION MTRL	10-SE	90	10	0	90	10	0	90	10	0	90	10	0
CMC ENGINEERING	10-SE	90	0	0	90	0	0	90	0	0	90	0	0
HENRY CO	10-SE	300	50	0	300	50	0	300	50	0	300	50	0
MAILLIE FALCONIERO & CO	10-SE	65	0	0	65	0	0	65	0	0	65	0	0
Annin & Co	10-SE	110	0	20	110	0	20	110	0	20	110	0	20
COMCAST EASTERN DIV	10-SE	125	25	25	125	25	25	125	25	25	125	25	25
GLOBAL PACKAGING INC	10-SE	120	20	0	120	20	0	120	20	0	120	20	0
LAGASSE Sweet	10-SE	50	0	0	50	0	0	50	0	0	50	0	0
PSC INFO GROUP	10-SE	150	0	0	150	0	0	150	0	0	150	0	0
SEI INVESTMENTS CO	10-SE	700	150	0	700	150	0	700	150	0	700	150	0
TOTAL CONTAINMENT INC	10-SE	100	0	0	100	0	0	100	0	0	100	0	0
ATRIA WOODBRIDGE PLACE	10-SE	60	0	0	60	0	0	60	0	0	60	0	0
BILCARE INC	10-SE	75	0	0	75	0	0	75	0	0	75	0	0
DANCO PRECISION INC	10-SE	50	0	0	50	0	0	50	0	0	50	0	0
DANIEL J DEITWEILER	10-SE	250	50	0	250	50	0	250	50	0	250	50	0
DOCUMENT SOLUTIONS GROUP	10-SE	80	0	0	80	0	0	80	0	0	80	0	0
GRAPHIC PACKAGING INTL	10-SE	200	50	0	200	50	0	200	50	0	200	50	0
Innovative PRINT	10-SE	50	0	0	50	0	0	50	0	0	50	0	0
J J HAINES & CO INC	10-SE	350	50	0	350	50	0	350	50	0	350	50	0
PHOENIX	10-SE	57	0	0	57	0	0	57	0	0	57	0	0
YMCA	10-SE	100	25	25	100	25	25	100	25	25	100	25	25
MARTIN STONE QUARRIES INC	10-NW	50	0	0	50	0	0	50	0	0	50	0	0
A W MERCER INC	10-NW	105	20	0	105	20	0	105	20	0	105	20	0
Boyertown Foundry	10-NW	50	0	0	50	0	0	50	0	0	50	0	0
CAMPBELL FITTINGS INC	10-NW	50	0	0	50	0	0	50	0	0	50	0	0
DRUG PLASTICS & GLASS CO INC	10-NW	200	75	0	200	75	0	200	75	0	200	75	0
Global Advanced Metals	10-NW	130	0	0	130	0	0	130	0	0	130	0	0
GATEWAY TICKETING SYSTEMS	10-NW	80	10	10	80	10	10	80	10	10	80	10	10

Table A-1. Major Employers in Limerick EPZ

		population						vehicles					
		Winter			Summer			Winter			Summer		
Major Employer	Zone	week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end
JUDSON A SMITH CO	10-NW	130	0	0	130	0	0	130	0	0	130	0	0
NATIONAL PENN BANCSHARES INC	10-NW	325	15	10	325	15	10	325	15	10	325	15	10
UNICAST CO	10-NW	80	0	0	80	0	0	80	0	0	80	0	0
COSMETIC ESSENCE INC	10-NW	95	15	0	95	15	0	95	15	0	95	15	0
HEALTHWORKS INC	10-NW	50	0	0	50	0	0	50	0	0	50	0	0
STV GROUP INC	10-NW	200	40	0	200	40	0	200	40	0	200	40	0
KULP CAR RENTALS	10-NW	65	25	10	65	25	10	65	25	10	65	25	10
PENFLEX	10-NW	60	0	0	60	0	0	60	0	0	60	0	0

Table A-2. Hotels and Motels in Limerick EPZ

County	Town	Facility Name	Units	Population						Vehicles					
				Winter			Summer			Winter			Summer		
				week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end
Montgomery	Oaks	Hampton Inn & Suites	107	128	128	193	128	128	193	107	107	107	107	107	107
Montgomery	Phoenixville	French Creek Inn	22	26	26	40	26	26	40	22	22	22	22	22	22
Montgomery	Collegeville	Marriott Courtyard	132	158	158	238	158	158	238	132	132	132	132	132	132
Montgomery	Phoenixville	The Mainstay Inn	26	31	31	47	31	31	47	26	26	26	26	26	26
Montgomery	Audubon	Homewood Suites	123	148	148	221	148	148	221	123	123	123	123	123	123
Montgomery	Royersford	Staybridge Suites	105	126	126	189	126	126	189	105	105	105	105	105	105
Montgomery	Skippack	Hotel Fiesole	16	19	19	29	19	19	29	16	16	16	16	16	16
Montgomery	Pottstown	Comfort Inn & Suites	119	143	143	214	143	143	214	119	119	119	119	119	119
Montgomery	Pottstown	Days Inn	119	143	143	214	143	143	214	119	119	119	119	119	119
Montgomery	Pottstown	Fellowship Farm	100	40	40	100	40	40	100	40	40	65	40	40	65
Montgomery	Limerick	Holiday inn Express	71	85	85	128	85	85	128	71	71	71	71	71	71
Montgomery	Pottstown	Quality Inn (f. Travelodge)	98	118	118	176	118	118	176	98	98	98	98	98	98
Montgomery	Pottstown	America's Best Value (f. Days Inn)	59	71	71	106	71	71	106	59	59	59	59	59	59
Montgomery	Pottstown	Motel 6	47	56	56	85	56	56	85	47	47	47	47	47	47
Berks	Douglassville	EconoLodge	36	43	43	65	43	43	65	36	36	36	36	36	36
Berks	New Berlinville	Budget Host Pottstown	19	23	23	34	23	23	34	19	19	19	19	19	19

Table A-3. Recreation and Shopping in Limerick EPZ

County	Town	Facility Name	Population						Vehicle					
			Winter			Summer			Winter			Summer		
			week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end	week-day	week-night	week-end
Berks	Elverson	Hopewell Furnace Historic Site	125	0	125	125	0	180	63	0	63	63	0	90
Berks	Bechtelsvile	Lazy K Campground	0	0	165	225	225	255	0	0	55	75	75	85
Chester	Warwick	Warwick Woods Camp Resort	360	360	360	600	600	660	120	120	120	200	200	220
Chester	Phoenixville	Phoenixville YMCA Program Center	100	0	0	240	0	540	38	0	0	38	0	203
Chester	Pottstown	Warwick County Park	135	40	150	150	40	270	51	15	56	51	15	101
Montgomery	Pottstown	Beulah Land Park	56	56	112	56	56	112	21	21	42	21	21	42
Montgomery	Schwenksville	Central Perkiomen Valley Park	34	0	68	34	0	68	13	0	26	13	0	26
Montgomery	Collegeville	Evansburg State Park	90	0	180	180	0	361	45	0	90	45	0	180
Montgomery	Gilbertsville	Hickory Park Campground	45	45	84	84	84	108	23	23	42	23	23	54
Montgomery	Oaks	Lower Perkiomen Valley Park	92	0	240	240	0	370	35	0	90	35	0	139
Montgomery	Green Lake	Upper Perkiomen Valley Park	619	40	1000	1000	0	1547	233	15	375	233	15	581
Montgomery	Royersford	Upper Schuylkill Valley Park	31	0	150	150	0	316	12	0	56	11	0	119
Montgomery	Pottstown	Shopping Rte 100	600	1500	1500	600	1500	1500	300	750	750	300	750	750
Montgomery	Limerick	Philadelphia Premium Outlets	540	1080	3750	540	1080	2250	270	540	1875	270	540	1125
Montgomery	Royersford	Ridge Pike atTownship Line	450	750	750	450	750	750	225	375	375	225	375	375
Montgomery	Oaks	Shopping District Rte 422	900	1800	1800	900	1800	1800	450	900	900	450	900	900
Chester	Coventry	Coventry Mall	1200	3000	3000	1200	3000	3000	600	1500	1500	600	1500	1500

Table A-4. Schools in the Limerick EPZ

					Population						Vehicles						Vehicles	
					Winter			Summer			Winter			Summer			Winter Day	
County	District	School Name	Students	Staff	Day	Night	Wkd	Day	Night	Wkd	Day	Night	Wkd	Day	Night	Wkd	Buses	Cars
Berks	Boyertown	Boyertown Area Junior High School - East	903	110	1013	0	0	0	0	0	132	0	0	0	0	0	22	44
Berks	Boyertown	Boyertown Area Junior High School - West	791	112	903	0	0	0	0	0	130	0	0	0	0	0	18	58
Berks	Boyertown	Boyertown Area High School	1705	200	1905	0	0	0	0	0	238	0	0	0	0	0	38	86
Berks	Boyertown	Boyertown Elementary School	692	85	777	0	0	0	0	0	101	0	0	0	0	0	16	37
Berks	Boyertown	Colebrookdale Elementary School	294	65	359	0	0	0	0	0	73	0	0	0	0	0	8	41
Berks	Boyertown	Earl Elementary School	300	60	360	0	0	0	0	0	68	0	0	0	0	0	8	36
Berks	Boyertown	Gilbertsville Elementary School	697	80	777	0	0	0	0	0	96	0	0	0	0	0	16	32
Berks	Boyertown	New Hanover-Upper Frederick Elementary School	728	80	808	0	0	0	0	0	98	0	0	0	0	0	18	26
Berks	Boyertown	Pine Forge Elementary School	275	55	330	0	0	0	0	0	63	0	0	0	0	0	8	31
Berks	Boyertown	Washington Elementary School	665	85	750	0	0	0	0	0	101	0	0	0	0	0	16	37
Berks	Boyertown	Jesse Wagner Adventist Elem	24	2	26	0	0	0	0	0	4	0	0	0	0	0	0	4
Berks	Daniel Boone	Amity Primary Center	445	70	515	0	0	0	0	0	80	0	0	0	0	0	10	40
Berks	Daniel Boone	Monocacy Elementary Center	671	90	761	0	0	0	0	0	106	0	0	0	0	0	16	42
Chester	East Pikeland	Montgomery School	271	31	302	0	0	0	0	0	39	0	0	0	0	0	8	7
Chester	Downingtown	Pickering Valley Elementary School	688	85	773	0	0	0	0	0	101	0	0	0	0	0	16	37
Chester	Glenmoore	Upattinas Open Community School	45	4	49	0	0	0	0	0	8	0	0	0	0	0	2	0
Chester	East Pikeland	St. Basil the Great School	198	33	226	0	0	0	0	0	39	0	0	0	0	0	6	15
Chester	Great Valley	Charlestown Elementary School	313	40	353	0	0	0	0	0	48	0	0	0	0	0	8	16
Chester	Owen J. Roberts	East Coventry Elementary School	578	74	652	0	0	0	0	0	88	0	0	0	0	0	14	32
Chester	Owen J. Roberts	French Creek Elementary School	527	66	593	0	0	0	0	0	78	0	0	0	0	0	12	30
Chester	Owen J. Roberts	Kimberton-Waldorf School	301	30	331	0	0	0	0	0	38	0	0	0	0	0	8	6
Chester	Owen J. Roberts	North Coventry Elementary School	613	78	691	0	0	0	0	0	92	0	0	0	0	0	14	36
Chester	Owen J. Roberts	Owen J. Roberts High School	1485	186	1671	0	0	0	0	0	220	0	0	0	0	0	34	84
Chester	Owen J. Roberts	Owen J. Roberts Middle School	781	98	879	0	0	0	0	0	116	0	0	0	0	0	18	44
Chester	Owen J. Roberts	East Vincent Elementary School	536	68	604	0	0	0	0	0	80	0	0	0	0	0	12	32
Chester	Owen J. Roberts	West Vincent Elementary School	506	64	570	0	0	0	0	0	76	0	0	0	0	0	12	28
Chester	Phoenixville	Barkley Elementary School	356	46	402	0	0	0	0	0	54	0	0	0	0	0	8	22
Chester	Phoenixville	Center for Arts and Tecnology-Pickering Campus	517	66	583	0	0	0	0	0	78	0	0	0	0	0	12	30
Chester	Phoenixville	East Pikeland Elementary School	327	42	369	0	0	0	0	0	50	0	0	0	0	0	8	18
Chester	Phoenixville	Holy Family School	352	44	396	0	0	0	0	0	52	0	0	0	0	0	8	20
Chester	Phoenixville	Phoenixville Area High School	898	114	1012	0	0	0	0	0	134	0	0	0	0	0	20	54
Chester	Phoenixville	Phoenixville Area Middle School	750	94	844	0	0	0	0	0	112	0	0	0	0	0	18	40
Chester	Phoenixville	Renaissance Academy	942	118	1060	0	0	0	0	0	140	0	0	0	0	0	22	52
Chester	Phoenixville	Schuylkill Elementary School	693	88	781	0	0	0	0	0	104	0	0	0	0	0	16	40
Chester	Phoenixville	Valley Forge Christian College	800	80	880	720	220	0	0	0	510	360	110	0	0	0	18	438
Montgomery	Methacton	Arrowhead Elementary School	326	42	368	0	0	0	0	0	50	0	0	0	0	0	8	18
Montgomery	Collegeville	Collegeville Montessori Academy	39	6	45	0	0	0	0	0	8	0	0	0	0	0	2	0
Montgomery	Perkiomen Valley	St. Eleanor School	500	64	564	0	0	0	0	0	76	0	0	0	0	0	12	28
Montgomery	Methacton	Eagleville Elementary School	338	44	382	0	0	0	0	0	52	0	0	0	0	0	8	20
Montgomery	Spring-Ford	Limerick Elementary School	396	50	446	0	0	0	0	0	60	0	0	0	0	0	10	20
Montgomery	Limerick	Western Center for Technical Studies	459	58	517	0	0	0	0	0	70	0	0	0	0	0	12	22
Montgomery	Methacton	Arcola Intermediate School	842	106	948	0	0	0	0	0	126	0	0	0	0	0	20	46
Montgomery	Methacton	Woodland Elementary	291	38	329	0	0	0	0	0	46	0	0	0	0	0	8	14
Montgomery	Methacton	Audubon Elementary	401	52	453	0	0	0	0	0	62	0	0	0	0	0	10	22
Montgomery	Methacton	Skyview Upper Elementary School	785	100	885	0	0	0	0	0	118	0	0	0	0	0	18	46
Montgomery	Methacton	St. Gabriels Hall	210	28	238	220	220	180	180	180	34	32	32	28	28	28	6	10
Montgomery	Spring-Ford	Oaks Elementary School	520	66	586	0	0	0	0	0	78	0	0	0	0	0	12	30
Montgomery	Perkiomen Valley	Evergreen Elementary School	685	86	771	0	0	0	0	0	102	0	0	0	0	0	16	38
Montgomery	Perkiomen Valley	Perkiomen Valley South Elementary School	627	80	707	0	0	0	0	0	94	0	0	0	0	0	14	38
Montgomery	Perkiomen Valley	Schwenksville Elementary School	541	68	609	0	0	0	0	0	82	0	0	0	0	0	14	26

Table A-4. Schools in the Limerick EPZ

					Population						Vehicles						Vehicles	
					Winter			Summer			Winter			Summer			Winter Day	
County	District	School Name	Students	Staff	Day	Night	Wkd	Day	Night	Wkd	Day	Night	Wkd	Day	Night	Wkd	Buses	Cars
Montgomery	Perkiomen Valley	Perkiomen Valley High School	1808	226	2034	0	0	0	0	0	268	0	0	0	0	0	42	100
Montgomery	Perkiomen Valley	Perkiomen Valley Middle School - East	782	98	880	0	0	0	0	0	116	0	0	0	0	0	18	44
Montgomery	Perkiomen Valley	Perkiomen Valley Middle School - West	605	76	681	0	0	0	0	0	56	0	0	0	0	0	14	
Montgomery	Perkiomen Valley	Skippack Elementary School	782	98	880	0	0	0	0	0	116	0	0	0	0	0	18	44
Montgomery	Perkiomen Valley	Valley Forge Baptist Temple Academy	185	24	209	0	0	0	0	0	30	0	0	0	0	0	6	6
Montgomery	Perkiomen Valley	New Life Youth & Family Services	53	8	61	55	55	55	55	55	8	8	8	8	8	8	2	
Montgomery	Boyertown	Perkiomen Valley Academy	24	4	21	0	0	21	0	0	8	0	0	8	0	0	2	
Montgomery	Perkiomen Valley	Bright Spot Child Care	130	18	148	0	0	111	0	0	16	0	0	12	0	0	4	
Montgomery	Pottsgrove	West-Mont Christian Academy	315	40	355	0	0	0	0	0	48	0	0	0	0	0	8	16
Montgomery	Pottstown	Elizabeth B. Barth Elementary School	421	54	475	0	0	0	0	0	64	0	0	0	0	0	10	24
Montgomery	Pottstown	Edgewood Elementary School	288	36	324	0	0	0	0	0	44	0	0	0	0	0	8	12
Montgomery	Pottstown	Franklin Elementary School	301	38	339	0	0	0	0	0	46	0	0	0	0	0	8	14
Montgomery	Pottstown	The Hill School	496	62	558	516	82	160	160	82	62	44	12	16	16	12	12	14
Montgomery	Pottstown	Lincoln Elementary School	378	48	426	0	0	0	0	0	58	0	0	0	0	0	10	18
Montgomery	Pottstown	Pottstown Middle School	600	76	676	0	0	0	0	0	90	0	0	0	0	0	14	34
Montgomery	Pottstown	Pottstown High School	823	104	927	0	0	0	0	0	124	0	0	0	0	0	20	44
Montgomery	Pottstown	Coventry Christian School	420	54	474	0	0	0	0	0	64	0	0	0	0	0	10	24
Montgomery	Pottstown	Mount Calvary Academy	333	42	375	0	0	0	0	0	50	0	0	0	0	0	8	18
Montgomery	Pottsgrove	Ringing Rocks Elementary	344	44	388	0	0	0	0	0	52	0	0	0	0	0	8	20
Montgomery	Pottsgrove	West Pottsgrove Elementary School	461	58	519	0	0	0	0	0	70	0	0	0	0	0	12	22
Montgomery	Pottsgrove	Lower Pottsgrove Elementary School	655	82	737	0	0	0	0	0	98	0	0	0	0	0	16	34
Montgomery	Pottsgrove	Pottsgrove Middle School	762	96	858	0	0	0	0	0	114	0	0	0	0	0	18	42
Montgomery	Pottsgrove	Pottsgrove High School	1065	134	1199	0	0	0	0	0	158	0	0	0	0	0	24	62
Montgomery	Pottstown	Rupert Elementary School	270	34	304	0	0	0	0	0	40	0	0	0	0	0	6	16
Montgomery	Pottstown	St. Aloysius	522	66	588	0	0	0	0	0	78	0	0	0	0	0	12	30
Montgomery	Pottstown	St. Peter's School	182	24	206	0	0	0	0	0	30	0	0	0	0	0	6	6
Montgomery	Pottstown	Wyndcroft School	233	30	263	0	0	0	0	0	36	0	0	0	0	0	6	12
Montgomery	Spring-Ford	Royersford Elementary School	431	54	485	0	0	0	0	0	64	0	0	0	0	0	10	24
Montgomery	Spring-Ford	Sacred Heart	115	14	129	0	0	0	0	0	18	0	0	0	0	0	4	2
Montgomery	Sauderton	Salford Hills Elementary	330	42	372	0	0	0	0	0	50	0	0	0	0	0	8	18
Montgomery	Perkiomen Valley	St. Mary's	345	44	389	0	0	0	0	0	52	0	0	0	0	0	8	20
Montgomery	Spring-Ford	Brooke Elementary School	421	54	475	0	0	0	0	0	64	0	0	0	0	0	10	24
Montgomery	Spring-Ford	Spring City Elementary School	158	20	178	0	0	0	0	0	24	0	0	0	0	0	4	8
Montgomery	Collegeville	Ursinus College	1750	200	1950	1310	1200	450	350	200	960	640	420	240	180	100	40	800
Montgomery	Spring-Ford	Evans Elementary School	597	76	673	0	0	0	0	0	90	0	0	0	0	0	14	34
Montgomery	Spring-Ford	Upper Providence Elementary School	532	68	600	0	0	0	0	0	80	0	0	0	0	0	12	32
Montgomery	Spring-Ford	5th - 6th Grade Center	1258	158	1416	0	0	0	0	0	186	0	0	0	0	0	28	74
Montgomery	Spring-Ford	7th Grade Center	589	74	663	0	0	0	0	0	88	0	0	0	0	0	14	32
Montgomery	Spring-Ford	8th Grade Center	609	78	687	0	0	0	0	0	92	0	0	0	0	0	14	36
Montgomery	Spring-Ford	10th & 12th Grade Center	1522	192	1714	0	0	0	0	0	226	0	0	0	0	0	34	90
Montgomery	Spring-Ford	9th Grade Center	579	74	653	0	0	0	0	0	88	0	0	0	0	0	14	32
Montgomery	Spring-Ford	Pope John Paul II	896	60	956	0	0	0	0	0	80	0	0	0	0	0	20	0
Montgomery	Spring-Ford	Blessed Theresa of Calcutta	239	16	255	0	0	0	0	0	24	0	0	0	0	0	6	0
Montgomery	Spring-Ford	Chesterbrook Academy	120	20	140	0	0	0	0	0	24	0	0	0	0	0	4	8

Table A-5. Pre-School and Daycare Facilities in Limerick EPZ

			Population		vehicles	
County	Town	Facility Name	winter	summer	winter	summer
Berks	Boyertown	Almost Home Children's Center	87	65	15	13
Berks	Boyertown	Boyertown Area YMCA	371	278	51	39
Berks	Boyertown	Boyertown YMCA (2)	283	212	40	31
Berks	Boyertown	St. Joseph's (Hill) Lutheran Church Day Care Center	75	56	14	11
Berks	Douglassville	Douglassville Children's Center	73	55	14	11
Berks	Douglassville	Douglassville Kindercare - 2324	129	97	21	17
Berks	Douglassville	St. Gabriel's Good Shepherd Learning Center	100	75	17	14
Berks	Douglassville	St. Paul's Day Care	159	119	24	19
Chester	Chester Springs	Bright Light Learning Ctr	119	89	19	16
Chester	Chester Springs	Goddard School Chester Springs	116	87	19	15
Chester	Phoenixville	International Montessori	56	42	11	8
Chester	Phoenixville	Kiddie Academy	135	101	21	17
Chester	Phoenixville	Kindercare Learning Center No. 1405	137	103	22	17
Chester	Phoenixville	Little Angels Day Care	70	53	13	11
Chester	Phoenixville	Magic Memories	65	49	13	10
Chester	Phoenixville	Phoenixville Area Children's Learning Center	78	59	14	12
Chester	Phoenixville	Children's Learning Center 2	91	68	16	13
Chester	Phoenixville	Phoenixville Area YMCA Child Care Center	237	178	34	27
Chester	Phoenixville	Stepping Stone Education Center of Phoenixville	50	38	10	8
Chester	Phoenixville	Teach & Learn Day School	64	48	13	10
Chester	Phoenixville	Malvern School	136	102	22	17
Chester	Phoenixville	Valley Forge Kinder House	43	32	9	6
Chester	Pottstown	Coventry Christian Schools	150	113	23	19
Chester	Pottstown	Our House Early Learning Center	42	32	8	6
Chester	Pottstown	Pottstown YMCA French Ck	22	17	4	3
Chester	Pottstown	Warwick Child Care - South Coventry Center	89	67	16	13
Chester	Pottstown	Warwick Child Care - North Coventry Center	246	185	35	28
Chester	Spring City	Grace Assembly Day Care Center	59	44	12	9
Chester	Spring City	Kids Kare Korner	29	22	6	4
Chester	Spring City	Our Place to Grow	35	26	7	5
Berks	Boyertown	Boyertown Area YMCA Growing Dreams Child Care Center	283	212	40	31
Berks	Boyertown	Boyertown Children's Center	76	57	14	11
Montgomery	Audubon	FV YMCA Audubon Elem	65	49	13	10
Montgomery	Audubon	FV YMCA Woodland Elem	127	95	20	16
Montgomery	Audubon	Short Stuff & Co	132	99	21	17
Montgomery	Audubon	Valley Forge Children's Academy	96	72	17	14
Montgomery	Audubon	Victory Early Learning Academy	97	73	17	14
Montgomery	Collegeville	Chesterbrook Academy	169	127	26	20
Montgomery	Collegeville	Creative Beginnings Preschool	40	30	8	6
Montgomery	Collegeville	Creative Child Care Too	77	58	14	12
Montgomery	Collegeville	Freedom Valley YMCA Perkiomen Valley MS	144	108	23	18
Montgomery	Collegeville	FV YMCA South Elem	34	26	7	5
Montgomery	Collegeville	Flanagan's Pre-School	150	113	23	19
Montgomery	Collegeville	Kiddie Academy C'Ville	186	140	28	22
Montgomery	Collegeville	Kindercare 3060	135	101	21	17
Montgomery	Collegeville	Kindercare - Building A 2332	129	97	21	17
Montgomery	Collegeville	Phoenixville Area YMCA-Arrowhead Elem School	110	83	18	15
Montgomery	Collegeville	Play and Learn Center - Collegeville	102	77	17	14
Montgomery	Collegeville	Malvern School	136	102	22	17
Montgomery	Collegeville	Tot Spot Learnin Ctr	69	52	13	10
Montgomery	Collegeville	Tykes and Tots Day Care	86	65	15	13
Montgomery	Eaglesville	Phoenixville Area YMCA - Eagleville Elementary School	158	119	24	19
Montgomery	Gilbertsville	Creative Moments	104	78	18	14
Montgomery	Gilbertsville	New Hanover Child Care	58	44	12	9
Montgomery	Gilbertsville	The Goddard School	112	84	19	15
Montgomery	Gilbertsville	Hendricks Family Growing Dreams	278	209	39	31
Montgomery	Gilbertsville	Little Faces Learning Center	49	37	10	7
Montgomery	Green Lane	Play and Learn - Green Lane	189	142	28	22

Table A-5. Pre-School and Daycare Facilities in Limerick EPZ

			Population		vehicles	
County	Town	Facility Name	winter	summer	winter	summer
Montgomery	Harleysville	N Penn YMCA - Salford Hills ES	107	80	18	15
Montgomery	Harleysville	Castle Academy	209	157	31	24
Montgomery	Limerick	Bright Beginnings Child Care Center	74	56	14	11
Montgomery	Oaks	Oaks Early Learning	79	59	14	12
Montgomery	Oaks	Phoenixville Area YMCA-Oaks Elementary School	193	145	29	23
Montgomery	Oaks	SEI Family Center	92	69	16	13
Montgomery	Pottstown	Coventry Christian Schools 2	104	78	18	14
Montgomery	Pottstown	Creative Minds Montessori	145	109	23	18
Montgomery	Pottstown	Dotlen Academy	50	38	10	8
Montgomery	Pottstown	Sunny Dayz Child Care	24	18	5	4
Montgomery	Pottstown	Montgomery Early Learning Center - Pottstown Center	263	197	37	29
Montgomery	Pottstown	Kindercare 3056	160	120	25	20
Montgomery	Pottstown	FV YMCA Pottstown Day Care	229	172	33	26
Montgomery	Pottstown	Little Footprints	91	68	16	13
Montgomery	Pottstown	Little Mary Daycare	58	44	12	9
Montgomery	Pottstown	The Learning Experience	158	119	24	19
Montgomery	Pottstown	Wee Care Child Dev Ctr	81	61	15	12
Montgomery	Pottstown	YWCA Hill School Preschool	11	8	2	2
Montgomery	Pottstown	YWCA ready set grow	97	73	17	14
Montgomery	Pottstown	YWCA Tricounty Daycare	12	9	2	2
Montgomery	Royersford	Providence Christian Preschool	61	46	12	9
Montgomery	Royersford	Chesterbrook Academy	366	275	50	39
Montgomery	Royersford	Chesterbrook Academy 2	137	103	22	17
Montgomery	Royersford	Goddard School of Royersford	160	120	25	20
Montgomery	Royersford	Kids Kare Korner III	144	108	23	18
Montgomery	Royersford	Kiddie Academy Royersford	175	131	26	21
Montgomery	Royersford	Kinder Works	190	143	28	22
Montgomery	Royersford	Malvern School	141	106	22	18
Montgomery	Royersford	FV YMCA - Brooke Elementary	87	65	15	13
Montgomery	Royersford	FV YMCA - Limerick Elementary	125	94	20	16
Montgomery	Royersford	FV YMCA - Royersford Center	81	61	15	12
Montgomery	Royersford	FV YMCA - Evans Elementary	184	138	28	22
Montgomery	Royersford	FV YMCA - Spring Valley	29	22	6	4
Montgomery	Royersford	FV YMCA - Royersford Elem	123	92	20	16
Montgomery	Royersford	Tot Time Child Dev Ctr	67	50	13	10
Montgomery	Sanatoga	The Goddard School	119	89	19	16
Montgomery	Skippack	Goddard School	117	88	19	15
Montgomery	Schwencksville	North Penn YMCA Schwenk ES	234	176	34	26
Montgomery	Schwencksville	Jerusalem Lutheran Day Care Center	43	32	9	6
Montgomery	Schwencksville	Goddard School	115	86	19	15
Montgomery	Trappe	Children of America Trappe	156	117	24	19
Montgomery	Trappe	Twin Acres Country Day School	68	51	13	10

Table A-6. Health and Correctional Facilities in Limerick EPZ

County	Town	Facility Name	patients	non-ambulatory	staff		Population		Vehicles		bus	WC bus	ambu-lance
					day	night	Day	Night/Wkd	Day	Night			
Chester	Phoenixville	Phoenixville Hospital of the University of Pennsylvania Health System Inc.	127	60	100	50	227	177	86	60	3	5	5
Chester	Phoenixville	Phoenixville Convalescent Manor	68	50	25	15	93	83	24	18	1	4	5
Chester	Spring City	Southeastern Pennsylvania Veterans Center	185	20	104	45	289	230	136	106	8	4	2
Chester	Kimberton	The Woodbridge	120	10	30	12	150	132	72	64	6	2	1
Chester	Phoenixville	Golden Living Center	130	5	75	20	205	150	102	76	6	2	1
Chester	Phoenixville	Genesis Health Care at Spring Mill	22	2	14	6	36	28	20	16	1	0	1
Montgomery	Royersford	Parkhouse, Providence Pointe	451	51	150	45	601	496	278	224	20	5	3
Montgomery	Eagleville	Eagleville Hospital	272	50	100	36	372	308	164	132	11	5	3
Montgomery	Eagleville	Montgomery County Correctional Facility	1000	20	200	120	1200	1120	100	33	49	4	2
Montgomery	Audubon	Meadows at Shannondell	60	10	40	10	100	70	48	32	3	2	1
Montgomery	Pottstown	Coventry Manor	41	8	12	6	53	47	26	22	2	2	0
Montgomery	Pottstown	Frederick Mennonite Home	126	30	32	18	158	144	66	58	5	6	3
Montgomery	Pottstown	Manor Care Health Services	206	103	52	32	258	238	80	70	5	10	5
Montgomery	Pottstown	Manatawny Manor	120	80	30	20	150	140	36	30	2	8	4
Montgomery	Pottstown	Montgomery County Geriatric and Rehabilitation Center	591	471	187	120	778	711	154	122	6	47	24
Montgomery	Pottstown	Pottstown Memorial Medical Center	295	180	480	320	775	615	300	220	6	17	12
Montgomery	Pottstown	Sanatoga Center	119	24	24	15	143	134	62	56	5	4	2
Montgomery	Pottstown	Park Lane Commons	85	10	50	15	135	100	64	48	4	2	1
Berks	Douglassville	Chestnut Knoll	100	10	40	16	140	116	68	56	5	2	1
Berks	Douglassville	Colonial Manor	24	4	8	4	32	28	16	14	1	1	0
Berks	Douglassville	Keystone Villa	114	14	45	20	159	134	74	62	5	2	1
Berks	Amity	Hearthstone at Amity	100	10	70	15	170	115	82	54	5	2	1

*Number of ambulance and WC bus are based on two trips for facilities with 50 or more non-ambulatory patients.

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Appendix B

Telephone Survey of EPZ Residents

Limerick EPZ

Summary of Telephone Survey Results

Completed surveys	384
Age unknown	67
responses analyzed	317
Demographic	
total population	292213
total HH	107370
persons per HH	2.72
Results (after adjustment)	
vehicles used to evacuate when all at home	1.22
fraction taking 1 vehicle	0.80
fraction taking 2 veh	0.18
fraction taking 3 or more	0.02

Age Mix	SURVEY Response (percent)	census 2010 age for head of household (percent)	adjustment factor
under 24	2.21	2.17	1.77
25-34	4.73	13.17	1.77
35-44	12.30	21.45	1.77
45-54	16.40	25.13	1.77
55-64	21.45	17.84	0.83
65 and over	42.90	20.24	0.47

Work Outside Home	(% of HH)
one or more work outside	74.1
Of those who work outside	percent
take vehicle	90.3
depart direct	34.0
stay outside EPZ	21.5
return home	44.5
one returns	21.2
2 or more return	13.6

Work Shifts	(percent)
Weekday	82.0
Swing shift	4.3
Graveyard	0.3
evening/weekend	7.0
rotate	6.4

time distribution (fraction)	**0 to 15** minutes	**15 to 30** minutes	**30 to 45** minutes	**45 to 60** minutes	**> 60** minutes
leave work after notice	0.76	0.16	0.05	0.02	0.02
travel home	0.42	0.32	0.16	0.05	0.05
depart after work return	0.37	0.45	0.09	0.06	0.03
	0 to 20	**20 to 40**	**40 to 60**	**60 to 90**	**> 90**
depart (all at home)	0.31	0.44	0.15	0.08	0.02

ARCADIS
Exelon Survey
Final v6 - August 23, 2011

INTRODUCTION

Hello, my name is _____ and I am calling from MDC Research, a public opinion firm. We are conducting a brief survey to gather information from households in your area about emergency response planning, and we'd like to include your opinions. This survey is being conducted on behalf of the (insert facility name) Nuclear Facility, and will take approximately 5 minutes to complete. We are not trying to sell you anything. The information gathered from this survey will help local agencies more effectively provide community assistance should an emergency situation arise.

Can I please speak with an adult member of the household?

SCREENER

S1. What is the zip code of your primary residence? This is the home where you live the majority of the time. DO NOT READ ZIP CODE LIST

List of appropriate zip codes will be displayed here
99999 Location outside the EPZ – **THANK & TERMINATE**

S2. Which of the following categories best describes your age?

11 Under 18 yrs of age – **ASK FOR REFERRAL or THANK & TERMINATE**
12 18 to 24
13 25 to 34
14 35 to 44
15 45 to 54
16 55 to 64
17 65 to 74
18 75 or older
98 (DO NOT READ) Refused

QUESTIONNAIRE

Q1 How many people currently reside in your household?

Record: _____ # of residents
998 **(DO NOT READ)** Refused – **THANK & TERMINATE**

Q2 How many motor vehicles are normally based at your home?

Record: _____ # of vehicles
997 None - **SKIP TO Q14**
998 **(DO NOT READ)** Refused

Q3 How many members of your household are over the age of 16?

Record: _____ # of residents
998 **(DO NOT READ)** Refused

Q4 How many members of your household are licensed drivers?

Record: _____ # of drivers
998 **(DO NOT READ)** Refused

Q5 How many of the adults in your household work outside the home?

Record _____ → **Skip to Q6A**
997 None – **Continue to Q5A**
998 **(DO NOT READ)** Refused
If refused, explain; The nature of this project is to estimate traffic volumes and flow in the event of an emergency evacuation, so this data is necessary in order for us to continue with the survey.
If still refused - **THANK & TERMINATE**

Q5A (ONLY ASK IF Q5=997) Which of the following best describes the non-working adults in your household? MULTIPLE MENTION – IP NOTE: No more mentions than Q3 mentions.

11 Currently unemployed/actively looking for work
12 Retired
13 On Disability or leave of absence
14 Student/continuing education
15 Homemaker
99 Other – please specify

SKIP TO Q11

Repeat the following Q6A-F sequence for each working adult cited in Q5

For each of the working adults you just referenced, I'd like to ask a few questions related to what their likely actions would be in the case of an emergency evacuation. I understand that I will be asking you to speculate on what other members of the household may do in this situation, but your best guesses are just fine for our purposes.

Q6A Who is the first working adult in the household that you are thinking about? What is their relationship to you?

1 Self
2 Spouse or significant other
3 Parent of child
4 Other relative or in-law
5 Roommate
6 Boarder
7 Other

Q6B Which of the following best describes this person's usual work schedule?

1 Monday – Friday, 8:00am to 5:00pm
2 Swing Shift
3 Graveyard
4 Evenings and weekends
5 Rotating shifts
6 Other or irregular schedule
7 **(DO NOT READ)** Don't know

Q6C Does this person generally use a personal vehicle to commute back and forth to work?

1 Yes
2 No
7 **(DO NOT READ)** Don't know

Q6D If an evacuation notice were given while this person was at work, do you think they would most likely…

1 Evacuate directly from work
2 Come home first and then evacuate, or
3 Stay outside the evacuation zone where they work → **Skip to Q7**
7 **(DO NOT READ)** Don't know

Q6E How long do you think it would take this person to get prepared and actually leave work? **(Read list if necessary)**

1 Less than 15 minutes
2 15 to 30 minutes
3 30 to 45 minutes
4 45 to 60 minutes
5 More than 60 minutes
7 **(DO NOT READ)** Don't know

If response at 6D is 1, skip from here to Q7

Q6F About how long does it take this household member to get from work to home? **(Read list if necessary)**

1 Less than 15 minutes
2 15 to 30 minutes
3 30 to 45 minutes
4 45 to 60 minutes
5 More than 60 minutes
7 **(DO NOT READ)** Don't know

Q7A-F Repeat Q6 sequence for worker #2

Q8A-F Repeat Q6 sequence for worker #3

Q9A-F Repeat Q6 sequence for worker #4

Q10 And once everyone who is coming home from work has arrived, how long would it take to prepare and depart from home, taking into consideration whether or not someone else is usually home who may be starting these preparation while they are travelling?

1 Less than 15 minutes
2 15 to 30 minutes
3 30 to 45 minutes
4 45 to 60 minutes
5 More than 60 minutes
7 **(DO NOT READ)** Don't know

Q11 Are any of the licensed drivers in your household restricted to **daytime driving** only?

1 Yes
2 No
9 **(DO NOT READ)** Refused

Q12 If an evacuation were ordered when all household members were at home (for example, at night or on a weekend), approximately how long would it take your household to

prepare to depart? Please assume that you are advised to plan to be away from your home for 3 days. Would you say that it would take… READ LIST

1 Less than 20 minutes to depart
2 20 to 40 minutes to depart
3 40 to 60 minutes to depart
4 60 to 90 minutes to depart; or
5 More than 90 minutes to depart

Q13 How many vehicles would your household take if an evacuation were ordered when all household members were at home?

Record: _____ # of vehicles
998 **(DO NOT READ)** Refused

Q14 Are any members of your household seasonal residents? And by seasonal we mean any people who do **not** reside in your home the majority of the year.

1 Yes
2 No - **SKIP TO Q15**
9 **(DO NOT READ)** Refused

Q14A (ASK IF Q14=1) How many of your <insert Q1 response> household members are seasonal?

Record: _____ # of seasonal household members
998 **(DO NOT READ)** Refused

Q14B (ASK IF Q14=1) What seasons do they live in another location away from your home? READ LIST – Multiple Mention

1 Spring
2 Summer
3 Fall
4 Winter

Q15 Would any member of your household require a specialized vehicle, such as a wheelchair, van or ambulance, to evacuate from your home in case of an emergency?

1 Yes
2 No

9 **(DO NOT READ)** Refused

This is all the questions we have for you today/tonight. Thank you for participating in this survey. Your responses will help us to make an accurate prediction of traffic conditions during an emergency situation. If you have any questions about this survey, please feel free to contact <insert contact name, job title, and phone number/email>.

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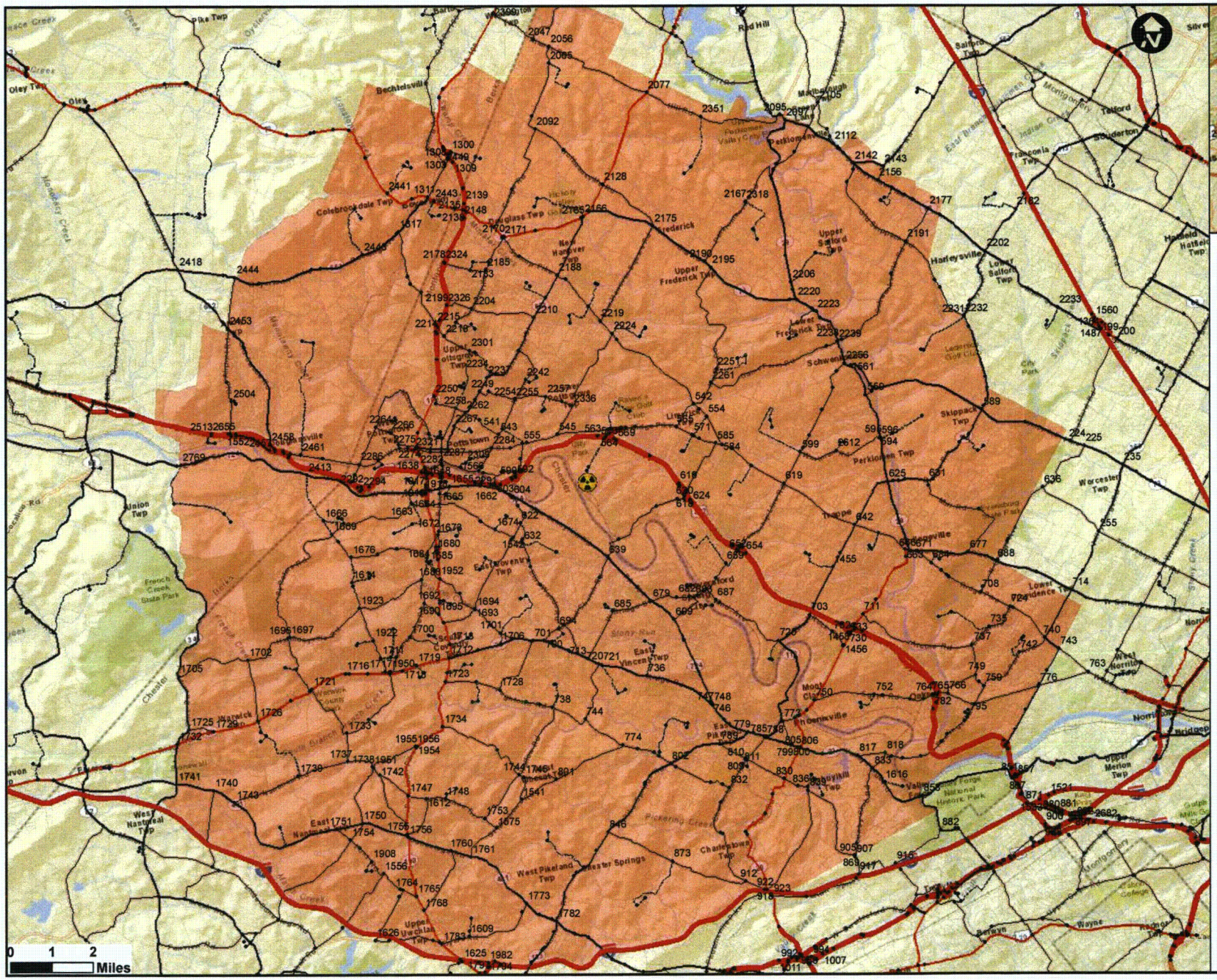
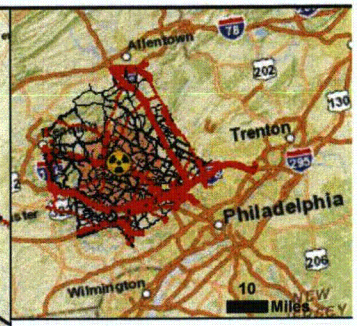
Appendix C

Roadway Network Map and Data Table





Roadway Network for Limerick Station ETE Analysis

August 2012

Legend

- Limerick Station
- Nodes

Road Classification

- Freeway
- Principal Arterial
- Major Arterial
- Minor Arterial
- Collector
- Local Rd
- Limrick EPZ

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Exelon.

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1	155	156	2.174	11	1	Principal Arterial	1700	55
2	156	155	2.174	11	1	Principal Arterial	1700	55
3	156	157	3.991	11	2	Principal Arterial	3300	45
4	157	156	3.991	11	2	Principal Arterial	3300	45
5	165	166	0.016	11	1	Principal Arterial	1700	45
6	166	165	0.016	11	1	Principal Arterial	1700	45
7	166	167	0.022	11	1	Principal Arterial	1700	45
8	167	166	0.022	11	1	Principal Arterial	1700	45
9	167	168	0.016	11	1	Principal Arterial	1700	45
10	168	167	0.016	11	1	Principal Arterial	1700	45
11	169	170	0.023	11	1	Principal Arterial	1700	45
12	170	169	0.023	11	1	Principal Arterial	1700	45
13	170	171	0.027	11	1	Principal Arterial	1700	45
14	171	170	0.027	11	1	Principal Arterial	1700	45
15	171	172	0.018	11	1	Principal Arterial	1700	45
16	172	171	0.018	11	1	Principal Arterial	1700	45
17	174	175	0.02	11	1	Minor Arterial	1700	40
18	175	174	0.02	11	1	Minor Arterial	1700	40
19	164	177	0.206	12	1	Ramp	1500	35
20	177	165	0.019	12	1	Ramp	1500	35
21	177	166	0.021	12	1	Ramp	1500	35
22	178	179	0.261	12	1	Ramp	1500	35
23	168	180	0.015	12	1	Ramp	1500	35
24	167	180	0.024	12	1	Ramp	1500	35
25	169	178	0.024	12	1	Ramp	1500	35
26	170	178	0.039	12	1	Ramp	1500	35
27	181	172	0.017	12	1	Ramp	1500	35
28	181	171	0.02	12	1	Ramp	1500	35
29	180	182	0.244	12	1	Ramp	1500	35
30	183	181	0.191	12	1	Ramp	1500	35
31	184	185	0.142	12	1	Ramp	1500	35
32	174	184	0.031	12	1	Ramp	1500	35
33	175	184	0.024	12	1	Ramp	1500	35
34	186	174	0.028	12	1	Ramp	1500	35
35	186	175	0.019	12	1	Ramp	1500	35
36	188	187	0.022	12	1	Ramp	1500	35
37	189	186	0.204	12	1	Ramp	1500	35
38	191	190	0.189	12	1	Ramp	1500	35
39	159	192	0.283	11	1	Principal Arterial	1700	45
40	193	194	0.04	11	1	Collector / Local Road	1700	40
41	193	195	0.062	11	2	Principal Arterial	3300	45
42	195	193	0.062	11	2	Principal Arterial	3300	45
43	194	195	0.058	11	1	Major Arterial	1700	45
44	195	194	0.058	11	1	Major Arterial	1700	45
45	203	202	0.025	11	1	Collector / Local Road	1700	40
46	203	204	0.029	11	1	Major Arterial	1700	45
47	204	203	0.029	11	1	Major Arterial	1700	45
48	202	204	0.023	11	1	Collector / Local Road	1700	40
49	204	202	0.023	11	1	Collector / Local Road	1700	40
50	207	208	0.13	11	1	Principal Arterial	1700	45
51	208	207	0.13	11	1	Principal Arterial	1700	45
52	209	211	0.24	10	1	Collector / Local Road	800	15
53	211	209	0.24	10	1	Collector / Local Road	800	15
54	209	212	0.344	11	1	Major Arterial	1700	50
55	212	209	0.344	11	1	Major Arterial	1700	50
56	217	218	0.183	11	1	Major Arterial	1700	45
57	218	217	0.183	11	1	Major Arterial	1700	45
58	218	219	0.129	11	1	Major Arterial	1700	45
59	219	218	0.129	11	1	Major Arterial	1700	45
60	217	220	0.294	11	1	Principal Arterial	1700	45
61	220	217	0.294	11	1	Principal Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
62	221	222	0.024	11	1	Major Arterial	1700	50
63	222	221	0.024	11	1	Major Arterial	1700	50
64	223	222	0.032	11	1	Collector / Local Road	1700	40
65	221	223	0.027	11	1	Collector / Local Road	1700	40
66	223	221	0.027	11	1	Collector / Local Road	1700	40
67	224	225	0.359	11	1	Major Arterial	1700	45
68	225	224	0.359	11	1	Major Arterial	1700	45
69	226	227	0.077	11	1	Major Arterial	1700	45
70	227	226	0.077	11	1	Major Arterial	1700	45
71	226	228	0.122	11	1	Major Arterial	1700	45
72	228	226	0.122	11	1	Major Arterial	1700	45
73	229	230	0.165	11	1	Principal Arterial	1700	45
74	230	229	0.165	11	1	Principal Arterial	1700	45
75	229	228	0.137	11	1	Collector / Local Road	1700	40
76	229	232	0.231	11	1	Principal Arterial	1700	45
77	232	229	0.231	11	1	Principal Arterial	1700	45
78	232	233	0.057	11	1	Principal Arterial	1700	45
79	233	232	0.057	11	1	Principal Arterial	1700	45
80	231	234	0.23	11	1	Principal Arterial	1700	45
81	234	231	0.23	11	1	Principal Arterial	1700	45
82	235	236	0.372	12	1	Major Arterial	1700	35
83	236	235	0.372	12	1	Major Arterial	1700	35
84	239	240	0.035	11	1	Collector / Local Road	1700	40
85	239	241	0.036	11	1	Minor Arterial	1700	40
86	241	239	0.036	11	1	Minor Arterial	1700	40
87	240	241	0.033	11	1	Major Arterial	1700	50
88	241	240	0.033	11	1	Major Arterial	1700	50
89	241	242	0.023	11	1	Minor Arterial	1700	40
90	242	241	0.023	11	1	Minor Arterial	1700	40
91	242	244	0.07	11	1	Minor Arterial	1700	40
92	244	242	0.07	11	1	Minor Arterial	1700	40
93	242	245	0.074	11	1	Collector / Local Road	1700	40
94	244	246	0.057	11	1	Collector / Local Road	1700	40
95	246	244	0.057	11	1	Collector / Local Road	1700	40
96	245	246	0.026	11	1	Collector / Local Road	1700	40
97	246	247	0.027	11	1	Collector / Local Road	1700	40
98	247	246	0.027	11	1	Collector / Local Road	1700	40
99	245	247	0.042	11	1	Collector / Local Road	1700	40
100	248	249	0.047	11	1	Major Arterial	1250	45
101	249	248	0.047	11	1	Major Arterial	1250	45
102	252	253	0.037	11	1	Major Arterial	1700	50
103	253	252	0.037	11	1	Major Arterial	1700	50
104	260	261	0.016	11	1	Minor Arterial	1700	40
105	261	260	0.016	11	1	Minor Arterial	1700	40
106	265	266	0.238	11	1	Minor Arterial	1700	40
107	266	265	0.238	11	1	Minor Arterial	1700	40
108	266	267	0.267	11	1	Minor Arterial	1700	40
109	267	266	0.267	11	1	Minor Arterial	1700	40
110	276	277	0.02	12	1	Major Arterial	1700	35
111	277	276	0.02	12	1	Major Arterial	1700	35
112	277	278	0.016	11	1	Collector / Local Road	1700	40
113	278	277	0.016	11	1	Collector / Local Road	1700	40
114	276	278	0.022	11	1	Collector / Local Road	1700	40
115	283	279	0.049	11	1	Collector / Local Road	1700	40
116	283	282	0.029	11	1	Collector / Local Road	1700	40
117	282	284	0.03	11	1	Collector / Local Road	1700	40
118	285	284	0.113	11	1	Collector / Local Road	1700	40
119	282	285	0.103	11	1	Minor Arterial	1700	40
120	285	282	0.103	11	1	Minor Arterial	1700	40
121	275	286	0.269	11	1	Major Arterial	1700	45
122	286	275	0.269	11	1	Major Arterial	1700	45
123	290	291	0.024	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
124	294	293	0.027	11	1	Collector / Local Road	1700	40
125	295	296	0.024	11	1	Principal Arterial	1700	45
126	296	295	0.024	11	1	Principal Arterial	1700	45
127	297	296	0.03	11	1	Collector / Local Road	1700	45
128	295	297	0.024	12	2	Major Arterial	2700	35
129	297	295	0.024	12	2	Major Arterial	2700	35
130	299	300	0.213	11	1	Collector / Local Road	1700	40
131	298	301	0.103	11	1	Collector / Local Road	1700	40
132	301	298	0.103	11	1	Collector / Local Road	1700	40
133	301	299	0.025	11	1	Collector / Local Road	1700	40
134	301	302	0.019	11	1	Collector / Local Road	1700	40
135	302	301	0.019	11	1	Collector / Local Road	1700	40
136	302	299	0.021	10	1	Collector / Local Road	800	15
137	303	304	0.127	12	2	Freeway	4100	60
138	308	307	0.025	11	1	Collector / Local Road	1700	40
139	308	310	0.021	11	1	Minor Arterial	1700	40
140	310	308	0.021	11	1	Minor Arterial	1700	40
141	310	307	0.015	11	1	Principal Arterial	1700	45
142	310	311	0.006	11	1	Collector / Local Road	1700	40
143	311	310	0.006	11	1	Collector / Local Road	1700	40
144	313	310	0.239	11	1	Principal Arterial	1700	45
145	315	314	0.021	12	2	Freeway	4100	60
146	316	313	0.07	11	1	Principal Arterial	1700	45
147	322	323	0.119	12	2	Freeway	4100	55
148	324	326	0.103	12	1	Ramp	1500	35
149	327	325	0.111	12	1	Ramp	1500	35
150	329	328	0.057	11	1	Principal Arterial	1700	45
151	331	330	0.153	12	1	Ramp	1500	35
152	330	332	0.068	11	1	Collector / Local Road	1700	40
153	332	330	0.068	11	1	Collector / Local Road	1700	40
154	332	333	0.085	12	1	Ramp	1500	35
155	332	335	0.028	11	1	Collector / Local Road	1700	40
156	335	332	0.028	11	1	Collector / Local Road	1700	40
157	337	338	0.091	12	2	Freeway	4100	55
158	341	342	0.014	11	1	Major Arterial	1700	45
159	342	341	0.014	11	1	Major Arterial	1700	45
160	341	343	0.014	11	1	Collector / Local Road	1700	40
161	343	341	0.014	11	1	Collector / Local Road	1700	40
162	340	347	0.225	11	1	Collector / Local Road	1700	40
163	347	340	0.225	11	1	Collector / Local Road	1700	40
164	346	348	0.233	10	1	Collector / Local Road	800	15
165	348	346	0.233	10	1	Collector / Local Road	800	15
166	349	350	0.011	11	1	Collector / Local Road	1700	40
167	350	349	0.011	11	1	Collector / Local Road	1700	40
168	351	352	0.044	11	2	Major Arterial	2700	50
169	352	351	0.044	11	2	Major Arterial	2700	50
170	352	353	0.053	11	1	Collector / Local Road	1700	40
171	354	355	0.029	11	2	Major Arterial	2700	50
172	355	354	0.029	11	2	Major Arterial	2700	50
173	353	354	0.053	11	1	Minor Arterial	1700	40
174	357	359	0.033	11	1	Collector / Local Road	1700	40
175	359	357	0.033	11	1	Collector / Local Road	1700	40
176	364	365	0.01	11	1	Minor Arterial	1700	40
177	365	364	0.01	11	1	Minor Arterial	1700	40
178	366	367	0.632	12	3	Freeway	6150	65
179	364	369	0.137	11	1	Principal Arterial	1700	45
180	370	365	0.134	11	1	Major Arterial	1700	50
181	371	372	0.239	12	3	Freeway	6150	65
182	375	376	0.009	11	1	Collector / Local Road	1700	45
183	376	375	0.009	11	1	Collector / Local Road	1700	45
184	377	374	0.059	11	1	Major Arterial	1700	45
185	378	379	0.256	11	1	Collector / Local Road	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
186	379	378	0.256	11	1	Collector / Local Road	1700	45
187	381	382	0.351	11	1	Collector / Local Road	1700	40
188	382	381	0.351	11	1	Collector / Local Road	1700	40
189	388	389	0.318	11	2	Collector / Local Road	3200	40
190	389	388	0.318	11	2	Collector / Local Road	3200	40
191	391	390	0.175	11	2	Major Arterial	3200	45
192	394	395	0.197	11	2	Collector / Local Road	3200	40
193	395	394	0.197	11	2	Collector / Local Road	3200	40
194	398	399	0.132	11	1	Collector / Local Road	1700	40
195	399	398	0.132	11	1	Collector / Local Road	1700	40
196	396	400	0.167	11	2	Minor Arterial	3200	40
197	400	396	0.167	11	2	Minor Arterial	3200	40
198	397	402	0.088	11	1	Principal Arterial	1700	45
199	403	401	0.021	11	1	Major Arterial	1700	50
200	402	403	0.009	11	1	Collector / Local Road	1700	40
201	403	402	0.009	11	1	Collector / Local Road	1700	40
202	404	405	0.178	11	2	Minor Arterial	3200	40
203	405	404	0.178	11	2	Minor Arterial	3200	40
204	406	401	0.026	11	1	Collector / Local Road	1700	40
205	403	406	0.024	11	1	Major Arterial	1700	45
206	406	403	0.024	11	1	Major Arterial	1700	45
207	407	406	0.045	11	1	Collector / Local Road	1700	40
208	407	403	0.03	11	1	Principal Arterial	1700	45
209	411	412	0.028	11	1	Major Arterial	1700	45
210	412	411	0.028	11	1	Major Arterial	1700	45
211	412	413	0.022	11	1	Major Arterial	1700	45
212	413	412	0.022	11	1	Major Arterial	1700	45
213	411	413	0.039	11	1	Collector / Local Road	1700	40
214	414	415	0.171	11	1	Minor Arterial	1700	40
215	415	414	0.171	11	1	Minor Arterial	1700	40
216	419	418	0.042	11	1	Collector / Local Road	1700	40
217	419	420	0.013	11	1	Collector / Local Road	1700	40
218	420	419	0.013	11	1	Collector / Local Road	1700	40
219	422	421	0.11	11	1	Collector / Local Road	1700	40
220	422	424	0.089	11	1	Minor Arterial	1700	40
221	424	422	0.089	11	1	Minor Arterial	1700	40
222	421	424	0.103	11	1	Major Arterial	1700	45
223	424	421	0.103	11	1	Major Arterial	1700	45
224	426	425	0.225	12	2	Freeway	4100	65
225	427	428	0.017	11	1	Minor Arterial	1700	40
226	428	427	0.017	11	1	Minor Arterial	1700	40
227	424	429	0.204	11	1	Major Arterial	1700	45
228	429	424	0.204	11	1	Major Arterial	1700	45
229	423	430	0.071	11	1	Major Arterial	1700	45
230	430	423	0.071	11	1	Major Arterial	1700	45
231	430	431	0.057	11	1	Collector / Local Road	1700	40
232	431	430	0.057	11	1	Collector / Local Road	1700	40
233	433	434	0.347	11	1	Minor Arterial	1700	40
234	434	433	0.347	11	1	Minor Arterial	1700	40
235	427	435	0.023	11	1	Major Arterial	1700	45
236	435	427	0.023	11	1	Major Arterial	1700	45
237	443	444	0.017	11	1	Minor Arterial	1700	40
238	444	443	0.017	11	1	Minor Arterial	1700	40
239	445	446	0.018	11	1	Minor Arterial	1700	40
240	446	445	0.018	11	1	Minor Arterial	1700	40
241	446	447	0.021	11	1	Minor Arterial	1700	40
242	447	446	0.021	11	1	Minor Arterial	1700	40
243	445	447	0.032	11	1	Collector / Local Road	1700	40
244	449	450	0.029	11	1	Principal Arterial	1700	45
245	450	449	0.029	11	1	Principal Arterial	1700	45
246	449	452	0.257	11	1	Principal Arterial	1700	45
247	452	449	0.257	11	1	Principal Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
248	452	454	0.099	11	1	Principal Arterial	1700	45
249	454	452	0.099	11	1	Principal Arterial	1700	45
250	454	455	0.086	11	1	Principal Arterial	1700	45
251	455	454	0.086	11	1	Principal Arterial	1700	45
252	453	456	0.028	11	1	Collector / Local Road	1700	40
253	456	453	0.028	11	1	Collector / Local Road	1700	40
254	455	456	0.085	11	1	Principal Arterial	1700	45
255	456	455	0.085	11	1	Principal Arterial	1700	45
256	457	453	0.036	11	1	Collector / Local Road	1700	40
257	456	457	0.027	11	1	Principal Arterial	1700	45
258	457	456	0.027	11	1	Principal Arterial	1700	45
259	458	459	0.039	11	1	Principal Arterial	1700	45
260	459	458	0.039	11	1	Principal Arterial	1700	45
261	460	252	0.062	12	1	Ramp	1500	35
262	460	253	0.045	12	1	Ramp	1500	35
263	250	237	0.193	12	1	Ramp	1500	35
264	461	460	0.164	12	1	Ramp	1500	35
265	462	258	0.135	12	1	Ramp	1500	35
266	260	462	0.022	12	1	Ramp	1500	35
267	261	462	0.018	12	1	Ramp	1500	35
268	463	262	0.173	12	1	Ramp	1500	35
269	466	465	0.21	12	1	Ramp	1500	35
270	272	467	0.246	12	1	Ramp	1500	35
271	467	289	0.033	12	1	Ramp	1500	35
272	290	468	0.032	12	1	Ramp	1500	35
273	468	469	0.176	12	1	Ramp	1500	35
274	470	471	0.222	12	1	Ramp	1500	35
275	294	300	0.008	11	1	Collector / Local Road	1700	40
276	472	294	0.019	12	1	Ramp	1500	35
277	472	293	0.032	12	1	Ramp	1500	35
278	304	472	0.234	12	1	Ramp	1500	35
279	476	475	0.157	11	1	Ramp	1500	55
280	477	478	0.297	11	1	Ramp	1500	55
281	315	313	0.246	12	1	Ramp	1500	35
282	479	480	0.073	12	1	Ramp	1500	35
283	316	314	0.232	12	1	Ramp	1500	35
284	481	479	0.029	12	1	Ramp	1500	35
285	481	319	0.188	12	1	Ramp	1500	35
286	324	323	0.202	12	1	Ramp	1500	35
287	482	483	0.147	12	1	Ramp	1500	35
288	322	326	0.145	12	1	Ramp	1500	35
289	484	318	0.24	12	1	Ramp	1500	35
290	485	486	0.032	12	1	Ramp	1500	35
291	329	486	0.17	12	1	Ramp	1500	35
292	485	328	0.186	12	1	Ramp	1500	35
293	331	487	0.165	12	1	Ramp	1500	35
294	192	479	0.242	12	1	Ramp	1500	35
295	327	338	0.147	12	1	Ramp	1500	35
296	488	333	0.066	12	1	Ramp	1500	35
297	488	335	0.054	12	1	Ramp	1500	35
298	489	488	0.074	12	1	Ramp	1500	35
299	320	490	0.27	12	1	Ramp	1500	35
300	491	485	0.157	12	1	Ramp	1500	35
301	337	325	0.226	12	1	Ramp	1500	35
302	493	494	0.738	11	1	Ramp	1500	55
303	496	495	1.12	11	1	Ramp	1500	55
304	371	497	1.228	11	1	Ramp	1500	55
305	498	499	1.103	11	1	Ramp	1500	55
306	500	379	0.315	12	1	Ramp	1500	35
307	502	501	0.16	12	1	Ramp	1500	35
308	378	504	0.435	12	1	Ramp	1500	35
309	500	504	0.425	11	1	Ramp	1500	55

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
310	505	506	0.747	11	1	Ramp	1500	55
311	508	507	0.97	11	1	Ramp	1500	55
312	509	382	0.228	12	1	Ramp	1500	35
313	509	383	0.229	11	1	Ramp	1500	55
314	510	388	0.283	12	1	Ramp	1500	35
315	394	511	0.127	12	1	Ramp	1500	35
316	512	399	0.116	12	1	Ramp	1500	35
317	513	396	0.874	12	1	Ramp	1500	35
318	514	512	0.111	12	1	Ramp	1500	35
319	512	398	0.125	12	1	Ramp	1500	35
320	400	515	0.707	12	1	Ramp	1500	35
321	396	516	0.809	12	1	Ramp	1500	35
322	405	517	1.015	12	1	Ramp	1500	35
323	518	404	1.218	12	1	Ramp	1500	35
324	417	519	0.198	12	1	Ramp	1500	35
325	520	521	0.307	11	1	Ramp	1500	55
326	522	432	0.014	12	1	Ramp	1500	5
327	522	431	0.023	12	1	Ramp	1500	35
328	427	425	0.318	12	1	Ramp	1500	35
329	433	523	0.07	12	1	Ramp	1500	35
330	524	525	0.818	12	1	Ramp	1500	35
331	436	522	0.395	12	1	Ramp	1500	35
332	526	427	0.018	12	1	Ramp	1500	35
333	528	527	0.662	11	1	Ramp	1500	55
334	531	530	0.861	12	1	Ramp	1500	35
335	532	524	0.622	11	1	Ramp	1500	55
336	533	442	0.452	11	1	Ramp	1500	55
337	534	535	0.23	12	1	Ramp	1500	35
338	459	534	0.038	12	1	Ramp	1500	35
339	458	534	0.048	12	1	Ramp	1500	35
340	536	456	0.351	12	1	Ramp	1500	35
341	537	455	0.1	12	1	Ramp	1500	35
342	537	454	0.064	12	1	Ramp	1500	35
343	454	538	0.071	12	1	Ramp	1500	35
344	452	538	0.144	12	1	Ramp	1500	35
345	538	539	0.201	12	1	Ramp	1500	35
346	541	543	0.497	11	1	Minor Arterial	1700	40
347	543	541	0.497	11	1	Minor Arterial	1700	40
348	547	548	0.034	11	2	Minor Arterial	3200	40
349	548	547	0.034	11	2	Minor Arterial	3200	40
350	548	549	0.194	11	2	Minor Arterial	3200	40
351	549	548	0.194	11	2	Minor Arterial	3200	40
352	550	551	0.142	12	2	Freeway	3200	40
353	551	550	0.142	11	2	Minor Arterial	3200	40
354	548	552	0.023	11	1	Collector / Local Road	1700	40
355	552	548	0.023	11	1	Collector / Local Road	1700	40
356	551	553	0.352	11	2	Minor Arterial	3200	40
357	553	551	0.352	11	2	Minor Arterial	3200	40
358	555	557	0.387	11	2	Minor Arterial	3200	40
359	557	555	0.387	11	2	Minor Arterial	3200	40
360	562	561	0.007	11	1	Collector / Local Road	1250	40
361	567	562	0.171	12	1	Ramp	1500	35
362	566	569	1.105	12	1	Ramp	1500	35
363	565	571	1.366	11	1	Minor Arterial	1250	40
364	571	565	1.366	11	1	Minor Arterial	1250	40
365	571	572	0.132	11	1	Minor Arterial	1700	40
366	572	571	0.132	11	1	Minor Arterial	1700	40
367	573	574	0.055	11	1	Minor Arterial	1250	40
368	574	573	0.055	11	1	Minor Arterial	1250	40
369	574	576	0.829	11	1	Minor Arterial	1250	45
370	576	574	0.829	11	1	Minor Arterial	1250	45
371	576	577	0.078	11	1	Collector / Local Road	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
372	577	576	0.078	11	1	Collector / Local Road	1250	40
373	579	578	0.177	12	1	Ramp	1500	35
374	578	575	0.211	12	1	Ramp	1500	35
375	578	580	0.146	12	1	Ramp	1500	35
376	575	580	0.151	11	1	Collector / Local Road	1250	40
377	580	575	0.151	11	1	Collector / Local Road	1250	40
378	580	581	0.262	11	1	Collector / Local Road	1250	40
379	581	580	0.262	11	1	Collector / Local Road	1250	40
380	577	582	0.055	12	1	Ramp	1500	35
381	576	582	0.095	11	1	Ramp	1500	45
382	582	583	0.131	11	1	Ramp	1500	45
383	584	585	0.48	11	1	Minor Arterial	1250	40
384	585	584	0.48	11	1	Minor Arterial	1250	40
385	566	588	2.52	11	1	Collector / Local Road	1200	45
386	588	566	2.52	11	1	Collector / Local Road	1200	45
387	583	590	0.457	11	1	Ramp	1500	45
388	591	592	0.307	12	2	Freeway	4100	55
389	594	595	0.051	11	1	Collector / Local Road	1700	40
390	595	594	0.051	11	1	Collector / Local Road	1700	40
391	595	596	0.025	11	1	Major Arterial	1700	45
392	596	595	0.025	11	1	Major Arterial	1700	45
393	594	596	0.074	11	1	Collector / Local Road	1700	40
394	596	594	0.074	11	1	Collector / Local Road	1700	40
395	609	610	0.769	12	1	Ramp	1500	35
396	611	609	0.076	12	1	Ramp	1500	35
397	606	612	0.287	11	1	Collector / Local Road	1250	40
398	612	606	0.287	11	1	Collector / Local Road	1250	40
399	611	613	0.073	11	1	Minor Arterial	1700	40
400	613	611	0.073	11	1	Minor Arterial	1700	40
401	613	609	0.088	12	1	Ramp	1500	35
402	614	611	0.105	12	1	Ramp	1500	35
403	614	613	0.06	12	1	Ramp	1500	35
404	616	615	0.79	12	1	Ramp	1500	35
405	615	617	0.056	12	1	Ramp	1500	35
406	617	618	0.095	11	1	Minor Arterial	1700	40
407	618	617	0.095	11	1	Minor Arterial	1700	40
408	615	618	0.1	12	1	Ramp	1500	35
409	618	620	0.179	11	1	Minor Arterial	1700	40
410	620	618	0.179	11	1	Minor Arterial	1700	40
411	620	621	0.501	11	1	Collector / Local Road	1700	40
412	621	620	0.501	11	1	Collector / Local Road	1700	40
413	612	622	0.751	11	1	Minor Arterial	1250	40
414	622	612	0.751	11	1	Minor Arterial	1250	40
415	623	614	0.701	12	1	Ramp	1500	35
416	620	624	0.73	12	1	Ramp	1500	35
417	625	626	0.409	11	1	Major Arterial	1700	45
418	626	625	0.409	11	1	Major Arterial	1700	45
419	622	630	1.394	11	1	Collector / Local Road	1250	40
420	630	622	1.394	11	1	Collector / Local Road	1250	40
421	629	631	0.137	11	1	Major Arterial	1250	45
422	631	629	0.137	11	1	Major Arterial	1250	45
423	630	632	0.319	11	1	Collector / Local Road	1700	40
424	632	630	0.319	11	1	Collector / Local Road	1700	40
425	631	633	0.116	11	1	Collector / Local Road	1250	40
426	633	631	0.116	11	1	Collector / Local Road	1250	40
427	632	635	1.47	11	1	Collector / Local Road	1700	40
428	635	632	1.47	11	1	Collector / Local Road	1700	40
429	635	638	0.147	11	1	Collector / Local Road	1250	40
430	638	635	0.147	11	1	Collector / Local Road	1250	40
431	639	640	0.059	11	1	Collector / Local Road	1700	40
432	640	639	0.059	11	1	Collector / Local Road	1700	40
433	639	641	0.081	11	1	Major Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
434	641	639	0.081	11	1	Major Arterial	1700	45
435	644	645	0.476	12	1	Ramp	1500	35
436	643	644	0.22	12	1	Ramp	1500	35
437	643	646	0.164	11	1	Minor Arterial	1700	40
438	646	643	0.164	11	1	Minor Arterial	1700	40
439	646	644	0.138	12	1	Ramp	1500	35
440	647	643	0.238	12	1	Ramp	1500	35
441	647	646	0.177	12	1	Ramp	1500	35
442	649	648	0.539	12	1	Ramp	1500	35
443	648	650	0.077	12	1	Ramp	1500	35
444	650	651	0.078	12	1	Ramp	1500	35
445	652	651	0.126	12	1	Ramp	1500	35
446	650	652	0.104	11	1	Minor Arterial	1700	40
447	652	650	0.104	11	1	Minor Arterial	1700	40
448	648	652	0.13	12	1	Ramp	1500	35
449	651	654	0.537	12	1	Ramp	1500	35
450	655	647	0.521	12	1	Ramp	1500	35
451	666	668	0.057	12	2	Freeway	2700	30
452	668	666	0.057	12	2	Major Arterial	2700	30
453	670	671	0.171	12	1	Major Arterial	1700	35
454	671	670	0.171	11	1	Major Arterial	1700	50
455	671	673	0.198	12	2	Minor Arterial	2700	35
456	673	671	0.198	12	1	Minor Arterial	1700	35
457	669	674	0.048	10	1	Collector / Local Road	1200	25
458	674	669	0.048	11	1	Collector / Local Road	1250	40
459	663	675	0.557	11	2	Principal Arterial	3300	45
460	675	663	0.557	11	2	Principal Arterial	3300	45
461	672	682	0.917	10	1	Collector / Local Road	800	15
462	682	672	0.917	10	1	Collector / Local Road	800	15
463	681	683	0.294	11	1	Collector / Local Road	1700	40
464	683	681	0.294	11	1	Collector / Local Road	1700	40
465	682	683	0.368	11	1	Collector / Local Road	1700	40
466	683	682	0.368	11	1	Collector / Local Road	1700	40
467	673	684	0.396	12	2	Minor Arterial	2700	35
468	684	673	0.396	12	2	Minor Arterial	2700	35
469	688	689	0.027	10	1	Collector / Local Road	1200	25
470	689	688	0.027	11	1	Collector / Local Road	1250	40
471	686	688	0.112	12	1	Major Arterial	1200	35
472	688	686	0.112	11	1	Major Arterial	1250	50
473	687	691	0.098	11	1	Collector / Local Road	1700	40
474	691	687	0.098	11	1	Collector / Local Road	1700	40
475	684	692	1.01	11	2	Minor Arterial	3200	40
476	692	684	1.01	11	2	Minor Arterial	3200	40
477	690	694	0.16	11	1	Minor Arterial	1250	40
478	694	690	0.16	11	1	Minor Arterial	1250	40
479	692	696	0.51	11	2	Minor Arterial	3200	45
480	696	692	0.51	11	2	Minor Arterial	3200	45
481	696	697	0.071	11	1	Minor Arterial	1700	45
482	697	696	0.071	11	1	Minor Arterial	1700	45
483	694	698	0.168	10	1	Collector / Local Road	800	15
484	698	694	0.168	10	1	Collector / Local Road	800	15
485	694	700	1.496	11	1	Minor Arterial	1700	40
486	700	694	1.496	11	1	Minor Arterial	1700	40
487	700	701	0.886	11	1	Major Arterial	1250	40
488	701	700	0.886	11	1	Major Arterial	1250	40
489	706	707	0.04	11	1	Major Arterial	1700	50
490	707	706	0.04	11	1	Major Arterial	1700	50
491	704	708	0.433	11	1	Collector / Local Road	1700	40
492	708	704	0.433	11	1	Collector / Local Road	1700	40
493	706	709	0.166	11	1	Major Arterial	1250	50
494	709	706	0.166	11	1	Major Arterial	1250	50
495	705	711	1.608	11	2	Principal Arterial	3300	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
496	711	705	1.608	11	2	Principal Arterial	3300	45
497	709	713	0.311	11	1	Major Arterial	1250	50
498	713	709	0.311	11	1	Major Arterial	1250	50
499	711	716	1.018	11	3	Principal Arterial	4950	45
500	716	711	1.018	11	3	Principal Arterial	4950	45
501	717	718	0.707	12	1	Ramp	1500	35
502	716	717	0.287	12	1	Ramp	1500	35
503	716	719	0.19	11	3	Principal Arterial	4950	45
504	719	716	0.19	11	3	Principal Arterial	4950	45
505	719	717	0.198	12	1	Ramp	1500	35
506	713	720	0.286	11	1	Major Arterial	1250	50
507	720	713	0.286	11	1	Major Arterial	1250	50
508	720	721	0.065	11	1	Major Arterial	1250	50
509	721	720	0.065	11	1	Major Arterial	1250	50
510	722	716	0.275	12	1	Ramp	1500	35
511	722	719	0.162	12	1	Ramp	1500	35
512	724	726	0.265	11	2	Minor Arterial	3200	45
513	726	724	0.265	11	2	Minor Arterial	3200	45
514	715	727	0.885	12	1	Ramp	1500	35
515	729	730	0.213	12	1	Ramp	1500	35
516	731	722	0.19	12	1	Ramp	1500	35
517	729	732	0.137	11	2	Principal Arterial	3300	45
518	732	729	0.137	11	2	Principal Arterial	3300	45
519	732	730	0.172	12	1	Ramp	1500	35
520	727	732	0.188	12	1	Ramp	1500	35
521	732	733	0.135	11	2	Principal Arterial	3300	45
522	733	732	0.135	11	2	Principal Arterial	3300	45
523	727	733	0.222	12	1	Ramp	1500	35
524	712	736	0.745	10	1	Collector / Local Road	800	15
525	736	712	0.745	10	1	Collector / Local Road	800	15
526	735	737	1.928	11	1	Collector / Local Road	1700	40
527	737	735	1.928	11	1	Collector / Local Road	1700	40
528	738	739	0.321	11	1	Minor Arterial	1250	40
529	739	738	0.321	11	1	Minor Arterial	1250	40
530	745	747	0.225	11	1	Major Arterial	1700	50
531	747	745	0.225	11	1	Major Arterial	1700	50
532	746	747	0.064	11	1	Collector / Local Road	1250	40
533	747	746	0.064	11	1	Collector / Local Road	1250	40
534	746	748	0.107	11	1	Major Arterial	1250	45
535	748	746	0.107	11	1	Major Arterial	1250	45
536	747	748	0.094	11	1	Major Arterial	1250	50
537	748	747	0.094	11	1	Major Arterial	1250	50
538	754	759	0.473	11	1	Collector / Local Road	1700	40
539	759	754	0.473	11	1	Collector / Local Road	1700	40
540	760	761	0.833	12	1	Ramp	1500	35
541	764	765	0.25	11	2	Minor Arterial	3200	40
542	765	764	0.25	11	2	Minor Arterial	3200	40
543	769	765	0.308	12	1	Ramp	1500	35
544	769	764	0.162	12	1	Ramp	1500	35
545	772	769	0.406	12	1	Ramp	1500	35
546	775	776	0.099	12	2	Minor Arterial	2700	35
547	776	775	0.099	12	2	Minor Arterial	2700	35
548	776	777	0.079	12	2	Major Arterial	2700	35
549	777	776	0.079	12	2	Major Arterial	2700	35
550	778	760	0.827	12	1	Ramp	1500	35
551	774	780	0.349	11	1	Minor Arterial	1250	40
552	780	774	0.349	11	1	Minor Arterial	1250	40
553	779	781	0.462	11	1	Major Arterial	1700	45
554	781	779	0.462	11	1	Major Arterial	1700	45
555	764	782	1.16	12	1	Ramp	1500	35
556	787	786	0.016	11	1	Major Arterial	1700	45
557	786	788	0.052	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
558	785	788	0.158	12	1	Major Arterial	1700	35
559	788	785	0.158	12	1	Major Arterial	1700	35
560	791	787	0.069	11	1	Major Arterial	1700	45
561	788	791	0.051	12	1	Major Arterial	1700	35
562	791	788	0.051	11	1	Major Arterial	1700	45
563	790	792	0.078	10	1	Collector / Local Road	800	15
564	792	790	0.078	10	1	Collector / Local Road	800	15
565	784	792	0.136	11	1	Minor Arterial	1250	45
566	792	784	0.136	11	1	Minor Arterial	1250	45
567	794	795	0.288	10	1	Collector / Local Road	800	10
568	795	794	0.288	10	1	Collector / Local Road	800	10
569	795	796	0.232	11	1	Minor Arterial	1700	40
570	796	795	0.232	11	1	Minor Arterial	1700	40
571	798	799	0.045	10	1	Collector / Local Road	800	15
572	798	800	0.045	10	1	Collector / Local Road	800	15
573	800	798	0.045	10	1	Collector / Local Road	800	15
574	799	800	0.061	12	1	Major Arterial	1700	35
575	800	799	0.061	11	1	Major Arterial	1700	45
576	793	802	1.58	11	1	Major Arterial	1250	55
577	802	793	1.58	11	1	Major Arterial	1250	55
578	792	802	1.166	11	1	Collector / Local Road	1250	45
579	802	792	1.166	11	1	Collector / Local Road	1250	45
580	804	805	0.045	12	1	Major Arterial	1700	35
581	805	804	0.045	12	1	Major Arterial	1700	35
582	805	806	0.052	11	1	Principal Arterial	1700	45
583	806	805	0.052	11	1	Principal Arterial	1700	45
584	804	806	0.06	11	1	Collector / Local Road	1700	40
585	802	807	0.499	11	1	Collector / Local Road	1250	40
586	807	802	0.499	11	1	Collector / Local Road	1250	40
587	818	820	0.575	11	1	Minor Arterial	1700	40
588	820	818	0.575	11	1	Minor Arterial	1700	40
589	819	822	0.32	11	1	Collector / Local Road	1250	40
590	822	819	0.32	11	1	Collector / Local Road	1250	40
591	826	827	0.194	11	1	Ramp	1500	45
592	828	826	0.06	11	1	Ramp	1500	45
593	828	829	0.042	12	1	Minor Arterial	1200	35
594	829	828	0.042	12	1	Minor Arterial	1200	35
595	829	826	0.034	12	1	Ramp	1500	5
596	834	821	0.171	12	1	Ramp	1500	35
597	834	825	0.126	12	2	Freeway	4100	60
598	835	836	0.764	11	1	Collector / Local Road	1700	40
599	836	835	0.764	11	1	Collector / Local Road	1700	40
600	830	837	1.716	11	1	Principal Arterial	1600	45
601	837	830	1.716	11	1	Principal Arterial	1600	45
602	841	842	0.091	11	1	Major Arterial	1700	45
603	840	844	0.053	10	1	Collector / Local Road	800	15
604	844	840	0.053	10	1	Collector / Local Road	800	15
605	847	848	0.204	11	1	Major Arterial	1700	45
606	849	847	0.212	11	1	Major Arterial	1700	45
607	853	854	0.007	11	1	Collector / Local Road	1250	40
608	853	855	0.064	11	1	Major Arterial	1250	45
609	855	856	0.007	11	1	Major Arterial	1250	45
610	856	855	0.007	11	1	Major Arterial	1250	45
611	858	859	0.167	11	1	Major Arterial	1250	45
612	859	858	0.167	11	1	Major Arterial	1250	45
613	862	849	0.997	12	1	Ramp	1500	35
614	846	863	1.716	11	1	Major Arterial	1250	55
615	863	846	1.716	11	1	Major Arterial	1250	55
616	864	865	0.058	11	1	Minor Arterial	1700	40
617	865	864	0.058	11	1	Minor Arterial	1700	40
618	868	871	0.852	12	2	Freeway	4100	50
619	875	874	0.3	12	2	Freeway	4100	65

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
620	874	876	0.03	12	2	Freeway	4100	60
621	879	878	0.567	12	1	Ramp	1500	35
622	880	881	0.219	12	1	Ramp	1500	35
623	878	884	0.295	11	1	Major Arterial	1700	45
624	884	878	0.295	11	1	Major Arterial	1700	45
625	884	880	0.151	12	1	Ramp	1500	35
626	883	885	0.054	11	1	Major Arterial	1250	45
627	887	888	0.039	11	1	Minor Arterial	1700	40
628	888	887	0.039	11	1	Minor Arterial	1700	40
629	889	880	0.075	12	1	Ramp	1500	35
630	884	889	0.309	11	1	Major Arterial	1700	45
631	889	884	0.309	11	1	Major Arterial	1700	45
632	882	883	1.214	12	1	Major Arterial	1200	35
633	883	882	1.214	12	1	Major Arterial	1200	35
634	891	890	0.162	11	1	Collector / Local Road	1700	40
635	887	890	0.03	11	1	Minor Arterial	1700	40
636	890	887	0.03	11	1	Minor Arterial	1700	40
637	890	892	0.038	11	1	Minor Arterial	1700	40
638	892	890	0.038	11	1	Minor Arterial	1700	40
639	894	887	0.276	11	1	Collector / Local Road	1700	40
640	895	896	0.36	11	1	Ramp	1500	55
641	898	897	0.356	12	2	Freeway	4100	65
642	899	897	0.456	12	1	Ramp	1500	35
643	901	902	0.821	11	1	Ramp	1500	55
644	869	886	0.975	11	1	Collector / Local Road	1250	40
645	886	869	0.975	11	1	Collector / Local Road	1250	40
646	869	905	0.086	11	1	Collector / Local Road	1250	40
647	905	869	0.086	11	1	Collector / Local Road	1250	40
648	904	906	0.019	11	1	Major Arterial	1250	40
649	906	904	0.019	11	1	Major Arterial	1250	45
650	869	907	0.124	11	1	Collector / Local Road	1250	40
651	907	869	0.124	11	1	Collector / Local Road	1250	40
652	905	907	0.113	11	1	Collector / Local Road	1250	40
653	907	905	0.113	11	1	Collector / Local Road	1250	40
654	909	908	1.236	11	1	Ramp	1500	55
655	415	903	0.095	11	1	Minor Arterial	1700	40
656	903	415	0.095	11	1	Minor Arterial	1700	40
657	907	917	1.484	11	1	Collector / Local Road	1250	40
658	917	907	1.484	11	1	Collector / Local Road	1250	40
659	912	918	1.603	11	1	Minor Arterial	1250	40
660	918	912	1.603	11	1	Minor Arterial	1250	40
661	918	919	0.062	11	2	Principal Arterial	3300	45
662	919	918	0.062	11	1	Principal Arterial	1600	45
663	917	920	0.332	11	1	Collector / Local Road	1250	40
664	920	917	0.332	11	1	Collector / Local Road	1250	40
665	919	922	0.143	11	2	Principal Arterial	3300	45
666	922	919	0.143	11	2	Principal Arterial	3300	45
667	922	923	0.63	11	2	Principal Arterial	3300	45
668	923	922	0.63	11	2	Principal Arterial	3300	45
669	927	926	0.134	12	1	Ramp	1500	35
670	928	926	0.164	11	1	Collector / Local Road	1700	40
671	930	925	0.293	11	1	Collector / Local Road	1700	40
672	926	931	0.234	11	1	Collector / Local Road	1700	40
673	929	931	0.02	11	1	Major Arterial	1700	40
674	931	929	0.02	11	1	Major Arterial	1700	40
675	931	932	0.024	12	1	Ramp	1500	35
676	929	932	0.025	12	1	Ramp	1500	35
677	931	933	0.066	11	1	Major Arterial	1700	45
678	933	931	0.066	11	1	Major Arterial	1700	45
679	934	930	0.176	12	1	Ramp	1500	35
680	932	935	0.163	12	1	Ramp	1500	35
681	937	933	0.228	12	1	Ramp	1500	35

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
682	938	930	0.249	11	1	Collector / Local Road	1700	40
683	933	938	0.022	11	1	Major Arterial	1700	45
684	938	933	0.022	11	1	Major Arterial	1700	45
685	941	942	0.006	11	1	Collector / Local Road	1700	40
686	942	941	0.006	11	1	Collector / Local Road	1700	40
687	935	944	0.675	12	4	Freeway	8200	55
688	945	942	0.098	11	1	Collector / Local Road	1700	40
689	941	946	0.1	11	1	Collector / Local Road	1700	40
690	949	947	0.206	11	1	Major Arterial	1700	45
691	950	953	0.178	11	1	Principal Arterial	1700	45
692	953	950	0.178	11	1	Principal Arterial	1700	45
693	954	956	0.026	11	1	Major Arterial	1700	50
694	956	954	0.026	11	1	Major Arterial	1700	50
695	958	959	0.228	10	1	Collector / Local Road	800	15
696	959	958	0.228	10	1	Collector / Local Road	800	15
697	960	956	0.052	12	1	Ramp	1500	35
698	960	954	0.044	12	1	Ramp	1500	35
699	957	958	0.172	10	1	Collector / Local Road	800	15
700	958	957	0.172	10	1	Collector / Local Road	800	15
701	961	960	0.165	12	1	Ramp	1500	35
702	951	962	0.228	12	1	Ramp	1500	35
703	962	966	1.194	12	2	Freeway	4100	55
704	970	971	0.007	11	1	Major Arterial	1250	50
705	973	969	0.024	11	1	Minor Arterial	1250	40
706	973	970	0.007	11	1	Collector / Local Road	1250	45
707	974	973	0.007	11	1	Major Arterial	1250	50
708	971	974	0.007	11	1	Collector / Local Road	1250	45
709	976	969	0.042	12	1	Ramp	1500	35
710	976	973	0.037	12	1	Ramp	1500	35
711	984	974	0.362	11	1	Major Arterial	1250	50
712	984	983	0.004	11	1	Principal Arterial	1600	45
713	983	985	0.009	11	1	Major Arterial	1250	50
714	978	985	0.183	11	2	Principal Arterial	3300	45
715	986	984	0.008	11	1	Major Arterial	1250	50
716	985	986	0.005	11	1	Principal Arterial	1600	45
717	987	988	0.316	11	1	Major Arterial	1250	45
718	988	987	0.316	11	1	Major Arterial	1250	45
719	982	976	1.108	12	1	Ramp	1500	35
720	985	989	0.188	11	1	Major Arterial	1250	50
721	978	989	0.264	11	1	Collector / Local Road	1250	45
722	989	987	0.339	11	1	Major Arterial	1250	50
723	987	986	0.17	11	1	Major Arterial	1250	50
724	979	991	0.088	11	1	Collector / Local Road	1250	40
725	991	979	0.088	11	1	Collector / Local Road	1250	40
726	988	992	0.989	11	1	Ramp	1500	45
727	993	988	0.608	12	1	Ramp	1500	35
728	974	994	1.208	12	1	Ramp	1500	35
729	979	995	0.348	11	1	Major Arterial	1250	45
730	995	979	0.348	11	1	Major Arterial	1250	45
731	995	996	0.051	11	1	Major Arterial	1700	45
732	996	995	0.051	11	1	Major Arterial	1700	45
733	998	997	0.208	12	1	Ramp	1500	35
734	997	996	0.051	12	1	Ramp	1500	35
735	997	999	0.017	12	1	Ramp	1500	35
736	996	999	0.042	11	1	Major Arterial	1250	45
737	999	996	0.042	11	1	Major Arterial	1250	45
738	1002	1001	0.726	12	1	Ramp	1500	35
739	999	1003	0.117	11	1	Major Arterial	1250	45
740	1003	999	0.117	11	1	Major Arterial	1250	45
741	1004	1005	0.148	12	1	Ramp	1500	35
742	1006	1007	0.217	12	1	Ramp	1500	35
743	1008	1006	0.653	12	1	Ramp	1500	35

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
744	999	1009	0.055	12	1	Ramp	1500	35
745	996	1009	0.064	12	1	Ramp	1500	35
746	1003	1004	0.03	12	1	Ramp	1500	35
747	1000	1011	1.146	12	1	Ramp	1500	35
748	1012	1004	0.051	12	1	Ramp	1500	35
749	1003	1012	0.04	11	1	Major Arterial	1250	45
750	1012	1003	0.04	11	1	Major Arterial	1250	45
751	1013	1003	0.059	12	1	Ramp	1500	35
752	1012	1014	0.054	11	1	Major Arterial	1250	45
753	1014	1012	0.054	11	1	Major Arterial	1250	45
754	1013	1014	0.137	12	1	Ramp	1500	35
755	1015	1016	0.009	11	1	Collector / Local Road	1700	45
756	1016	1015	0.009	11	1	Collector / Local Road	1700	45
757	1001	1016	0.329	11	1	Principal Arterial	1600	45
758	1000	1018	0.583	11	1	Minor Arterial	1250	40
759	1018	1000	0.583	11	1	Minor Arterial	1250	40
760	1019	1015	0.123	11	1	Principal Arterial	1700	45
761	1020	1013	0.149	12	1	Ramp	1500	35
762	1009	1021	0.172	12	1	Ramp	1500	35
763	1026	1027	0.029	11	1	Minor Arterial	1700	40
764	1027	1026	0.029	11	1	Minor Arterial	1700	40
765	1026	1028	0.02	11	1	Collector / Local Road	1700	40
766	1028	1026	0.02	11	1	Collector / Local Road	1700	40
767	1027	1028	0.027	11	1	Major Arterial	1700	45
768	1028	1027	0.027	11	1	Major Arterial	1700	45
769	1028	1029	0.098	11	1	Major Arterial	1700	45
770	1029	1028	0.098	11	1	Major Arterial	1700	45
771	1021	1030	1.273	12	4	Freeway	8200	55
772	1032	1031	0.166	11	1	Principal Arterial	1600	45
773	1033	1031	0.229	11	1	Collector / Local Road	1250	45
774	1032	1033	0.057	11	2	Principal Arterial	3300	45
775	1033	1032	0.057	11	2	Principal Arterial	3300	45
776	1033	1034	0.205	11	2	Principal Arterial	3300	45
777	1034	1033	0.205	11	2	Principal Arterial	3300	45
778	1035	1036	0.153	11	2	Principal Arterial	3300	45
779	1036	1035	0.153	11	2	Principal Arterial	3300	45
780	1043	1044	0.124	11	1	Principal Arterial	1700	45
781	1044	1043	0.124	11	1	Principal Arterial	1700	45
782	1044	1045	0.148	11	1	Principal Arterial	1700	45
783	1047	1044	0.149	11	1	Principal Arterial	1700	45
784	1045	1047	0.007	11	1	Collector / Local Road	1700	45
785	1047	1045	0.007	11	1	Collector / Local Road	1700	45
786	1049	1050	0.076	12	1	Ramp	1500	35
787	1051	1052	0.007	11	1	Collector / Local Road	1700	45
788	1052	1051	0.007	11	1	Collector / Local Road	1700	45
789	1053	1054	0.145	11	1	Major Arterial	1700	45
790	1052	1053	0.182	11	1	Major Arterial	1700	45
791	1056	1055	0.26	12	1	Ramp	1500	35
792	1062	1063	0.047	11	1	Collector / Local Road	1700	45
793	1063	1062	0.047	11	1	Collector / Local Road	1700	45
794	1062	1064	0.067	11	2	Principal Arterial	3700	50
795	1070	1071	0.019	11	1	Minor Arterial	1700	40
796	1071	1070	0.019	11	1	Minor Arterial	1700	40
797	1070	1073	0.024	11	1	Collector / Local Road	1700	40
798	1073	1070	0.024	11	1	Collector / Local Road	1700	40
799	1073	1075	0.168	12	1	Ramp	1500	35
800	1072	1076	0.101	11	1	Principal Arterial	1600	45
801	1073	1077	0.071	11	1	Collector / Local Road	1250	40
802	1077	1073	0.071	11	1	Collector / Local Road	1250	40
803	1079	1078	0.198	12	1	Ramp	1500	35
804	1076	1077	0.175	12	1	Ramp	1500	35
805	1078	1080	0.027	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
806	1081	1082	0.155	11	1	Collector / Local Road	1250	40
807	1077	1083	0.101	12	1	Ramp	1500	35
808	1084	1080	0.096	11	1	Major Arterial	1700	45
809	1078	1084	0.107	11	1	Minor Arterial	1700	40
810	1087	1089	0.076	11	1	Collector / Local Road	1700	40
811	1089	1087	0.076	11	1	Collector / Local Road	1700	40
812	1094	1096	0.166	11	1	Principal Arterial	1600	45
813	1096	1094	0.166	11	1	Principal Arterial	1600	45
814	1092	1097	0.702	11	1	Collector / Local Road	1250	40
815	1097	1092	0.702	11	1	Collector / Local Road	1250	40
816	1099	1100	0.103	11	1	Collector / Local Road	1700	40
817	1100	1099	0.103	11	1	Collector / Local Road	1700	40
818	1100	1101	0.043	11	1	Collector / Local Road	1700	40
819	1101	1100	0.043	11	1	Collector / Local Road	1700	40
820	1102	1101	0.099	11	1	Collector / Local Road	1700	40
821	1100	1102	0.07	11	1	Minor Arterial	1700	40
822	1102	1100	0.07	11	1	Minor Arterial	1700	40
823	1099	1102	0.099	11	1	Collector / Local Road	1700	40
824	1098	1105	0.472	11	1	Minor Arterial	1700	40
825	1105	1098	0.472	11	1	Minor Arterial	1700	40
826	1107	1106	0.041	10	1	Collector / Local Road	800	15
827	1107	1108	0.026	11	2	Principal Arterial	3300	45
828	1108	1107	0.026	11	2	Principal Arterial	3300	45
829	1106	1108	0.025	12	1	Minor Arterial	1700	35
830	1108	1106	0.025	12	1	Minor Arterial	1700	35
831	1108	1109	0.022	11	2	Principal Arterial	3300	45
832	1109	1108	0.022	11	2	Principal Arterial	3300	45
833	1106	1109	0.031	10	1	Collector / Local Road	800	15
834	1110	1107	0.032	10	1	Collector / Local Road	800	15
835	1108	1110	0.024	12	1	Minor Arterial	1700	35
836	1110	1108	0.024	12	1	Minor Arterial	1700	35
837	1109	1110	0.037	10	1	Collector / Local Road	800	15
838	1107	1111	0.212	11	2	Principal Arterial	3300	45
839	1111	1107	0.212	11	2	Principal Arterial	3300	45
840	1112	1111	0.339	12	1	Ramp	1500	35
841	1111	1113	0.27	12	1	Ramp	1500	35
842	1109	1115	1.114	11	2	Principal Arterial	3300	45
843	1115	1109	1.114	11	2	Principal Arterial	3300	45
844	1115	1116	0.134	12	1	Ramp	1500	35
845	1115	1118	0.156	11	2	Principal Arterial	3300	45
846	1118	1115	0.156	11	2	Principal Arterial	3300	45
847	1116	1119	0.096	11	1	Minor Arterial	1700	40
848	1119	1116	0.096	11	1	Minor Arterial	1700	40
849	1121	1122	0.17	12	1	Ramp	1500	35
850	1120	1121	0.048	12	1	Ramp	1500	35
851	1123	1121	0.027	12	1	Ramp	1500	35
852	1124	1123	0.021	12	1	Ramp	1500	35
853	1123	1125	0.028	11	1	Minor Arterial	1700	40
854	1125	1123	0.028	11	1	Minor Arterial	1700	40
855	1124	1125	0.034	12	1	Ramp	1500	35
856	1126	1124	0.11	12	1	Ramp	1500	35
857	1125	1127	0.092	11	1	Minor Arterial	1700	40
858	1127	1125	0.092	11	1	Minor Arterial	1700	40
859	1117	1128	0.175	12	1	Ramp	1500	35
860	1129	1130	0.161	12	1	Ramp	1500	35
861	1119	1118	0.282	12	1	Ramp	1500	35
862	1127	1129	0.048	12	1	Ramp	1500	35
863	1131	1129	0.027	12	1	Ramp	1500	35
864	1128	1131	0.055	12	1	Ramp	1500	35
865	1128	1132	0.116	12	1	Ramp	1500	35
866	1133	1134	0.175	12	1	Ramp	1500	35
867	1137	1133	0.071	12	1	Ramp	1500	35

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
868	1135	1138	0.017	11	1	Collector / Local Road	1700	40
869	1135	1139	0.031	11	1	Major Arterial	1700	45
870	1139	1135	0.031	11	1	Major Arterial	1700	45
871	1139	1138	0.035	11	2	Principal Arterial	3300	45
872	1137	1140	0.052	11	2	Principal Arterial	3300	45
873	1140	1133	0.042	12	1	Ramp	1500	35
874	1141	1134	0.181	12	3	Freeway	6150	45
875	1139	1142	0.017	11	1	Major Arterial	1700	45
876	1142	1139	0.017	11	1	Major Arterial	1700	45
877	1143	1140	0.007	11	1	Collector / Local Road	1700	45
878	1140	1144	0.057	11	2	Principal Arterial	3300	45
879	1141	1144	0.188	12	1	Ramp	1500	35
880	1144	1145	0.075	11	2	Principal Arterial	3300	45
881	1149	1148	0.008	12	2	Freeway	4100	45
882	1150	1151	0.047	11	2	Major Arterial	3200	45
883	1150	1145	0.007	11	1	Collector / Local Road	1700	40
884	1152	1150	0.004	11	2	Major Arterial	3200	45
885	1145	1152	0.007	11	1	Collector / Local Road	1700	45
886	1155	1154	0.022	11	1	Major Arterial	1700	45
887	1156	1151	0.061	12	1	Ramp	1500	35
888	1156	1150	0.029	12	1	Ramp	1500	35
889	1152	1157	0.048	12	1	Ramp	1500	35
890	1154	1157	0.081	12	1	Ramp	1500	35
891	1148	1156	0.123	12	1	Ramp	1500	35
892	1159	1153	0.177	11	1	Minor Arterial	1700	40
893	1160	1162	0.025	11	1	Major Arterial	1700	45
894	1163	1136	0.25	12	1	Ramp	1500	35
895	1159	1160	0.065	11	1	Collector / Local Road	1700	40
896	1160	1159	0.065	11	1	Collector / Local Road	1700	40
897	1157	1164	0.183	12	1	Ramp	1500	35
898	1168	1169	0.067	11	1	Major Arterial	1700	45
899	1169	1168	0.067	11	1	Major Arterial	1700	45
900	1172	1171	0.167	12	1	Ramp	1500	35
901	1172	1173	0.365	12	2	Freeway	4100	45
902	1171	1174	0.075	11	1	Collector / Local Road	1700	40
903	1174	1171	0.075	11	1	Collector / Local Road	1700	40
904	1174	1170	0.211	12	1	Ramp	1500	35
905	1171	1173	0.205	12	1	Ramp	1500	35
906	1176	1174	0.2	12	1	Ramp	1500	35
907	1173	1177	0.158	12	2	Freeway	4100	45
908	1178	1176	0.159	12	2	Freeway	4100	45
909	1179	1180	0.164	12	1	Ramp	1500	35
910	1182	1183	0.239	11	2	Ramp	3000	45
911	1181	1182	0.032	11	1	Major Arterial	1700	45
912	1182	1181	0.032	11	1	Major Arterial	1700	45
913	1182	1184	0.018	11	2	Major Arterial	3200	45
914	1184	1182	0.018	11	2	Major Arterial	3200	45
915	1184	1185	0.075	11	2	Principal Arterial	3300	45
916	1186	1187	0.117	11	2	Major Arterial	3200	45
917	1187	1186	0.117	11	2	Major Arterial	3200	45
918	666	667	0.044	12	2	Principal Arterial	2750	30
919	667	666	0.044	12	2	Freeway	2750	30
920	664	666	0.054	11	1	Major Arterial	1700	45
921	663	667	0.253	12	2	Principal Arterial	2750	30
922	667	663	0.253	12	2	Principal Arterial	2750	30
923	418	1190	0.035	11	1	Minor Arterial	1700	40
924	1190	418	0.035	11	1	Minor Arterial	1700	40
925	419	1190	0.021	11	1	Collector / Local Road	1700	40
926	1190	419	0.021	11	1	Collector / Local Road	1700	40
927	752	756	0.201	11	1	Minor Arterial	1700	40
928	756	752	0.201	11	1	Minor Arterial	1700	40
929	558	1191	0.278	11	1	Major Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
930	1191	558	0.278	11	1	Major Arterial	1700	45
931	187	191	0.023	12	1	Ramp	1500	35
932	1196	188	0.149	12	1	Ramp	1500	35
933	176	187	0.017	11	1	Minor Arterial	1700	40
934	187	176	0.017	11	1	Minor Arterial	1700	40
935	188	176	0.029	12	1	Ramp	1500	35
936	176	191	0.032	12	1	Ramp	1500	35
937	427	438	0.025	11	1	Major Arterial	1700	45
938	438	427	0.025	11	1	Major Arterial	1700	45
939	438	435	0.042	11	1	Collector / Local Road	1700	40
940	435	428	0.024	11	1	Collector / Local Road	1700	40
941	426	526	0.35	12	1	Ramp	1500	35
942	526	438	0.027	12	1	Ramp	1500	35
943	448	450	0.035	11	1	Principal Arterial	1700	45
944	450	448	0.035	11	1	Principal Arterial	1700	45
945	448	451	0.021	11	1	Collector / Local Road	1700	40
946	451	450	0.026	11	1	Collector / Local Road	1700	40
947	700	707	2.063	11	1	Major Arterial	1700	40
948	707	700	2.063	11	1	Major Arterial	1700	40
949	1082	1070	0.024	10	1	Collector / Local Road	800	15
950	1082	1071	0.035	11	1	Collector / Local Road	1700	40
951	990	1198	0.609	10	1	Collector / Local Road	800	15
952	1198	990	0.609	10	1	Collector / Local Road	800	15
953	342	343	0.02	11	1	Collector / Local Road	1700	40
954	1202	525	0.142	12	1	Ramp	1500	35
955	603	604	0.065	11	1	Collector / Local Road	1250	40
956	604	603	0.065	11	1	Collector / Local Road	1250	40
957	597	604	0.347	11	1	Collector / Local Road	1250	40
958	597	603	0.346	11	1	Major Arterial	1250	45
959	603	597	0.346	11	1	Major Arterial	1250	45
960	386	1203	0.034	11	1	Collector / Local Road	1700	40
961	1203	386	0.034	11	1	Collector / Local Road	1700	40
962	1204	391	0.175	11	2	Major Arterial	3200	45
963	390	1204	0.007	11	1	Major Arterial	1700	45
964	1204	390	0.007	11	1	Major Arterial	1700	45
965	352	355	0.052	11	2	Major Arterial	2700	50
966	355	352	0.052	11	2	Major Arterial	2700	50
967	355	353	0.032	11	1	Minor Arterial	1700	40
968	808	810	0.113	11	1	Collector / Local Road	1700	40
969	1206	1207	0.201	12	2	Freeway	4100	65
970	1208	1209	0.058	11	1	Major Arterial	1700	45
971	1210	1208	0.21	11	2	Major Arterial	3200	45
972	1213	1212	0.089	11	2	Principal Arterial	3700	50
973	1207	1215	0.126	11	1	Ramp	1500	55
974	1215	1212	0.052	11	1	Ramp	1500	55
975	1212	1216	0.008	11	1	Collector / Local Road	1700	45
976	1212	1217	0.057	11	2	Principal Arterial	3700	50
977	1215	1217	0.081	11	1	Ramp	1500	55
978	1210	1211	0.268	11	1	Ramp	1500	55
979	1218	1219	0.05	11	2	Principal Arterial	3700	50
980	1217	1218	0.052	11	2	Principal Arterial	3700	50
981	1220	1208	0.311	12	1	Ramp	1500	35
982	1221	1222	0.031	12	1	Ramp	1500	35
983	1221	1223	0.022	12	1	Ramp	1500	35
984	1222	1223	0.017	11	1	Minor Arterial	1700	40
985	1223	1222	0.017	11	1	Minor Arterial	1700	40
986	1225	1224	0.019	12	1	Ramp	1500	35
987	1223	1225	0.008	11	1	Major Arterial	1700	50
988	1225	1223	0.008	11	1	Major Arterial	1700	50
989	1226	1224	0.028	12	1	Ramp	1500	35
990	1225	1226	0.027	11	1	Major Arterial	1700	50
991	1226	1225	0.027	11	1	Major Arterial	1700	50

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
992	1214	1227	0.16	12	2	Freeway	4100	65
993	1224	1228	0.172	12	1	Ramp	1500	35
994	1229	1230	0.039	11	1	Minor Arterial	1700	40
995	1229	1231	0.009	11	1	Collector / Local Road	1700	40
996	1226	1232	0.049	11	1	Major Arterial	1700	50
997	1232	1226	0.049	11	1	Major Arterial	1700	50
998	1233	1221	0.204	12	1	Ramp	1500	35
999	1233	1228	0.102	12	2	Freeway	4100	65
1000	1234	1230	0.06	12	1	Ramp	1500	35
1001	1234	1229	0.03	12	1	Ramp	1500	35
1002	1232	1235	0.023	11	1	Major Arterial	1700	50
1003	1235	1232	0.023	11	1	Major Arterial	1700	50
1004	1235	1236	0.019	12	1	Ramp	1500	35
1005	1232	1236	0.03	12	1	Ramp	1500	35
1006	1237	1229	0.093	11	1	Minor Arterial	1700	40
1007	1235	1238	0.012	11	1	Major Arterial	1700	50
1008	1238	1235	0.012	11	1	Major Arterial	1700	50
1009	1239	1238	0.016	12	1	Ramp	1500	35
1010	1236	1227	0.176	12	1	Ramp	1500	35
1011	1214	1239	0.208	12	1	Ramp	1500	35
1012	1238	1240	0.019	11	1	Major Arterial	1700	50
1013	1240	1238	0.019	11	1	Major Arterial	1700	50
1014	1239	1240	0.027	12	1	Ramp	1500	35
1015	1242	1241	0.124	11	1	Minor Arterial	1700	40
1016	1237	1243	0.236	12	1	Ramp	1500	35
1017	1244	1234	0.227	12	1	Ramp	1500	35
1018	1245	1246	0.214	12	1	Ramp	1500	35
1019	1241	1248	0.146	12	1	Ramp	1500	35
1020	1241	1250	0.035	11	1	Minor Arterial	1700	40
1021	1251	1250	0.03	12	1	Ramp	1500	35
1022	1250	1252	0.008	11	1	Collector / Local Road	1700	40
1023	1250	1253	0.012	11	1	Minor Arterial	1700	40
1024	1251	1253	0.03	12	1	Ramp	1500	35
1025	1255	1256	0.08	11	1	Minor Arterial	1700	40
1026	1257	1247	0.288	12	1	Ramp	1500	35
1027	1257	1258	0.084	11	1	Major Arterial	1250	50
1028	1258	1257	0.084	11	1	Major Arterial	1250	50
1029	1259	1260	0.513	12	1	Ramp	1500	35
1030	1249	1258	0.292	12	1	Ramp	1500	35
1031	1261	1262	0.198	12	1	Ramp	1500	35
1032	1264	1263	0.579	12	2	Freeway	4100	65
1033	1265	1263	0.319	12	1	Ramp	1500	35
1034	1268	1269	0.085	12	2	Freeway	4100	55
1035	1269	1268	0.085	12	2	Freeway	4100	55
1036	1270	1271	0.009	11	1	Minor Arterial	1700	40
1037	1271	1270	0.009	11	1	Minor Arterial	1700	40
1038	1273	1274	0.206	11	1	Major Arterial	1250	45
1039	1274	1273	0.206	11	1	Major Arterial	1250	45
1040	1278	1279	0.024	11	1	Principal Arterial	1600	55
1041	1279	1278	0.024	11	2	Principal Arterial	3300	45
1042	1280	1281	0.052	11	1	Major Arterial	1250	45
1043	1281	1280	0.052	11	1	Major Arterial	1250	45
1044	1282	1280	0.078	11	1	Collector / Local Road	1250	40
1045	1281	1282	0.043	11	2	Principal Arterial	3300	45
1046	1282	1281	0.043	11	2	Principal Arterial	3300	45
1047	1283	1284	0.042	11	1	Principal Arterial	1600	40
1048	1284	1283	0.042	11	1	Principal Arterial	1600	40
1049	1286	1285	0.361	11	2	Major Arterial	3200	45
1050	1285	1287	0.256	12	1	Ramp	1500	35
1051	1289	1288	0.191	12	1	Ramp	1500	35
1052	1290	1291	0.146	11	1	Minor Arterial	1700	40
1053	1291	1290	0.146	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1054	1292	1293	0.063	12	1	Ramp	1500	35
1055	1290	1292	0.055	11	1	Minor Arterial	1700	40
1056	1292	1290	0.055	11	1	Minor Arterial	1700	40
1057	1294	1290	0.178	12	1	Ramp	1500	35
1058	1296	1297	0.224	11	2	Principal Arterial	3700	55
1059	1299	1300	0.082	11	1	Minor Arterial	1700	40
1060	1300	1299	0.082	11	1	Minor Arterial	1700	40
1061	1301	1302	0.518	12	1	Ramp	1500	35
1062	1299	1303	0.337	11	1	Minor Arterial	1700	40
1063	1303	1299	0.337	11	1	Minor Arterial	1700	40
1064	1305	1304	0.307	12	1	Ramp	1500	35
1065	1304	1303	0.069	12	1	Ramp	1500	35
1066	1306	1307	0.075	11	1	Minor Arterial	1700	40
1067	1307	1306	0.075	11	1	Minor Arterial	1700	40
1068	1306	1308	0.079	11	1	Minor Arterial	1700	40
1069	1308	1306	0.079	11	1	Minor Arterial	1700	40
1070	1304	1308	0.198	12	1	Ramp	1500	35
1071	1310	1309	0.382	12	1	Ramp	1500	35
1072	1312	1313	0.03	11	1	Major Arterial	1700	45
1073	1314	1312	0.025	11	1	Major Arterial	1700	45
1074	1313	1314	0.015	11	1	Minor Arterial	1700	40
1075	1314	1313	0.015	11	1	Minor Arterial	1700	40
1076	1316	1317	0.055	11	1	Major Arterial	1700	45
1077	1317	1316	0.055	11	1	Major Arterial	1700	45
1078	1320	1321	0.25	11	1	Major Arterial	1700	45
1079	1321	1320	0.25	11	1	Major Arterial	1700	45
1080	1322	1320	0.048	11	1	Major Arterial	1700	45
1081	1322	1323	0.029	11	1	Collector / Local Road	1700	40
1082	1320	1323	0.048	11	1	Major Arterial	1700	45
1083	1324	1322	0.078	11	1	Major Arterial	1700	45
1084	1323	1325	0.07	11	1	Major Arterial	1700	45
1085	1325	1324	0.053	11	1	Collector / Local Road	1700	40
1086	1325	1326	0.132	12	1	Ramp	1500	35
1087	1327	1324	0.232	11	2	Ramp	3000	40
1088	1329	1328	0.031	12	1	Ramp	1500	35
1089	1329	1330	0.032	11	1	Minor Arterial	1700	40
1090	1330	1329	0.032	11	1	Minor Arterial	1700	40
1091	1330	1328	0.023	12	1	Ramp	1500	35
1092	1328	1331	0.135	12	1	Ramp	1500	35
1093	1330	1332	0.055	11	1	Minor Arterial	1700	40
1094	1332	1330	0.055	11	1	Minor Arterial	1700	40
1095	1333	1332	0.13	12	1	Ramp	1500	35
1096	1335	1334	0.572	11	1	Ramp	1500	55
1097	1336	1334	0.355	11	1	Ramp	1500	55
1098	1337	1338	0.267	11	1	Ramp	1500	55
1099	1337	1339	0.658	11	1	Ramp	1500	55
1100	1334	1340	0.149	12	2	Freeway	4100	60
1101	1341	1337	0.206	12	2	Freeway	4100	60
1102	1340	1342	0.147	12	1	Ramp	1500	35
1103	1342	1343	0.025	12	1	Ramp	1500	35
1104	1342	1344	0.024	12	1	Ramp	1500	35
1105	1343	1344	0.025	11	1	Major Arterial	1250	45
1106	1344	1343	0.025	11	1	Major Arterial	1250	45
1107	1345	1341	0.136	12	1	Ramp	1500	35
1108	1346	1345	0.022	12	1	Ramp	1500	35
1109	1344	1346	0.09	11	1	Major Arterial	1250	45
1110	1346	1344	0.09	11	1	Major Arterial	1250	45
1111	1347	1345	0.03	12	1	Ramp	1500	35
1112	1346	1347	0.023	11	1	Major Arterial	1250	45
1113	1347	1346	0.023	11	1	Major Arterial	1250	45
1114	1347	1348	0.037	11	1	Major Arterial	1250	45
1115	1348	1347	0.037	11	1	Major Arterial	1250	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1116	1349	1348	0.034	12	1	Ramp	1500	35
1117	1349	1347	0.038	12	1	Ramp	1500	35
1118	1350	1351	0.066	11	2	Major Arterial	3200	45
1119	1351	1350	0.066	11	2	Major Arterial	3200	45
1120	1340	1352	0.441	12	2	Freeway	4100	60
1121	1344	1352	0.276	12	1	Ramp	1500	35
1122	1353	1349	0.264	12	1	Ramp	1500	35
1123	1354	1355	0.582	11	1	Major Arterial	1250	55
1124	1357	1358	0.014	11	2	Major Arterial	3200	45
1125	1358	1357	0.014	11	2	Major Arterial	3200	45
1126	1359	1357	0.012	12	1	Ramp	1500	35
1127	1360	1361	0.019	11	1	Major Arterial	1250	45
1128	1361	1360	0.019	11	1	Major Arterial	1250	45
1129	1365	1366	0.132	12	1	Ramp	1500	35
1130	1365	1367	0.006	11	1	Major Arterial	1250	45
1131	1367	1365	0.006	11	1	Major Arterial	1250	45
1132	1368	1367	0.147	12	1	Ramp	1500	35
1133	1368	1366	0.203	12	2	Freeway	4100	60
1134	1375	1376	0.022	11	2	Principal Arterial	3300	45
1135	1376	1375	0.022	11	2	Principal Arterial	3300	45
1136	1375	1377	0.005	11	2	Ramp	3000	40
1137	1377	1375	0.005	11	2	Ramp	3000	40
1138	1244	1243	0.211	12	2	Freeway	4100	65
1139	1380	1354	0.336	11	2	Major Arterial	3600	55
1140	1332	1381	0.061	11	1	Minor Arterial	1700	40
1141	1381	1332	0.061	11	1	Minor Arterial	1700	40
1142	1284	1382	0.042	11	1	Collector / Local Road	1250	45
1143	1283	1382	0.014	11	1	Major Arterial	1250	45
1144	1382	1283	0.014	11	1	Major Arterial	1250	45
1145	1383	1384	0.016	11	1	Minor Arterial	1250	40
1146	1384	1383	0.016	11	1	Minor Arterial	1250	40
1147	1385	1383	0.024	11	1	Collector / Local Road	1250	40
1148	1384	1385	0.016	11	2	Principal Arterial	3300	45
1149	1385	1384	0.016	11	2	Principal Arterial	3300	45
1150	1384	1386	0.016	11	2	Principal Arterial	3300	45
1151	1386	1384	0.016	11	2	Principal Arterial	3300	45
1152	1383	1386	0.025	11	1	Collector / Local Road	1250	40
1153	1389	1388	0.022	10	1	Collector / Local Road	800	15
1154	1389	1390	0.076	11	2	Principal Arterial	3700	55
1155	1391	1392	0.286	11	1	Ramp	1500	55
1156	1393	1394	0.028	11	1	Principal Arterial	1600	45
1157	1394	1393	0.028	11	1	Principal Arterial	1600	45
1158	1396	1395	0.248	11	1	Ramp	1500	55
1159	1396	1397	0.429	11	1	Ramp	1500	55
1160	1398	1392	0.398	11	1	Ramp	1500	55
1161	1398	1397	0.201	12	2	Freeway	4100	65
1162	1399	1400	0.172	12	1	Ramp	1500	35
1163	1402	1401	0.146	12	1	Ramp	1500	35
1164	1393	1402	0.035	12	1	Ramp	1500	35
1165	1394	1402	0.017	12	1	Ramp	1500	35
1166	1360	1403	0.024	12	1	Ramp	1500	35
1167	1357	1361	0.007	11	1	Major Arterial	1250	45
1168	1361	1357	0.007	11	1	Major Arterial	1250	45
1169	1361	1403	0.01	12	1	Ramp	1500	35
1170	1404	1359	0.354	12	1	Ramp	1500	35
1171	1359	1358	0.018	12	1	Ramp	1500	35
1172	1306	1310	0.087	12	1	Ramp	1500	35
1173	1303	1307	0.047	11	1	Minor Arterial	1700	40
1174	1307	1303	0.047	11	1	Minor Arterial	1700	40
1175	1307	1310	0.084	12	1	Ramp	1500	35
1176	1302	1299	0.087	12	1	Ramp	1500	35
1177	1302	1300	0.052	12	1	Ramp	1500	35

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1178	1298	1300	0.025	11	1	Minor Arterial	1700	40
1179	1300	1298	0.025	11	1	Minor Arterial	1700	40
1180	1287	1289	0.024	12	1	Ramp	1500	35
1181	1291	1289	0.032	12	1	Ramp	1500	35
1182	1293	1405	0.196	12	1	Ramp	1500	35
1183	1290	1293	0.024	12	1	Ramp	1500	35
1184	1406	1407	0.167	12	2	Freeway	4100	65
1185	1209	1408	0.068	11	1	Major Arterial	1700	45
1186	1216	1409	0.058	11	1	Ramp	1500	55
1187	1219	1216	0.059	11	2	Principal Arterial	3700	50
1188	1219	1409	0.099	11	1	Ramp	1500	55
1189	1242	1410	0.207	12	1	Ramp	1500	35
1190	1256	1411	0.301	12	1	Ramp	1500	35
1191	1256	1252	0.059	11	1	Minor Arterial	1700	40
1192	1261	1412	0.402	12	2	Freeway	4100	65
1193	1413	1412	0.552	12	1	Ramp	1500	35
1194	1413	1260	0.053	11	2	Principal Arterial	3300	45
1195	226	230	0.025	11	1	Principal Arterial	1700	45
1196	230	226	0.025	11	1	Principal Arterial	1700	45
1197	230	227	0.187	11	1	Collector / Local Road	1700	40
1198	213	1418	0.062	11	1	Collector / Local Road	1700	40
1199	1418	213	0.062	11	1	Collector / Local Road	1700	40
1200	213	214	0.009	11	1	Principal Arterial	1700	45
1201	214	213	0.009	11	1	Principal Arterial	1700	45
1202	214	1418	0.109	11	1	Collector / Local Road	1700	40
1203	1030	1200	0.111	11	1	Ramp	1500	55
1204	1054	1051	0.033	11	1	Major Arterial	1700	45
1205	1051	1056	0.026	12	1	Ramp	1500	35
1206	1054	1056	0.029	11	1	Minor Arterial	1700	40
1207	1419	1420	0.306	11	1	Ramp	1500	55
1208	1063	1421	0.232	11	1	Ramp	1500	55
1209	1422	1051	0.299	12	1	Ramp	1500	35
1210	1423	1199	0.227	12	1	Ramp	1500	35
1211	1047	1423	0.014	12	1	Ramp	1500	35
1212	1424	1047	0.014	11	1	Principal Arterial	1700	45
1213	1424	1423	0.017	12	1	Ramp	1500	35
1214	1421	1422	1.612	12	2	Freeway	4100	60
1215	1419	1426	0.262	12	2	Freeway	4100	60
1216	1062	1066	0.011	11	1	Collector / Local Road	1700	45
1217	1066	1062	0.011	11	1	Collector / Local Road	1700	45
1218	1064	1420	0.069	11	2	Principal Arterial	3700	50
1219	1064	1426	0.25	11	1	Ramp	1500	55
1220	1420	1427	0.011	11	1	Collector / Local Road	1700	45
1221	1427	1428	0.307	11	1	Ramp	1500	55
1222	925	1429	0.089	12	1	Ramp	1500	35
1223	1050	1430	0.097	12	1	Ramp	1500	35
1224	1039	1432	0.556	11	1	Principal Arterial	1600	45
1225	1432	1039	0.556	11	1	Principal Arterial	1600	45
1226	1380	1435	0.158	11	1	Collector / Local Road	1250	40
1227	1435	1380	0.158	11	1	Collector / Local Road	1250	40
1228	458	1437	0.18	11	1	Principal Arterial	1700	45
1229	1437	458	0.18	11	1	Principal Arterial	1700	45
1230	1400	1438	0.048	11	1	Major Arterial	1250	45
1231	1438	1400	0.048	11	1	Major Arterial	1250	45
1232	1420	1439	0.059	11	2	Principal Arterial	3700	50
1233	1440	1427	0.062	11	2	Principal Arterial	3700	50
1234	1439	1440	0.011	10	1	Collector / Local Road	800	15
1235	1440	1439	0.011	10	1	Collector / Local Road	800	15
1236	208	1441	0.028	11	1	Principal Arterial	1700	45
1237	1441	208	0.028	11	1	Principal Arterial	1700	45
1238	205	1441	0.073	11	1	Principal Arterial	1700	45
1239	1441	205	0.073	11	1	Principal Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1240	1399	1442	0.175	12	1	Freeway	2050	55
1241	1442	1438	0.297	12	1	Ramp	1500	35
1242	1400	1443	0.037	11	1	Major Arterial	1250	45
1243	1443	1400	0.037	11	1	Major Arterial	1250	45
1244	1442	1444	0.35	12	2	Freeway	4100	60
1245	1443	1445	0.017	12	1	Ramp	1500	35
1246	1443	1446	0.023	11	1	Major Arterial	1250	45
1247	1446	1443	0.023	11	1	Major Arterial	1250	45
1248	1446	1445	0.032	12	1	Ramp	1500	35
1249	1445	1444	0.431	12	1	Ramp	1500	35
1250	893	1447	0.111	11	1	Major Arterial	1250	40
1251	1447	893	0.111	11	1	Major Arterial	1250	40
1252	870	1447	0.213	11	1	Major Arterial	1700	40
1253	1447	870	0.213	11	1	Major Arterial	1700	40
1254	701	1449	0.163	11	1	Collector / Local Road	1250	40
1255	1449	701	0.163	11	1	Collector / Local Road	1250	40
1256	980	1450	0.021	11	1	Collector / Local Road	1700	40
1257	980	1451	0.017	11	1	Minor Arterial	1700	40
1258	1451	980	0.017	11	1	Minor Arterial	1700	40
1259	1450	1451	0.015	11	1	Collector / Local Road	1700	40
1260	1451	1450	0.015	11	1	Collector / Local Road	1700	40
1261	856	854	0.062	11	1	Major Arterial	1250	45
1262	502	1452	0.057	11	3	Major Arterial	3700	40
1263	416	420	0.334	11	1	Collector / Local Road	1700	40
1264	420	416	0.334	11	1	Collector / Local Road	1700	40
1265	733	1457	0.886	11	2	Principal Arterial	3300	45
1266	1457	733	0.886	11	2	Principal Arterial	3300	45
1267	1456	1457	0.114	11	1	Principal Arterial	1700	45
1268	1457	1456	0.114	11	1	Principal Arterial	1700	45
1269	1456	1458	0.099	11	1	Collector / Local Road	1700	40
1270	1458	1456	0.099	11	1	Collector / Local Road	1700	40
1271	1457	1458	0.085	11	1	Minor Arterial	1700	40
1272	1459	1460	0.155	11	1	Minor Arterial	1700	40
1273	1460	1459	0.155	11	1	Minor Arterial	1700	40
1274	924	928	0.158	11	1	Collector / Local Road	1700	40
1275	928	924	0.158	11	1	Collector / Local Road	1700	40
1276	1032	1432	0.315	11	2	Principal Arterial	3300	45
1277	1432	1032	0.315	11	2	Principal Arterial	3300	45
1278	1029	1432	0.444	11	1	Major Arterial	1250	45
1279	1432	1029	0.444	11	1	Major Arterial	1250	45
1280	971	983	0.361	11	1	Major Arterial	1250	50
1281	1461	1186	0.032	11	1	Principal Arterial	1700	50
1282	1183	1462	0.023	11	2	Major Arterial	3200	45
1283	1463	1155	0.021	11	1	Major Arterial	1700	45
1284	1163	1464	0.148	12	2	Freeway	4100	45
1285	1130	1465	0.062	12	2	Freeway	4100	45
1286	1466	1467	0.146	12	2	Freeway	4100	45
1287	1467	1468	1.022	12	2	Freeway	4100	55
1288	1466	1470	0.482	11	2	Ramp	3000	55
1289	1471	1469	0.26	11	2	Ramp	3000	55
1290	1474	1388	0.057	11	2	Principal Arterial	3700	50
1291	1475	1476	0.67	12	2	Freeway	4100	55
1292	1476	1301	0.194	11	2	Principal Arterial	3700	55
1293	1486	1478	0.007	11	1	Minor Arterial	1700	40
1294	467	1486	0.024	12	1	Ramp	1500	35
1295	1478	291	0.007	11	1	Minor Arterial	1700	40
1296	291	468	0.02	12	1	Ramp	1500	35
1297	291	1486	0.007	11	1	Collector / Local Road	1700	40
1298	1486	289	0.018	11	1	Collector / Local Road	1700	40
1299	1488	1430	0.222	12	2	Freeway	4100	60
1300	1030	1488	0.035	12	2	Freeway	4100	55
1301	1489	1490	1.285	12	4	Freeway	8200	55

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1302	1490	1020	0.072	12	2	Freeway	4100	45
1303	1425	1489	0.036	12	2	Freeway	4100	55
1304	1491	1021	0.094	12	2	Freeway	4100	60
1305	998	1491	0.335	12	2	Freeway	4100	45
1306	1007	1492	0.134	12	2	Freeway	4100	45
1307	1492	1197	0.151	12	2	Freeway	4100	60
1308	968	1493	1.173	12	2	Freeway	4100	55
1309	1493	961	0.032	12	3	Freeway	6150	55
1310	1494	590	0.337	12	2	Freeway	4100	55
1311	1495	616	0.181	12	2	Freeway	4100	60
1312	1496	610	0.244	12	2	Freeway	4100	60
1313	649	1497	0.125	12	2	Freeway	4100	55
1314	1501	1500	0.263	12	2	Freeway	4100	65
1315	1502	499	0.103	12	2	Freeway	4100	65
1316	1518	1519	0.015	11	2	Minor Arterial	3200	40
1317	1519	1518	0.015	11	2	Minor Arterial	3200	40
1318	827	1520	0.116	12	2	Freeway	4100	60
1319	1529	1528	0.196	12	3	Freeway	6150	55
1320	944	1529	0.163	12	4	Freeway	8200	55
1321	1535	233	0.25	11	2	Principal Arterial	3300	45
1322	190	1537	0.022	12	2	Freeway	4100	55
1323	589	1539	0.3	11	1	Major Arterial	1700	45
1324	1539	589	0.3	11	1	Major Arterial	1700	45
1325	801	1541	3.23	11	1	Minor Arterial	1250	40
1326	1541	801	3.23	11	1	Minor Arterial	1250	40
1327	943	1543	0.339	11	1	Major Arterial	1700	45
1328	1543	943	0.339	11	1	Major Arterial	1700	45
1329	1544	1440	0.023	11	2	Principal Arterial	3700	50
1330	1439	1544	0.024	11	2	Principal Arterial	3700	50
1331	1483	1066	0.242	11	1	Ramp	1500	55
1332	1374	1546	0.37	11	1	Principal Arterial	1600	45
1333	1546	1374	0.37	11	1	Principal Arterial	1600	45
1334	1548	402	0.012	11	1	Collector / Local Road	1700	40
1335	397	1548	0.108	11	1	Collector / Local Road	1700	40
1336	1441	1549	0.065	10	1	Collector / Local Road	800	15
1337	1549	205	0.037	10	1	Collector / Local Road	800	15
1338	1551	1552	0.131	11	1	Collector / Local Road	1700	40
1339	1552	1551	0.131	11	1	Collector / Local Road	1700	40
1340	1087	1088	0.181	12	1	Ramp	1500	35
1341	1468	1089	0.208	12	1	Ramp	1500	35
1342	1553	470	0.007	10	1	Collector / Local Road	800	15
1343	1554	581	0.03	12	1	Ramp	1500	35
1344	581	1555	0.011	11	1	Collector / Local Road	1250	40
1345	1555	581	0.011	11	1	Collector / Local Road	1250	40
1346	577	1555	0.043	11	1	Collector / Local Road	1250	40
1347	1555	577	0.043	11	1	Collector / Local Road	1250	40
1348	1554	1555	0.029	12	1	Ramp	1500	35
1349	1295	1558	0.19	12	1	Ramp	1500	35
1350	1559	1560	0.715	12	1	Ramp	1500	35
1351	1364	1559	0.033	12	1	Ramp	1500	35
1352	1559	1364	0.033	12	1	Ramp	1500	35
1353	197	1364	0.785	12	1	Ramp	1500	35
1354	1564	1565	0.104	11	1	Collector / Local Road	1700	40
1355	1565	1564	0.104	11	1	Collector / Local Road	1700	40
1356	1564	1566	1.538	11	1	Minor Arterial	1700	40
1357	1566	1564	1.538	11	1	Minor Arterial	1700	40
1358	1570	1571	0.895	12	2	Freeway	4100	60
1359	811	1576	0.112	10	1	Collector / Local Road	800	10
1360	1576	811	0.112	10	1	Collector / Local Road	800	10
1361	831	1577	0.138	10	1	Collector / Local Road	800	10
1362	1577	831	0.138	10	1	Collector / Local Road	800	10
1363	572	1578	0.158	11	1	Minor Arterial	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1364	1578	572	0.158	11	1	Minor Arterial	1250	40
1365	207	1581	0.128	11	1	Principal Arterial	1700	45
1366	1581	207	0.128	11	1	Principal Arterial	1700	45
1367	1583	1584	0.087	11	1	Major Arterial	1700	45
1368	1584	1583	0.087	11	1	Major Arterial	1700	45
1369	1585	1586	0.05	11	1	Major Arterial	1700	45
1370	1586	1585	0.05	11	1	Major Arterial	1700	45
1371	1587	1588	0.057	11	1	Principal Arterial	1700	45
1372	1588	1587	0.057	11	1	Principal Arterial	1700	45
1373	1589	1590	0.068	11	1	Major Arterial	1700	45
1374	1590	1589	0.068	11	1	Major Arterial	1700	45
1375	986	1001	0.446	11	1	Principal Arterial	1600	45
1376	1591	1592	0.167	11	2	Principal Arterial	3300	45
1377	1592	1591	0.167	11	2	Principal Arterial	3300	45
1378	1593	1594	0.254	12	1	Minor Arterial	1700	25
1379	1594	1593	0.254	12	1	Minor Arterial	1700	25
1380	1595	1596	0.216	11	1	Minor Arterial	1700	40
1381	1596	1595	0.216	11	1	Minor Arterial	1700	40
1382	1600	1601	0.517	12	1	Ramp	1500	35
1383	1601	1600	0.517	12	1	Ramp	1500	35
1384	1602	827	0.102	12	2	Freeway	4100	60
1385	1609	1610	0.252	11	1	Minor Arterial	1700	40
1386	1610	1609	0.252	11	1	Minor Arterial	1700	40
1387	1614	1615	1.436	10	1	Collector / Local Road	800	15
1388	1615	1614	1.436	10	1	Collector / Local Road	800	15
1389	1616	1617	0.034	10	1	Collector / Local Road	800	10
1390	1617	1616	0.034	10	1	Collector / Local Road	800	10
1391	1618	1619	0.589	11	2	Principal Arterial	3300	45
1392	1619	1618	0.589	11	2	Principal Arterial	3300	45
1393	1618	1620	0.281	11	2	Principal Arterial	3300	45
1394	1620	1618	0.281	11	2	Principal Arterial	3300	45
1395	1618	1621	0.871	12	1	Ramp	1500	35
1396	1621	1622	0.152	11	1	Major Arterial	1700	45
1397	1622	1621	0.152	11	1	Major Arterial	1700	45
1398	1624	1625	0.364	11	1	Minor Arterial	1700	40
1399	1625	1624	0.364	11	1	Minor Arterial	1700	40
1400	1557	1631	0.21	11	1	Minor Arterial	1700	40
1401	1631	1557	0.21	11	1	Minor Arterial	1700	40
1402	1632	1631	0.008	11	1	Minor Arterial	1700	40
1403	1634	1635	0.097	12	1	Minor Arterial	1700	25
1404	1635	1634	0.097	11	1	Minor Arterial	1700	40
1405	1637	2766	0.2	11	2	Principal Arterial	3300	45
1406	2766	1637	0.2	11	2	Principal Arterial	3300	45
1407	2766	1638	0.124	12	1	Ramp	1500	35
1408	1592	1637	0.112	11	2	Principal Arterial	3300	45
1409	1637	1592	0.112	11	2	Principal Arterial	3300	45
1410	1639	1592	0.404	12	1	Ramp	1500	35
1411	1592	1640	0.476	12	1	Ramp	1500	35
1412	1641	1637	0.557	12	1	Ramp	1500	35
1413	1641	1640	0.256	12	2	Freeway	4100	55
1414	1643	1642	0.36	12	2	Freeway	4100	55
1415	1591	1644	0.45	12	1	Ramp	1500	35
1416	1591	1645	0.113	11	2	Principal Arterial	3300	45
1417	1645	1591	0.113	11	2	Principal Arterial	3300	45
1418	1642	1646	0.596	12	2	Freeway	4100	55
1419	1643	1645	0.391	12	1	Ramp	1500	35
1420	1647	1594	0.598	12	1	Ramp	1500	35
1421	1648	1642	0.551	12	1	Ramp	1500	35
1422	1645	1648	0.222	11	2	Principal Arterial	3300	45
1423	1648	1645	0.222	11	2	Principal Arterial	3300	45
1424	1649	1648	0.574	12	1	Ramp	1500	35
1425	1593	1650	0.142	12	1	Ramp	1500	35

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1426	1650	1646	0.347	12	1	Ramp	1500	35
1427	1593	1651	0.028	12	1	Minor Arterial	1700	25
1428	1651	1593	0.028	12	1	Minor Arterial	1700	25
1429	1651	1650	0.112	12	1	Ramp	1500	35
1430	1599	1647	2.096	12	2	Freeway	4100	55
1431	1596	1599	0.447	12	1	Ramp	1500	35
1432	1654	1656	0.154	12	1	Minor Arterial	1700	35
1433	1656	1654	0.154	12	1	Minor Arterial	1700	35
1434	1597	1595	0.46	12	1	Ramp	1500	35
1435	1601	1598	0.246	12	1	Ramp	1500	35
1436	1595	1658	0.092	11	1	Minor Arterial	1700	40
1437	1658	1595	0.092	11	1	Minor Arterial	1700	40
1438	1659	1601	0.143	12	1	Ramp	1500	35
1439	1600	1545	0.312	12	1	Ramp	1500	35
1440	1660	1600	0.343	12	1	Ramp	1500	35
1441	1600	1662	0.116	12	1	Ramp	1500	35
1442	1662	1600	0.116	12	1	Ramp	1500	35
1443	1663	1664	0.034	11	1	Minor Arterial	1700	40
1444	1664	1663	0.034	11	1	Minor Arterial	1700	40
1445	1669	1671	0.722	11	1	Minor Arterial	1700	40
1446	1671	1669	0.722	11	1	Minor Arterial	1700	40
1447	1672	1673	0.357	11	1	Minor Arterial	1700	40
1448	1673	1672	0.357	11	1	Minor Arterial	1700	40
1449	1540	1542	0.201	11	1	Minor Arterial	1700	40
1450	1542	1540	0.201	11	1	Minor Arterial	1700	40
1451	1678	1677	0.34	11	1	Minor Arterial	1700	40
1452	1677	1679	0.324	11	1	Principal Arterial	1700	45
1453	1677	1680	0.072	11	1	Minor Arterial	1700	40
1454	1679	1680	0.379	11	1	Principal Arterial	1700	45
1455	1681	1677	0.2	11	1	Principal Arterial	1700	45
1456	1682	1684	0.096	11	1	Minor Arterial	1250	40
1457	1684	1682	0.096	11	1	Minor Arterial	1250	40
1458	1684	1685	0.058	11	1	Minor Arterial	1250	40
1459	1685	1684	0.058	11	1	Minor Arterial	1250	40
1460	1614	1687	0.31	10	1	Collector / Local Road	800	10
1461	1687	1614	0.31	10	1	Collector / Local Road	800	10
1462	1689	1690	0.349	10	1	Collector / Local Road	800	15
1463	1690	1689	0.349	10	1	Collector / Local Road	800	15
1464	1690	1691	0.266	11	1	Principal Arterial	1700	45
1465	1691	1690	0.266	11	1	Principal Arterial	1700	45
1466	1690	1695	0.841	11	1	Principal Arterial	1700	45
1467	1695	1690	0.841	11	1	Principal Arterial	1700	45
1468	1692	1695	1.454	11	1	Minor Arterial	1250	40
1469	1695	1692	1.454	11	1	Minor Arterial	1250	40
1470	1696	1697	0.045	11	1	Minor Arterial	1250	40
1471	1697	1696	0.045	11	1	Minor Arterial	1250	40
1472	1701	1703	0.325	11	1	Collector / Local Road	1700	40
1473	1703	1701	0.325	11	1	Collector / Local Road	1700	40
1474	1701	1706	0.267	11	1	Collector / Local Road	1250	40
1475	1706	1701	0.267	11	1	Collector / Local Road	1250	40
1476	1703	1706	0.318	11	1	Major Arterial	1250	40
1477	1706	1703	0.318	11	1	Major Arterial	1250	40
1478	1707	1708	0.415	10	1	Collector / Local Road	800	15
1479	1708	1707	0.415	10	1	Collector / Local Road	800	15
1480	1700	1709	0.629	11	1	Minor Arterial	1250	40
1481	1709	1700	0.629	11	1	Minor Arterial	1250	40
1482	1707	1709	0.418	10	1	Collector / Local Road	800	15
1483	1709	1707	0.418	10	1	Collector / Local Road	800	15
1484	1712	1713	1.104	11	1	Principal Arterial	1600	45
1485	1713	1712	1.104	11	1	Principal Arterial	1600	45
1486	1714	1715	0.076	12	1	Principal Arterial	1600	35
1487	1715	1714	0.076	11	1	Principal Arterial	1600	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1488	1718	1719	0.359	11	1	Principal Arterial	1600	50
1489	1719	1718	0.359	11	1	Principal Arterial	1600	50
1490	1718	1720	0.312	11	1	Principal Arterial	1600	50
1491	1720	1718	0.312	11	1	Principal Arterial	1600	50
1492	1721	1722	0.062	12	1	Principal Arterial	1600	35
1493	1722	1721	0.062	12	1	Principal Arterial	1600	35
1494	1726	1731	0.302	10	1	Collector / Local Road	800	10
1495	1731	1726	0.302	10	1	Collector / Local Road	800	10
1496	1744	1745	0.455	11	1	Minor Arterial	1250	40
1497	1745	1744	0.455	11	1	Minor Arterial	1250	40
1498	1612	1748	0.469	11	1	Minor Arterial	1250	40
1499	1748	1612	0.469	11	1	Minor Arterial	1250	40
1500	1747	1752	2.298	11	1	Principal Arterial	1600	45
1501	1752	1747	2.298	11	1	Principal Arterial	1600	45
1502	1751	1754	0.417	11	1	Minor Arterial	1250	40
1503	1754	1751	0.417	11	1	Minor Arterial	1250	40
1504	1752	1755	0.754	11	1	Principal Arterial	1600	45
1505	1755	1752	0.754	11	1	Principal Arterial	1600	45
1506	1755	1756	0.258	11	1	Principal Arterial	1600	45
1507	1756	1755	0.258	11	1	Principal Arterial	1600	45
1508	1754	1757	0.28	11	1	Minor Arterial	1250	40
1509	1757	1754	0.28	11	1	Minor Arterial	1250	40
1510	1758	1759	0.165	11	1	Minor Arterial	1250	40
1511	1759	1758	0.165	11	1	Minor Arterial	1250	40
1512	1763	1764	0.061	11	1	Minor Arterial	1250	40
1513	1764	1763	0.061	11	1	Minor Arterial	1250	40
1514	1764	1765	1.203	11	1	Minor Arterial	1250	40
1515	1765	1764	1.203	11	1	Minor Arterial	1250	40
1516	1765	1768	1.23	11	1	Principal Arterial	1600	45
1517	1768	1765	1.23	11	1	Principal Arterial	1600	45
1518	1772	1773	0.231	11	1	Minor Arterial	1250	40
1519	1773	1772	0.231	11	1	Minor Arterial	1250	40
1520	1770	1774	0.268	11	1	Major Arterial	1250	45
1521	1774	1770	0.268	11	1	Major Arterial	1250	45
1522	1774	1775	0.134	10	1	Collector / Local Road	800	15
1523	1775	1774	0.134	10	1	Collector / Local Road	800	15
1524	1781	1782	0.888	11	1	Major Arterial	1250	45
1525	1782	1781	0.888	11	1	Major Arterial	1250	45
1526	1780	1783	0.21	12	1	Principal Arterial	1600	35
1527	1783	1780	0.21	12	1	Principal Arterial	1600	35
1528	1785	1786	0.041	11	1	Minor Arterial	1250	40
1529	1786	1785	0.041	11	1	Minor Arterial	1250	40
1530	1787	1788	0.016	11	1	Principal Arterial	1700	45
1531	1788	1787	0.016	12	1	Principal Arterial	1700	35
1532	1625	1788	0.132	11	2	Principal Arterial	3300	45
1533	1788	1625	0.132	11	2	Principal Arterial	3300	45
1534	1791	1790	0.549	11	1	Ramp	1500	55
1535	1792	1793	0.851	11	1	Ramp	1500	55
1536	1792	1794	0.152	11	1	Ramp	1500	55
1537	1794	1792	0.152	11	1	Ramp	1500	55
1538	1789	1794	0.984	11	1	Ramp	1500	55
1539	1796	1797	0.454	12	1	Ramp	1500	35
1540	1799	1800	0.55	11	2	Major Arterial	3200	45
1541	1800	1799	0.55	11	2	Major Arterial	3200	45
1542	1606	1806	0.021	11	1	Major Arterial	1700	45
1543	1806	1606	0.021	11	1	Major Arterial	1700	45
1544	1632	1805	0.796	11	2	Major Arterial	3200	45
1545	1805	1632	0.796	11	2	Major Arterial	3200	45
1546	1807	1812	0.38	11	1	Minor Arterial	1700	40
1547	1812	1807	0.38	11	1	Minor Arterial	1700	40
1548	1809	1813	0.247	11	1	Minor Arterial	1250	40
1549	1813	1809	0.247	11	1	Minor Arterial	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1550	1813	1814	0.091	11	1	Minor Arterial	1700	40
1551	1814	1813	0.091	11	1	Minor Arterial	1700	40
1552	1813	1815	0.124	11	1	Minor Arterial	1700	40
1553	1815	1813	0.124	11	1	Minor Arterial	1700	40
1554	1817	1818	0.062	11	1	Major Arterial	1700	45
1555	1818	1817	0.062	11	1	Major Arterial	1700	45
1556	1605	1630	0.014	11	1	Minor Arterial	1700	40
1557	1630	1605	0.014	11	1	Minor Arterial	1700	40
1558	1825	1829	0.121	11	1	Minor Arterial	1700	40
1559	1829	1825	0.121	11	1	Minor Arterial	1700	40
1560	1627	1830	0.049	10	1	Collector / Local Road	800	15
1561	1830	1627	0.049	10	1	Collector / Local Road	800	15
1562	1832	1833	0.371	11	1	Minor Arterial	1700	40
1563	1833	1832	0.371	11	1	Minor Arterial	1700	40
1564	1838	1839	0.073	11	1	Principal Arterial	1700	45
1565	1839	1838	0.073	11	1	Principal Arterial	1700	45
1566	1840	1841	0.025	11	1	Ramp	1500	45
1567	1590	1840	0.026	11	1	Major Arterial	1700	45
1568	1840	1590	0.026	11	1	Major Arterial	1700	45
1569	1590	1841	0.014	12	1	Ramp	1500	35
1570	1845	1846	0.225	12	2	Freeway	4100	60
1571	1846	1847	0.099	12	1	Ramp	1500	35
1572	1848	1849	0.099	12	1	Ramp	1500	35
1573	1851	1852	0.039	11	1	Minor Arterial	1700	40
1574	1852	1851	0.039	11	1	Minor Arterial	1700	40
1575	1853	1852	0.066	11	1	Minor Arterial	1700	40
1576	1851	1853	0.043	11	1	Major Arterial	1700	45
1577	1853	1851	0.043	11	1	Major Arterial	1700	45
1578	1854	1855	0.134	11	1	Ramp	1500	45
1579	1855	1856	0.038	11	1	Ramp	1500	45
1580	1856	1855	0.038	11	1	Ramp	1500	45
1581	1856	1857	0.024	11	1	Ramp	1500	45
1582	1857	1856	0.024	11	1	Ramp	1500	45
1583	1854	1858	0.117	12	2	Freeway	4100	60
1584	1855	1858	0.088	12	1	Ramp	1500	35
1585	1856	1859	0.076	12	1	Ramp	1500	35
1586	1857	1860	0.039	11	1	Ramp	1500	45
1587	1860	1857	0.039	11	1	Ramp	1500	45
1588	1859	1860	0.042	11	1	Principal Arterial	1700	45
1589	1860	1859	0.042	11	1	Principal Arterial	1700	45
1590	1588	1857	0.046	12	1	Ramp	1500	35
1591	1588	1860	0.019	11	1	Principal Arterial	1700	45
1592	1860	1588	0.019	11	1	Principal Arterial	1700	45
1593	1861	1862	0.042	11	1	Principal Arterial	1700	45
1594	1862	1861	0.042	11	1	Principal Arterial	1700	45
1595	1587	1863	0.034	11	1	Principal Arterial	1700	45
1596	1863	1587	0.034	11	1	Principal Arterial	1700	45
1597	1863	1864	0.069	11	1	Principal Arterial	1700	45
1598	1864	1863	0.069	11	1	Principal Arterial	1700	45
1599	1863	1865	0.03	12	1	Ramp	1500	35
1600	1865	1863	0.03	12	1	Ramp	1500	35
1601	1587	1865	0.045	12	1	Ramp	1500	35
1602	1864	1866	0.04	11	1	Principal Arterial	1700	45
1603	1866	1864	0.04	11	1	Principal Arterial	1700	45
1604	1867	1864	0.098	12	1	Ramp	1500	35
1605	1865	1867	0.024	12	1	Ramp	1500	35
1606	1867	1865	0.024	12	1	Ramp	1500	35
1607	1868	1869	0.087	12	1	Ramp	1500	35
1608	1867	1868	0.048	12	1	Ramp	1500	35
1609	1868	1867	0.048	12	1	Ramp	1500	35
1610	1571	1868	0.097	12	1	Ramp	1500	35
1611	1571	1869	0.135	12	2	Freeway	4100	60

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1612	1086	1870	0.222	11	1	Minor Arterial	1700	40
1613	1870	1086	0.222	11	1	Minor Arterial	1700	40
1614	1866	1871	0.14	11	1	Principal Arterial	1700	45
1615	1871	1866	0.14	11	1	Principal Arterial	1700	45
1616	1872	1873	0.053	10	1	Collector / Local Road	800	15
1617	1873	1872	0.053	10	1	Collector / Local Road	800	15
1618	1878	1879	0.012	11	1	Major Arterial	1700	45
1619	1879	1878	0.012	11	1	Major Arterial	1700	45
1620	1879	1880	0.029	12	1	Ramp	1500	35
1621	1569	1878	0.075	12	1	Ramp	1500	35
1622	1586	1878	0.017	11	1	Major Arterial	1700	45
1623	1878	1586	0.017	11	1	Major Arterial	1700	45
1624	1586	1880	0.014	12	1	Ramp	1500	35
1625	1880	1881	0.112	12	1	Ramp	1500	35
1626	1882	1570	0.093	12	1	Ramp	1500	35
1627	1585	1882	0.017	12	1	Ramp	1500	35
1628	1883	1882	0.022	12	1	Ramp	1500	35
1629	1585	1883	0.027	11	1	Major Arterial	1700	45
1630	1883	1585	0.027	11	1	Major Arterial	1700	45
1631	1884	1883	0.113	12	1	Ramp	1500	35
1632	1888	1889	0.045	12	1	Ramp	1500	35
1633	1889	1888	0.045	12	1	Ramp	1500	35
1634	1889	1584	0.055	12	1	Ramp	1500	35
1635	1889	1890	0.048	12	1	Ramp	1500	35
1636	1890	1889	0.048	12	1	Ramp	1500	35
1637	1891	1890	0.068	12	1	Ramp	1500	35
1638	1891	1892	0.068	12	2	Freeway	4100	60
1639	1890	1892	0.071	12	1	Ramp	1500	35
1640	1894	1893	0.063	12	1	Ramp	1500	35
1641	1896	1895	0.066	12	1	Ramp	1500	35
1642	1583	1894	0.03	12	1	Ramp	1500	35
1643	1895	1583	0.031	12	1	Ramp	1500	35
1644	1897	1894	0.054	12	1	Ramp	1500	35
1645	1583	1897	0.04	11	1	Major Arterial	1700	45
1646	1897	1583	0.04	11	1	Major Arterial	1700	45
1647	1895	1897	0.052	12	1	Ramp	1500	35
1648	1541	1745	0.587	11	1	Minor Arterial	1250	40
1649	1745	1541	0.587	11	1	Minor Arterial	1250	40
1650	1776	1782	0.413	11	1	Major Arterial	1250	45
1651	1782	1776	0.413	11	1	Major Arterial	1250	45
1652	1903	1904	0.048	11	2	Major Arterial	3200	45
1653	1904	1903	0.048	11	1	Major Arterial	1700	45
1654	1907	1908	0.266	10	1	Collector / Local Road	800	15
1655	1908	1907	0.266	10	1	Collector / Local Road	800	15
1656	1764	1909	0.174	11	1	Minor Arterial	1250	40
1657	1909	1764	0.174	11	1	Minor Arterial	1250	40
1658	1667	1911	0.387	10	1	Collector / Local Road	800	15
1659	1911	1667	0.387	10	1	Collector / Local Road	800	15
1660	1912	1913	0.146	11	1	Major Arterial	1700	45
1661	1913	1912	0.146	11	1	Major Arterial	1700	45
1662	1619	1914	0.043	11	2	Principal Arterial	3300	45
1663	1914	1619	0.043	11	2	Principal Arterial	3300	45
1664	1915	1916	0.197	11	2	Principal Arterial	3300	45
1665	1916	1915	0.197	11	2	Principal Arterial	3300	45
1666	1648	1916	0.541	11	2	Principal Arterial	3300	45
1667	1916	1648	0.541	11	2	Principal Arterial	3300	45
1668	1917	1916	0.275	12	1	Ramp	1500	35
1669	1622	1917	0.214	12	1	Ramp	1500	35
1670	1621	1917	0.173	12	1	Ramp	1500	35
1671	1915	1918	0.375	12	1	Ramp	1500	35
1672	1913	1918	0.085	11	1	Major Arterial	1700	45
1673	1918	1913	0.085	11	1	Major Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1674	1919	1913	0.197	12	1	Ramp	1500	35
1675	1919	1920	0.333	12	1	Ramp	1500	35
1676	1920	1919	0.333	12	1	Ramp	1500	35
1677	1914	1920	0.155	12	1	Ramp	1500	35
1678	1912	1919	0.144	12	1	Ramp	1500	35
1679	1919	1912	0.144	12	1	Ramp	1500	35
1680	1920	1619	0.12	12	1	Ramp	1500	35
1681	1371	1662	0.693	11	1	Major Arterial	1700	45
1682	1662	1371	0.693	11	1	Major Arterial	1700	45
1683	1681	1678	0.519	11	1	Minor Arterial	1700	40
1684	1921	1922	0.385	10	1	Collector / Local Road	800	15
1685	1922	1921	0.385	10	1	Collector / Local Road	800	15
1686	1695	1698	0.742	11	1	Principal Arterial	1600	45
1687	1698	1695	0.742	11	1	Principal Arterial	1600	45
1688	1720	1924	0.045	11	1	Minor Arterial	1250	40
1689	1924	1720	0.045	11	1	Minor Arterial	1250	40
1690	1929	1928	0.414	12	1	Ramp	1500	35
1691	1928	1799	0.927	11	1	Ramp	1500	55
1692	1797	1929	0.47	11	2	Principal Arterial	3300	45
1693	1929	1797	0.47	11	2	Principal Arterial	3300	45
1694	1800	1796	0.611	11	1	Ramp	1500	55
1695	1800	1929	0.405	11	2	Principal Arterial	3300	45
1696	1929	1800	0.405	11	2	Principal Arterial	3300	45
1697	1903	1930	0.027	11	2	Major Arterial	3200	45
1698	1930	1903	0.027	11	1	Major Arterial	1700	45
1699	1632	1931	0.262	12	2	Major Arterial	2700	35
1700	1931	1632	0.262	12	2	Major Arterial	2700	35
1701	1936	1935	0.188	12	1	Ramp	1500	35
1702	1938	1939	0.403	12	1	Ramp	1500	35
1703	1937	1939	0.354	12	2	Freeway	4100	60
1704	1936	1941	0.164	11	1	Principal Arterial	1700	45
1705	1941	1936	0.164	11	1	Principal Arterial	1700	45
1706	1936	1942	0.052	11	1	Principal Arterial	1700	45
1707	1942	1936	0.052	11	1	Principal Arterial	1700	45
1708	1942	1943	0.409	12	1	Ramp	1500	35
1709	1944	1945	0.112	11	1	Minor Arterial	1700	40
1710	1945	1944	0.112	11	1	Minor Arterial	1700	40
1711	1657	1912	0.952	11	1	Major Arterial	1700	45
1712	1912	1657	0.952	11	1	Major Arterial	1700	45
1713	1657	1664	0.243	11	1	Minor Arterial	1700	40
1714	1664	1657	0.243	11	1	Minor Arterial	1700	40
1715	1724	1726	0.904	11	1	Principal Arterial	1600	45
1716	1726	1724	0.904	11	1	Principal Arterial	1600	45
1717	1737	1739	1.243	11	1	Minor Arterial	1250	40
1718	1739	1737	1.243	11	1	Minor Arterial	1250	40
1719	1922	1923	0.857	11	1	Minor Arterial	1250	40
1720	1923	1922	0.857	11	1	Minor Arterial	1250	40
1721	1711	1922	0.462	11	1	Minor Arterial	1250	40
1722	1922	1711	0.462	11	1	Minor Arterial	1250	40
1723	1924	1950	0.022	11	1	Minor Arterial	1250	40
1724	1950	1924	0.022	11	1	Minor Arterial	1250	40
1725	1717	1924	0.114	11	1	Minor Arterial	1250	40
1726	1924	1717	0.114	11	1	Minor Arterial	1250	40
1727	1707	1711	0.758	10	1	Collector / Local Road	800	15
1728	1711	1707	0.758	10	1	Collector / Local Road	800	15
1729	1718	1950	0.295	11	1	Minor Arterial	1250	40
1730	1950	1718	0.295	11	1	Minor Arterial	1250	40
1731	1738	1951	0.052	11	1	Minor Arterial	1250	40
1732	1951	1738	0.052	11	1	Minor Arterial	1250	40
1733	1620	1665	0.31	11	1	Minor Arterial	1700	40
1734	1665	1620	0.31	11	1	Minor Arterial	1700	40
1735	1684	1688	0.464	11	1	Minor Arterial	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1736	1688	1684	0.464	11	1	Minor Arterial	1250	40
1737	1620	1679	3.333	11	1	Principal Arterial	1700	45
1738	1679	1620	3.333	11	1	Principal Arterial	1700	45
1739	1691	1952	0.534	11	1	Principal Arterial	1600	45
1740	1952	1691	0.534	11	1	Principal Arterial	1600	45
1741	1685	1952	0.46	11	1	Minor Arterial	1250	40
1742	1952	1685	0.46	11	1	Minor Arterial	1250	40
1743	1704	1713	1.525	10	1	Collector / Local Road	800	15
1744	1713	1704	1.525	10	1	Collector / Local Road	800	15
1745	1954	1955	0.034	11	1	Principal Arterial	1600	45
1746	1955	1954	0.034	11	1	Principal Arterial	1600	45
1747	1955	1956	0.04	11	1	Minor Arterial	1250	40
1748	1956	1955	0.04	11	1	Minor Arterial	1250	40
1749	1954	1956	0.029	11	1	Collector / Local Road	1250	40
1750	1956	1954	0.029	11	1	Collector / Local Road	1250	40
1751	1748	1957	0.122	10	1	Collector / Local Road	800	15
1752	1957	1748	0.122	10	1	Collector / Local Road	800	15
1753	1727	1905	0.542	10	1	Collector / Local Road	800	15
1754	1905	1727	0.542	10	1	Collector / Local Road	800	15
1755	1959	1960	0.085	10	1	Collector / Local Road	800	10
1756	1960	1959	0.085	10	1	Collector / Local Road	800	10
1757	1661	1665	0.799	11	1	Minor Arterial	1700	40
1758	1665	1661	0.799	11	1	Minor Arterial	1700	40
1759	1801	1925	0.122	11	1	Minor Arterial	1250	40
1760	1925	1801	0.122	11	1	Minor Arterial	1250	40
1761	1786	1965	0.051	11	1	Major Arterial	1250	45
1762	1965	1786	0.051	11	1	Major Arterial	1250	45
1763	1785	1965	0.032	11	1	Minor Arterial	1250	40
1764	1965	1785	0.032	11	1	Minor Arterial	1250	40
1765	1843	1942	0.104	11	1	Principal Arterial	1700	45
1766	1942	1843	0.104	11	1	Principal Arterial	1700	45
1767	1940	1943	0.377	12	2	Freeway	4100	60
1768	1847	1848	0.095	11	1	Minor Arterial	1700	40
1769	1848	1847	0.095	11	1	Minor Arterial	1700	40
1770	1876	1966	0.104	11	1	Minor Arterial	1700	40
1771	1966	1876	0.104	11	1	Minor Arterial	1700	40
1772	1934	1966	0.053	11	1	Minor Arterial	1700	40
1773	1762	1967	0.645	11	1	Major Arterial	1250	45
1774	1967	1762	0.645	11	1	Major Arterial	1250	45
1775	1770	1926	0.343	11	1	Minor Arterial	1250	40
1776	1926	1770	0.343	11	1	Minor Arterial	1250	40
1777	1774	1926	0.255	10	1	Collector / Local Road	800	15
1778	1926	1774	0.255	10	1	Collector / Local Road	800	15
1779	1750	1751	0.617	11	1	Major Arterial	1250	45
1780	1751	1750	0.617	11	1	Major Arterial	1250	45
1781	1750	1754	0.505	11	1	Minor Arterial	1250	40
1782	1754	1750	0.505	11	1	Minor Arterial	1250	40
1783	1607	1830	0.089	10	1	Collector / Local Road	800	15
1784	1830	1607	0.089	10	1	Collector / Local Road	800	15
1785	1607	1968	0.272	10	1	Collector / Local Road	800	15
1786	1968	1607	0.272	10	1	Collector / Local Road	800	15
1787	1969	1970	0.053	11	2	Major Arterial	3600	50
1788	1970	1969	0.053	11	2	Major Arterial	3600	50
1789	1970	1971	0.057	11	2	Major Arterial	3600	50
1790	1971	1970	0.057	11	2	Major Arterial	3600	50
1791	1608	1970	0.034	11	1	Minor Arterial	1700	40
1792	1970	1608	0.034	11	1	Minor Arterial	1700	40
1793	1969	1972	0.048	11	1	Minor Arterial	1700	40
1794	1972	1970	0.019	11	1	Minor Arterial	1700	40
1795	1971	1608	0.065	11	1	Minor Arterial	1700	40
1796	1627	1973	0.066	11	2	Major Arterial	3600	50
1797	1973	1627	0.066	11	2	Major Arterial	3600	50

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1798	1973	1830	0.068	10	1	Collector / Local Road	800	15
1799	1963	1974	0.093	10	1	Collector / Local Road	800	10
1800	1974	1963	0.093	10	1	Collector / Local Road	800	10
1801	1862	1975	0.029	11	1	Major Arterial	1700	45
1802	1975	1862	0.029	11	1	Major Arterial	1700	45
1803	1861	1975	0.045	11	1	Major Arterial	1700	45
1804	1975	1861	0.045	11	1	Major Arterial	1700	45
1805	1584	1888	0.03	11	1	Major Arterial	1700	45
1806	1888	1584	0.03	11	1	Major Arterial	1700	45
1807	1815	1823	0.789	11	1	Minor Arterial	1700	40
1808	1823	1815	0.789	11	1	Minor Arterial	1700	40
1809	1604	1802	0.209	11	1	Minor Arterial	1700	40
1810	1802	1604	0.209	11	1	Minor Arterial	1700	40
1811	1902	1976	0.033	11	2	Major Arterial	3200	45
1812	1976	1902	0.033	11	1	Major Arterial	1700	45
1813	1693	1694	0.106	11	1	Minor Arterial	1250	40
1814	1694	1693	0.106	11	1	Minor Arterial	1250	40
1815	1822	1826	0.165	11	2	Major Arterial	3200	45
1816	1826	1822	0.165	11	2	Major Arterial	3200	45
1817	1940	1978	0.297	12	1	Ramp	1500	35
1818	1978	1941	0.048	12	1	Ramp	1500	35
1819	1941	1979	0.036	11	1	Major Arterial	1700	45
1820	1979	1941	0.036	11	1	Major Arterial	1700	45
1821	1978	1979	0.057	12	1	Ramp	1500	35
1822	1937	1980	0.345	12	1	Ramp	1500	35
1823	1980	1938	0.023	12	1	Ramp	1500	35
1824	1980	1981	0.028	12	1	Ramp	1500	35
1825	1843	1981	0.272	11	1	Major Arterial	1700	50
1826	1981	1843	0.272	11	1	Major Arterial	1700	50
1827	1938	1981	0.019	11	1	Major Arterial	1700	50
1828	1981	1938	0.019	11	1	Major Arterial	1700	50
1829	1644	1643	0.233	12	2	Freeway	4100	55
1830	1569	1881	0.192	12	2	Freeway	4100	60
1831	1776	1983	0.322	11	1	Major Arterial	1700	45
1832	1983	1776	0.322	11	1	Major Arterial	1700	45
1833	1773	1983	0.409	11	1	Major Arterial	1250	45
1834	1983	1773	0.409	11	1	Major Arterial	1250	45
1835	1885	1934	0.176	11	1	Principal Arterial	1700	45
1836	1934	1885	0.176	11	1	Principal Arterial	1700	45
1837	1986	1989	0.036	12	1	Ramp	1500	35
1838	1989	1986	0.036	12	1	Ramp	1500	35
1839	1990	1989	0.234	12	1	Ramp	1500	35
1840	1993	1994	0.08	12	1	Ramp	1500	35
1841	1993	1995	0.052	11	1	Principal Arterial	1600	55
1842	1995	1993	0.052	11	2	Principal Arterial	3300	45
1843	1994	1995	0.046	12	1	Ramp	1500	35
1844	1995	1994	0.046	12	1	Ramp	1500	35
1845	1995	1996	0.042	11	1	Principal Arterial	1600	55
1846	1996	1995	0.042	11	2	Principal Arterial	3300	45
1847	1994	1996	0.066	12	1	Ramp	1500	35
1848	2003	2004	0.18	11	1	Minor Arterial	1700	40
1849	2004	2003	0.18	11	1	Minor Arterial	1700	40
1850	2003	2005	0.186	11	1	Collector / Local Road	1700	40
1851	2005	2003	0.186	11	1	Collector / Local Road	1700	40
1852	2005	2007	0.048	11	1	Minor Arterial	1700	40
1853	2007	2005	0.048	11	1	Minor Arterial	1700	40
1854	2006	2008	0.016	11	1	Principal Arterial	1600	45
1855	2008	2006	0.016	11	1	Principal Arterial	1600	45
1856	2010	2011	0.028	11	1	Major Arterial	1700	45
1857	2011	2010	0.028	11	1	Major Arterial	1700	45
1858	2014	2015	0.086	11	1	Collector / Local Road	1700	40
1859	2013	2016	0.354	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1860	2016	2013	0.354	11	1	Minor Arterial	1700	40
1861	2022	2024	0.116	11	1	Minor Arterial	1250	40
1862	2024	2022	0.116	11	1	Minor Arterial	1250	40
1863	2023	2025	0.079	11	1	Collector / Local Road	1700	40
1864	2023	2026	0.09	12	1	Principal Arterial	1700	35
1865	2026	2023	0.09	12	1	Principal Arterial	1700	35
1866	2025	2026	0.037	11	1	Collector / Local Road	1700	40
1867	2026	2025	0.037	11	1	Collector / Local Road	1700	40
1868	2023	2027	0.08	11	1	Major Arterial	1700	45
1869	2027	2023	0.08	11	1	Major Arterial	1700	45
1870	2028	2029	0.156	12	1	Principal Arterial	1600	35
1871	2029	2028	0.156	12	1	Principal Arterial	1600	35
1872	2028	2034	0.232	12	1	Principal Arterial	1600	35
1873	2034	2028	0.232	12	1	Principal Arterial	1600	35
1874	2038	2040	0.096	11	1	Minor Arterial	1250	40
1875	2040	2038	0.096	11	1	Minor Arterial	1250	40
1876	2041	2042	0.053	10	1	Collector / Local Road	800	15
1877	2042	2041	0.053	10	1	Collector / Local Road	800	15
1878	2051	2050	0.158	12	1	Ramp	1500	35
1879	2050	2052	0.098	11	1	Minor Arterial	1250	40
1880	2052	2050	0.098	11	1	Minor Arterial	1250	40
1881	2053	2054	0.168	12	1	Ramp	1500	35
1882	2049	2055	0.143	11	1	Principal Arterial	1600	45
1883	2055	2049	0.143	11	1	Principal Arterial	1600	45
1884	2048	2055	0.262	11	1	Minor Arterial	1250	40
1885	2055	2048	0.262	11	1	Minor Arterial	1250	40
1886	2055	2057	0.135	11	1	Minor Arterial	1250	40
1887	2057	2055	0.135	11	1	Minor Arterial	1250	40
1888	2050	2058	0.155	12	1	Ramp	1500	35
1889	2059	2053	0.14	12	1	Ramp	1500	35
1890	2057	2062	0.216	11	1	Minor Arterial	1700	40
1891	2062	2057	0.216	11	1	Minor Arterial	1700	40
1892	2066	2067	0.052	11	1	Collector / Local Road	1700	40
1893	2064	2068	0.127	11	1	Minor Arterial	1700	40
1894	2068	2064	0.127	11	1	Minor Arterial	1700	40
1895	2071	2072	0.121	11	1	Minor Arterial	1250	40
1896	2072	2071	0.121	11	1	Minor Arterial	1250	40
1897	2075	2076	0.511	11	1	Major Arterial	1250	45
1898	2076	2075	0.511	11	1	Major Arterial	1250	45
1899	2072	2076	0.469	11	1	Minor Arterial	1700	40
1900	2076	2072	0.469	11	1	Minor Arterial	1700	40
1901	2081	2082	0.184	12	1	Ramp	1500	35
1902	2081	2083	0.034	11	1	Major Arterial	1700	45
1903	2083	2081	0.034	11	1	Major Arterial	1700	45
1904	2080	2084	0.205	12	1	Ramp	1500	35
1905	2084	2085	0.142	12	1	Ramp	1500	35
1906	2086	2081	0.17	12	1	Ramp	1500	35
1907	2090	2091	0.024	11	1	Minor Arterial	1250	40
1908	2091	2090	0.024	11	1	Minor Arterial	1250	40
1909	2087	2094	0.403	11	1	Major Arterial	1700	45
1910	2094	2087	0.403	11	1	Major Arterial	1700	45
1911	2090	2096	0.214	11	1	Minor Arterial	1250	40
1912	2096	2090	0.214	11	1	Minor Arterial	1250	40
1913	2104	2105	0.749	11	1	Minor Arterial	1250	40
1914	2105	2104	0.749	11	1	Minor Arterial	1250	40
1915	2104	2109	0.177	11	1	Minor Arterial	1700	40
1916	2109	2104	0.177	11	1	Minor Arterial	1700	40
1917	2109	2112	0.207	11	1	Minor Arterial	1250	40
1918	2112	2109	0.207	11	1	Minor Arterial	1250	40
1919	2110	2112	0.142	12	1	Major Arterial	1200	35
1920	2112	2110	0.142	12	1	Major Arterial	1200	35
1921	2112	2116	0.144	12	1	Major Arterial	1200	35

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1922	2116	2112	0.144	12	1	Major Arterial	1200	35
1923	2116	2117	0.014	12	1	Major Arterial	1200	35
1924	2117	2116	0.014	11	1	Major Arterial	1250	45
1925	2117	2118	0.035	12	1	Major Arterial	1200	35
1926	2118	2117	0.035	12	1	Major Arterial	1200	35
1927	2119	2120	0.183	12	1	Ramp	1500	35
1928	2124	2123	0.239	12	1	Ramp	1500	35
1929	2123	2125	0.133	12	1	Ramp	1500	35
1930	2126	2127	0.02	12	1	Minor Arterial	1700	35
1931	2127	2126	0.02	12	1	Minor Arterial	1700	35
1932	2129	2119	0.173	12	1	Ramp	1500	35
1933	2127	2130	0.134	11	1	Major Arterial	1250	40
1934	2130	2127	0.134	11	1	Major Arterial	1250	40
1935	2130	2131	0.021	11	1	Major Arterial	1250	40
1936	2131	2130	0.021	11	1	Major Arterial	1250	45
1937	2136	2135	0.567	12	1	Ramp	1500	35
1938	2138	2139	0.583	12	1	Ramp	1500	35
1939	2131	2140	0.162	11	1	Major Arterial	1700	40
1940	2140	2131	0.162	11	1	Major Arterial	1700	40
1941	2141	2142	0.153	11	1	Minor Arterial	1250	40
1942	2142	2141	0.153	11	1	Minor Arterial	1250	40
1943	2140	2144	0.063	11	1	Major Arterial	1700	40
1944	2144	2140	0.063	11	1	Major Arterial	1700	40
1945	2147	2138	0.625	12	1	Ramp	1500	35
1946	2135	2148	0.635	12	1	Ramp	1500	35
1947	2149	2151	0.088	12	1	Minor Arterial	1700	25
1948	2151	2149	0.088	12	1	Minor Arterial	1700	25
1949	2150	2152	0.01	12	1	Minor Arterial	1700	25
1950	2152	2150	0.01	12	1	Minor Arterial	1700	25
1951	2151	2152	0.021	12	1	Minor Arterial	1700	25
1952	2152	2151	0.021	12	1	Minor Arterial	1700	25
1953	2152	2153	0.026	10	1	Collector / Local Road	800	25
1954	2153	2152	0.026	10	1	Collector / Local Road	800	25
1955	2151	2153	0.018	10	1	Collector / Local Road	800	15
1956	2153	2151	0.018	10	1	Collector / Local Road	800	15
1957	2143	2156	0.349	11	1	Minor Arterial	1250	40
1958	2156	2143	0.349	11	1	Minor Arterial	1250	40
1959	2128	2157	0.721	11	1	Principal Arterial	1600	45
1960	2157	2128	0.721	11	1	Principal Arterial	1600	45
1961	2159	2160	0.092	11	1	Collector / Local Road	1700	40
1962	2159	2163	0.025	11	1	Collector / Local Road	1700	40
1963	2160	2163	0.096	11	1	Minor Arterial	1700	40
1964	2165	2166	0.177	11	1	Principal Arterial	1600	45
1965	2166	2165	0.177	11	1	Principal Arterial	1600	45
1966	2169	2170	0.102	11	1	Principal Arterial	1700	45
1967	2164	2170	1.034	12	1	Principal Arterial	1700	35
1968	2170	2164	1.034	12	1	Principal Arterial	1700	35
1969	2169	2171	0.071	11	1	Minor Arterial	1700	40
1970	2171	2169	0.071	11	1	Minor Arterial	1700	40
1971	2170	2171	0.101	11	1	Minor Arterial	1700	40
1972	2171	2170	0.101	11	1	Minor Arterial	1700	40
1973	2176	2182	0.429	11	1	Major Arterial	1700	45
1974	2182	2176	0.429	11	1	Major Arterial	1700	45
1975	2184	2187	0.269	11	1	Principal Arterial	1700	45
1976	2187	2184	0.269	11	1	Principal Arterial	1700	45
1977	2188	2192	0.74	12	1	Minor Arterial	1200	35
1978	2192	2188	0.74	12	1	Minor Arterial	1200	35
1979	2190	2195	0.206	11	1	Major Arterial	1250	45
1980	2195	2190	0.206	11	1	Major Arterial	1250	45
1981	2196	2197	1.511	10	1	Collector / Local Road	800	10
1982	2197	2196	1.511	10	1	Collector / Local Road	800	10
1983	2205	2199	1.363	12	2	Freeway	4100	55

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
1984	2194	2206	0.654	11	1	Major Arterial	1700	55
1985	2206	2194	0.654	11	1	Major Arterial	1700	55
1986	2209	2205	0.485	11	1	Ramp	1500	40
1987	2206	2212	0.183	11	1	Major Arterial	1700	55
1988	2212	2206	0.183	11	1	Major Arterial	1700	55
1989	2215	2214	0.556	12	1	Ramp	1500	35
1990	2207	2219	0.436	12	1	Minor Arterial	1200	35
1991	2219	2207	0.436	12	1	Minor Arterial	1200	35
1992	2224	2225	0.172	11	1	Minor Arterial	1700	40
1993	2225	2224	0.172	11	1	Minor Arterial	1700	40
1994	2223	2230	0.18	11	1	Major Arterial	1250	45
1995	2230	2223	0.18	11	1	Major Arterial	1250	45
1996	2231	2232	0.047	11	1	Major Arterial	1250	45
1997	2232	2231	0.047	11	1	Major Arterial	1250	45
1998	2234	2236	0.158	11	1	Minor Arterial	1700	40
1999	2236	2234	0.158	11	1	Minor Arterial	1700	40
2000	2236	2237	0.236	11	1	Major Arterial	1700	40
2001	2237	2236	0.236	11	1	Major Arterial	1700	40
2002	2238	2239	0.02	11	1	Major Arterial	1700	45
2003	2239	2238	0.02	11	1	Major Arterial	1700	45
2004	2243	2244	0.058	10	1	Collector / Local Road	800	10
2005	2244	2243	0.058	10	1	Collector / Local Road	800	10
2006	2243	2245	0.223	10	1	Collector / Local Road	800	15
2007	2245	2243	0.223	10	1	Collector / Local Road	800	15
2008	2254	2255	0.055	11	1	Minor Arterial	1700	40
2009	2255	2254	0.055	11	1	Minor Arterial	1700	40
2010	1561	2256	0.497	11	1	Major Arterial	1700	45
2011	2256	1561	0.497	11	1	Major Arterial	1700	45
2012	2251	2261	0.349	11	1	Minor Arterial	1250	40
2013	2261	2251	0.349	11	1	Minor Arterial	1250	40
2014	2271	2273	0.24	11	1	Collector / Local Road	1700	40
2015	2273	2271	0.24	11	1	Collector / Local Road	1700	40
2016	2274	2275	0.098	11	1	Major Arterial	1700	45
2017	2275	2274	0.098	11	1	Major Arterial	1700	45
2018	2276	2274	0.1	11	1	Collector / Local Road	1700	40
2019	2275	2276	0.029	11	2	Principal Arterial	3300	45
2020	2276	2275	0.029	11	2	Principal Arterial	3300	45
2021	2276	2277	0.06	11	2	Principal Arterial	3300	45
2022	2277	2276	0.06	11	2	Principal Arterial	3300	45
2023	2278	2281	0.236	11	1	Minor Arterial	1700	40
2024	2281	2278	0.236	11	1	Minor Arterial	1700	40
2025	2279	2282	0.233	11	1	Collector / Local Road	1700	40
2026	2282	2279	0.233	11	1	Collector / Local Road	1700	40
2027	2280	2283	0.236	11	1	Collector / Local Road	1700	40
2028	2288	2289	0.566	11	1	Minor Arterial	1700	40
2029	2289	2288	0.566	11	1	Minor Arterial	1700	40
2030	2288	2290	0.175	12	1	Ramp	1500	35
2031	1564	2291	0.358	11	1	Minor Arterial	1700	40
2032	2291	1564	0.358	11	1	Minor Arterial	1700	40
2033	2288	2292	0.874	12	1	Ramp	1500	35
2034	2292	2288	0.874	12	1	Ramp	1500	35
2035	2293	2292	0.617	12	1	Ramp	1500	35
2036	2295	2294	0.402	12	2	Freeway	4100	55
2037	2296	2294	0.273	12	1	Ramp	1500	35
2038	2295	2296	0.343	12	1	Ramp	1500	35
2039	2297	2298	0.184	10	1	Collector / Local Road	800	15
2040	2298	2297	0.184	10	1	Collector / Local Road	800	15
2041	2299	1475	0.022	12	2	Freeway	4100	55
2042	2234	2237	0.171	11	1	Collector / Local Road	1700	40
2043	2237	2234	0.171	11	1	Collector / Local Road	1700	40
2044	2300	2301	0.127	11	1	Minor Arterial	1700	40
2045	2301	2300	0.127	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2046	2270	2308	0.031	10	1	Collector / Local Road	800	15
2047	2308	2270	0.031	10	1	Collector / Local Road	800	15
2048	2307	2308	0.067	10	1	Collector / Local Road	800	10
2049	2308	2307	0.067	10	1	Collector / Local Road	800	10
2050	1565	2309	0.383	10	1	Collector / Local Road	800	15
2051	2309	1565	0.383	10	1	Collector / Local Road	800	15
2052	2309	2310	0.137	10	1	Collector / Local Road	800	15
2053	2310	2309	0.137	10	1	Collector / Local Road	800	15
2054	573	2291	1.627	11	1	Minor Arterial	1700	40
2055	2291	573	1.627	11	1	Minor Arterial	1700	40
2056	2052	2061	0.283	11	1	Major Arterial	1250	45
2057	2061	2052	0.283	11	1	Major Arterial	1250	45
2058	2031	2298	0.313	10	1	Collector / Local Road	800	15
2059	2298	2031	0.313	10	1	Collector / Local Road	800	15
2060	2041	2044	0.117	10	1	Collector / Local Road	800	15
2061	2044	2041	0.117	10	1	Collector / Local Road	800	15
2062	2088	2090	0.323	11	1	Collector / Local Road	1250	40
2063	2090	2088	0.323	11	1	Collector / Local Road	1250	40
2064	2313	2315	0.138	11	1	Principal Arterial	1700	45
2065	2315	2313	0.138	11	1	Principal Arterial	1700	45
2066	2316	2315	0.078	11	1	Principal Arterial	1700	45
2067	2161	2317	0.17	11	2	Principal Arterial	3300	45
2068	2107	2127	0.664	11	1	Major Arterial	1700	45
2069	2127	2107	0.664	11	1	Major Arterial	1700	45
2070	2115	2126	0.498	12	1	Minor Arterial	1200	35
2071	2126	2115	0.498	12	1	Minor Arterial	1200	35
2072	2118	2122	0.133	11	1	Major Arterial	1250	45
2073	2122	2118	0.133	11	1	Major Arterial	1250	45
2074	2167	2318	0.014	12	1	Minor Arterial	1200	35
2075	2318	2167	0.014	11	1	Minor Arterial	1250	40
2076	2319	2320	0.038	10	1	Collector / Local Road	800	10
2077	2320	2319	0.038	10	1	Collector / Local Road	800	10
2078	2277	2321	0.612	12	1	Ramp	1500	35
2079	2322	1563	1.163	12	1	Ramp	1500	35
2080	2273	2322	0.613	11	2	Minor Arterial	3200	40
2081	2322	2273	0.613	11	2	Minor Arterial	3200	40
2082	2122	2142	0.347	11	1	Major Arterial	1700	45
2083	2142	2122	0.347	11	1	Major Arterial	1700	45
2084	2156	2173	0.379	11	1	Major Arterial	1700	45
2085	2173	2156	0.379	11	1	Major Arterial	1700	45
2086	2173	2323	0.357	11	1	Major Arterial	1700	45
2087	2323	2173	0.357	11	1	Major Arterial	1700	45
2088	2250	2227	3.055	11	2	Principal Arterial	3700	55
2089	2326	2325	1.377	12	2	Freeway	4100	55
2090	2178	2324	0.032	11	1	Minor Arterial	1700	40
2091	2324	2178	0.032	11	1	Minor Arterial	1700	40
2092	2199	2326	0.028	11	1	Collector / Local Road	1700	40
2093	2326	2199	0.028	11	1	Collector / Local Road	1700	40
2094	2158	2172	0.314	11	1	Major Arterial	1700	40
2095	2172	2158	0.314	11	1	Major Arterial	1700	40
2096	2330	2331	0.318	10	1	Collector / Local Road	800	15
2097	2331	2330	0.318	10	1	Collector / Local Road	800	15
2098	2096	2103	1.062	11	1	Collector / Local Road	1250	40
2099	2103	2096	1.062	11	1	Collector / Local Road	1250	40
2100	2263	2333	0.044	10	1	Collector / Local Road	800	10
2101	2333	2263	0.044	10	1	Collector / Local Road	800	10
2102	2231	2240	0.261	11	1	Major Arterial	1700	45
2103	2240	2231	0.261	11	1	Major Arterial	1700	45
2104	1561	2259	0.092	11	1	Major Arterial	1700	45
2105	2259	1561	0.092	11	1	Major Arterial	1700	45
2106	2008	2334	0.14	11	1	Principal Arterial	1600	45
2107	2334	2008	0.14	11	1	Principal Arterial	1600	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2108	2012	2334	0.391	11	2	Minor Arterial	3200	40
2109	2292	2296	0.672	12	1	Ramp	1500	35
2110	2296	2292	0.672	12	1	Ramp	1500	35
2111	2238	2335	0.103	11	1	Minor Arterial	1700	40
2112	2335	2238	0.103	11	1	Minor Arterial	1700	40
2113	1582	2334	0.05	11	1	Principal Arterial	1600	45
2114	2334	1582	0.05	11	1	Principal Arterial	1600	45
2115	2226	2232	1.272	11	1	Major Arterial	1250	45
2116	2232	2226	1.272	11	1	Major Arterial	1250	45
2117	2339	2340	0.26	10	1	Collector / Local Road	800	10
2118	2340	2339	0.26	10	1	Collector / Local Road	800	10
2119	2341	2342	0.042	11	1	Collector / Local Road	1700	40
2120	2342	2341	0.042	11	1	Collector / Local Road	1700	40
2121	2018	2343	0.068	11	1	Minor Arterial	1700	40
2122	2343	2018	0.068	11	1	Minor Arterial	1700	40
2123	2342	2344	0.073	11	1	Collector / Local Road	1700	40
2124	2344	2342	0.073	11	1	Collector / Local Road	1700	40
2125	2346	2347	0.404	11	1	Minor Arterial	1250	40
2126	2347	2346	0.404	11	1	Minor Arterial	1250	40
2127	2349	2350	0.043	10	1	Collector / Local Road	800	15
2128	2350	2349	0.043	10	1	Collector / Local Road	800	15
2129	2024	2346	0.74	11	1	Minor Arterial	1250	40
2130	2346	2024	0.74	11	1	Minor Arterial	1250	40
2131	1990	2356	0.044	12	2	Freeway	4100	60
2132	2139	2299	1.116	12	2	Freeway	4100	55
2133	2325	2215	0.358	12	1	Ramp	1500	35
2134	2371	1327	0.012	11	2	Principal Arterial	3700	50
2135	2372	2373	0.055	11	1	Minor Arterial	1700	40
2136	2373	2372	0.055	11	1	Minor Arterial	1700	40
2137	2399	2400	0.043	11	1	Principal Arterial	1600	45
2138	2400	2399	0.043	11	2	Principal Arterial	3300	45
2139	2400	2401	0.165	11	1	Principal Arterial	1700	45
2140	2401	2400	0.165	11	1	Principal Arterial	1700	45
2141	2402	2403	0.052	12	1	Principal Arterial	1700	35
2142	2403	2402	0.052	11	2	Principal Arterial	3300	45
2143	2404	2405	0.054	12	1	Principal Arterial	1600	35
2144	2405	2404	0.054	12	1	Principal Arterial	1600	35
2145	2405	2406	0.253	11	1	Principal Arterial	1600	55
2146	2406	2405	0.253	11	1	Principal Arterial	1600	55
2147	1273	2407	0.26	11	1	Minor Arterial	1250	40
2148	2407	1273	0.26	11	1	Minor Arterial	1250	40
2149	2410	2411	0.121	11	1	Minor Arterial	1700	40
2150	2411	2410	0.121	11	1	Minor Arterial	1700	40
2151	2364	2414	0.021	11	1	Minor Arterial	1700	40
2152	2414	2364	0.021	11	1	Minor Arterial	1700	40
2153	2416	2417	1.017	10	1	Collector / Local Road	800	15
2154	2417	2416	1.017	10	1	Collector / Local Road	800	15
2155	1380	2421	0.146	11	1	Minor Arterial	1250	40
2156	2421	1380	0.146	11	1	Minor Arterial	1250	40
2157	2421	2422	0.116	11	1	Minor Arterial	1700	40
2158	2422	2421	0.116	11	1	Minor Arterial	1700	40
2159	1416	2424	0.024	11	1	Major Arterial	1250	45
2160	2424	1416	0.024	11	1	Major Arterial	1250	45
2161	1453	2424	0.032	11	1	Major Arterial	1250	45
2162	2424	1453	0.032	11	1	Major Arterial	1250	45
2163	2429	2430	0.089	11	1	Major Arterial	1700	45
2164	2430	2429	0.089	11	1	Major Arterial	1700	45
2165	1284	2433	0.076	11	1	Principal Arterial	1600	40
2166	2433	1284	0.076	11	1	Principal Arterial	1600	40
2167	2434	2435	0.05	11	1	Principal Arterial	1600	55
2168	2435	2434	0.05	11	2	Principal Arterial	3300	45
2169	2438	2439	0.465	11	1	Principal Arterial	1600	50

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2170	2439	2438	0.465	11	1	Principal Arterial	1600	50
2171	2450	2451	0.035	11	1	Principal Arterial	1700	45
2172	2451	2450	0.035	11	2	Principal Arterial	3300	45
2173	2452	2453	0.196	12	1	Major Arterial	1200	35
2174	2453	2452	0.196	12	1	Major Arterial	1200	35
2175	2452	2454	0.048	12	1	Major Arterial	1700	35
2176	2454	2452	0.048	12	1	Major Arterial	1700	35
2177	1551	2459	0.352	11	2	Principal Arterial	3700	50
2178	2460	2461	0.516	11	2	Minor Arterial	3200	45
2179	2461	2460	0.516	11	2	Minor Arterial	3200	45
2180	2462	1552	0.398	11	3	Principal Arterial	5550	55
2181	1552	1550	0.179	11	3	Principal Arterial	5550	55
2182	2466	2468	0.241	10	1	Collector / Local Road	800	10
2183	2468	2466	0.241	10	1	Collector / Local Road	800	10
2184	2469	2470	0.05	10	1	Collector / Local Road	800	15
2185	2470	2469	0.05	10	1	Collector / Local Road	800	15
2186	2432	2469	0.163	10	1	Collector / Local Road	800	15
2187	2469	2432	0.163	10	1	Collector / Local Road	800	15
2188	2473	2474	0.09	11	1	Collector / Local Road	1700	40
2189	2474	2473	0.09	11	1	Collector / Local Road	1700	40
2190	2477	2478	0.048	11	1	Collector / Local Road	1700	40
2191	2478	2477	0.048	11	1	Collector / Local Road	1700	40
2192	2480	2481	0.609	10	1	Collector / Local Road	800	15
2193	2481	2480	0.609	10	1	Collector / Local Road	800	15
2194	2415	2417	0.526	10	1	Collector / Local Road	800	15
2195	2417	2415	0.526	10	1	Collector / Local Road	800	15
2196	2483	2484	0.117	10	1	Collector / Local Road	800	10
2197	2484	2483	0.117	10	1	Collector / Local Road	800	10
2198	2486	2487	0.109	11	1	Collector / Local Road	1700	40
2199	2487	2486	0.109	11	1	Collector / Local Road	1700	40
2200	2486	2490	0.255	11	1	Collector / Local Road	1250	40
2201	2490	2486	0.255	11	1	Collector / Local Road	1250	40
2202	2495	2496	0.122	10	1	Collector / Local Road	800	15
2203	2496	2495	0.122	10	1	Collector / Local Road	800	15
2204	2503	2504	0.055	10	1	Collector / Local Road	800	15
2205	2504	2503	0.055	10	1	Collector / Local Road	800	15
2206	1287	2512	0.043	11	1	Minor Arterial	1700	40
2207	2512	1287	0.043	11	1	Minor Arterial	1700	40
2208	1267	2518	0.054	11	1	Minor Arterial	1700	40
2209	2518	1267	0.054	11	1	Minor Arterial	1700	40
2210	2532	2533	0.227	11	1	Principal Arterial	1600	45
2211	2533	2532	0.227	11	1	Principal Arterial	1600	45
2212	2523	2536	0.437	11	1	Minor Arterial	1700	40
2213	2536	2523	0.437	11	1	Minor Arterial	1700	40
2214	2539	2518	0.059	11	1	Collector / Local Road	1700	40
2215	2505	2548	0.495	11	1	Major Arterial	1700	45
2216	2548	2505	0.495	11	1	Major Arterial	1700	45
2217	1356	2548	0.142	11	1	Major Arterial	1250	45
2218	2548	1356	0.142	11	1	Major Arterial	1250	45
2219	2366	2490	0.214	11	1	Collector / Local Road	1700	40
2220	2490	2366	0.214	11	1	Collector / Local Road	1700	40
2221	2468	2553	0.254	10	1	Collector / Local Road	800	15
2222	2553	2468	0.254	10	1	Collector / Local Road	800	15
2223	2555	2556	0.289	11	1	Minor Arterial	1250	40
2224	2556	2555	0.289	11	1	Minor Arterial	1250	40
2225	2397	2558	0.011	11	1	Minor Arterial	1250	40
2226	2558	2397	0.011	11	1	Minor Arterial	1250	40
2227	2401	2467	0.186	12	1	Principal Arterial	1700	35
2228	2467	2401	0.186	12	1	Principal Arterial	1700	35
2229	1279	2434	0.5	11	1	Principal Arterial	1600	55
2230	2434	1279	0.5	11	1	Principal Arterial	1600	55
2231	1278	2406	0.685	11	1	Principal Arterial	1600	55

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2232	2406	1278	0.685	11	1	Principal Arterial	1600	55
2233	2517	1294	0.605	11	2	Major Arterial	3200	45
2234	2564	2565	0.178	11	2	Principal Arterial	3700	50
2235	1074	2565	0.341	11	2	Major Arterial	3200	45
2236	2568	2569	0.022	11	1	Minor Arterial	1700	40
2237	2569	2568	0.022	11	1	Minor Arterial	1700	40
2238	2370	2572	0.006	11	1	Collector / Local Road	1700	40
2239	2572	2370	0.006	11	1	Collector / Local Road	1700	40
2240	1287	1291	0.028	11	1	Minor Arterial	1700	40
2241	1291	1287	0.028	11	1	Minor Arterial	1700	40
2242	2485	2487	0.134	11	1	Collector / Local Road	1700	40
2243	2487	2485	0.134	11	1	Collector / Local Road	1700	40
2244	1350	2573	0.158	11	1	Major Arterial	1700	45
2245	2573	1350	0.158	11	1	Major Arterial	1700	45
2246	2574	1415	0.606	11	2	Principal Arterial	3300	45
2247	2576	2575	0.452	11	1	Principal Arterial	1600	45
2248	1414	2461	0.839	11	2	Minor Arterial	3200	45
2249	2461	1414	0.839	11	2	Minor Arterial	3200	45
2250	2457	2458	0.481	11	1	Major Arterial	1250	45
2251	2458	2457	0.481	11	1	Major Arterial	1250	45
2252	2453	2579	0.153	12	1	Major Arterial	1200	35
2253	2579	2453	0.153	12	1	Major Arterial	1200	35
2254	2582	2583	0.03	11	1	Collector / Local Road	1700	40
2255	2583	2582	0.03	11	1	Collector / Local Road	1700	40
2256	2593	2597	0.035	11	1	Major Arterial	1700	45
2257	2597	2593	0.035	11	1	Major Arterial	1700	45
2258	1394	1438	0.046	11	1	Principal Arterial	1600	45
2259	1438	1394	0.046	11	1	Principal Arterial	1600	45
2260	1365	2385	0.257	11	1	Major Arterial	1250	45
2261	2385	1365	0.257	11	1	Major Arterial	1250	45
2262	1375	2598	0.009	11	2	Principal Arterial	3300	45
2263	2598	1375	0.009	11	2	Principal Arterial	3300	45
2264	1480	1251	0.257	12	1	Ramp	1500	35
2265	1393	2395	0.096	11	1	Principal Arterial	1600	45
2266	2395	1393	0.096	11	1	Principal Arterial	1600	45
2267	2601	2602	0.05	11	1	Collector / Local Road	1700	40
2268	2602	2601	0.05	11	1	Collector / Local Road	1700	40
2269	2386	2607	0.068	11	1	Major Arterial	1700	45
2270	2607	2386	0.068	11	1	Major Arterial	1700	45
2271	1546	2511	0.37	10	1	Collector / Local Road	800	15
2272	2511	1546	0.37	10	1	Collector / Local Road	800	15
2273	1395	1373	2.912	12	2	Freeway	4100	65
2274	605	2614	0.178	11	1	Major Arterial	1250	45
2275	2614	605	0.178	11	1	Major Arterial	1250	45
2276	542	2615	0.619	11	1	Minor Arterial	1250	40
2277	2615	542	0.619	11	1	Minor Arterial	1250	40
2278	2617	2616	0.921	11	1	Ramp	1500	55
2279	1993	2620	0.035	11	1	Principal Arterial	1600	55
2280	2620	1993	0.035	11	2	Principal Arterial	3300	45
2281	1992	2620	0.021	11	1	Principal Arterial	1600	55
2282	2620	1992	0.021	11	2	Principal Arterial	3300	45
2283	2620	1995	0.244	10	1	Collector / Local Road	800	15
2284	866	2621	0.073	11	1	Principal Arterial	1700	45
2285	2621	866	0.073	11	1	Principal Arterial	1700	45
2286	814	2622	0.034	11	1	Major Arterial	1700	55
2287	2622	814	0.034	11	1	Major Arterial	1700	45
2288	909	2623	0.615	11	2	Ramp	3000	50
2289	952	2625	0.325	11	1	Major Arterial	1700	45
2290	2625	952	0.325	11	1	Major Arterial	1700	45
2291	1222	2537	0.021	11	1	Minor Arterial	1700	40
2292	2537	1222	0.021	11	1	Minor Arterial	1700	40
2293	2526	2541	0.295	11	2	Principal Arterial	3300	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2294	2626	2527	0.305	11	2	Principal Arterial	3300	40
2295	2546	1259	2.186	12	2	Freeway	4100	65
2296	1263	2547	2.225	12	2	Freeway	4100	65
2297	2587	2627	0.096	11	1	Minor Arterial	1700	40
2298	2627	2587	0.096	11	1	Minor Arterial	1700	40
2299	1264	1479	0.444	12	1	Ramp	1500	35
2300	2542	2633	0.028	11	1	Minor Arterial	1700	40
2301	2633	2542	0.028	11	1	Minor Arterial	1700	40
2302	2542	2634	0.024	12	1	Principal Arterial	1700	25
2303	2634	2542	0.024	12	1	Principal Arterial	1700	25
2304	2633	2634	0.03	11	1	Collector / Local Road	1700	40
2305	2585	2627	0.133	11	1	Collector / Local Road	1700	40
2306	2627	2585	0.133	11	1	Collector / Local Road	1700	40
2307	2541	2626	0.016	10	1	Collector / Local Road	800	15
2308	2626	2541	0.016	10	1	Collector / Local Road	800	15
2309	2584	2588	0.256	11	1	Minor Arterial	1250	40
2310	2588	2584	0.256	11	1	Minor Arterial	1250	40
2311	2583	2635	0.147	11	1	Collector / Local Road	1250	40
2312	2635	2583	0.147	11	1	Collector / Local Road	1250	40
2313	2529	2544	0.548	11	1	Principal Arterial	1600	40
2314	2544	2529	0.548	11	1	Principal Arterial	1600	40
2315	2532	2599	0.012	11	1	Principal Arterial	1600	45
2316	2599	2532	0.012	11	2	Principal Arterial	3300	45
2317	908	2639	0.377	12	2	Freeway	4100	60
2318	2639	2640	0.17	12	2	Freeway	4100	60
2319	2639	2641	0.13	12	1	Ramp	1500	35
2320	2641	2640	0.101	12	1	Ramp	1500	35
2321	2638	2642	0.02	11	1	Collector / Local Road	1700	40
2322	2642	2638	0.02	11	1	Collector / Local Road	1700	40
2323	2641	2643	0.088	11	1	Minor Arterial	1700	40
2324	2643	2641	0.088	11	1	Minor Arterial	1700	40
2325	2638	2643	0.023	11	1	Minor Arterial	1700	40
2326	2643	2638	0.023	11	1	Minor Arterial	1700	40
2327	2643	2642	0.03	11	1	Minor Arterial	1700	40
2328	946	2644	0.047	11	1	Minor Arterial	1700	40
2329	1528	2645	0.13	12	1	Ramp	1500	35
2330	2645	945	0.079	12	1	Ramp	1500	35
2331	2645	2646	0.03	12	1	Ramp	1500	35
2332	2646	2647	0.087	11	1	Minor Arterial	1700	40
2333	2647	2646	0.087	11	1	Minor Arterial	1700	40
2334	953	2648	0.107	11	1	Minor Arterial	1700	40
2335	2648	953	0.107	11	1	Minor Arterial	1700	40
2336	2644	2646	0.022	11	1	Minor Arterial	1700	40
2337	2651	2649	0.247	12	1	Ramp	1500	35
2338	2644	2651	0.032	12	1	Ramp	1500	35
2339	2646	2651	0.021	12	1	Ramp	1500	35
2340	2650	2648	0.257	12	1	Ramp	1500	35
2341	2647	2652	0.04	11	1	Minor Arterial	1700	40
2342	2652	2647	0.04	11	1	Minor Arterial	1700	40
2343	2648	2652	0.007	11	1	Minor Arterial	1700	40
2344	2652	2648	0.007	11	1	Minor Arterial	1700	40
2345	2647	2653	0.053	12	1	Ramp	1500	35
2346	2653	1531	0.199	12	1	Ramp	1500	35
2347	2652	2653	0.027	12	1	Ramp	1500	35
2348	2406	2654	0.25	10	1	Collector / Local Road	800	10
2349	2654	2406	0.25	10	1	Collector / Local Road	800	10
2350	2407	2556	0.103	11	1	Minor Arterial	1700	40
2351	2556	2407	0.103	11	1	Minor Arterial	1700	40
2352	2513	2655	0.009	10	1	Collector / Local Road	800	15
2353	2655	2513	0.009	10	1	Collector / Local Road	800	15
2354	2398	2553	0.459	10	1	Collector / Local Road	800	15
2355	2553	2398	0.459	10	1	Collector / Local Road	800	15

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2356	2465	2467	0.052	12	1	Principal Arterial	1700	35
2357	2467	2465	0.052	12	1	Principal Arterial	1700	35
2358	2402	2465	0.021	12	1	Principal Arterial	1700	35
2359	2465	2402	0.021	11	2	Principal Arterial	3300	45
2360	1808	2656	0.831	11	1	Minor Arterial	1700	40
2361	2656	1808	0.831	11	1	Minor Arterial	1700	40
2362	1712	2657	0.618	11	1	Major Arterial	1250	40
2363	2657	1712	0.618	11	1	Major Arterial	1250	40
2364	1723	2658	0.213	11	1	Principal Arterial	1600	45
2365	2658	1723	0.213	11	1	Principal Arterial	1600	45
2366	1712	2658	1.219	11	1	Principal Arterial	1600	45
2367	2658	1712	1.219	11	1	Principal Arterial	1600	45
2368	2513	1551	1.602	11	2	Principal Arterial	3700	50
2369	906	910	0.059	11	1	Major Arterial	1250	40
2370	910	906	0.059	11	1	Major Arterial	1250	40
2371	1045	1049	0.086	11	1	Principal Arterial	1700	45
2372	2440	2475	0.584	11	1	Principal Arterial	1600	50
2373	2475	2440	0.584	11	1	Principal Arterial	1600	50
2374	2506	2662	0.179	12	1	Major Arterial	1200	30
2375	2662	2506	0.179	12	1	Major Arterial	1200	30
2376	2549	2550	0.009	11	1	Major Arterial	1250	45
2377	2550	2549	0.009	11	1	Major Arterial	1250	45
2378	2663	2664	0.309	10	1	Collector / Local Road	800	15
2379	2664	2663	0.309	10	1	Collector / Local Road	800	15
2380	1665	1672	2.11	11	1	Minor Arterial	1700	40
2381	1672	1665	2.11	11	1	Minor Arterial	1700	40
2382	1188	2667	0.213	11	2	Major Arterial	3200	45
2383	2667	1188	0.213	11	2	Major Arterial	3200	45
2384	2392	2668	0.272	11	1	Principal Arterial	1600	40
2385	2668	2392	0.272	11	1	Principal Arterial	1600	40
2386	2668	2669	0.026	11	1	Principal Arterial	1600	40
2387	2669	2668	0.026	11	2	Principal Arterial	3300	45
2388	2469	2670	0.07	10	1	Collector / Local Road	800	15
2389	2670	2469	0.07	10	1	Collector / Local Road	800	15
2390	2432	2670	0.166	11	1	Principal Arterial	1600	40
2391	2670	2432	0.166	11	1	Principal Arterial	1600	40
2392	1283	2670	0.064	11	1	Principal Arterial	1600	40
2393	2670	1283	0.064	11	1	Principal Arterial	1600	40
2394	1434	2501	0.232	11	1	Minor Arterial	1700	40
2395	2501	1434	0.232	11	1	Minor Arterial	1700	40
2396	2479	2672	0.008	11	1	Collector / Local Road	1700	40
2397	2672	2479	0.008	11	1	Collector / Local Road	1700	40
2398	2419	2493	0.016	11	1	Major Arterial	1700	45
2399	2493	2419	0.016	11	1	Major Arterial	1700	45
2400	1436	2374	0.127	11	2	Major Arterial	3200	45
2401	2374	1436	0.127	11	2	Major Arterial	3200	45
2402	2494	2578	0.245	11	1	Major Arterial	1700	45
2403	2578	2494	0.245	11	1	Major Arterial	1700	45
2404	2500	2663	0.345	11	2	Major Arterial	3200	45
2405	2663	2500	0.345	11	2	Major Arterial	3200	45
2406	1434	2596	0.378	11	1	Major Arterial	1700	45
2407	2596	1434	0.378	11	1	Major Arterial	1700	45
2408	2438	2476	0.372	11	1	Principal Arterial	1700	50
2409	2476	2438	0.372	11	1	Principal Arterial	1700	50
2410	2515	2593	0.324	11	1	Minor Arterial	1700	40
2411	2593	2515	0.324	11	1	Minor Arterial	1700	40
2412	2392	2471	0.377	11	1	Principal Arterial	1600	40
2413	2471	2392	0.377	11	1	Principal Arterial	1600	40
2414	1282	1385	1.101	11	2	Principal Arterial	3300	45
2415	1385	1282	1.101	11	2	Principal Arterial	3300	45
2416	1286	2383	0.356	11	1	Major Arterial	1250	45
2417	2383	1286	0.356	11	1	Major Arterial	1250	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2418	2363	2676	0.016	11	1	Collector / Local Road	1700	40
2419	2676	2363	0.016	11	1	Collector / Local Road	1700	40
2420	2487	2488	0.114	11	1	Collector / Local Road	1700	40
2421	2488	2487	0.114	11	1	Collector / Local Road	1700	40
2422	2678	1525	0.666	12	1	Ramp	1500	35
2423	895	2679	0.522	11	1	Ramp	1500	55
2424	2679	2680	0.485	11	1	Ramp	1500	55
2425	2616	2618	0.101	11	1	Ramp	1500	55
2426	2618	2616	0.101	11	1	Ramp	1500	55
2427	911	2681	0.155	12	2	Freeway	4100	60
2428	899	2684	0.191	12	1	Ramp	1500	35
2429	891	888	0.177	11	1	Principal Arterial	1700	45
2430	2685	900	0.962	11	2	Ramp	3000	50
2431	1523	2688	0.288	12	1	Ramp	1500	35
2432	2688	896	0.853	12	1	Ramp	1500	35
2433	894	892	0.298	11	2	Principal Arterial	3300	45
2434	1524	2689	0.532	11	1	Ramp	1500	55
2435	949	1527	0.135	12	1	Ramp	1500	35
2436	944	1530	0.351	12	1	Ramp	1500	35
2437	1790	1792	0.622	11	1	Ramp	1500	55
2438	1792	1790	0.622	11	1	Ramp	1500	55
2439	498	2690	0.118	12	2	Freeway	4100	60
2440	2330	2332	0.04	11	1	Minor Arterial	1700	40
2441	2332	2330	0.04	11	1	Minor Arterial	1700	40
2442	2033	2035	0.199	11	1	Minor Arterial	1250	40
2443	2035	2033	0.199	11	1	Minor Arterial	1250	40
2444	2174	2323	0.224	11	1	Major Arterial	1250	45
2445	2323	2174	0.224	11	1	Major Arterial	1250	45
2446	2216	2222	0.211	11	1	Minor Arterial	1700	40
2447	2222	2216	0.211	11	1	Minor Arterial	1700	40
2448	2223	2304	0.121	11	1	Major Arterial	1250	45
2449	2304	2223	0.121	11	1	Major Arterial	1250	45
2450	2163	2317	0.179	11	1	Minor Arterial	1700	40
2451	2317	2316	0.178	11	1	Principal Arterial	1700	45
2452	2188	2201	1.966	11	1	Major Arterial	1250	45
2453	2201	2188	1.966	11	1	Major Arterial	1250	45
2454	2693	553	0.749	11	1	Minor Arterial	1250	40
2455	613	617	0.289	11	1	Minor Arterial	1700	40
2456	617	613	0.289	11	1	Minor Arterial	1700	40
2457	646	650	0.293	11	1	Minor Arterial	1700	40
2458	650	646	0.293	11	1	Minor Arterial	1700	40
2459	623	1496	1.352	12	2	Freeway	4100	55
2460	569	1495	6.053	12	2	Freeway	4100	55
2461	610	586	3.211	12	2	Freeway	4100	55
2462	624	649	4.644	12	2	Freeway	4100	55
2463	1497	654	1.109	12	2	Freeway	4100	55
2464	550	561	0.876	11	2	Minor Arterial	3200	40
2465	561	550	0.876	12	2	Freeway	3200	40
2466	583	592	0.742	12	1	Ramp	1500	35
2467	2285	2694	0.146	10	1	Collector / Local Road	800	15
2468	2694	2285	0.146	10	1	Collector / Local Road	800	15
2469	2286	2289	0.88	11	1	Collector / Local Road	1700	40
2470	2289	2286	0.88	11	1	Collector / Local Road	1700	40
2471	1633	2287	0.205	11	2	Collector / Local Road	3200	40
2472	2287	1633	0.205	11	2	Collector / Local Road	3200	40
2473	564	566	0.34	11	2	Minor Arterial	3200	40
2474	566	564	0.34	12	2	Freeway	3200	40
2475	2209	2215	0.222	11	1	Minor Arterial	1700	40
2476	2215	2209	0.222	11	1	Minor Arterial	1700	40
2477	2325	2214	0.877	12	2	Freeway	4100	55
2478	2136	2148	1.197	12	2	Freeway	4100	55
2479	2135	2138	0.138	12	1	Principal Arterial	1700	35

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2480	2138	2135	0.138	11	1	Principal Arterial	1700	45
2481	2147	2139	1.204	12	2	Freeway	4100	55
2482	232	2696	0.28	11	2	Principal Arterial	3300	45
2483	261	262	0.039	11	1	Minor Arterial	1700	40
2484	262	261	0.039	11	1	Minor Arterial	1700	40
2485	333	327	0.098	12	1	Ramp	1500	35
2486	487	489	0.092	12	2	Freeway	4100	55
2487	338	322	0.089	12	2	Freeway	4100	55
2488	326	331	0.094	12	1	Ramp	1500	35
2489	440	1202	0.894	11	1	Ramp	1500	55
2490	532	528	1.237	12	2	Freeway	4100	65
2491	527	1516	0.592	11	1	Ramp	1500	55
2492	523	527	0.544	12	1	Ramp	1500	35
2493	1202	2699	0.391	11	1	Ramp	1500	55
2494	1510	2699	0.775	11	1	Ramp	1500	55
2495	525	433	0.414	12	1	Ramp	1500	35
2496	2700	530	0.362	11	1	Ramp	1500	55
2497	2699	520	0.593	11	1	Ramp	1500	55
2498	523	520	0.774	12	1	Ramp	1500	35
2499	1509	2701	0.474	11	1	Ramp	1500	55
2500	2701	529	0.311	11	1	Ramp	1500	55
2501	2701	1517	0.857	11	1	Ramp	1500	55
2502	524	1511	1.223	11	1	Ramp	1500	55
2503	2702	434	0.592	11	1	Minor Arterial	1700	40
2504	430	435	0.111	11	1	Major Arterial	1700	45
2505	435	430	0.111	11	1	Major Arterial	1700	45
2506	2686	2678	1.481	11	1	Ramp	1500	55
2507	2678	895	1.05	11	1	Ramp	1500	55
2508	897	901	0.487	12	2	Freeway	4100	65
2509	1526	899	0.687	12	1	Ramp	1500	35
2510	2679	2684	0.944	11	1	Ramp	1500	55
2511	1522	875	2.375	11	1	Ramp	1500	55
2512	872	875	1.57	11	1	Ramp	1500	55
2513	1534	862	0.72	12	3	Freeway	6150	50
2514	857	850	0.21	12	2	Freeway	4100	50
2515	384	392	0.28	12	1	Ramp	1500	35
2516	391	1203	0.09	11	1	Major Arterial	1700	45
2517	1203	391	0.09	11	1	Major Arterial	1700	45
2518	2703	2683	0.393	11	1	Ramp	1500	55
2519	2684	2617	0.172	11	1	Ramp	1500	55
2520	2687	2688	0.433	12	1	Ramp	1500	35
2521	2703	2617	0.347	11	1	Ramp	1500	55
2522	898	2703	0.154	11	1	Ramp	1500	55
2523	854	852	0.249	11	1	Major Arterial	1250	45
2524	851	853	0.254	11	1	Major Arterial	1250	45
2525	2624	2704	0.37	11	1	Ramp	1500	55
2526	860	2705	0.161	12	2	Freeway	4100	50
2527	320	1536	0.272	12	1	Ramp	1500	35
2528	1195	318	0.448	12	1	Ramp	1500	35
2529	539	2706	0.282	12	2	Freeway	4100	65
2530	2707	536	0.263	12	2	Freeway	4100	65
2531	457	459	0.094	11	1	Principal Arterial	1700	45
2532	459	457	0.094	11	1	Principal Arterial	1700	45
2533	1515	537	0.341	12	1	Ramp	1500	35
2534	1515	539	0.459	12	2	Freeway	4100	65
2535	1558	1559	0.836	12	1	Ramp	1500	35
2536	1559	1558	0.836	12	1	Ramp	1500	35
2537	248	2637	0.706	11	1	Collector / Local Road	1250	40
2538	2637	248	0.706	11	1	Collector / Local Road	1250	40
2539	249	256	0.619	11	1	Major Arterial	1250	45
2540	256	249	0.619	11	1	Major Arterial	1250	45
2541	544	2708	0.103	11	1	Collector / Local Road	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2542	2708	544	0.103	11	1	Collector / Local Road	1250	40
2543	668	2709	0.06	12	2	Major Arterial	2700	30
2544	2709	668	0.06	12	1	Major Arterial	1200	30
2545	671	2709	0.36	12	1	Major Arterial	1200	35
2546	2709	671	0.36	12	2	Major Arterial	2700	35
2547	719	729	0.45	11	3	Principal Arterial	4950	45
2548	729	719	0.45	11	3	Principal Arterial	4950	45
2549	730	1498	0.773	12	1	Ramp	1500	35
2550	761	731	7.043	12	2	Freeway	4100	55
2551	760	765	0.298	11	2	Minor Arterial	3200	40
2552	765	760	0.298	11	2	Minor Arterial	3200	40
2553	2157	2166	0.19	11	1	Principal Arterial	1600	45
2554	2166	2157	0.19	11	1	Principal Arterial	1600	45
2555	2702	1513	1.246	12	1	Ramp	1500	35
2556	1512	2712	1.266	12	1	Ramp	1500	35
2557	422	2713	0.497	11	1	Minor Arterial	1250	40
2558	2713	422	0.497	11	1	Minor Arterial	1250	40
2559	400	405	0.199	11	2	Minor Arterial	3200	40
2560	405	400	0.199	11	2	Minor Arterial	3200	40
2561	395	399	0.43	11	1	Collector / Local Road	1700	40
2562	399	395	0.43	11	1	Collector / Local Road	1700	40
2563	511	513	0.268	12	2	Freeway	4100	65
2564	381	393	0.544	11	1	Minor Arterial	1700	40
2565	393	381	0.544	11	1	Minor Arterial	1700	40
2566	493	2690	0.905	11	1	Ramp	1500	55
2567	499	371	0.106	12	3	Freeway	6150	65
2568	497	494	0.602	12	2	Freeway	4100	60
2569	378	382	0.081	11	1	Collector / Local Road	1700	45
2570	382	378	0.081	11	1	Collector / Local Road	1700	45
2571	504	2716	0.959	11	1	Ramp	1500	55
2572	383	1518	0.031	11	2	Minor Arterial	3200	40
2573	1518	383	0.031	11	2	Minor Arterial	3200	45
2574	503	500	0.508	11	1	Ramp	1500	55
2575	1505	501	0.305	11	1	Ramp	1500	55
2576	1452	2716	0.239	12	1	Ramp	1500	35
2577	2717	1502	0.232	12	3	Freeway	6150	65
2578	376	379	0.607	11	1	Collector / Local Road	1700	45
2579	379	376	0.607	11	1	Collector / Local Road	1700	45
2580	495	1507	0.789	12	3	Freeway	6150	65
2581	375	502	0.03	11	3	Major Arterial	3700	50
2582	1514	376	0.027	11	1	Major Arterial	1700	50
2583	506	2717	0.32	12	2	Freeway	4100	65
2584	1507	507	1.428	11	1	Ramp	1500	55
2585	505	1506	1.064	11	1	Ramp	1500	55
2586	1504	509	0.369	11	1	Ramp	1500	55
2587	367	1501	0.383	12	3	Freeway	6150	65
2588	367	493	0.718	11	1	Ramp	1500	55
2589	164	182	0.506	12	2	Freeway	4100	55
2590	591	1554	0.291	12	1	Ramp	1500	35
2591	579	1494	0.799	12	2	Freeway	4100	60
2592	2050	2053	0.069	11	1	Minor Arterial	1250	40
2593	2053	2050	0.069	11	1	Minor Arterial	1250	40
2594	2008	2012	0.569	11	2	Minor Arterial	3200	40
2595	2083	2084	0.04	11	1	Minor Arterial	1700	40
2596	2084	2083	0.04	11	1	Minor Arterial	1700	40
2597	2069	2303	0.179	11	1	Minor Arterial	1250	40
2598	2303	2069	0.179	11	1	Minor Arterial	1250	40
2599	1996	1997	0.431	11	1	Principal Arterial	1600	55
2600	1997	1996	0.431	11	1	Principal Arterial	1600	55
2601	2021	2298	0.363	10	1	Collector / Local Road	800	15
2602	2298	2021	0.363	10	1	Collector / Local Road	800	15
2603	2031	2032	0.342	11	1	Minor Arterial	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2604	2032	2031	0.342	11	1	Minor Arterial	1250	40
2605	2119	2123	0.073	11	1	Major Arterial	1700	45
2606	2123	2119	0.073	11	1	Major Arterial	1700	45
2607	486	481	0.065	12	1	Ramp	1500	35
2608	1194	1484	0.349	11	1	Ramp	1500	55
2609	307	2720	0.081	11	1	Principal Arterial	1700	45
2610	1478	1553	0.122	11	1	Collector / Local Road	1700	40
2611	314	482	0.129	12	2	Freeway	4100	60
2612	2718	466	0.169	11	1	Minor Arterial	1700	40
2613	300	2722	0.054	10	1	Collector / Local Road	800	15
2614	300	2723	0.007	11	1	Collector / Local Road	1700	40
2615	2723	470	0.051	11	1	Collector / Local Road	1700	40
2616	2721	2723	0.055	10	1	Collector / Local Road	800	15
2617	2721	2722	0.009	10	1	Collector / Local Road	800	10
2618	2722	2721	0.009	10	1	Collector / Local Road	800	10
2619	2069	2070	0.021	11	1	Minor Arterial	1700	40
2620	2070	2069	0.021	11	1	Minor Arterial	1700	40
2621	2724	311	0.089	11	1	Principal Arterial	1700	45
2622	1948	2725	0.025	11	1	Principal Arterial	1600	45
2623	2725	1948	0.025	11	1	Principal Arterial	1600	45
2624	2000	2726	0.043	11	1	Principal Arterial	1600	45
2625	2726	2000	0.043	11	1	Principal Arterial	1600	45
2626	1553	294	0.059	11	1	Collector / Local Road	1700	40
2627	2356	1987	1.164	12	2	Freeway	4100	60
2628	2355	2357	1.164	12	2	Freeway	4100	60
2629	1986	1987	0.978	12	1	Ramp	1500	35
2630	1988	2355	0.639	12	1	Ramp	1500	35
2631	2355	1988	0.639	12	1	Ramp	1500	35
2632	1269	2727	0.367	11	2	Principal Arterial	3300	40
2633	2727	2728	0.344	10	1	Collector / Local Road	800	15
2634	2728	2727	0.344	10	1	Collector / Local Road	800	15
2635	2538	2729	0.223	10	1	Collector / Local Road	800	15
2636	2729	2538	0.223	10	1	Collector / Local Road	800	15
2637	2134	2732	0.077	11	1	Major Arterial	1700	45
2638	2732	2134	0.077	11	1	Major Arterial	1700	45
2639	2123	2732	0.111	11	1	Major Arterial	1700	45
2640	2732	2123	0.111	11	1	Major Arterial	1700	45
2641	2134	2733	0.058	11	1	Minor Arterial	1700	40
2642	2733	2134	0.058	11	1	Minor Arterial	1700	40
2643	2722	2739	0.122	10	1	Collector / Local Road	800	10
2644	2739	2722	0.122	10	1	Collector / Local Road	800	10
2645	2667	2740	0.35	10	1	Collector / Local Road	800	15
2646	2740	2667	0.35	10	1	Collector / Local Road	800	15
2647	721	2741	0.806	10	1	Collector / Local Road	800	15
2648	2741	721	0.806	10	1	Collector / Local Road	800	15
2649	588	2745	0.332	11	1	Collector / Local Road	1200	45
2650	2745	588	0.332	11	1	Collector / Local Road	1200	45
2651	601	2746	1.093	10	1	Collector / Local Road	800	15
2652	2746	601	1.093	10	1	Collector / Local Road	800	15
2653	2065	2750	0.948	10	1	Collector / Local Road	800	15
2654	2750	2065	0.948	10	1	Collector / Local Road	800	15
2655	1686	2753	0.284	10	1	Collector / Local Road	800	15
2656	2753	1686	0.284	10	1	Collector / Local Road	800	15
2657	1685	2754	0.063	10	1	Collector / Local Road	800	15
2658	2754	1685	0.063	10	1	Collector / Local Road	800	15
2659	1719	2755	0.269	10	1	Collector / Local Road	800	15
2660	2755	1719	0.269	10	1	Collector / Local Road	800	15
2661	1733	2757	0.642	11	1	Minor Arterial	1250	40
2662	2757	1733	0.642	11	1	Minor Arterial	1250	40
2663	1743	2758	1.824	11	1	Major Arterial	1250	45
2664	2758	1743	1.824	11	1	Major Arterial	1250	45
2665	1731	2760	0.161	10	1	Collector / Local Road	800	15

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2666	2760	1731	0.161	10	1	Collector / Local Road	800	15
2667	2502	2763	0.711	12	1	Major Arterial	1700	35
2668	2763	2502	0.711	12	1	Major Arterial	1700	35
2669	2596	2763	0.171	12	1	Major Arterial	1700	35
2670	2763	2596	0.171	12	1	Major Arterial	1700	35
2671	1161	1165	0.863	10	1	Collector / Local Road	800	15
2672	1165	1161	0.863	10	1	Collector / Local Road	800	15
2673	1636	2765	0.834	11	1	Minor Arterial	1250	40
2674	2765	1636	0.834	11	1	Minor Arterial	1250	40
2675	1	2745	1.164	11	1	Collector / Local Road	1200	45
2676	2745	1	1.164	11	1	Collector / Local Road	1200	45
2677	2	2753	1.064	10	1	Collector / Local Road	800	25
2678	2753	2	1.064	10	1	Collector / Local Road	800	25
2679	3	2742	0.497	10	1	Collector / Local Road	800	25
2680	2742	3	0.497	10	1	Collector / Local Road	800	25
2681	4	698	0.992	10	1	Collector / Local Road	800	25
2682	698	4	0.992	10	1	Collector / Local Road	800	25
2683	5	637	0.228	10	1	Collector / Local Road	800	25
2684	637	5	0.228	10	1	Collector / Local Road	800	25
2685	6	2746	0.039	10	1	Collector / Local Road	800	25
2686	2746	6	0.039	10	1	Collector / Local Road	800	25
2687	7	587	0.124	10	1	Collector / Local Road	800	25
2688	587	7	0.124	10	1	Collector / Local Road	800	25
2689	8	1562	1.201	10	1	Collector / Local Road	800	25
2690	1562	8	1.201	10	1	Collector / Local Road	800	25
2691	9	2338	0.201	10	1	Collector / Local Road	800	25
2692	2338	9	0.201	10	1	Collector / Local Road	800	25
2693	10	2246	0.671	10	1	Collector / Local Road	800	25
2694	2246	10	0.671	10	1	Collector / Local Road	800	25
2695	11	2743	0.024	10	1	Collector / Local Road	800	25
2696	2743	11	0.024	10	1	Collector / Local Road	800	25
2697	12	2744	0.107	10	1	Collector / Local Road	800	25
2698	2744	12	0.107	10	1	Collector / Local Road	800	25
2699	13	672	0.389	10	1	Collector / Local Road	800	25
2700	672	13	0.389	10	1	Collector / Local Road	800	25
2701	14	1704	0.333	10	1	Collector / Local Road	800	25
2702	1704	14	0.333	10	1	Collector / Local Road	800	25
2703	15	1689	0.621	10	1	Collector / Local Road	800	25
2704	1689	15	0.621	10	1	Collector / Local Road	800	25
2705	16	2752	0.033	10	1	Collector / Local Road	800	25
2706	2752	16	0.033	10	1	Collector / Local Road	800	25
2707	17	1953	0.414	10	1	Collector / Local Road	800	25
2708	1953	17	0.414	10	1	Collector / Local Road	800	25
2709	18	1708	1.827	10	1	Collector / Local Road	800	25
2710	1708	18	1.827	10	1	Collector / Local Road	800	25
2711	19	1921	0.205	10	1	Collector / Local Road	800	25
2712	1921	19	0.205	10	1	Collector / Local Road	800	25
2713	20	2754	0.801	10	1	Collector / Local Road	800	25
2714	2754	20	0.801	10	1	Collector / Local Road	800	25
2715	21	1615	0.36	10	1	Collector / Local Road	800	25
2716	1615	21	0.36	10	1	Collector / Local Road	800	25
2717	22	1668	1.579	10	1	Collector / Local Road	800	25
2718	1668	22	1.579	10	1	Collector / Local Road	800	25
2719	23	1911	0.319	10	1	Collector / Local Road	800	25
2720	1911	23	0.319	10	1	Collector / Local Road	800	25
2721	24	693	0.544	10	1	Collector / Local Road	800	25
2722	693	24	0.544	10	1	Collector / Local Road	800	25
2723	25	1974	0.949	10	1	Collector / Local Road	800	25
2724	1974	25	0.949	10	1	Collector / Local Road	800	25
2725	26	1654	0.406	10	1	Collector / Local Road	800	25
2726	1654	26	0.406	10	1	Collector / Local Road	800	25
2727	27	1652	0.192	10	1	Collector / Local Road	800	25

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2728	1652	27	0.192	10	1	Collector / Local Road	800	25
2729	28	2694	0.635	10	1	Collector / Local Road	800	25
2730	2694	28	0.635	10	1	Collector / Local Road	800	25
2731	29	2310	1.074	10	1	Collector / Local Road	800	25
2732	2310	29	1.074	10	1	Collector / Local Road	800	25
2733	30	2306	0.288	10	1	Collector / Local Road	800	25
2734	2306	30	0.288	10	1	Collector / Local Road	800	25
2735	31	2307	0.211	10	1	Collector / Local Road	800	25
2736	2307	31	0.211	10	1	Collector / Local Road	800	25
2737	32	2333	0.304	10	1	Collector / Local Road	800	25
2738	2333	32	0.304	10	1	Collector / Local Road	800	25
2739	33	2244	0.399	10	1	Collector / Local Road	800	25
2740	2244	33	0.399	10	1	Collector / Local Road	800	25
2741	34	2211	0.469	10	1	Collector / Local Road	800	25
2742	2211	34	0.469	10	1	Collector / Local Road	800	25
2743	35	1547	0.279	10	1	Collector / Local Road	800	25
2744	1547	35	0.279	10	1	Collector / Local Road	800	25
2745	36	2353	0.397	10	1	Collector / Local Road	800	25
2746	2353	36	0.397	10	1	Collector / Local Road	800	25
2747	37	2213	0.519	10	1	Collector / Local Road	800	25
2748	2213	37	0.519	10	1	Collector / Local Road	800	25
2749	38	2340	0.084	10	1	Collector / Local Road	800	25
2750	2340	38	0.084	10	1	Collector / Local Road	800	25
2751	39	2747	0.168	10	1	Collector / Local Road	800	25
2752	2747	39	0.168	10	1	Collector / Local Road	800	25
2753	40	2248	0.676	10	1	Collector / Local Road	800	25
2754	2248	40	0.676	10	1	Collector / Local Road	800	25
2755	41	1574	0.572	10	1	Collector / Local Road	800	25
2756	1574	41	0.572	10	1	Collector / Local Road	800	25
2757	42	712	0.792	10	1	Collector / Local Road	800	25
2758	712	42	0.792	10	1	Collector / Local Road	800	25
2759	43	2741	0.613	10	1	Collector / Local Road	800	25
2760	2741	43	0.613	10	1	Collector / Local Road	800	25
2761	44	2756	0.184	10	1	Collector / Local Road	800	25
2762	2756	44	0.184	10	1	Collector / Local Road	800	25
2763	45	1727	0.442	10	1	Collector / Local Road	800	25
2764	1727	45	0.442	10	1	Collector / Local Road	800	25
2765	46	2659	0.595	10	1	Collector / Local Road	800	25
2766	2659	46	0.595	10	1	Collector / Local Road	800	25
2767	47	2755	0.476	10	1	Collector / Local Road	800	25
2768	2755	47	0.476	10	1	Collector / Local Road	800	25
2769	48	2180	1.218	10	1	Collector / Local Road	800	25
2770	2180	48	1.218	10	1	Collector / Local Road	800	25
2771	49	2320	0.776	10	1	Collector / Local Road	800	25
2772	2320	49	0.776	10	1	Collector / Local Road	800	25
2773	50	2197	0.884	10	1	Collector / Local Road	800	25
2774	2197	50	0.884	10	1	Collector / Local Road	800	25
2775	51	2328	0.41	10	1	Collector / Local Road	800	25
2776	2328	51	0.41	10	1	Collector / Local Road	800	25
2777	52	2735	0.213	10	1	Collector / Local Road	800	25
2778	2735	52	0.213	10	1	Collector / Local Road	800	25
2779	53	2613	0.37	10	1	Collector / Local Road	800	25
2780	2613	53	0.37	10	1	Collector / Local Road	800	25
2781	54	593	2.61	10	1	Collector / Local Road	800	25
2782	593	54	2.61	10	1	Collector / Local Road	800	25
2783	55	2736	0.528	10	1	Collector / Local Road	800	25
2784	2736	55	0.528	10	1	Collector / Local Road	800	25
2785	56	661	0.267	10	1	Collector / Local Road	800	25
2786	661	56	0.267	10	1	Collector / Local Road	800	25
2787	57	728	1.116	10	1	Collector / Local Road	800	25
2788	728	57	1.116	10	1	Collector / Local Road	800	25
2789	58	2748	0.67	10	1	Collector / Local Road	800	25

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2790	2748	58	0.67	10	1	Collector / Local Road	800	25
2791	59	741	0.189	10	1	Collector / Local Road	800	25
2792	741	59	0.189	10	1	Collector / Local Road	800	25
2793	60	2611	0.329	10	1	Collector / Local Road	800	25
2794	2611	60	0.329	10	1	Collector / Local Road	800	25
2795	61	1431	0.197	10	1	Collector / Local Road	800	25
2796	1431	61	0.197	10	1	Collector / Local Road	800	25
2797	62	768	0.364	10	1	Collector / Local Road	800	25
2798	768	62	0.364	10	1	Collector / Local Road	800	25
2799	63	794	0.331	10	1	Collector / Local Road	800	25
2800	794	63	0.331	10	1	Collector / Local Road	800	25
2801	64	1617	1.412	10	1	Collector / Local Road	800	25
2802	1617	64	1.412	10	1	Collector / Local Road	800	25
2803	65	1577	1.332	10	1	Collector / Local Road	800	25
2804	1577	65	1.332	10	1	Collector / Local Road	800	25
2805	66	1576	0.522	10	1	Collector / Local Road	800	25
2806	1576	66	0.522	10	1	Collector / Local Road	800	25
2807	67	758	0.334	10	1	Collector / Local Road	800	25
2808	758	67	0.334	10	1	Collector / Local Road	800	25
2809	68	1454	0.833	10	1	Collector / Local Road	800	25
2810	1454	68	0.833	10	1	Collector / Local Road	800	25
2811	69	2492	0.602	10	1	Collector / Local Road	800	25
2812	2492	69	0.602	10	1	Collector / Local Road	800	25
2813	70	2759	0.684	10	1	Collector / Local Road	800	25
2814	2759	70	0.684	10	1	Collector / Local Road	800	25
2815	71	1611	1.015	10	1	Collector / Local Road	800	25
2816	1611	71	1.015	10	1	Collector / Local Road	800	25
2817	72	1957	0.908	10	1	Collector / Local Road	800	25
2818	1957	72	0.908	10	1	Collector / Local Road	800	25
2819	73	2757	0.562	10	1	Collector / Local Road	800	25
2820	2757	73	0.562	10	1	Collector / Local Road	800	25
2821	74	1907	0.396	10	1	Collector / Local Road	800	25
2822	1907	74	0.396	10	1	Collector / Local Road	800	25
2823	75	2758	1.49	10	1	Collector / Local Road	800	25
2824	2758	75	1.49	10	1	Collector / Local Road	800	25
2825	76	2760	0.563	10	1	Collector / Local Road	800	25
2826	2760	76	0.563	10	1	Collector / Local Road	800	25
2827	77	2761	0.879	10	1	Collector / Local Road	800	25
2828	2761	77	0.879	10	1	Collector / Local Road	800	25
2829	78	2510	0.811	10	1	Collector / Local Road	800	25
2830	2510	78	0.811	10	1	Collector / Local Road	800	25
2831	79	2508	0.561	10	1	Collector / Local Road	800	25
2832	2508	79	0.561	10	1	Collector / Local Road	800	25
2833	80	2481	0.511	10	1	Collector / Local Road	800	25
2834	2481	80	0.511	10	1	Collector / Local Road	800	25
2835	81	2503	0.248	10	1	Collector / Local Road	800	25
2836	2503	81	0.248	10	1	Collector / Local Road	800	25
2837	82	2499	0.903	10	1	Collector / Local Road	800	25
2838	2499	82	0.903	10	1	Collector / Local Road	800	25
2839	83	2489	0.9	10	1	Collector / Local Road	800	25
2840	2489	83	0.9	10	1	Collector / Local Road	800	25
2841	84	2749	0.379	10	1	Collector / Local Road	800	25
2842	2749	84	0.379	10	1	Collector / Local Road	800	25
2843	85	2750	0.213	10	1	Collector / Local Road	800	25
2844	2750	85	0.213	10	1	Collector / Local Road	800	25
2845	86	2352	0.723	10	1	Collector / Local Road	800	25
2846	2352	86	0.723	10	1	Collector / Local Road	800	25
2847	87	2235	0.615	10	1	Collector / Local Road	800	25
2848	2235	87	0.615	10	1	Collector / Local Road	800	25
2849	88	2297	0.803	10	1	Collector / Local Road	800	25
2850	2297	88	0.803	10	1	Collector / Local Road	800	25
2851	89	344	0.507	10	1	Collector / Local Road	800	25

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2852	344	89	0.507	10	1	Collector / Local Road	800	25
2853	89	345	0.283	10	1	Collector / Local Road	800	25
2854	345	89	0.283	10	1	Collector / Local Road	800	25
2855	90	840	0.226	10	1	Collector / Local Road	800	25
2856	840	90	0.226	10	1	Collector / Local Road	800	25
2857	91	959	0.212	10	1	Collector / Local Road	800	25
2858	959	91	0.212	10	1	Collector / Local Road	800	25
2859	92	1046	0.161	10	1	Collector / Local Road	800	25
2860	1046	92	0.161	10	1	Collector / Local Road	800	25
2861	93	1025	0.426	10	1	Collector / Local Road	800	25
2862	1025	93	0.426	10	1	Collector / Local Road	800	25
2863	94	1198	0.256	10	1	Collector / Local Road	800	25
2864	1198	94	0.256	10	1	Collector / Local Road	800	25
2865	95	1193	0.211	10	1	Collector / Local Road	800	25
2866	1193	95	0.211	10	1	Collector / Local Road	800	25
2867	95	1629	0.12	10	1	Collector / Local Road	800	25
2868	1629	95	0.12	10	1	Collector / Local Road	800	25
2869	96	1932	0.081	10	1	Collector / Local Road	800	25
2870	1932	96	0.081	10	1	Collector / Local Road	800	25
2871	97	1906	2.396	10	1	Collector / Local Road	800	25
2872	1906	97	2.396	10	1	Collector / Local Road	800	25
2873	98	1775	0.411	10	1	Collector / Local Road	800	25
2874	1775	98	0.411	10	1	Collector / Local Road	800	25
2875	99	2350	0.075	10	1	Collector / Local Road	800	25
2876	2350	99	0.075	10	1	Collector / Local Road	800	25
2877	100	1960	0.243	10	1	Collector / Local Road	800	25
2878	1960	100	0.243	10	1	Collector / Local Road	800	25
2879	101	1947	0.062	10	1	Collector / Local Road	800	25
2880	1947	101	0.062	10	1	Collector / Local Road	800	25
2881	102	2762	0.337	10	1	Collector / Local Road	800	25
2882	2762	102	0.337	10	1	Collector / Local Road	800	25
2883	103	2590	0.557	10	1	Collector / Local Road	800	25
2884	2590	103	0.557	10	1	Collector / Local Road	800	25
2885	104	2591	0.236	10	1	Collector / Local Road	800	25
2886	2591	104	0.236	10	1	Collector / Local Road	800	25
2887	105	2665	1.013	10	1	Collector / Local Road	800	25
2888	2665	105	1.013	10	1	Collector / Local Road	800	25
2889	106	2764	0.6	10	1	Collector / Local Road	800	25
2890	2764	106	0.6	10	1	Collector / Local Road	800	25
2891	107	2482	1.015	10	1	Collector / Local Road	800	25
2892	2482	107	1.015	10	1	Collector / Local Road	800	25
2893	107	2484	0.304	10	1	Collector / Local Road	800	25
2894	2484	107	0.304	10	1	Collector / Local Road	800	25
2895	108	2751	0.325	10	1	Collector / Local Road	800	25
2896	2751	108	0.325	10	1	Collector / Local Road	800	25
2897	109	2553	0.802	10	1	Collector / Local Road	800	25
2898	2553	109	0.802	10	1	Collector / Local Road	800	25
2899	110	2042	0.101	10	1	Collector / Local Road	800	25
2900	2042	110	0.101	10	1	Collector / Local Road	800	25
2901	111	2654	0.522	10	1	Collector / Local Road	800	25
2902	2654	111	0.522	10	1	Collector / Local Road	800	25
2903	112	2731	0.349	10	1	Collector / Local Road	800	25
2904	2731	112	0.349	10	1	Collector / Local Road	800	25
2905	113	2329	0.803	10	1	Collector / Local Road	800	25
2906	2329	113	0.803	10	1	Collector / Local Road	800	25
2907	114	2331	0.976	10	1	Collector / Local Road	800	25
2908	2331	114	0.976	10	1	Collector / Local Road	800	25
2909	115	211	0.567	10	1	Collector / Local Road	800	25
2910	211	115	0.567	10	1	Collector / Local Road	800	25
2911	116	2247	0.326	10	1	Collector / Local Road	800	25
2912	2247	116	0.326	10	1	Collector / Local Road	800	25
2913	117	270	0.222	10	1	Collector / Local Road	800	25

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2914	270	117	0.222	10	1	Collector / Local Road	800	25
2915	117	271	0.497	10	1	Collector / Local Road	800	25
2916	271	117	0.497	10	1	Collector / Local Road	800	25
2917	118	2496	0.448	10	1	Collector / Local Road	800	25
2918	2496	118	0.448	10	1	Collector / Local Road	800	25
2919	119	2470	0.38	10	1	Collector / Local Road	800	25
2920	2470	119	0.38	10	1	Collector / Local Road	800	25
2921	120	2730	0.346	10	1	Collector / Local Road	800	25
2922	2730	120	0.346	10	1	Collector / Local Road	800	25
2923	121	2763	0.199	10	1	Collector / Local Road	800	25
2924	2763	121	0.199	10	1	Collector / Local Road	800	25
2925	122	2740	0.111	10	1	Collector / Local Road	800	25
2926	2740	122	0.111	10	1	Collector / Local Road	800	25
2927	123	2511	0.434	10	1	Collector / Local Road	800	25
2928	2511	123	0.434	10	1	Collector / Local Road	800	25
2929	124	1873	0.145	10	1	Collector / Local Road	800	25
2930	1873	124	0.145	10	1	Collector / Local Road	800	25
2931	125	1968	0.355	10	1	Collector / Local Road	800	25
2932	1968	125	0.355	10	1	Collector / Local Road	800	25
2933	126	2737	0.485	10	1	Collector / Local Road	800	25
2934	2737	126	0.485	10	1	Collector / Local Road	800	25
2935	126	2738	0.241	10	2	Collector / Local Road	1600	25
2936	2738	126	0.241	10	2	Collector / Local Road	1600	25
2937	127	2732	0.167	10	1	Collector / Local Road	800	25
2938	2732	127	0.167	10	1	Collector / Local Road	800	25
2939	127	2733	0.26	10	1	Collector / Local Road	800	25
2940	2733	127	0.26	10	1	Collector / Local Road	800	25
2941	128	2728	0.183	10	1	Collector / Local Road	800	25
2942	2728	128	0.183	10	1	Collector / Local Road	800	25
2943	128	2729	0.586	10	1	Collector / Local Road	800	25
2944	2729	128	0.586	10	1	Collector / Local Road	800	25
2945	129	280	0.919	10	1	Collector / Local Road	800	25
2946	280	129	0.919	10	1	Collector / Local Road	800	25
2947	129	2739	0.386	10	1	Collector / Local Road	800	25
2948	2739	129	0.386	10	1	Collector / Local Road	800	25
2949	130	2734	0.432	10	1	Collector / Local Road	800	25
2950	2734	130	0.432	10	1	Collector / Local Road	800	25
2951	131	2691	0.126	10	1	Collector / Local Road	800	25
2952	2691	131	0.126	10	1	Collector / Local Road	800	25
2953	131	2692	0.123	10	1	Collector / Local Road	800	25
2954	2692	131	0.123	10	1	Collector / Local Road	800	25
2955	132	1373	0.177	10	1	Collector / Local Road	800	25
2956	1373	132	0.177	10	1	Collector / Local Road	800	25
2957	132	2379	0.19	10	1	Collector / Local Road	800	25
2958	2379	132	0.19	10	1	Collector / Local Road	800	25
2959	133	2573	0.641	10	1	Collector / Local Road	800	25
2960	2573	133	0.641	10	1	Collector / Local Road	800	25
2961	134	1318	0.793	10	1	Collector / Local Road	800	25
2962	1318	134	0.793	10	1	Collector / Local Road	800	25
2963	134	1319	0.688	10	1	Collector / Local Road	800	25
2964	1319	134	0.688	10	1	Collector / Local Road	800	25
2965	135	2396	1.252	10	1	Collector / Local Road	800	25
2966	2396	135	1.252	10	1	Collector / Local Road	800	25
2967	136	2546	0.433	10	1	Collector / Local Road	800	25
2968	2546	136	0.433	10	1	Collector / Local Road	800	25
2969	136	2547	0.418	10	1	Collector / Local Road	800	25
2970	2547	136	0.418	10	1	Collector / Local Road	800	25
2971	137	1205	0.427	10	1	Collector / Local Road	800	25
2972	1205	137	0.427	10	1	Collector / Local Road	800	25
2973	137	1206	0.847	10	1	Collector / Local Road	800	25
2974	1206	137	0.847	10	1	Collector / Local Road	800	25
2975	138	1460	0.566	10	1	Collector / Local Road	800	25

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
2976	1460	138	0.566	10	1	Collector / Local Road	800	25
2977	139	321	0.145	10	1	Collector / Local Road	800	25
2978	321	139	0.145	10	1	Collector / Local Road	800	25
2979	139	1485	0.133	10	1	Collector / Local Road	800	25
2980	1485	139	0.133	10	1	Collector / Local Road	800	25
2981	140	161	0.221	10	1	Collector / Local Road	800	25
2982	161	140	0.221	10	1	Collector / Local Road	800	25
2983	141	189	0.115	10	1	Collector / Local Road	800	25
2984	189	141	0.115	10	1	Collector / Local Road	800	25
2985	141	1537	0.111	10	1	Collector / Local Road	800	25
2986	1537	141	0.111	10	1	Collector / Local Road	800	25
2987	142	2710	0.693	10	1	Collector / Local Road	800	25
2988	2710	142	0.693	10	1	Collector / Local Road	800	25
2989	142	2711	0.727	10	1	Collector / Local Road	800	25
2990	2711	142	0.727	10	1	Collector / Local Road	800	25
2991	143	2706	0.276	10	1	Collector / Local Road	800	25
2992	2706	143	0.276	10	1	Collector / Local Road	800	25
2993	143	2707	0.297	10	1	Collector / Local Road	800	25
2994	2707	143	0.297	10	1	Collector / Local Road	800	25
2995	144	1096	0.25	10	1	Collector / Local Road	800	25
2996	1096	144	0.25	10	1	Collector / Local Road	800	25
2997	145	1146	0.333	10	1	Collector / Local Road	800	25
2998	1146	145	0.333	10	1	Collector / Local Road	800	25
2999	145	1147	0.331	10	1	Collector / Local Road	800	25
3000	1147	145	0.331	10	1	Collector / Local Road	800	25
3001	146	1175	0.391	10	1	Collector / Local Road	800	25
3002	1175	146	0.391	10	1	Collector / Local Road	800	25
3003	147	1189	0.386	10	1	Collector / Local Road	800	25
3004	1189	147	0.386	10	1	Collector / Local Road	800	25
3005	148	1901	0.303	10	1	Collector / Local Road	800	25
3006	1901	148	0.303	10	1	Collector / Local Road	800	25
3007	149	1892	0.254	10	1	Collector / Local Road	800	25
3008	1892	149	0.254	10	1	Collector / Local Road	800	25
3009	149	1896	0.249	10	1	Collector / Local Road	800	25
3010	1896	149	0.249	10	1	Collector / Local Road	800	25
3011	150	2554	0.733	10	1	Collector / Local Road	800	25
3012	2554	150	0.733	10	1	Collector / Local Road	800	25
3013	151	2516	0.202	10	1	Collector / Local Road	800	25
3014	2516	151	0.202	10	1	Collector / Local Road	800	25
3015	151	2517	0.232	10	1	Collector / Local Road	800	25
3016	2517	151	0.232	10	1	Collector / Local Road	800	25
3017	152	160	0.13	10	1	Collector / Local Road	800	25
3018	160	152	0.13	10	1	Collector / Local Road	800	25
3019	152	162	0.104	10	1	Collector / Local Road	800	25
3020	162	152	0.104	10	1	Collector / Local Road	800	25
3021	153	464	0.074	10	1	Collector / Local Road	800	25
3022	464	153	0.074	10	1	Collector / Local Road	800	25
3023	153	1538	0.076	10	1	Collector / Local Road	800	25
3024	1538	153	0.076	10	1	Collector / Local Road	800	25
3025	154	238	1.309	10	1	Collector / Local Road	800	25
3026	238	154	1.309	10	1	Collector / Local Road	800	25
3027	156	158	1.637	11	2	Principal Arterial	3300	45
3028	158	156	1.637	11	2	Principal Arterial	3300	45
3029	159	161	0.162	11	1	Principal Arterial	1700	45
3030	161	159	0.162	11	1	Principal Arterial	1700	45
3031	163	165	1.072	11	1	Principal Arterial	1700	45
3032	165	163	1.072	11	1	Principal Arterial	1700	45
3033	168	169	0.036	11	1	Principal Arterial	1700	45
3034	169	168	0.036	11	1	Principal Arterial	1700	45
3035	173	174	0.376	11	1	Minor Arterial	1700	40
3036	174	173	0.376	11	1	Minor Arterial	1700	40
3037	175	187	0.031	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3038	187	175	0.031	11	1	Minor Arterial	1700	40
3039	197	1560	0.988	12	2	Freeway	4100	60
3040	196	201	0.767	11	1	Major Arterial	1700	45
3041	201	196	0.767	11	1	Major Arterial	1700	45
3042	198	202	0.592	11	1	Collector / Local Road	1700	40
3043	202	198	0.592	11	1	Collector / Local Road	1700	40
3044	196	203	0.588	11	1	Major Arterial	1700	45
3045	203	196	0.588	11	1	Major Arterial	1700	45
3046	195	205	0.79	11	1	Principal Arterial	1700	45
3047	205	195	0.79	11	1	Principal Arterial	1700	45
3048	201	206	0.583	11	1	Major Arterial	1700	45
3049	206	201	0.583	11	1	Major Arterial	1700	45
3050	205	2734	0.169	10	1	Collector / Local Road	800	10
3051	2734	205	0.169	10	1	Collector / Local Road	800	10
3052	207	2734	0.129	10	1	Collector / Local Road	800	10
3053	2734	207	0.129	10	1	Collector / Local Road	800	10
3054	200	209	1.784	11	1	Major Arterial	1700	50
3055	209	200	1.784	11	1	Major Arterial	1700	50
3056	210	1581	0.296	11	2	Principal Arterial	3300	45
3057	1581	210	0.296	11	2	Principal Arterial	3300	45
3058	210	217	0.644	11	1	Principal Arterial	1700	45
3059	217	210	0.644	11	1	Principal Arterial	1700	45
3060	206	217	1.816	11	1	Major Arterial	1700	45
3061	217	206	1.816	11	1	Major Arterial	1700	45
3062	211	215	0.726	10	1	Collector / Local Road	800	15
3063	215	211	0.726	10	1	Collector / Local Road	800	15
3064	212	215	0.629	11	1	Major Arterial	1700	45
3065	215	212	0.629	11	1	Major Arterial	1700	45
3066	201	216	1.703	11	1	Minor Arterial	1700	40
3067	216	201	1.703	11	1	Minor Arterial	1700	40
3068	216	221	0.668	11	1	Major Arterial	1700	50
3069	221	216	0.668	11	1	Major Arterial	1700	50
3070	218	220	0.222	11	1	Collector / Local Road	1700	40
3071	220	218	0.222	11	1	Collector / Local Road	1700	40
3072	219	227	1.187	11	1	Major Arterial	1700	45
3073	227	219	1.187	11	1	Major Arterial	1700	45
3074	222	231	2.189	11	1	Major Arterial	1700	50
3075	231	222	2.189	11	1	Major Arterial	1700	50
3076	215	235	2.005	11	1	Major Arterial	1700	45
3077	235	215	2.005	11	1	Major Arterial	1700	45
3078	220	231	1.088	11	1	Principal Arterial	1700	45
3079	231	220	1.088	11	1	Principal Arterial	1700	45
3080	236	1572	0.39	11	1	Major Arterial	1700	45
3081	1572	236	0.39	11	1	Major Arterial	1700	45
3082	223	2637	1.977	11	1	Collector / Local Road	1700	40
3083	2637	223	1.977	11	1	Collector / Local Road	1700	40
3084	231	240	1.825	11	1	Major Arterial	1700	50
3085	240	231	1.825	11	1	Major Arterial	1700	50
3086	235	255	1.702	11	1	Major Arterial	1250	45
3087	255	235	1.702	11	1	Major Arterial	1250	45
3088	241	250	0.894	11	1	Major Arterial	1700	50
3089	250	241	0.894	11	1	Major Arterial	1700	50
3090	243	254	0.449	11	1	Minor Arterial	1700	40
3091	254	243	0.449	11	1	Minor Arterial	1700	40
3092	251	254	0.662	11	1	Major Arterial	1700	50
3093	254	251	0.662	11	1	Major Arterial	1700	50
3094	252	254	0.956	11	1	Major Arterial	1700	50
3095	254	252	0.956	11	1	Major Arterial	1700	50
3096	249	266	1.627	11	1	Collector / Local Road	1250	40
3097	266	249	1.627	11	1	Collector / Local Road	1250	40
3098	256	259	0.878	11	1	Major Arterial	1700	45
3099	259	256	0.878	11	1	Major Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3100	255	264	1.034	11	1	Major Arterial	1250	45
3101	264	255	1.034	11	1	Major Arterial	1250	45
3102	254	260	0.958	11	1	Minor Arterial	1700	40
3103	260	254	0.958	11	1	Minor Arterial	1700	40
3104	257	263	0.757	11	2	Principal Arterial	3300	45
3105	263	257	0.757	11	2	Principal Arterial	3300	45
3106	255	265	1.525	11	1	Minor Arterial	1250	40
3107	265	255	1.525	11	1	Minor Arterial	1250	40
3108	259	263	0.344	11	1	Major Arterial	1700	40
3109	263	259	0.344	11	1	Major Arterial	1700	40
3110	262	268	0.753	11	1	Minor Arterial	1700	40
3111	268	262	0.753	11	1	Minor Arterial	1700	40
3112	266	269	0.263	11	1	Collector / Local Road	1700	40
3113	269	266	0.263	11	1	Collector / Local Road	1700	40
3114	269	270	0.256	10	1	Collector / Local Road	800	15
3115	270	269	0.256	10	1	Collector / Local Road	800	15
3116	267	271	0.532	10	1	Collector / Local Road	800	15
3117	271	267	0.532	10	1	Collector / Local Road	800	15
3118	263	274	1.615	11	1	Principal Arterial	1700	45
3119	274	263	1.615	11	1	Principal Arterial	1700	45
3120	269	277	0.835	11	1	Collector / Local Road	1700	40
3121	277	269	0.835	11	1	Collector / Local Road	1700	40
3122	466	273	0.421	11	1	Minor Arterial	1700	40
3123	263	275	1.302	11	1	Principal Arterial	1700	45
3124	275	263	1.302	11	1	Principal Arterial	1700	45
3125	267	281	1.435	11	1	Minor Arterial	1700	40
3126	281	267	1.435	11	1	Minor Arterial	1700	40
3127	275	281	0.291	11	1	Principal Arterial	1700	45
3128	281	275	0.291	11	1	Principal Arterial	1700	45
3129	273	279	0.399	11	1	Minor Arterial	1700	40
3130	279	273	0.399	11	1	Minor Arterial	1700	40
3131	279	282	0.042	11	1	Minor Arterial	1700	40
3132	282	279	0.042	11	1	Minor Arterial	1700	40
3133	271	288	0.685	10	1	Collector / Local Road	800	15
3134	288	271	0.685	10	1	Collector / Local Road	800	15
3135	289	283	0.189	11	1	Collector / Local Road	1700	40
3136	281	286	0.156	11	1	Minor Arterial	1700	40
3137	286	281	0.156	11	1	Minor Arterial	1700	40
3138	287	288	0.196	12	2	Major Arterial	2700	35
3139	288	287	0.196	12	2	Major Arterial	2700	35
3140	280	292	0.378	11	1	Minor Arterial	1700	40
3141	292	280	0.378	11	1	Minor Arterial	1700	40
3142	281	296	0.542	11	1	Principal Arterial	1700	45
3143	296	281	0.542	11	1	Principal Arterial	1700	45
3144	288	295	0.893	12	2	Major Arterial	2700	35
3145	295	288	0.893	12	2	Major Arterial	2700	35
3146	286	305	0.541	11	1	Major Arterial	1700	45
3147	305	286	0.541	11	1	Major Arterial	1700	45
3148	293	302	0.201	11	1	Collector / Local Road	1700	40
3149	297	305	0.377	12	2	Major Arterial	2700	35
3150	305	297	0.377	12	2	Major Arterial	2700	35
3151	268	306	2.149	11	1	Minor Arterial	1700	40
3152	306	268	2.149	11	1	Minor Arterial	1700	40
3153	268	309	1.518	11	1	Minor Arterial	1700	40
3154	309	268	1.518	11	1	Minor Arterial	1700	40
3155	286	312	1.253	11	1	Minor Arterial	1700	40
3156	312	286	1.253	11	1	Minor Arterial	1700	40
3157	274	334	1.527	11	1	Collector / Local Road	1700	40
3158	334	274	1.527	11	1	Collector / Local Road	1700	40
3159	312	334	0.355	11	1	Minor Arterial	1700	40
3160	334	312	0.355	11	1	Minor Arterial	1700	40
3161	318	324	0.311	12	1	Ramp	1500	35

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3162	325	320	0.305	12	1	Ramp	1500	35
3163	309	330	0.477	11	1	Collector / Local Road	1700	40
3164	330	309	0.477	11	1	Collector / Local Road	1700	40
3165	295	336	1.073	11	1	Principal Arterial	1700	45
3166	336	295	1.073	11	1	Principal Arterial	1700	45
3167	317	339	0.637	11	1	Collector / Local Road	1700	40
3168	339	317	0.637	11	1	Collector / Local Road	1700	40
3169	305	342	1.043	11	1	Major Arterial	1700	45
3170	342	305	1.043	11	1	Major Arterial	1700	45
3171	345	346	0.123	10	1	Collector / Local Road	800	15
3172	346	345	0.123	10	1	Collector / Local Road	800	15
3173	340	346	0.247	10	1	Collector / Local Road	800	15
3174	346	340	0.247	10	1	Collector / Local Road	800	15
3175	312	351	0.967	11	1	Collector / Local Road	1700	40
3176	351	312	0.967	11	1	Collector / Local Road	1700	40
3177	339	344	0.432	10	1	Collector / Local Road	800	15
3178	344	339	0.432	10	1	Collector / Local Road	800	15
3179	339	349	0.692	11	1	Collector / Local Road	1700	40
3180	349	339	0.692	11	1	Collector / Local Road	1700	40
3181	347	348	0.249	11	2	Minor Arterial	3200	40
3182	348	347	0.249	11	2	Minor Arterial	3200	40
3183	305	351	1.659	11	2	Major Arterial	2700	50
3184	351	305	1.659	11	2	Major Arterial	2700	50
3185	357	350	0.205	11	1	Collector / Local Road	1700	40
3186	336	359	0.966	11	1	Principal Arterial	1700	45
3187	359	336	0.966	11	1	Principal Arterial	1700	45
3188	306	356	1.452	11	1	Minor Arterial	1700	40
3189	356	306	1.452	11	1	Minor Arterial	1700	40
3190	348	358	0.388	11	2	Minor Arterial	3200	40
3191	358	348	0.388	11	2	Minor Arterial	3200	40
3192	354	361	0.367	11	2	Major Arterial	2700	50
3193	361	354	0.367	11	2	Major Arterial	2700	50
3194	360	341	0.867	11	1	Major Arterial	1700	45
3195	359	360	0.359	11	1	Collector / Local Road	1700	40
3196	360	359	0.359	11	1	Collector / Local Road	1700	40
3197	353	363	0.795	11	1	Minor Arterial	1700	40
3198	363	353	0.795	11	1	Minor Arterial	1700	40
3199	368	360	0.477	11	1	Major Arterial	1700	45
3200	374	368	0.117	11	1	Major Arterial	1700	45
3201	361	375	0.499	11	2	Major Arterial	2700	50
3202	373	368	0.183	11	1	Minor Arterial	1700	40
3203	365	374	0.394	11	1	Minor Arterial	1700	40
3204	374	365	0.394	11	1	Minor Arterial	1700	40
3205	356	381	1.186	11	1	Minor Arterial	1700	40
3206	381	356	1.186	11	1	Minor Arterial	1700	40
3207	377	380	0.135	11	1	Major Arterial	1700	45
3208	380	377	0.135	11	1	Major Arterial	1700	45
3209	383	389	0.213	11	2	Minor Arterial	3200	40
3210	389	383	0.213	11	2	Minor Arterial	3200	40
3211	385	386	0.064	11	1	Major Arterial	1700	45
3212	386	385	0.064	11	1	Major Arterial	1700	45
3213	374	387	1.629	11	1	Minor Arterial	1700	40
3214	387	374	1.629	11	1	Minor Arterial	1700	40
3215	394	2738	0.123	10	2	Collector / Local Road	1600	15
3216	2738	394	0.123	10	2	Collector / Local Road	1600	15
3217	387	396	0.888	11	2	Minor Arterial	3200	40
3218	396	387	0.888	11	2	Minor Arterial	3200	40
3219	401	1508	0.716	11	1	Major Arterial	1700	50
3220	391	406	0.664	11	1	Major Arterial	1700	45
3221	406	391	0.664	11	1	Major Arterial	1700	45
3222	398	408	0.485	11	1	Collector / Local Road	1700	40
3223	408	398	0.485	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3224	404	408	0.462	11	2	Minor Arterial	3200	40
3225	408	404	0.462	11	2	Minor Arterial	3200	40
3226	393	409	1.033	11	1	Minor Arterial	1700	40
3227	409	393	1.033	11	1	Minor Arterial	1700	40
3228	408	409	1.171	11	2	Minor Arterial	3200	40
3229	409	408	1.171	11	2	Minor Arterial	3200	40
3230	409	410	0.942	11	1	Minor Arterial	1700	40
3231	410	409	0.942	11	1	Minor Arterial	1700	40
3232	414	903	0.192	11	1	Minor Arterial	1700	40
3233	903	414	0.192	11	1	Minor Arterial	1700	40
3234	414	417	1.339	11	1	Minor Arterial	1700	40
3235	417	414	1.339	11	1	Minor Arterial	1700	40
3236	413	416	0.931	11	1	Major Arterial	1700	45
3237	416	413	0.931	11	1	Major Arterial	1700	45
3238	417	418	0.217	11	1	Minor Arterial	1700	40
3239	418	417	0.217	11	1	Minor Arterial	1700	40
3240	410	2713	1.417	11	1	Minor Arterial	1700	40
3241	2713	410	1.417	11	1	Minor Arterial	1700	40
3242	416	423	0.404	11	1	Major Arterial	1700	45
3243	423	416	0.404	11	1	Major Arterial	1700	45
3244	420	423	0.282	11	1	Collector / Local Road	1700	40
3245	423	420	0.282	11	1	Collector / Local Road	1700	40
3246	412	421	1.452	11	1	Major Arterial	1700	45
3247	421	412	1.452	11	1	Major Arterial	1700	45
3248	433	437	1.619	11	1	Minor Arterial	1700	40
3249	437	433	1.619	11	1	Minor Arterial	1700	40
3250	438	441	0.406	11	1	Major Arterial	1700	45
3251	441	438	0.406	11	1	Major Arterial	1700	45
3252	439	436	0.334	12	2	Freeway	4100	65
3253	2700	440	0.551	12	2	Freeway	4100	65
3254	441	444	1.746	11	1	Minor Arterial	1700	40
3255	444	441	1.746	11	1	Minor Arterial	1700	40
3256	444	445	1.386	11	1	Minor Arterial	1700	40
3257	445	444	1.386	11	1	Minor Arterial	1700	40
3258	447	449	0.45	11	1	Minor Arterial	1700	40
3259	449	447	0.45	11	1	Minor Arterial	1700	40
3260	446	453	0.532	11	1	Collector / Local Road	1700	40
3261	453	446	0.532	11	1	Collector / Local Road	1700	40
3262	473	1194	0.152	11	1	Ramp	1500	55
3263	474	473	0.232	11	1	Ramp	1500	55
3264	335	492	0.138	12	1	Ramp	1500	35
3265	501	505	0.118	11	1	Ramp	1500	55
3266	507	503	0.422	11	1	Ramp	1500	55
3267	529	437	0.327	12	1	Ramp	1500	35
3268	529	439	0.887	11	1	Ramp	1500	55
3269	530	533	0.585	11	1	Ramp	1500	55
3270	2698	533	1.276	11	1	Ramp	1500	55
3271	540	546	0.483	11	1	Minor Arterial	1700	40
3272	546	540	0.483	11	1	Minor Arterial	1700	40
3273	542	565	0.846	11	1	Minor Arterial	1250	40
3274	565	542	0.846	11	1	Minor Arterial	1250	40
3275	546	568	0.583	11	1	Minor Arterial	1250	40
3276	568	546	0.583	11	1	Minor Arterial	1250	40
3277	545	547	1.432	11	1	Minor Arterial	1700	40
3278	547	545	1.432	11	1	Minor Arterial	1700	40
3279	541	555	0.878	10	1	Collector / Local Road	800	15
3280	555	541	0.878	10	1	Collector / Local Road	800	15
3281	548	1562	0.699	10	1	Collector / Local Road	800	15
3282	1562	548	0.699	10	1	Collector / Local Road	800	15
3283	550	549	0.629	11	2	Minor Arterial	3200	40
3284	553	556	0.34	11	2	Minor Arterial	3200	40
3285	556	553	0.34	11	2	Minor Arterial	3200	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3286	559	1561	1.517	11	1	Major Arterial	1700	45
3287	1561	559	1.517	11	1	Major Arterial	1700	45
3288	555	560	0.72	11	2	Minor Arterial	3200	40
3289	560	555	0.72	11	2	Minor Arterial	3200	40
3290	559	2708	0.163	11	1	Collector / Local Road	1700	40
3291	2708	559	0.163	11	1	Collector / Local Road	1700	40
3292	556	565	1.002	11	1	Minor Arterial	1250	40
3293	565	556	1.002	11	1	Minor Arterial	1250	40
3294	552	561	0.09	11	1	Collector / Local Road	1250	40
3295	561	552	0.09	11	1	Collector / Local Road	1250	40
3296	564	563	0.739	12	1	Ramp	1500	35
3297	561	564	0.119	11	2	Minor Arterial	3200	40
3298	564	561	0.119	12	2	Freeway	3200	40
3299	2695	566	0.68	12	1	Ramp	1500	35
3300	570	575	0.691	11	1	Collector / Local Road	1250	40
3301	575	570	0.691	11	1	Collector / Local Road	1250	40
3302	559	595	1.085	11	1	Major Arterial	1700	45
3303	595	559	1.085	11	1	Major Arterial	1700	45
3304	584	1580	0.6	11	1	Minor Arterial	1250	40
3305	1580	584	0.6	11	1	Minor Arterial	1250	40
3306	597	1371	0.184	11	1	Major Arterial	1250	45
3307	1371	597	0.184	11	1	Major Arterial	1250	45
3308	598	599	0.156	11	1	Minor Arterial	1700	40
3309	599	598	0.156	11	1	Minor Arterial	1700	40
3310	589	2614	1.637	11	1	Major Arterial	1700	45
3311	2614	589	1.637	11	1	Major Arterial	1700	45
3312	603	608	0.634	11	1	Major Arterial	1250	55
3313	608	603	0.634	11	1	Major Arterial	1250	55
3314	605	607	0.183	11	1	Major Arterial	1250	45
3315	607	605	0.183	11	1	Major Arterial	1250	45
3316	605	2736	0.556	10	1	Collector / Local Road	800	15
3317	2736	605	0.556	10	1	Collector / Local Road	800	15
3318	601	619	2.172	11	1	Minor Arterial	1700	45
3319	619	601	2.172	11	1	Minor Arterial	1700	45
3320	622	1542	0.75	11	1	Minor Arterial	1700	40
3321	1542	622	0.75	11	1	Minor Arterial	1700	40
3322	632	1540	0.914	11	1	Minor Arterial	1700	40
3323	1540	632	0.914	11	1	Minor Arterial	1700	40
3324	225	636	1.634	11	1	Collector / Local Road	1250	40
3325	636	225	1.634	11	1	Collector / Local Road	1250	40
3326	638	657	0.505	11	1	Collector / Local Road	1700	40
3327	657	638	0.505	11	1	Collector / Local Road	1700	40
3328	639	658	0.543	11	1	Minor Arterial	1700	40
3329	658	639	0.543	11	1	Minor Arterial	1700	40
3330	625	642	2.003	11	1	Major Arterial	1700	40
3331	642	625	2.003	11	1	Major Arterial	1700	40
3332	642	653	1.275	12	1	Minor Arterial	1700	30
3333	653	642	1.275	12	1	Minor Arterial	1700	30
3334	659	665	0.835	11	1	Minor Arterial	1700	40
3335	665	659	0.835	11	1	Minor Arterial	1700	40
3336	653	663	0.951	12	1	Minor Arterial	1700	30
3337	663	653	0.951	12	1	Minor Arterial	1700	30
3338	636	669	1.519	11	1	Collector / Local Road	1250	40
3339	669	636	1.519	11	1	Collector / Local Road	1250	40
3340	676	678	0.222	11	1	Collector / Local Road	1700	40
3341	678	676	0.222	11	1	Collector / Local Road	1700	40
3342	656	677	1.503	11	1	Collector / Local Road	1250	40
3343	677	656	1.503	11	1	Collector / Local Road	1250	40
3344	678	681	0.161	11	1	Collector / Local Road	1250	40
3345	681	678	0.161	11	1	Collector / Local Road	1250	40
3346	680	682	0.562	11	1	Collector / Local Road	1700	40
3347	682	680	0.562	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3348	679	685	0.956	11	1	Collector / Local Road	1700	40
3349	685	679	0.956	11	1	Collector / Local Road	1700	40
3350	674	689	0.53	10	1	Collector / Local Road	1200	25
3351	689	674	0.53	10	1	Collector / Local Road	1200	25
3352	677	686	0.597	12	1	Major Arterial	1200	35
3353	686	677	0.597	12	1	Major Arterial	1200	35
3354	687	693	0.146	10	1	Collector / Local Road	800	15
3355	693	687	0.146	10	1	Collector / Local Road	800	15
3356	679	699	1.269	11	1	Major Arterial	1700	45
3357	699	679	1.269	11	1	Major Arterial	1700	45
3358	695	699	0.451	11	1	Minor Arterial	1700	40
3359	699	695	0.451	11	1	Minor Arterial	1700	40
3360	699	710	0.572	11	1	Major Arterial	1700	45
3361	710	699	0.572	11	1	Major Arterial	1700	45
3362	264	714	0.971	11	1	Major Arterial	1700	45
3363	714	264	0.971	11	1	Major Arterial	1700	45
3364	703	723	1.189	11	1	Minor Arterial	1700	40
3365	723	703	1.189	11	1	Minor Arterial	1700	40
3366	708	724	2.397	11	2	Minor Arterial	3200	45
3367	724	708	2.397	11	2	Minor Arterial	3200	45
3368	691	725	2.376	11	1	Minor Arterial	1700	40
3369	725	691	2.376	11	1	Minor Arterial	1700	40
3370	723	1458	1.055	11	1	Collector / Local Road	1700	40
3371	1458	723	1.055	11	1	Collector / Local Road	1700	40
3372	725	1431	0.798	10	1	Collector / Local Road	800	15
3373	1431	725	0.798	10	1	Collector / Local Road	800	15
3374	721	736	1.113	11	1	Major Arterial	1250	50
3375	736	721	1.113	11	1	Major Arterial	1250	50
3376	738	2756	0.584	10	1	Collector / Local Road	800	15
3377	2756	738	0.584	10	1	Collector / Local Road	800	15
3378	740	742	1.047	11	1	Minor Arterial	1700	40
3379	742	740	1.047	11	1	Minor Arterial	1700	40
3380	738	744	1.296	11	1	Minor Arterial	1250	40
3381	744	738	1.296	11	1	Minor Arterial	1250	40
3382	750	1456	3.621	11	1	Principal Arterial	1700	45
3383	1456	750	3.621	11	1	Principal Arterial	1700	45
3384	743	753	0.75	11	1	Minor Arterial	1700	45
3385	753	743	0.75	11	1	Minor Arterial	1700	45
3386	749	766	1.063	11	1	Collector / Local Road	1700	40
3387	766	749	1.063	11	1	Collector / Local Road	1700	40
3388	750	752	1.72	11	1	Minor Arterial	1700	40
3389	752	750	1.72	11	1	Minor Arterial	1700	40
3390	743	763	2.057	11	1	Minor Arterial	1700	40
3391	763	743	2.057	11	1	Minor Arterial	1700	40
3392	749	754	0.434	10	1	Collector / Local Road	1700	35
3393	754	749	0.434	10	1	Collector / Local Road	1700	35
3394	742	759	2.367	11	1	Minor Arterial	1700	40
3395	759	742	2.367	11	1	Minor Arterial	1700	40
3396	750	757	0.366	11	1	Principal Arterial	1700	45
3397	757	750	0.366	11	1	Principal Arterial	1700	45
3398	753	775	0.376	12	1	Minor Arterial	1700	35
3399	775	753	0.376	12	1	Minor Arterial	1700	35
3400	757	762	0.399	11	1	Principal Arterial	1600	45
3401	762	757	0.399	11	1	Principal Arterial	1600	45
3402	347	763	0.569	11	2	Minor Arterial	3200	40
3403	763	347	0.569	11	2	Minor Arterial	3200	40
3404	752	768	0.501	10	1	Collector / Local Road	800	15
3405	768	752	0.501	10	1	Collector / Local Road	800	15
3406	762	770	0.135	11	1	Principal Arterial	1700	45
3407	770	762	0.135	11	1	Principal Arterial	1700	45
3408	764	771	0.805	11	2	Minor Arterial	3200	40
3409	771	764	0.805	11	2	Minor Arterial	3200	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3410	767	771	0.332	11	1	Minor Arterial	1700	40
3411	771	767	0.332	11	1	Minor Arterial	1700	40
3412	744	774	1.676	11	1	Minor Arterial	1250	40
3413	774	744	1.676	11	1	Minor Arterial	1250	40
3414	770	773	0.661	11	1	Collector / Local Road	1700	40
3415	773	770	0.661	11	1	Collector / Local Road	1700	40
3416	763	776	1.596	11	1	Minor Arterial	1700	40
3417	776	763	1.596	11	1	Minor Arterial	1700	40
3418	759	783	0.7	11	1	Minor Arterial	1700	40
3419	783	759	0.7	11	1	Minor Arterial	1700	40
3420	780	784	0.405	11	1	Minor Arterial	1700	40
3421	784	780	0.405	11	1	Minor Arterial	1700	40
3422	773	787	0.742	11	1	Major Arterial	1700	45
3423	787	773	0.742	11	1	Major Arterial	1700	45
3424	781	785	0.355	12	1	Major Arterial	1700	35
3425	785	781	0.355	12	1	Major Arterial	1700	35
3426	786	785	0.164	11	1	Major Arterial	1700	45
3427	777	797	0.632	11	2	Major Arterial	3200	45
3428	797	777	0.632	11	2	Major Arterial	3200	45
3429	773	798	0.856	10	1	Collector / Local Road	800	15
3430	798	773	0.856	10	1	Collector / Local Road	800	15
3431	791	799	1.043	12	1	Major Arterial	1700	35
3432	799	791	1.043	12	1	Major Arterial	1700	35
3433	796	1448	0.098	12	1	Minor Arterial	1700	35
3434	1448	796	0.098	12	1	Minor Arterial	1700	35
3435	802	814	1.924	11	1	Major Arterial	1250	55
3436	814	802	1.924	11	1	Major Arterial	1250	55
3437	800	803	0.416	12	1	Major Arterial	1700	35
3438	803	800	0.416	12	1	Major Arterial	1700	35
3439	788	809	1.302	11	1	Minor Arterial	1700	40
3440	809	788	1.302	11	1	Minor Arterial	1700	40
3441	803	804	0.053	12	1	Major Arterial	1700	35
3442	804	803	0.053	11	1	Major Arterial	1700	45
3443	812	1448	0.55	11	1	Minor Arterial	1250	40
3444	1448	812	0.55	11	1	Minor Arterial	1250	40
3445	808	809	0.089	11	1	Collector / Local Road	1700	40
3446	809	808	0.089	11	1	Collector / Local Road	1700	40
3447	809	810	0.077	11	1	Minor Arterial	1700	40
3448	810	809	0.077	11	1	Minor Arterial	1700	40
3449	812	816	0.207	11	1	Minor Arterial	1700	40
3450	816	812	0.207	11	1	Minor Arterial	1700	40
3451	797	815	0.536	11	1	Major Arterial	1700	45
3452	815	797	0.536	11	1	Major Arterial	1700	45
3453	807	819	0.917	11	1	Collector / Local Road	1700	40
3454	819	807	0.917	11	1	Collector / Local Road	1700	40
3455	815	821	0.354	11	1	Major Arterial	1250	45
3456	821	815	0.354	11	1	Major Arterial	1250	45
3457	818	833	1.401	11	1	Collector / Local Road	1700	40
3458	833	818	1.401	11	1	Collector / Local Road	1700	40
3459	820	823	0.259	11	1	Minor Arterial	1250	40
3460	823	820	0.259	11	1	Minor Arterial	1250	40
3461	822	832	0.169	11	1	Collector / Local Road	1700	40
3462	832	822	0.169	11	1	Collector / Local Road	1700	40
3463	817	833	1.194	11	1	Major Arterial	1700	45
3464	833	817	1.194	11	1	Major Arterial	1700	45
3465	831	836	0.806	10	1	Collector / Local Road	800	15
3466	836	831	0.806	10	1	Collector / Local Road	800	15
3467	832	838	0.415	11	1	Minor Arterial	1700	40
3468	838	832	0.415	11	1	Minor Arterial	1700	40
3469	833	1616	0.733	11	1	Major Arterial	1700	45
3470	1616	833	0.733	11	1	Major Arterial	1700	45
3471	836	839	0.224	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3472	839	836	0.224	11	1	Collector / Local Road	1700	40
3473	837	1433	0.499	11	1	Principal Arterial	1700	45
3474	1433	837	0.499	11	1	Principal Arterial	1700	45
3475	843	853	0.316	12	1	Ramp	1500	35
3476	850	845	0.424	12	2	Freeway	4100	50
3477	841	847	0.843	11	1	Major Arterial	1700	45
3478	847	841	0.843	11	1	Major Arterial	1700	45
3479	850	851	0.398	12	1	Ramp	1500	35
3480	848	845	0.287	12	1	Ramp	1500	35
3481	848	851	0.311	11	1	Major Arterial	1700	45
3482	852	849	0.309	11	1	Major Arterial	1700	45
3483	852	857	0.311	12	1	Ramp	1500	35
3484	854	860	0.484	12	1	Ramp	1500	35
3485	855	858	2.75	11	1	Major Arterial	1250	45
3486	858	855	2.75	11	1	Major Arterial	1250	45
3487	856	861	0.209	11	1	Major Arterial	1250	45
3488	861	856	0.209	11	1	Major Arterial	1250	45
3489	859	1616	1.128	11	1	Major Arterial	1700	45
3490	1616	859	1.128	11	1	Major Arterial	1700	45
3491	866	1433	0.659	11	1	Principal Arterial	1600	45
3492	1433	866	0.659	11	1	Principal Arterial	1600	45
3493	870	2759	1.204	10	1	Collector / Local Road	800	35
3494	2759	870	1.204	10	1	Collector / Local Road	800	35
3495	2705	868	0.234	12	3	Freeway	6150	50
3496	863	870	0.521	11	1	Major Arterial	1250	40
3497	870	863	0.521	11	1	Major Arterial	1250	40
3498	889	2687	0.52	11	1	Major Arterial	1700	45
3499	2687	889	0.52	11	1	Major Arterial	1700	45
3500	918	2621	3.134	11	1	Principal Arterial	1600	45
3501	2621	918	3.134	11	1	Principal Arterial	1600	45
3502	892	903	1.125	11	1	Minor Arterial	1700	40
3503	903	892	1.125	11	1	Minor Arterial	1700	40
3504	885	904	0.328	11	1	Major Arterial	1250	40
3505	904	885	0.328	11	1	Major Arterial	1250	40
3506	2618	900	0.748	11	1	Ramp	1500	55
3507	2619	2642	0.94	11	1	Collector / Local Road	1700	40
3508	2642	2619	0.94	11	1	Collector / Local Road	1700	40
3509	873	912	3.728	11	1	Collector / Local Road	1250	40
3510	912	873	3.728	11	1	Collector / Local Road	1250	40
3511	913	911	0.972	12	2	Freeway	4100	60
3512	882	915	2.314	11	1	Collector / Local Road	1250	40
3513	915	882	2.314	11	1	Collector / Local Road	1250	40
3514	415	914	0.475	11	1	Minor Arterial	1700	40
3515	914	415	0.475	11	1	Minor Arterial	1700	40
3516	915	921	0.382	11	1	Collector / Local Road	1250	40
3517	921	915	0.382	11	1	Collector / Local Road	1250	40
3518	916	936	0.575	11	1	Minor Arterial	1700	40
3519	936	916	0.575	11	1	Minor Arterial	1700	40
3520	914	936	0.721	11	1	Minor Arterial	1700	40
3521	936	914	0.721	11	1	Minor Arterial	1700	40
3522	937	934	0.302	12	2	Freeway	4100	60
3523	920	939	1.311	11	1	Collector / Local Road	1700	40
3524	939	920	1.311	11	1	Collector / Local Road	1700	40
3525	938	940	0.098	11	1	Minor Arterial	1700	40
3526	940	938	0.098	11	1	Minor Arterial	1700	40
3527	921	948	0.793	11	1	Collector / Local Road	1700	40
3528	948	921	0.793	11	1	Collector / Local Road	1700	40
3529	443	914	1.248	11	1	Minor Arterial	1700	40
3530	914	443	1.248	11	1	Minor Arterial	1700	40
3531	940	958	1.244	10	1	Collector / Local Road	800	15
3532	958	940	1.244	10	1	Collector / Local Road	800	15
3533	948	951	0.289	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3534	951	948	0.289	11	1	Collector / Local Road	1700	40
3535	943	952	0.767	11	1	Major Arterial	1250	45
3536	952	943	0.767	11	1	Major Arterial	1250	45
3537	951	954	0.087	11	1	Major Arterial	1700	50
3538	954	951	0.087	11	1	Major Arterial	1700	50
3539	923	955	2.583	11	2	Principal Arterial	3300	45
3540	955	923	2.583	11	2	Principal Arterial	3300	45
3541	936	963	0.924	11	1	Minor Arterial	1700	40
3542	963	936	0.924	11	1	Minor Arterial	1700	40
3543	956	964	0.261	11	1	Major Arterial	1700	50
3544	964	956	0.261	11	1	Major Arterial	1700	50
3545	918	979	4.708	11	1	Collector / Local Road	1250	40
3546	979	918	4.708	11	1	Collector / Local Road	1250	40
3547	953	964	0.421	11	1	Principal Arterial	1700	45
3548	964	953	0.421	11	1	Principal Arterial	1700	45
3549	951	965	1.716	11	1	Minor Arterial	1700	40
3550	965	951	1.716	11	1	Minor Arterial	1700	40
3551	965	967	0.563	11	1	Minor Arterial	1250	40
3552	967	965	0.563	11	1	Minor Arterial	1250	40
3553	972	2625	0.488	11	1	Major Arterial	1250	45
3554	2625	972	0.488	11	1	Major Arterial	1250	45
3555	966	982	1.257	12	2	Freeway	4100	45
3556	1197	968	0.791	12	2	Freeway	4100	45
3557	963	1451	1.087	11	1	Minor Arterial	1700	40
3558	1451	963	1.087	11	1	Minor Arterial	1700	40
3559	977	980	0.475	11	1	Minor Arterial	1700	40
3560	980	977	0.475	11	1	Minor Arterial	1700	40
3561	977	981	0.767	11	1	Minor Arterial	1700	40
3562	981	977	0.767	11	1	Minor Arterial	1700	40
3563	988	1000	0.489	11	1	Major Arterial	1250	50
3564	1000	988	0.489	11	1	Major Arterial	1250	50
3565	981	1010	0.402	11	1	Collector / Local Road	1700	40
3566	1010	981	0.402	11	1	Collector / Local Road	1700	40
3567	957	1010	1.084	11	1	Minor Arterial	1700	40
3568	1010	957	1.084	11	1	Minor Arterial	1700	40
3569	1006	1015	0.19	11	1	Collector / Local Road	1250	45
3570	1015	1006	0.19	11	1	Collector / Local Road	1250	45
3571	1014	1022	0.663	11	1	Major Arterial	1250	45
3572	1022	1014	0.663	11	1	Major Arterial	1250	45
3573	1017	1450	0.646	11	1	Collector / Local Road	1700	40
3574	1450	1017	0.646	11	1	Collector / Local Road	1700	40
3575	977	1024	0.46	11	1	Minor Arterial	1700	40
3576	1024	977	0.46	11	1	Minor Arterial	1700	40
3577	1017	1024	0.918	11	1	Principal Arterial	1700	45
3578	1024	1017	0.918	11	1	Principal Arterial	1700	45
3579	1031	1019	1.069	11	1	Principal Arterial	1600	45
3580	1016	1032	0.408	11	1	Principal Arterial	1600	45
3581	1010	1023	0.235	11	1	Minor Arterial	1700	40
3582	1023	1010	0.235	11	1	Minor Arterial	1700	40
3583	1022	1025	0.11	10	1	Collector / Local Road	800	15
3584	1025	1022	0.11	10	1	Collector / Local Road	800	15
3585	1018	1026	0.185	11	1	Minor Arterial	1700	40
3586	1026	1018	0.185	11	1	Minor Arterial	1700	40
3587	1022	1027	0.493	11	1	Major Arterial	1700	45
3588	1027	1022	0.493	11	1	Major Arterial	1700	45
3589	1023	1035	1.575	11	1	Principal Arterial	1700	45
3590	1035	1023	1.575	11	1	Principal Arterial	1700	45
3591	1036	1037	0.487	11	2	Principal Arterial	3300	45
3592	1037	1036	0.487	11	2	Principal Arterial	3300	45
3593	990	1038	1.009	10	1	Collector / Local Road	800	15
3594	1038	990	1.009	10	1	Collector / Local Road	800	15
3595	1038	1041	0.575	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3596	1041	1038	0.575	11	1	Collector / Local Road	1700	40
3597	1034	1042	0.945	11	1	Collector / Local Road	1700	40
3598	1042	1034	0.945	11	1	Collector / Local Road	1700	40
3599	1041	1043	0.42	11	1	Principal Arterial	1700	45
3600	1043	1041	0.42	11	1	Principal Arterial	1700	45
3601	1042	1046	0.186	10	1	Collector / Local Road	800	15
3602	1046	1042	0.186	10	1	Collector / Local Road	800	15
3603	1042	1059	0.612	11	1	Collector / Local Road	1700	40
3604	1059	1042	0.612	11	1	Collector / Local Road	1700	40
3605	1048	1199	0.223	12	2	Freeway	4100	55
3606	1049	1052	0.074	11	1	Principal Arterial	1700	45
3607	1200	1052	0.226	12	1	Ramp	1500	35
3608	1048	1047	0.318	12	1	Ramp	1500	35
3609	1037	1059	1.72	11	1	Minor Arterial	1700	40
3610	1059	1037	1.72	11	1	Minor Arterial	1700	40
3611	1058	1628	0.213	11	1	Major Arterial	1700	45
3612	1628	1058	0.213	11	1	Major Arterial	1700	45
3613	451	1060	2.221	11	1	Collector / Local Road	1700	40
3614	1060	451	2.221	11	1	Collector / Local Road	1700	40
3615	1193	1439	0.199	10	1	Collector / Local Road	800	15
3616	1439	1193	0.199	10	1	Collector / Local Road	800	15
3617	1061	1065	0.791	11	1	Principal Arterial	1600	45
3618	1065	1061	0.791	11	1	Principal Arterial	1600	45
3619	1059	1067	0.894	11	1	Collector / Local Road	1700	40
3620	1067	1059	0.894	11	1	Collector / Local Road	1700	40
3621	1065	1069	0.659	11	1	Principal Arterial	1700	45
3622	1069	1065	0.659	11	1	Principal Arterial	1700	45
3623	1069	1072	0.293	11	1	Principal Arterial	1600	45
3624	1072	1069	0.293	11	1	Principal Arterial	1600	45
3625	1067	1092	1.392	11	1	Collector / Local Road	1250	40
3626	1092	1067	1.392	11	1	Collector / Local Road	1250	40
3627	1084	1085	1.333	11	1	Collector / Local Road	1700	40
3628	1085	1084	1.333	11	1	Collector / Local Road	1700	40
3629	1084	1086	0.465	11	1	Collector / Local Road	1700	40
3630	1086	1084	0.465	11	1	Collector / Local Road	1700	40
3631	1085	1087	0.477	11	1	Collector / Local Road	1700	40
3632	1087	1085	0.477	11	1	Collector / Local Road	1700	40
3633	1057	1088	0.417	12	2	Freeway	4100	55
3634	1089	1091	0.153	11	1	Collector / Local Road	1700	40
3635	1091	1089	0.153	11	1	Collector / Local Road	1700	40
3636	1090	1095	1.966	11	1	Collector / Local Road	1250	40
3637	1095	1090	1.966	11	1	Collector / Local Road	1250	40
3638	1094	1081	1.17	11	1	Principal Arterial	1600	45
3639	1095	1097	0.976	11	1	Collector / Local Road	1250	40
3640	1097	1095	0.976	11	1	Collector / Local Road	1250	40
3641	1093	1100	0.543	11	1	Minor Arterial	1700	40
3642	1100	1093	0.543	11	1	Minor Arterial	1700	40
3643	1093	1104	0.602	11	1	Major Arterial	1700	45
3644	1104	1093	0.602	11	1	Major Arterial	1700	45
3645	1098	1103	0.405	11	1	Collector / Local Road	1700	40
3646	1103	1098	0.405	11	1	Collector / Local Road	1700	40
3647	1101	1104	0.427	11	1	Collector / Local Road	1700	40
3648	1104	1101	0.427	11	1	Collector / Local Road	1700	40
3649	1085	1106	1.927	12	1	Minor Arterial	1700	35
3650	1106	1085	1.927	12	1	Minor Arterial	1700	35
3651	1103	1105	0.446	11	1	Collector / Local Road	1700	40
3652	1105	1103	0.446	11	1	Collector / Local Road	1700	40
3653	1097	2666	2.045	11	1	Collector / Local Road	1250	40
3654	2666	1097	2.045	11	1	Collector / Local Road	1250	40
3655	1104	1114	0.815	11	1	Major Arterial	1700	45
3656	1114	1104	0.815	11	1	Major Arterial	1700	45
3657	1114	2666	1.044	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3658	2666	1114	1.044	11	1	Collector / Local Road	1700	40
3659	1102	1120	1.937	11	1	Minor Arterial	1700	40
3660	1120	1102	1.937	11	1	Minor Arterial	1700	40
3661	1120	1123	0.04	11	1	Minor Arterial	1700	40
3662	1123	1120	0.04	11	1	Minor Arterial	1700	40
3663	1127	1131	0.039	11	1	Minor Arterial	1700	40
3664	1131	1127	0.039	11	1	Minor Arterial	1700	40
3665	1131	1132	0.1	11	1	Minor Arterial	1700	40
3666	1132	1131	0.1	11	1	Minor Arterial	1700	40
3667	1114	1135	0.929	11	1	Major Arterial	1700	45
3668	1135	1114	0.929	11	1	Major Arterial	1700	45
3669	1110	1161	1.295	12	1	Minor Arterial	1700	35
3670	1161	1110	1.295	12	1	Minor Arterial	1700	35
3671	1143	1136	0.106	11	2	Principal Arterial	3300	45
3672	1146	1139	0.304	11	2	Principal Arterial	3300	45
3673	1464	1141	0.016	12	3	Freeway	6150	45
3674	1142	1147	0.29	11	2	Principal Arterial	3300	45
3675	1145	1463	0.06	11	2	Major Arterial	3200	45
3676	1132	1153	0.283	11	1	Minor Arterial	1700	40
3677	1153	1132	0.283	11	1	Minor Arterial	1700	40
3678	1154	1152	0.056	11	2	Major Arterial	3200	45
3679	1155	1158	0.2	11	1	Major Arterial	1700	45
3680	1158	1155	0.2	11	1	Major Arterial	1700	45
3681	1158	1160	0.239	11	1	Major Arterial	1700	45
3682	1153	1162	0.185	11	1	Minor Arterial	1700	40
3683	1159	1158	0.216	11	1	Major Arterial	1700	45
3684	1119	1165	0.669	11	1	Minor Arterial	1700	40
3685	1165	1119	0.669	11	1	Minor Arterial	1700	40
3686	1162	1166	0.579	11	1	Major Arterial	1700	45
3687	1165	1167	0.258	11	1	Minor Arterial	1700	40
3688	1167	1165	0.258	11	1	Minor Arterial	1700	40
3689	1166	1168	0.177	12	1	Minor Arterial	1700	35
3690	1167	1168	0.079	11	1	Major Arterial	1700	45
3691	1168	1167	0.079	11	1	Major Arterial	1700	45
3692	1169	1159	0.781	11	1	Major Arterial	1700	45
3693	1159	1171	0.86	11	1	Collector / Local Road	1700	40
3694	1171	1159	0.86	11	1	Collector / Local Road	1700	40
3695	1177	1179	0.715	11	2	Principal Arterial	3300	45
3696	1462	1178	0.714	11	2	Principal Arterial	3300	45
3697	1169	1180	1.436	11	1	Major Arterial	1700	45
3698	1180	1169	1.436	11	1	Major Arterial	1700	45
3699	1180	1181	0.191	11	1	Major Arterial	1700	45
3700	1181	1180	0.191	11	1	Major Arterial	1700	45
3701	1179	1185	0.411	11	2	Ramp	3000	45
3702	1186	1184	0.233	11	1	Principal Arterial	1700	50
3703	1187	1188	0.067	11	2	Major Arterial	3200	45
3704	1188	1187	0.067	11	1	Major Arterial	1700	50
3705	1189	2667	0.857	11	1	Major Arterial	1700	50
3706	2667	1189	0.857	11	1	Major Arterial	1700	50
3707	389	393	0.239	11	1	Minor Arterial	1700	40
3708	393	389	0.239	11	1	Minor Arterial	1700	40
3709	336	343	0.526	11	1	Collector / Local Road	1700	40
3710	343	336	0.526	11	1	Collector / Local Road	1700	40
3711	888	2687	0.673	11	1	Major Arterial	1700	45
3712	2687	888	0.673	11	1	Major Arterial	1700	45
3713	380	385	0.217	11	1	Major Arterial	1250	45
3714	385	380	0.217	11	1	Major Arterial	1250	45
3715	193	1192	0.921	11	2	Principal Arterial	3300	45
3716	1192	193	0.921	11	2	Principal Arterial	3300	45
3717	598	1573	0.335	11	1	Minor Arterial	1250	40
3718	1573	598	0.335	11	1	Minor Arterial	1250	40
3719	725	734	1.11	11	1	Major Arterial	1250	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3720	734	725	1.11	11	1	Major Arterial	1250	45
3721	273	280	0.321	11	1	Minor Arterial	1700	40
3722	280	273	0.321	11	1	Minor Arterial	1700	40
3723	359	362	0.349	11	1	Principal Arterial	1700	45
3724	362	359	0.349	11	1	Principal Arterial	1700	45
3725	441	531	0.934	11	1	Minor Arterial	1700	40
3726	531	441	0.934	11	1	Minor Arterial	1700	40
3727	448	1017	2.239	11	1	Principal Arterial	1700	45
3728	1017	448	2.239	11	1	Principal Arterial	1700	45
3729	1520	843	1.02	12	2	Freeway	4100	50
3730	845	834	0.47	12	2	Freeway	4100	50
3731	363	373	1.935	11	1	Minor Arterial	1700	40
3732	373	363	1.935	11	1	Minor Arterial	1700	40
3733	923	939	2.716	11	1	Collector / Local Road	1250	40
3734	939	923	2.716	11	1	Collector / Local Road	1250	40
3735	1057	1087	0.237	12	1	Ramp	1500	35
3736	1089	1201	0.192	12	1	Ramp	1500	35
3737	1181	1183	0.358	12	1	Ramp	1500	35
3738	465	272	0.34	12	2	Freeway	4100	60
3739	1211	1406	0.145	12	2	Freeway	4100	65
3740	1254	1417	0.117	11	1	Principal Arterial	1700	45
3741	1417	1254	0.117	11	1	Principal Arterial	1700	45
3742	1254	2632	0.499	11	2	Principal Arterial	3300	45
3743	2632	1254	0.499	11	2	Principal Arterial	3300	45
3744	1280	1416	0.082	11	1	Major Arterial	1250	45
3745	1416	1280	0.082	11	1	Major Arterial	1250	45
3746	1298	1296	0.58	12	1	Ramp	1500	35
3747	1354	1356	0.246	11	1	Major Arterial	1250	45
3748	1356	1354	0.246	11	1	Major Arterial	1250	45
3749	199	1364	0.652	12	1	Ramp	1500	35
3750	1364	199	0.652	12	1	Ramp	1500	35
3751	1367	1369	0.356	11	1	Major Arterial	1250	45
3752	1369	1367	0.356	11	1	Major Arterial	1250	45
3753	1372	2362	0.183	11	1	Major Arterial	1250	45
3754	2362	1372	0.183	11	1	Major Arterial	1250	45
3755	1374	1948	0.826	11	1	Principal Arterial	1600	45
3756	1948	1374	0.826	11	1	Principal Arterial	1600	45
3757	1274	2568	0.227	11	1	Minor Arterial	1250	40
3758	2568	1274	0.227	11	1	Minor Arterial	1250	40
3759	1414	1415	0.594	11	1	Minor Arterial	1250	45
3760	1200	1055	0.517	11	1	Ramp	1500	55
3761	1422	1425	0.63	11	1	Ramp	1500	55
3762	1052	1050	0.082	12	1	Ramp	1500	35
3763	1231	1242	0.108	11	1	Minor Arterial	1700	40
3764	1084	1098	1.301	11	1	Minor Arterial	1700	40
3765	1098	1084	1.301	11	1	Minor Arterial	1700	40
3766	214	226	1.427	11	1	Principal Arterial	1700	45
3767	226	214	1.427	11	1	Principal Arterial	1700	45
3768	1436	2371	0.187	11	2	Principal Arterial	3300	45
3769	172	173	0.692	11	1	Principal Arterial	1700	45
3770	173	172	0.692	11	1	Principal Arterial	1700	45
3771	697	708	1.174	11	2	Minor Arterial	3200	45
3772	708	697	1.174	11	2	Minor Arterial	3200	45
3773	1105	1116	0.737	11	1	Minor Arterial	1700	40
3774	1116	1105	0.737	11	1	Minor Arterial	1700	40
3775	1040	1068	1.678	11	1	Major Arterial	1700	45
3776	1068	1040	1.678	11	1	Major Arterial	1700	45
3777	1068	1093	1.537	11	1	Major Arterial	1700	45
3778	1093	1068	1.537	11	1	Major Arterial	1700	45
3779	940	977	1.403	11	1	Minor Arterial	1700	40
3780	977	940	1.403	11	1	Minor Arterial	1700	40
3781	991	1038	0.771	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3782	1038	991	0.771	11	1	Collector / Local Road	1700	40
3783	1453	1416	0.048	11	1	Collector / Local Road	1250	40
3784	248	1572	1.148	11	1	Major Arterial	1250	45
3785	1572	248	1.148	11	1	Major Arterial	1250	45
3786	225	235	1.059	12	1	Major Arterial	1700	35
3787	235	225	1.059	12	1	Major Arterial	1700	35
3788	244	268	1.867	11	1	Minor Arterial	1700	40
3789	268	244	1.867	11	1	Minor Arterial	1700	40
3790	408	410	0.733	11	1	Collector / Local Road	1700	40
3791	410	408	0.733	11	1	Collector / Local Road	1700	40
3792	660	1455	1.27	11	1	Major Arterial	1700	45
3793	1455	660	1.27	11	1	Major Arterial	1700	45
3794	703	1455	4.167	11	1	Major Arterial	1700	45
3795	1455	703	4.167	11	1	Major Arterial	1700	45
3796	967	970	0.322	11	1	Minor Arterial	1250	40
3797	969	967	0.295	11	1	Minor Arterial	1250	40
3798	1285	1288	0.233	11	2	Major Arterial	3200	45
3799	1294	1405	0.383	11	2	Major Arterial	3200	45
3800	1405	1286	0.423	11	2	Major Arterial	3200	45
3801	1185	1461	0.125	11	2	Principal Arterial	3300	45
3802	1176	1170	0.402	12	2	Freeway	4100	45
3803	1164	1172	0.423	12	2	Freeway	4100	45
3804	1170	1163	0.446	12	2	Freeway	4100	45
3805	1148	1164	0.195	12	2	Freeway	4100	45
3806	1465	1149	0.196	12	3	Freeway	6150	45
3807	1151	1143	0.082	11	2	Principal Arterial	3300	45
3808	1134	1126	0.095	12	2	Freeway	4100	45
3809	1117	1130	0.177	12	2	Freeway	4100	45
3810	1126	1122	0.183	12	2	Freeway	4100	45
3811	1113	1117	0.382	12	2	Freeway	4100	45
3812	1112	1466	0.615	12	2	Freeway	4100	45
3813	1138	1137	3.02	11	2	Principal Arterial	3300	45
3814	1136	1142	3.01	11	2	Principal Arterial	3300	45
3815	1335	1339	0.215	12	2	Freeway	4100	60
3816	1336	1338	0.319	12	2	Freeway	4100	60
3817	1353	1341	0.458	12	2	Freeway	4100	60
3818	1352	1404	1.742	12	2	Freeway	4100	60
3819	1377	1473	1.499	11	2	Ramp	3000	40
3820	1391	1395	0.429	12	2	Freeway	4100	65
3821	1305	1309	0.828	11	2	Principal Arterial	3700	55
3822	1301	1296	0.173	11	2	Principal Arterial	3700	55
3823	1297	1305	0.599	11	2	Principal Arterial	3700	55
3824	311	483	0.399	11	1	Principal Arterial	1700	45
3825	483	329	0.146	11	1	Principal Arterial	1700	45
3826	192	319	0.147	11	1	Principal Arterial	1700	45
3827	328	159	0.332	11	1	Principal Arterial	1700	45
3828	284	1478	0.211	11	1	Collector / Local Road	1700	40
3829	1259	1261	0.626	12	2	Freeway	4100	65
3830	1245	1244	0.223	12	2	Freeway	4100	65
3831	1248	1411	0.29	12	2	Freeway	4100	65
3832	1243	1410	0.187	12	2	Freeway	4100	65
3833	1480	1248	0.232	12	2	Freeway	4100	65
3834	1252	1237	0.167	11	1	Minor Arterial	1700	40
3835	1253	1255	0.121	11	1	Minor Arterial	1700	40
3836	1228	1220	0.96	12	2	Freeway	4100	65
3837	1481	1214	0.713	12	2	Freeway	4100	65
3838	1220	1211	0.194	12	2	Freeway	4100	65
3839	1207	1481	0.466	12	2	Freeway	4100	65
3840	1408	1213	0.232	11	2	Major Arterial	3200	45
3841	1216	1210	0.12	11	2	Principal Arterial	3700	50
3842	272	469	0.247	12	2	Freeway	4100	60
3843	304	471	0.446	12	2	Freeway	4100	60

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3844	469	474	0.414	12	2	Freeway	4100	60
3845	1482	303	0.273	12	2	Freeway	4100	60
3846	474	475	0.255	12	2	Freeway	4100	60
3847	480	1482	0.06	12	2	Freeway	4100	60
3848	475	315	0.06	12	2	Freeway	4100	60
3849	1407	1205	0.322	12	2	Freeway	4100	65
3850	491	480	0.355	12	2	Freeway	4100	60
3851	162	491	0.453	11	2	Principal Arterial	3700	50
3852	1055	1419	1.63	12	2	Freeway	4100	60
3853	1427	1066	0.136	11	2	Principal Arterial	3700	50
3854	1484	1485	0.852	12	2	Freeway	4100	65
3855	321	477	0.644	12	2	Freeway	4100	65
3856	955	978	1.062	11	2	Principal Arterial	3300	45
3857	1051	1424	0.149	11	1	Principal Arterial	1700	45
3858	1468	1201	0.393	12	2	Freeway	4100	55
3859	1201	1048	1.661	12	2	Freeway	4100	55
3860	1199	1425	0.237	12	2	Freeway	4100	55
3861	1430	1057	1.84	12	2	Freeway	4100	55
3862	1020	1005	0.378	12	2	Freeway	4100	45
3863	992	998	3.659	12	2	Freeway	4100	45
3864	1005	1011	1.311	12	2	Freeway	4100	45
3865	993	992	0.999	12	2	Freeway	4100	45
3866	1002	1008	0.929	12	2	Freeway	4100	45
3867	994	993	1.073	12	2	Freeway	4100	45
3868	1008	1007	1.153	12	2	Freeway	4100	45
3869	982	994	1.346	12	2	Freeway	4100	45
3870	1015	984	0.237	11	1	Principal Arterial	1600	45
3871	2695	569	0.9	12	2	Freeway	4100	60
3872	586	567	0.938	12	2	Freeway	4100	60
3873	616	624	1.471	12	2	Freeway	4100	55
3874	655	645	1.239	12	2	Freeway	4100	55
3875	645	623	1.728	12	2	Freeway	4100	55
3876	654	715	4.802	12	2	Freeway	4100	55
3877	718	655	3.281	12	2	Freeway	4100	55
3878	549	2693	0.302	11	2	Minor Arterial	3200	40
3879	1075	1072	0.132	11	1	Principal Arterial	1600	45
3880	1076	1083	0.281	11	1	Principal Arterial	1600	45
3881	772	782	1.114	12	2	Freeway	4100	55
3882	731	718	1.202	12	2	Freeway	4100	55
3883	715	1498	1.196	12	2	Freeway	4100	55
3884	349	357	0.22	11	1	Collector / Local Road	1700	40
3885	372	1499	0.298	12	3	Freeway	6150	65
3886	376	361	0.504	11	2	Major Arterial	2700	50
3887	1500	495	0.378	12	3	Freeway	6150	65
3888	1505	1514	0.114	11	2	Major Arterial	3200	40
3889	1507	1506	0.829	12	2	Freeway	4100	65
3890	508	506	1.411	12	2	Freeway	4100	65
3891	1503	511	1	12	2	Freeway	4100	65
3892	384	397	0.65	11	1	Principal Arterial	1700	45
3893	518	517	0.414	12	2	Freeway	4100	65
3894	515	516	0.938	12	2	Freeway	4100	65
3895	517	514	0.221	12	2	Freeway	4100	65
3896	513	515	0.288	12	2	Freeway	4100	65
3897	528	521	0.719	12	2	Freeway	4100	65
3898	1510	2698	1.273	12	2	Freeway	4100	60
3899	1511	1513	0.877	12	2	Freeway	4100	60
3900	1512	1510	0.879	12	2	Freeway	4100	60
3901	536	535	0.655	12	2	Freeway	4100	65
3902	496	498	0.898	12	2	Freeway	4100	60
3903	514	510	0.472	12	2	Freeway	4100	65
3904	436	519	1.208	12	2	Freeway	4100	65
3905	440	1517	0.264	12	2	Freeway	4100	60

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3906	428	1190	0.373	11	1	Minor Arterial	1700	40
3907	1190	428	0.373	11	1	Minor Arterial	1700	40
3908	1522	1533	0.942	12	2	Freeway	4100	65
3909	862	857	0.442	12	2	Freeway	4100	50
3910	871	909	2.409	12	2	Freeway	4100	50
3911	888	1523	0.219	11	2	Principal Arterial	3300	45
3912	1524	1525	0.183	12	2	Freeway	4100	55
3913	1526	2680	0.092	12	2	Freeway	4100	55
3914	934	1429	0.555	12	2	Freeway	4100	60
3915	927	935	0.556	12	2	Freeway	4100	60
3916	1527	937	0.815	12	4	Freeway	8200	55
3917	950	949	0.194	11	1	Principal Arterial	1700	45
3918	1530	950	0.151	11	1	Principal Arterial	1700	45
3919	1528	2649	0.426	12	3	Freeway	6150	55
3920	879	881	0.32	12	2	Freeway	4100	65
3921	876	879	0.141	12	2	Freeway	4100	65
3922	877	1532	1.005	12	2	Freeway	4100	65
3923	872	1521	1.525	12	2	Freeway	4100	65
3924	900	1534	2.198	12	2	Freeway	4100	50
3925	924	925	0.075	11	1	Collector / Local Road	1700	40
3926	925	924	0.075	11	1	Collector / Local Road	1700	40
3927	1195	1536	0.276	12	2	Freeway	4100	65
3928	484	490	0.417	12	2	Freeway	4100	65
3929	492	164	1.051	12	2	Freeway	4100	55
3930	189	185	0.395	12	2	Freeway	4100	55
3931	183	179	0.527	12	2	Freeway	4100	55
3932	482	160	0.605	11	2	Principal Arterial	3700	50
3933	1191	1539	0.465	11	1	Major Arterial	1250	45
3934	1539	1191	0.465	11	1	Major Arterial	1250	45
3935	255	636	1.765	11	1	Collector / Local Road	1250	40
3936	636	255	1.765	11	1	Collector / Local Road	1250	40
3937	1023	1024	1.265	11	1	Principal Arterial	1700	45
3938	1024	1023	1.265	11	1	Principal Arterial	1700	45
3939	701	1703	0.833	11	1	Major Arterial	1250	40
3940	1703	701	0.833	11	1	Major Arterial	1250	40
3941	801	1745	2.322	11	1	Minor Arterial	1250	40
3942	1745	801	2.322	11	1	Minor Arterial	1250	40
3943	893	1782	2.577	11	1	Major Arterial	1250	45
3944	1782	893	2.577	11	1	Major Arterial	1250	45
3945	703	725	1.502	11	1	Major Arterial	1700	45
3946	725	703	1.502	11	1	Major Arterial	1700	45
3947	212	216	0.812	11	1	Major Arterial	1700	50
3948	216	212	0.812	11	1	Major Arterial	1700	50
3949	1550	2655	1.36	11	2	Principal Arterial	3700	55
3950	478	476	0.092	11	1	Ramp	1500	55
3951	662	679	0.465	11	1	Major Arterial	1700	45
3952	679	662	0.465	11	1	Major Arterial	1700	45
3953	1092	1095	0.898	11	1	Collector / Local Road	1250	40
3954	1095	1092	0.898	11	1	Collector / Local Road	1250	40
3955	1036	1061	2.055	11	1	Principal Arterial	1700	45
3956	1061	1036	2.055	11	1	Principal Arterial	1700	45
3957	833	886	2.105	11	1	Collector / Local Road	1700	40
3958	886	833	2.105	11	1	Collector / Local Road	1700	40
3959	839	922	3.967	11	1	Collector / Local Road	1250	40
3960	922	839	3.967	11	1	Collector / Local Road	1250	40
3961	736	745	1.665	11	1	Major Arterial	1250	50
3962	745	736	1.665	11	1	Major Arterial	1250	50
3963	274	306	1.489	11	1	Principal Arterial	1700	45
3964	306	274	1.489	11	1	Principal Arterial	1700	45
3965	953	957	0.448	11	1	Minor Arterial	1700	40
3966	957	953	0.448	11	1	Minor Arterial	1700	40
3967	1069	1090	0.81	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
3968	1090	1069	0.81	11	1	Collector / Local Road	1700	40
3969	702	714	1.702	12	1	Major Arterial	1700	35
3970	714	702	1.702	12	1	Major Arterial	1700	35
3971	2379	1398	3.141	12	2	Freeway	4100	65
3972	341	363	1.414	11	1	Collector / Local Road	1700	40
3973	363	341	1.414	11	1	Collector / Local Road	1700	40
3974	783	795	0.486	11	1	Minor Arterial	1700	40
3975	795	783	0.486	11	1	Minor Arterial	1700	40
3976	737	749	2.167	11	1	Collector / Local Road	1700	40
3977	749	737	2.167	11	1	Collector / Local Road	1700	40
3978	1024	1060	2.555	11	1	Collector / Local Road	1700	40
3979	1060	1024	2.555	11	1	Collector / Local Road	1700	40
3980	842	844	0.757	11	1	Major Arterial	1700	45
3981	844	842	0.757	11	1	Major Arterial	1700	45
3982	1295	1487	0.839	12	2	Freeway	4100	60
3983	838	864	0.829	11	1	Minor Arterial	1250	40
3984	864	838	0.829	11	1	Minor Arterial	1250	40
3985	817	818	1.809	11	1	Minor Arterial	1700	40
3986	818	817	1.809	11	1	Minor Arterial	1700	40
3987	811	832	0.64	11	1	Minor Arterial	1700	40
3988	832	811	0.64	11	1	Minor Arterial	1700	40
3989	810	811	0.156	11	1	Minor Arterial	1700	40
3990	811	810	0.156	11	1	Minor Arterial	1700	40
3991	228	243	2.349	11	1	Major Arterial	1700	45
3992	243	228	2.349	11	1	Major Arterial	1700	45
3993	233	239	0.947	11	1	Minor Arterial	1700	40
3994	239	233	0.947	11	1	Minor Arterial	1700	40
3995	247	274	3.042	11	1	Collector / Local Road	1700	40
3996	274	247	3.042	11	1	Collector / Local Road	1700	40
3997	554	571	0.844	10	1	Collector / Local Road	800	15
3998	571	554	0.844	10	1	Collector / Local Road	800	15
3999	585	1578	0.405	11	1	Minor Arterial	1700	40
4000	1578	585	0.405	11	1	Minor Arterial	1700	40
4001	634	1579	1.281	11	1	Collector / Local Road	1700	40
4002	1579	634	1.281	11	1	Collector / Local Road	1700	40
4003	585	602	0.961	11	1	Minor Arterial	1700	40
4004	602	585	0.961	11	1	Minor Arterial	1700	40
4005	607	629	1.128	11	1	Major Arterial	1700	45
4006	629	607	1.128	11	1	Major Arterial	1700	45
4007	688	704	0.747	11	1	Collector / Local Road	1250	40
4008	704	688	0.747	11	1	Collector / Local Road	1250	40
4009	602	611	0.42	11	1	Minor Arterial	1700	40
4010	611	602	0.42	11	1	Minor Arterial	1700	40
4011	464	465	0.511	12	2	Freeway	4100	60
4012	1504	2714	0.503	12	2	Freeway	4100	65
4013	1582	2051	2.655	12	2	Freeway	4100	55
4014	1469	1113	0.732	12	2	Freeway	4100	45
4015	1122	1112	0.309	12	2	Freeway	4100	45
4016	1088	1469	1.063	12	2	Freeway	4100	55
4017	1011	1002	0.322	12	2	Freeway	4100	45
4018	2649	962	0.674	12	3	Freeway	6150	55
4019	961	2650	0.635	12	3	Freeway	6150	55
4020	2650	1531	0.342	12	3	Freeway	6150	55
4021	1531	1527	0.296	12	3	Freeway	6150	55
4022	1597	1660	0.896	12	2	Freeway	4100	55
4023	1598	1599	1.244	12	2	Freeway	4100	55
4024	1606	1807	0.078	11	1	Major Arterial	1700	45
4025	1807	1606	0.078	11	1	Major Arterial	1700	45
4026	1609	1611	0.129	10	1	Collector / Local Road	800	15
4027	1611	1609	0.129	10	1	Collector / Local Road	800	15
4028	846	873	3.47	11	1	Collector / Local Road	1250	40
4029	873	846	3.47	11	1	Collector / Local Road	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4030	823	824	0.439	11	1	Minor Arterial	1700	40
4031	824	823	0.439	11	1	Minor Arterial	1700	40
4032	734	773	2.05	11	1	Major Arterial	1700	45
4033	773	734	2.05	11	1	Major Arterial	1700	45
4034	1626	1778	0.341	11	1	Minor Arterial	1700	40
4035	1778	1626	0.341	11	1	Minor Arterial	1700	40
4036	924	2638	0.659	11	1	Collector / Local Road	1700	40
4037	2638	924	0.659	11	1	Collector / Local Road	1700	40
4038	1034	1037	1.765	11	2	Principal Arterial	3300	45
4039	1037	1034	1.765	11	2	Principal Arterial	3300	45
4040	964	1036	1.325	11	1	Principal Arterial	1700	45
4041	1036	964	1.325	11	1	Principal Arterial	1700	45
4042	1627	1628	0.372	11	2	Major Arterial	3600	50
4043	1628	1627	0.372	11	2	Major Arterial	3600	50
4044	1058	1629	0.367	10	1	Collector / Local Road	800	15
4045	1629	1058	0.367	10	1	Collector / Local Road	800	15
4046	1040	1041	0.601	11	1	Principal Arterial	1700	45
4047	1041	1040	0.601	11	1	Principal Arterial	1700	45
4048	1091	1099	1.754	11	1	Collector / Local Road	1700	40
4049	1099	1091	1.754	11	1	Collector / Local Road	1700	40
4050	1174	1175	0.795	11	1	Collector / Local Road	1700	40
4051	1175	1174	0.795	11	1	Collector / Local Road	1700	40
4052	390	844	2.288	11	1	Major Arterial	1700	45
4053	844	390	2.288	11	1	Major Arterial	1700	45
4054	334	356	1.492	11	1	Minor Arterial	1700	40
4055	356	334	1.492	11	1	Minor Arterial	1700	40
4056	690	709	0.785	11	1	Collector / Local Road	1250	40
4057	709	690	0.785	11	1	Collector / Local Road	1250	40
4058	806	830	1.073	11	1	Principal Arterial	1700	45
4059	830	806	1.073	11	1	Principal Arterial	1700	45
4060	679	680	0.636	11	1	Minor Arterial	1700	40
4061	680	679	0.636	11	1	Minor Arterial	1700	40
4062	839	905	4.083	11	1	Collector / Local Road	1250	40
4063	905	839	4.083	11	1	Collector / Local Road	1250	40
4064	1633	1634	0.091	11	2	Minor Arterial	3200	40
4065	1634	1633	0.091	11	2	Minor Arterial	3200	40
4066	1563	2766	1.044	11	2	Principal Arterial	3300	45
4067	2766	1563	1.044	11	2	Principal Arterial	3300	45
4068	1594	1635	0.355	12	1	Minor Arterial	1700	25
4069	1635	1594	0.355	12	1	Minor Arterial	1700	25
4070	1653	2765	0.614	11	1	Minor Arterial	1700	40
4071	2765	1653	0.614	11	1	Minor Arterial	1700	40
4072	1652	1653	0.115	10	1	Collector / Local Road	800	15
4073	1653	1652	0.115	10	1	Collector / Local Road	800	15
4074	1653	1657	0.271	11	1	Minor Arterial	1700	40
4075	1657	1653	0.271	11	1	Minor Arterial	1700	40
4076	1655	1656	0.238	11	1	Major Arterial	1700	45
4077	1656	1655	0.238	11	1	Major Arterial	1700	45
4078	1622	1656	0.53	11	1	Major Arterial	1700	45
4079	1656	1622	0.53	11	1	Major Arterial	1700	45
4080	1656	1661	0.286	11	1	Minor Arterial	1700	40
4081	1661	1656	0.286	11	1	Minor Arterial	1700	40
4082	1658	1662	1.17	12	1	Major Arterial	1700	35
4083	1662	1658	1.17	12	1	Major Arterial	1700	35
4084	1670	1674	0.405	11	1	Minor Arterial	1250	40
4085	1674	1670	0.405	11	1	Minor Arterial	1250	40
4086	1542	1674	0.989	11	1	Minor Arterial	1250	40
4087	1674	1542	0.989	11	1	Minor Arterial	1250	40
4088	1675	1682	0.788	11	1	Collector / Local Road	1250	40
4089	1682	1675	0.788	11	1	Collector / Local Road	1250	40
4090	1671	1676	0.911	11	1	Minor Arterial	1250	40
4091	1676	1671	0.911	11	1	Minor Arterial	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4092	1614	1676	2.026	10	1	Collector / Local Road	800	15
4093	1676	1614	2.026	10	1	Collector / Local Road	800	15
4094	1680	1683	0.315	11	1	Principal Arterial	1700	45
4095	1686	1693	1.293	11	1	Minor Arterial	1250	40
4096	1693	1686	1.293	11	1	Minor Arterial	1250	40
4097	1692	1700	1.138	11	1	Minor Arterial	1250	40
4098	1700	1692	1.138	11	1	Minor Arterial	1250	40
4099	1696	1702	1.241	11	1	Minor Arterial	1250	40
4100	1702	1696	1.241	11	1	Minor Arterial	1250	40
4101	1694	1699	0.534	11	1	Minor Arterial	1250	40
4102	1699	1694	0.534	11	1	Minor Arterial	1250	40
4103	1698	1713	1.792	11	1	Principal Arterial	1600	45
4104	1713	1698	1.792	11	1	Principal Arterial	1600	45
4105	1696	2761	0.817	11	1	Minor Arterial	1250	40
4106	2761	1696	0.817	11	1	Minor Arterial	1250	40
4107	1702	1726	1.468	11	1	Minor Arterial	1250	40
4108	1726	1702	1.468	11	1	Minor Arterial	1250	40
4109	1710	2657	0.538	11	1	Major Arterial	1250	50
4110	2657	1710	0.538	11	1	Major Arterial	1250	50
4111	1711	1717	0.355	11	1	Minor Arterial	1250	40
4112	1717	1711	0.355	11	1	Minor Arterial	1250	40
4113	1709	1950	0.373	11	1	Minor Arterial	1250	40
4114	1950	1709	0.373	11	1	Minor Arterial	1250	40
4115	1714	1716	0.438	12	1	Principal Arterial	1600	35
4116	1716	1714	0.438	12	1	Principal Arterial	1600	35
4117	1716	1717	0.42	11	1	Minor Arterial	1250	40
4118	1717	1716	0.42	11	1	Minor Arterial	1250	40
4119	1716	1720	0.523	11	1	Principal Arterial	1600	50
4120	1720	1716	0.523	11	1	Principal Arterial	1600	50
4121	1722	2761	0.644	11	1	Minor Arterial	1250	40
4122	2761	1722	0.644	11	1	Minor Arterial	1250	40
4123	1723	1905	0.742	11	1	Minor Arterial	1250	40
4124	1905	1723	0.742	11	1	Minor Arterial	1250	40
4125	1725	1729	0.615	11	1	Collector / Local Road	1250	40
4126	1729	1725	0.615	11	1	Collector / Local Road	1250	40
4127	1728	1730	0.728	11	1	Minor Arterial	1250	40
4128	1730	1728	0.728	11	1	Minor Arterial	1250	40
4129	1725	1732	0.471	11	1	Major Arterial	1250	45
4130	1732	1725	0.471	11	1	Major Arterial	1250	45
4131	739	1730	0.324	11	1	Minor Arterial	1700	40
4132	1730	739	0.324	11	1	Minor Arterial	1700	40
4133	1721	1733	1.583	11	1	Collector / Local Road	1250	40
4134	1733	1721	1.583	11	1	Collector / Local Road	1250	40
4135	1739	2760	1.514	10	1	Collector / Local Road	800	15
4136	2760	1739	1.514	10	1	Collector / Local Road	800	15
4137	1374	1736	0.748	11	1	Major Arterial	1250	45
4138	1736	1374	0.748	11	1	Major Arterial	1250	45
4139	1738	1956	3.776	11	1	Minor Arterial	1250	40
4140	1956	1738	3.776	11	1	Minor Arterial	1250	40
4141	1740	1741	0.898	11	1	Major Arterial	1250	45
4142	1741	1740	0.898	11	1	Major Arterial	1250	45
4143	1740	1743	0.604	11	1	Major Arterial	1250	45
4144	1743	1740	0.604	11	1	Major Arterial	1250	45
4145	1742	1951	0.239	11	1	Minor Arterial	1250	40
4146	1951	1742	0.239	11	1	Minor Arterial	1250	40
4147	1739	1743	1.667	11	1	Minor Arterial	1250	40
4148	1743	1739	1.667	11	1	Minor Arterial	1250	40
4149	1744	1958	1.2	11	1	Minor Arterial	1250	40
4150	1958	1744	1.2	11	1	Minor Arterial	1250	40
4151	738	1744	2.127	11	1	Minor Arterial	1250	40
4152	1744	738	2.127	11	1	Minor Arterial	1250	40
4153	1744	1753	1.78	11	1	Minor Arterial	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4154	1753	1744	1.78	11	1	Minor Arterial	1250	40
4155	1736	1746	1.064	11	1	Major Arterial	1250	45
4156	1746	1736	1.064	11	1	Major Arterial	1250	45
4157	1742	1747	0.86	11	1	Collector / Local Road	1250	40
4158	1747	1742	0.86	11	1	Collector / Local Road	1250	40
4159	1612	1747	0.439	11	1	Collector / Local Road	1250	40
4160	1747	1612	0.439	11	1	Collector / Local Road	1250	40
4161	1746	1749	1.056	11	1	Major Arterial	1250	45
4162	1749	1746	1.056	11	1	Major Arterial	1250	45
4163	1749	1959	0.16	11	1	Major Arterial	1250	45
4164	1959	1749	0.16	11	1	Major Arterial	1250	45
4165	1751	2758	1.3	11	1	Major Arterial	1250	45
4166	2758	1751	1.3	11	1	Major Arterial	1250	45
4167	1575	1753	1.205	11	1	Minor Arterial	1250	40
4168	1753	1575	1.205	11	1	Minor Arterial	1250	40
4169	1749	1758	1.813	11	1	Minor Arterial	1250	40
4170	1758	1749	1.813	11	1	Minor Arterial	1250	40
4171	1750	1756	1.353	11	1	Major Arterial	1250	45
4172	1756	1750	1.353	11	1	Major Arterial	1250	45
4173	1762	1959	1.206	11	1	Major Arterial	1250	45
4174	1959	1762	1.206	11	1	Major Arterial	1250	45
4175	1760	1761	0.507	12	1	Major Arterial	1200	35
4176	1761	1760	0.507	12	1	Major Arterial	1200	35
4177	1575	1761	3.283	11	1	Minor Arterial	1250	40
4178	1761	1575	3.283	11	1	Minor Arterial	1250	40
4179	1756	1765	3.848	11	1	Principal Arterial	1600	45
4180	1765	1756	3.848	11	1	Principal Arterial	1600	45
4181	1556	1763	0.622	11	1	Minor Arterial	1700	40
4182	1763	1556	0.622	11	1	Minor Arterial	1700	40
4183	1762	1769	1.171	11	1	Major Arterial	1250	45
4184	1769	1762	1.171	11	1	Major Arterial	1250	45
4185	1762	1766	2.289	11	1	Minor Arterial	1250	40
4186	1766	1762	2.289	11	1	Minor Arterial	1250	40
4187	1778	1779	1.645	11	1	Minor Arterial	1250	40
4188	1779	1778	1.645	11	1	Minor Arterial	1250	40
4189	1543	1782	1.369	11	1	Major Arterial	1250	45
4190	1782	1543	1.369	11	1	Major Arterial	1250	45
4191	1781	1904	0.437	11	2	Major Arterial	3200	45
4192	1904	1781	0.437	11	2	Major Arterial	3200	45
4193	1784	1786	1.175	11	1	Major Arterial	1250	45
4194	1786	1784	1.175	11	1	Major Arterial	1250	45
4195	1777	1784	0.75	11	1	Minor Arterial	1250	40
4196	1784	1777	0.75	11	1	Minor Arterial	1250	40
4197	1790	1982	0.394	11	1	Ramp	1500	55
4198	1785	1803	1.64	11	1	Minor Arterial	1250	40
4199	1803	1785	1.64	11	1	Minor Arterial	1250	40
4200	1794	1796	0.437	11	1	Ramp	1500	55
4201	1796	1794	0.437	11	1	Ramp	1500	55
4202	1769	1804	2.108	11	1	Major Arterial	1250	45
4203	1804	1769	2.108	11	1	Major Arterial	1250	45
4204	1795	1804	1.209	11	1	Principal Arterial	1600	45
4205	1804	1795	1.209	11	1	Principal Arterial	1600	45
4206	1804	1808	0.443	11	1	Principal Arterial	1700	45
4207	1808	1804	0.443	11	1	Principal Arterial	1700	45
4208	1603	1623	0.049	11	1	Minor Arterial	1700	40
4209	1623	1603	0.049	11	1	Minor Arterial	1700	40
4210	1801	1809	0.474	11	1	Collector / Local Road	1250	40
4211	1809	1801	0.474	11	1	Collector / Local Road	1250	40
4212	1623	1933	0.995	11	1	Minor Arterial	1700	40
4213	1933	1623	0.995	11	1	Minor Arterial	1700	40
4214	1630	1810	0.687	11	1	Minor Arterial	1700	40
4215	1810	1630	0.687	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4216	1811	1816	0.39	11	1	Collector / Local Road	1700	40
4217	1816	1811	0.39	11	1	Collector / Local Road	1700	40
4218	1820	1822	0.655	12	2	Major Arterial	2700	35
4219	1822	1820	0.655	12	2	Major Arterial	2700	35
4220	1819	1821	0.212	11	1	Minor Arterial	1700	40
4221	1821	1819	0.212	11	1	Minor Arterial	1700	40
4222	1821	1825	0.364	11	1	Collector / Local Road	1700	40
4223	1825	1821	0.364	11	1	Collector / Local Road	1700	40
4224	1827	1828	0.211	11	1	Minor Arterial	1700	40
4225	1828	1827	0.211	11	1	Minor Arterial	1700	40
4226	1828	1833	0.956	11	1	Minor Arterial	1700	40
4227	1833	1828	0.956	11	1	Minor Arterial	1700	40
4228	1818	1831	1.106	11	1	Major Arterial	1700	45
4229	1831	1818	1.106	11	1	Major Arterial	1700	45
4230	1823	1832	0.367	11	1	Collector / Local Road	1700	40
4231	1832	1823	0.367	11	1	Collector / Local Road	1700	40
4232	1834	1835	0.384	11	1	Major Arterial	1700	45
4233	1835	1834	0.384	11	1	Major Arterial	1700	45
4234	1832	1836	0.429	11	1	Minor Arterial	1700	40
4235	1836	1832	0.429	11	1	Minor Arterial	1700	40
4236	1836	1838	0.866	11	1	Principal Arterial	1700	45
4237	1838	1836	0.866	11	1	Principal Arterial	1700	45
4238	1544	1628	0.376	11	2	Major Arterial	3600	50
4239	1628	1544	0.376	11	2	Major Arterial	3600	50
4240	1837	1844	0.488	11	1	Minor Arterial	1700	40
4241	1844	1837	0.488	11	1	Minor Arterial	1700	40
4242	1835	1840	0.846	11	1	Major Arterial	1700	45
4243	1840	1835	0.846	11	1	Major Arterial	1700	45
4244	1841	1845	0.221	11	1	Ramp	1500	45
4245	1842	1589	0.12	12	1	Ramp	1500	35
4246	1846	1854	1.149	12	2	Freeway	4100	60
4247	1589	1975	0.525	11	1	Major Arterial	1700	45
4248	1975	1589	0.525	11	1	Major Arterial	1700	45
4249	1871	1872	0.105	11	1	Principal Arterial	1700	45
4250	1872	1871	0.105	11	1	Principal Arterial	1700	45
4251	1874	1938	0.66	11	1	Minor Arterial	1700	40
4252	1938	1874	0.66	11	1	Minor Arterial	1700	40
4253	1874	1875	0.15	11	1	Minor Arterial	1700	40
4254	1875	1874	0.15	11	1	Minor Arterial	1700	40
4255	1886	1934	0.398	11	1	Principal Arterial	1700	45
4256	1934	1886	0.398	11	1	Principal Arterial	1700	45
4257	1866	1887	0.935	11	1	Collector / Local Road	1700	40
4258	1887	1866	0.935	11	1	Collector / Local Road	1700	40
4259	1885	1887	1.064	11	1	Major Arterial	1700	45
4260	1887	1885	1.064	11	1	Major Arterial	1700	45
4261	1887	1898	1.177	11	1	Major Arterial	1700	45
4262	1898	1887	1.177	11	1	Major Arterial	1700	45
4263	1883	1898	0.794	11	1	Major Arterial	1700	45
4264	1898	1883	0.794	11	1	Major Arterial	1700	45
4265	1103	1877	1.318	11	1	Minor Arterial	1700	40
4266	1877	1103	1.318	11	1	Minor Arterial	1700	40
4267	1897	1899	1.361	11	2	Major Arterial	3200	45
4268	1899	1897	1.361	11	2	Major Arterial	3200	45
4269	1748	1753	1.099	11	1	Minor Arterial	1250	40
4270	1753	1748	1.099	11	1	Minor Arterial	1250	40
4271	1610	1783	1.182	11	1	Minor Arterial	1250	40
4272	1783	1610	1.182	11	1	Minor Arterial	1250	40
4273	1757	1908	0.444	11	1	Minor Arterial	1700	40
4274	1908	1757	0.444	11	1	Minor Arterial	1700	40
4275	1606	1906	0.586	10	1	Collector / Local Road	800	15
4276	1906	1606	0.586	10	1	Collector / Local Road	800	15
4277	1556	1908	1.114	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4278	1908	1556	1.114	11	1	Minor Arterial	1700	40
4279	1666	1667	1.592	10	1	Collector / Local Road	800	15
4280	1667	1666	1.592	10	1	Collector / Local Road	800	15
4281	1914	1915	0.299	11	2	Principal Arterial	3300	45
4282	1915	1914	0.299	11	2	Principal Arterial	3300	45
4283	1621	1918	0.298	11	1	Major Arterial	1700	45
4284	1918	1621	0.298	11	1	Major Arterial	1700	45
4285	1705	1725	1.387	11	1	Major Arterial	1250	45
4286	1725	1705	1.387	11	1	Major Arterial	1250	45
4287	1687	1923	0.554	10	1	Collector / Local Road	800	15
4288	1923	1687	0.554	10	1	Collector / Local Road	800	15
4289	1688	1692	1.04	11	1	Minor Arterial	1250	40
4290	1692	1688	1.04	11	1	Minor Arterial	1250	40
4291	1735	1946	0.758	12	1	Principal Arterial	1600	35
4292	1946	1735	0.758	12	1	Principal Arterial	1600	35
4293	1754	1767	2.791	11	1	Minor Arterial	1250	40
4294	1767	1754	2.791	11	1	Minor Arterial	1250	40
4295	1784	1806	1.533	11	1	Major Arterial	1250	45
4296	1806	1784	1.533	11	1	Major Arterial	1250	45
4297	1803	1925	1.537	11	1	Minor Arterial	1250	40
4298	1925	1803	1.537	11	1	Minor Arterial	1250	40
4299	1767	1926	0.659	11	1	Minor Arterial	1250	40
4300	1926	1767	0.659	11	1	Minor Arterial	1250	40
4301	1740	1758	1.914	11	1	Minor Arterial	1250	40
4302	1758	1740	1.914	11	1	Minor Arterial	1250	40
4303	1603	1604	0.386	11	1	Collector / Local Road	1700	40
4304	1604	1603	0.386	11	1	Collector / Local Road	1700	40
4305	1826	1834	0.329	11	1	Major Arterial	1700	45
4306	1834	1826	0.329	11	1	Major Arterial	1700	45
4307	1766	1795	1.899	11	1	Minor Arterial	1250	40
4308	1795	1766	1.899	11	1	Minor Arterial	1250	40
4309	1802	1817	1.363	11	1	Minor Arterial	1700	40
4310	1817	1802	1.363	11	1	Minor Arterial	1700	40
4311	1798	1927	0.311	11	1	Minor Arterial	1700	40
4312	1927	1798	0.311	11	1	Minor Arterial	1700	40
4313	1609	1772	1.565	11	1	Minor Arterial	1700	40
4314	1772	1609	1.565	11	1	Minor Arterial	1700	40
4315	1902	1930	0.39	11	2	Major Arterial	3200	45
4316	1930	1902	0.39	11	2	Major Arterial	3200	45
4317	1557	1933	0.7	11	1	Minor Arterial	1700	40
4318	1933	1557	0.7	11	1	Minor Arterial	1700	40
4319	1932	1933	0.783	10	1	Collector / Local Road	800	15
4320	1933	1932	0.783	10	1	Collector / Local Road	800	15
4321	1623	1834	1.807	11	1	Collector / Local Road	1700	40
4322	1834	1623	1.807	11	1	Collector / Local Road	1700	40
4323	1799	1805	1.482	11	2	Major Arterial	3200	45
4324	1805	1799	1.482	11	2	Major Arterial	3200	45
4325	1861	1934	0.509	11	1	Principal Arterial	1700	45
4326	1934	1861	0.509	11	1	Principal Arterial	1700	45
4327	1943	1935	0.219	12	2	Freeway	4100	60
4328	1939	1483	2.146	12	2	Freeway	4100	60
4329	1428	1940	2.093	12	2	Freeway	4100	60
4330	1829	1945	0.611	11	1	Minor Arterial	1700	40
4331	1945	1829	0.611	11	1	Minor Arterial	1700	40
4332	1568	1879	0.284	11	1	Major Arterial	1700	45
4333	1879	1568	0.284	11	1	Major Arterial	1700	45
4334	1899	1900	0.134	11	1	Major Arterial	1700	45
4335	1900	1899	0.134	11	1	Major Arterial	1700	45
4336	1657	1964	1.732	11	1	Major Arterial	1700	45
4337	1964	1657	1.732	11	1	Major Arterial	1700	45
4338	1702	1705	1.903	11	1	Minor Arterial	1250	40
4339	1705	1702	1.903	11	1	Minor Arterial	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4340	1946	2725	0.389	12	1	Principal Arterial	1600	35
4341	2725	1946	0.389	12	1	Principal Arterial	1600	35
4342	1946	1947	0.146	10	1	Collector / Local Road	800	15
4343	1947	1946	0.146	10	1	Collector / Local Road	800	15
4344	1729	1732	0.918	11	1	Principal Arterial	1600	45
4345	1732	1729	0.918	11	1	Principal Arterial	1600	45
4346	1726	1729	1.12	11	1	Principal Arterial	1600	45
4347	1729	1726	1.12	11	1	Principal Arterial	1600	45
4348	1669	1697	3.834	11	1	Minor Arterial	1250	40
4349	1697	1669	3.834	11	1	Minor Arterial	1250	40
4350	1722	1724	0.526	12	1	Principal Arterial	1600	35
4351	1724	1722	0.526	12	1	Principal Arterial	1600	35
4352	1666	1669	1.249	10	1	Collector / Local Road	800	15
4353	1669	1666	1.249	10	1	Collector / Local Road	800	15
4354	1667	1669	1.221	11	1	Collector / Local Road	1700	40
4355	1669	1667	1.221	11	1	Collector / Local Road	1700	40
4356	1664	1667	2.046	11	1	Collector / Local Road	1700	40
4357	1667	1664	2.046	11	1	Collector / Local Road	1700	40
4358	1715	1721	0.912	12	1	Principal Arterial	1600	35
4359	1721	1715	0.912	12	1	Principal Arterial	1600	35
4360	1733	1737	0.682	11	1	Minor Arterial	1250	40
4361	1737	1733	0.682	11	1	Minor Arterial	1250	40
4362	1750	1951	1.521	11	1	Minor Arterial	1250	40
4363	1951	1750	1.521	11	1	Minor Arterial	1250	40
4364	1747	1954	1.233	11	1	Principal Arterial	1600	45
4365	1954	1747	1.233	11	1	Principal Arterial	1600	45
4366	1620	1663	0.346	11	1	Minor Arterial	1700	40
4367	1663	1620	0.346	11	1	Minor Arterial	1700	40
4368	1741	1749	1.769	11	1	Major Arterial	1250	45
4369	1749	1741	1.769	11	1	Major Arterial	1250	45
4370	1728	1905	0.593	11	1	Minor Arterial	1250	40
4371	1905	1728	0.593	11	1	Minor Arterial	1250	40
4372	1449	1728	1.512	11	1	Minor Arterial	1250	40
4373	1728	1449	1.512	11	1	Minor Arterial	1250	40
4374	1706	1710	0.552	11	1	Major Arterial	1250	40
4375	1710	1706	0.552	11	1	Major Arterial	1250	40
4376	1870	1877	0.375	11	1	Minor Arterial	1700	40
4377	1877	1870	0.375	11	1	Minor Arterial	1700	40
4378	1875	1877	1.722	11	1	Minor Arterial	1700	40
4379	1877	1875	1.722	11	1	Minor Arterial	1700	40
4380	1850	1877	0.655	11	1	Minor Arterial	1700	40
4381	1877	1850	0.655	11	1	Minor Arterial	1700	40
4382	1875	1961	1.576	11	1	Minor Arterial	1700	40
4383	1961	1875	1.576	11	1	Minor Arterial	1700	40
4384	1850	1961	0.372	11	1	Minor Arterial	1700	40
4385	1961	1850	0.372	11	1	Minor Arterial	1700	40
4386	1888	1962	2.12	11	1	Major Arterial	1700	45
4387	1962	1888	2.12	11	1	Major Arterial	1700	45
4388	1824	1962	1.069	11	1	Major Arterial	1700	45
4389	1962	1824	1.069	11	1	Major Arterial	1700	45
4390	1804	1824	1.277	11	1	Major Arterial	1700	45
4391	1824	1804	1.277	11	1	Major Arterial	1700	45
4392	1803	2656	0.372	11	1	Minor Arterial	1250	40
4393	2656	1803	0.372	11	1	Minor Arterial	1250	40
4394	1803	1810	0.33	11	1	Minor Arterial	1250	40
4395	1810	1803	0.33	11	1	Minor Arterial	1250	40
4396	1605	1808	1.456	11	1	Principal Arterial	1700	45
4397	1808	1605	1.456	11	1	Principal Arterial	1700	45
4398	1634	1636	0.261	11	1	Minor Arterial	1700	40
4399	1636	1634	0.261	11	1	Minor Arterial	1700	40
4400	1651	1654	0.105	12	1	Minor Arterial	1700	25
4401	1654	1651	0.105	12	1	Minor Arterial	1700	25

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4402	1874	1886	1.886	11	1	Minor Arterial	1700	40
4403	1886	1874	1.886	11	1	Minor Arterial	1700	40
4404	1774	1965	0.886	11	1	Major Arterial	1250	45
4405	1965	1774	0.886	11	1	Major Arterial	1250	45
4406	1835	1847	1.769	11	1	Minor Arterial	1700	40
4407	1847	1835	1.769	11	1	Minor Arterial	1700	40
4408	1831	1851	1.459	11	1	Major Arterial	1700	45
4409	1851	1831	1.459	11	1	Major Arterial	1700	45
4410	1853	1876	0.341	11	1	Major Arterial	1700	45
4411	1876	1853	0.341	11	1	Major Arterial	1700	45
4412	1746	1766	3.222	11	1	Minor Arterial	1250	40
4413	1766	1746	3.222	11	1	Minor Arterial	1250	40
4414	1770	1967	1.698	11	1	Major Arterial	1250	45
4415	1967	1770	1.698	11	1	Major Arterial	1250	45
4416	1767	1777	1.219	11	1	Minor Arterial	1250	40
4417	1777	1767	1.219	11	1	Minor Arterial	1250	40
4418	1759	1767	1.945	11	1	Minor Arterial	1250	40
4419	1767	1759	1.945	11	1	Minor Arterial	1250	40
4420	1556	1910	2.939	11	1	Minor Arterial	1700	40
4421	1910	1556	2.939	11	1	Minor Arterial	1700	40
4422	1625	1797	1.159	11	2	Principal Arterial	3300	45
4423	1797	1625	1.159	11	2	Principal Arterial	3300	45
4424	1655	1963	0.279	10	1	Collector / Local Road	800	15
4425	1963	1655	0.279	10	1	Collector / Local Road	800	15
4426	1843	1862	1.156	11	1	Principal Arterial	1700	45
4427	1862	1843	1.156	11	1	Principal Arterial	1700	45
4428	1828	1837	1.062	11	1	Collector / Local Road	1700	40
4429	1837	1828	1.062	11	1	Collector / Local Road	1700	40
4430	1872	1885	0.734	11	1	Principal Arterial	1700	45
4431	1885	1872	0.734	11	1	Principal Arterial	1700	45
4432	1605	1836	1.532	11	1	Principal Arterial	1700	45
4433	1836	1605	1.532	11	1	Principal Arterial	1700	45
4434	1812	1815	0.546	11	1	Minor Arterial	1700	40
4435	1815	1812	0.546	11	1	Minor Arterial	1700	40
4436	1630	1814	1.356	11	1	Minor Arterial	1250	40
4437	1814	1630	1.356	11	1	Minor Arterial	1250	40
4438	1806	1925	0.822	11	1	Minor Arterial	1250	40
4439	1925	1806	0.822	11	1	Minor Arterial	1250	40
4440	1818	1827	0.927	11	1	Collector / Local Road	1700	40
4441	1827	1818	0.927	11	1	Collector / Local Road	1700	40
4442	1900	1901	0.29	11	1	Major Arterial	1700	45
4443	1901	1900	0.29	11	1	Major Arterial	1700	45
4444	1603	1831	1.771	11	1	Minor Arterial	1700	40
4445	1831	1603	1.771	11	1	Minor Arterial	1700	40
4446	1674	2744	0.416	10	1	Collector / Local Road	800	15
4447	2744	1674	0.416	10	1	Collector / Local Road	800	15
4448	1820	1931	0.398	12	2	Major Arterial	2700	35
4449	1931	1820	0.398	12	2	Major Arterial	2700	35
4450	1819	1820	0.418	10	1	Collector / Local Road	800	15
4451	1820	1819	0.418	10	1	Collector / Local Road	800	15
4452	1557	1931	0.311	11	1	Collector / Local Road	1700	40
4453	1931	1557	0.311	11	1	Collector / Local Road	1700	40
4454	1811	1931	0.205	11	1	Minor Arterial	1700	40
4455	1931	1811	0.205	11	1	Minor Arterial	1700	40
4456	1816	1819	0.178	11	1	Minor Arterial	1700	40
4457	1819	1816	0.178	11	1	Minor Arterial	1700	40
4458	1639	1638	0.167	12	2	Freeway	4100	55
4459	1649	1644	0.133	12	2	Freeway	4100	55
4460	1640	1639	0.345	12	2	Freeway	4100	55
4461	1647	1641	0.966	12	2	Freeway	4100	55
4462	1659	1598	0.3	12	2	Freeway	4100	55
4463	1660	1545	0.559	12	2	Freeway	4100	55

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4464	1683	1681	0.209	11	1	Principal Arterial	1700	45
4465	1842	1937	1.292	12	2	Freeway	4100	60
4466	1849	1842	0.311	12	2	Freeway	4100	60
4467	1869	1849	1.304	12	2	Freeway	4100	60
4468	1858	1569	1.061	12	2	Freeway	4100	60
4469	1884	1570	0.212	12	2	Freeway	4100	60
4470	1893	1884	3.915	12	2	Freeway	4100	60
4471	1896	1893	0.174	12	2	Freeway	4100	60
4472	1881	1891	4.043	12	2	Freeway	4100	60
4473	1605	1824	1.513	11	1	Minor Arterial	1700	40
4474	1824	1605	1.513	11	1	Minor Arterial	1700	40
4475	1673	1678	0.874	11	1	Minor Arterial	1700	40
4476	1678	1673	0.874	11	1	Minor Arterial	1700	40
4477	1697	1923	1.987	11	1	Minor Arterial	1250	40
4478	1923	1697	1.987	11	1	Minor Arterial	1250	40
4479	1628	1944	0.919	11	1	Major Arterial	1700	45
4480	1944	1628	0.919	11	1	Major Arterial	1700	45
4481	1607	1945	0.877	10	1	Collector / Local Road	800	15
4482	1945	1607	0.877	10	1	Collector / Local Road	800	15
4483	1608	1829	1.072	11	1	Minor Arterial	1700	40
4484	1829	1608	1.072	11	1	Minor Arterial	1700	40
4485	1848	1852	0.24	11	1	Minor Arterial	1700	40
4486	1852	1848	0.24	11	1	Minor Arterial	1700	40
4487	1944	1979	1.33	11	1	Major Arterial	1700	45
4488	1979	1944	1.33	11	1	Major Arterial	1700	45
4489	1984	1985	0.844	12	2	Principal Arterial	2750	35
4490	1985	1984	0.844	12	2	Principal Arterial	2750	35
4491	1989	1994	0.215	12	1	Ramp	1500	35
4492	1994	1989	0.215	12	1	Ramp	1500	35
4493	155	1991	2.305	11	1	Principal Arterial	1600	55
4494	1991	155	2.305	11	1	Principal Arterial	1600	55
4495	1991	1992	0.261	11	1	Principal Arterial	1600	55
4496	1992	1991	0.261	11	1	Principal Arterial	1600	55
4497	1999	2001	1.173	11	1	Major Arterial	1250	45
4498	2001	1999	1.173	11	1	Major Arterial	1250	45
4499	2002	2003	0.64	11	1	Minor Arterial	1700	40
4500	2003	2002	0.64	11	1	Minor Arterial	1700	40
4501	2001	2010	1.206	11	1	Major Arterial	1250	45
4502	2010	2001	1.206	11	1	Major Arterial	1250	45
4503	2000	2006	0.829	11	1	Principal Arterial	1600	45
4504	2006	2000	0.829	11	1	Principal Arterial	1600	45
4505	1997	2009	2.896	11	1	Principal Arterial	1600	55
4506	2009	1997	2.896	11	1	Principal Arterial	1600	55
4507	2011	2014	0.437	11	1	Major Arterial	1700	45
4508	2014	2011	0.437	11	1	Major Arterial	1700	45
4509	2007	2017	0.741	11	1	Minor Arterial	1250	40
4510	2017	2007	0.741	11	1	Minor Arterial	1250	40
4511	2018	2344	0.329	11	1	Collector / Local Road	1700	40
4512	2344	2018	0.329	11	1	Collector / Local Road	1700	40
4513	2019	2020	0.073	11	1	Principal Arterial	1700	55
4514	2020	2019	0.073	11	1	Principal Arterial	1700	55
4515	2022	2343	0.244	11	1	Minor Arterial	1700	40
4516	2343	2022	0.244	11	1	Minor Arterial	1700	40
4517	2020	2023	0.15	12	1	Principal Arterial	1700	35
4518	2023	2020	0.15	12	1	Principal Arterial	1700	35
4519	2026	2027	0.103	10	1	Collector / Local Road	800	15
4520	2027	2026	0.103	10	1	Collector / Local Road	800	15
4521	2021	2032	1.033	11	1	Minor Arterial	1250	40
4522	2032	2021	1.033	11	1	Minor Arterial	1250	40
4523	2026	2029	0.399	12	1	Principal Arterial	1700	35
4524	2029	2026	0.399	12	1	Principal Arterial	1700	35
4525	2024	2028	0.729	11	1	Minor Arterial	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4526	2028	2024	0.729	11	1	Minor Arterial	1250	40
4527	2009	2033	1.661	11	1	Minor Arterial	1250	40
4528	2033	2009	1.661	11	1	Minor Arterial	1250	40
4529	2034	2037	0.173	11	1	Principal Arterial	1600	45
4530	2037	2034	0.173	11	1	Principal Arterial	1600	45
4531	2035	2036	1.907	11	1	Minor Arterial	1250	40
4532	2036	2035	1.907	11	1	Minor Arterial	1250	40
4533	2012	2039	2.009	11	1	Minor Arterial	1250	40
4534	2039	2012	2.009	11	1	Minor Arterial	1250	40
4535	2024	2048	1.552	11	1	Minor Arterial	1250	40
4536	2048	2024	1.552	11	1	Minor Arterial	1250	40
4537	2030	2047	3.925	11	1	Collector / Local Road	1250	40
4538	2047	2030	3.925	11	1	Collector / Local Road	1250	40
4539	2041	2043	0.076	10	1	Collector / Local Road	800	15
4540	2043	2041	0.076	10	1	Collector / Local Road	800	15
4541	2044	2045	0.083	11	1	Minor Arterial	1700	40
4542	2045	2044	0.083	11	1	Minor Arterial	1700	40
4543	2039	2052	1.143	11	1	Major Arterial	1250	45
4544	2052	2039	1.143	11	1	Major Arterial	1250	45
4545	2043	2045	0.15	11	1	Major Arterial	1700	45
4546	2045	2043	0.15	11	1	Major Arterial	1700	45
4547	2039	2046	0.398	11	1	Minor Arterial	1250	40
4548	2046	2039	0.398	11	1	Minor Arterial	1250	40
4549	2047	2056	1.392	11	1	Minor Arterial	1250	40
4550	2056	2047	1.392	11	1	Minor Arterial	1250	40
4551	2046	2060	0.339	11	1	Minor Arterial	1700	40
4552	2060	2046	0.339	11	1	Minor Arterial	1700	40
4553	2056	2065	0.84	11	1	Minor Arterial	1250	40
4554	2065	2056	0.84	11	1	Minor Arterial	1250	40
4555	2060	2064	0.286	11	1	Collector / Local Road	1700	40
4556	2064	2060	0.286	11	1	Collector / Local Road	1700	40
4557	2063	2064	0.514	11	1	Minor Arterial	1700	40
4558	2064	2063	0.514	11	1	Minor Arterial	1700	40
4559	2040	2071	1.386	11	1	Minor Arterial	1250	40
4560	2071	2040	1.386	11	1	Minor Arterial	1250	40
4561	2070	2079	0.823	11	1	Major Arterial	1700	45
4562	2079	2070	0.823	11	1	Major Arterial	1700	45
4563	2074	2078	0.384	11	1	Major Arterial	1250	45
4564	2078	2074	0.384	11	1	Major Arterial	1250	45
4565	2055	2077	1.574	11	1	Principal Arterial	1600	45
4566	2077	2055	1.574	11	1	Principal Arterial	1600	45
4567	2073	2078	1.659	11	1	Minor Arterial	1250	40
4568	2078	2073	1.659	11	1	Minor Arterial	1250	40
4569	2091	2311	0.712	11	1	Collector / Local Road	1250	40
4570	2311	2091	0.712	11	1	Collector / Local Road	1250	40
4571	2076	2087	1.136	11	1	Major Arterial	1250	45
4572	2087	2076	1.136	11	1	Major Arterial	1250	45
4573	2088	2311	0.8	11	1	Minor Arterial	1250	40
4574	2311	2088	0.8	11	1	Minor Arterial	1250	40
4575	2094	2731	0.447	10	1	Collector / Local Road	800	15
4576	2731	2094	0.447	10	1	Collector / Local Road	800	15
4577	2089	2093	0.237	11	1	Major Arterial	1700	45
4578	2093	2089	0.237	11	1	Major Arterial	1700	45
4579	2093	2095	0.282	11	1	Major Arterial	1250	45
4580	2095	2093	0.282	11	1	Major Arterial	1250	45
4581	2097	2100	0.375	11	1	Major Arterial	1700	45
4582	2100	2097	0.375	11	1	Major Arterial	1700	45
4583	2097	2101	0.854	11	1	Major Arterial	1700	45
4584	2101	2097	0.854	11	1	Major Arterial	1700	45
4585	2101	2105	0.636	11	1	Minor Arterial	1250	40
4586	2105	2101	0.636	11	1	Minor Arterial	1250	40
4587	2098	2102	0.223	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4588	2102	2098	0.223	11	1	Collector / Local Road	1700	40
4589	2351	2352	1.285	10	1	Collector / Local Road	800	15
4590	2352	2351	1.285	10	1	Collector / Local Road	800	15
4591	2100	2107	0.575	11	1	Major Arterial	1250	45
4592	2107	2100	0.575	11	1	Major Arterial	1250	45
4593	2102	2106	0.246	11	1	Collector / Local Road	1700	40
4594	2106	2102	0.246	11	1	Collector / Local Road	1700	40
4595	2101	2115	0.714	11	1	Minor Arterial	1700	40
4596	2115	2101	0.714	11	1	Minor Arterial	1700	40
4597	2092	2145	3.731	11	1	Minor Arterial	1700	40
4598	2145	2092	3.731	11	1	Minor Arterial	1700	40
4599	2103	2114	0.474	11	1	Minor Arterial	1250	40
4600	2114	2103	0.474	11	1	Minor Arterial	1250	40
4601	2106	2113	0.602	11	1	Minor Arterial	1700	40
4602	2113	2106	0.602	11	1	Minor Arterial	1700	40
4603	2108	2110	0.332	12	1	Major Arterial	1700	35
4604	2110	2108	0.332	12	1	Major Arterial	1700	35
4605	2096	2113	1.175	11	1	Minor Arterial	1700	40
4606	2113	2096	1.175	11	1	Minor Arterial	1700	40
4607	2094	2143	2.057	11	1	Major Arterial	1250	45
4608	2143	2094	2.057	11	1	Major Arterial	1250	45
4609	2121	2134	0.386	11	1	Minor Arterial	1700	40
4610	2134	2121	0.386	11	1	Minor Arterial	1700	40
4611	2077	2128	2.486	11	1	Principal Arterial	1600	45
4612	2128	2077	2.486	11	1	Principal Arterial	1600	45
4613	2132	2137	0.342	11	1	Major Arterial	1700	40
4614	2137	2132	0.342	11	1	Major Arterial	1700	40
4615	2132	2133	0.21	12	1	Major Arterial	1700	35
4616	2133	2132	0.21	12	1	Major Arterial	1700	35
4617	2111	2146	0.862	11	1	Minor Arterial	1700	40
4618	2146	2111	0.862	11	1	Minor Arterial	1700	40
4619	2146	2733	0.534	11	1	Minor Arterial	1700	40
4620	2733	2146	0.534	11	1	Minor Arterial	1700	40
4621	1567	2135	0.256	12	1	Principal Arterial	1700	35
4622	2135	1567	0.256	12	1	Principal Arterial	1700	35
4623	2145	2164	2.262	11	1	Minor Arterial	1700	40
4624	2164	2145	2.262	11	1	Minor Arterial	1700	40
4625	2142	2156	0.704	11	1	Major Arterial	1250	45
4626	2156	2142	0.704	11	1	Major Arterial	1250	45
4627	2153	2154	0.101	10	1	Collector / Local Road	800	25
4628	2154	2153	0.101	10	1	Collector / Local Road	800	25
4629	2146	2160	0.302	11	1	Minor Arterial	1700	40
4630	2160	2146	0.302	11	1	Minor Arterial	1700	40
4631	2114	2172	1.439	11	1	Minor Arterial	1700	40
4632	2172	2114	1.439	11	1	Minor Arterial	1700	40
4633	2162	2129	0.885	12	2	Freeway	4100	55
4634	2150	2168	0.582	11	1	Collector / Local Road	1700	40
4635	2168	2150	0.582	11	1	Collector / Local Road	1700	40
4636	2137	2332	1.258	11	1	Minor Arterial	1700	40
4637	2332	2137	1.258	11	1	Minor Arterial	1700	40
4638	2154	2331	0.633	10	1	Collector / Local Road	800	15
4639	2331	2154	0.633	10	1	Collector / Local Road	800	15
4640	2174	2177	0.43	11	1	Major Arterial	1250	40
4641	2177	2174	0.43	11	1	Major Arterial	1250	40
4642	2168	2186	1.375	11	1	Minor Arterial	1700	40
4643	2186	2168	1.375	11	1	Minor Arterial	1700	40
4644	2171	2185	0.887	11	1	Minor Arterial	1700	40
4645	2185	2171	0.887	11	1	Minor Arterial	1700	40
4646	2178	2147	3.798	12	2	Freeway	4100	55
4647	2180	2183	0.21	10	1	Collector / Local Road	800	15
4648	2183	2180	0.21	10	1	Collector / Local Road	800	15
4649	2184	2314	1.086	11	1	Principal Arterial	1600	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4650	2314	2184	1.086	11	1	Principal Arterial	1600	45
4651	2177	2181	0.329	11	1	Major Arterial	1250	45
4652	2181	2177	0.329	11	1	Major Arterial	1250	45
4653	2178	2183	1.307	11	1	Minor Arterial	1700	40
4654	2183	2178	1.307	11	1	Minor Arterial	1700	40
4655	2183	2185	0.412	11	1	Minor Arterial	1700	40
4656	2185	2183	0.412	11	1	Minor Arterial	1700	40
4657	2187	2203	0.659	11	1	Principal Arterial	1600	45
4658	2203	2187	0.659	11	1	Principal Arterial	1600	45
4659	2189	2497	0.326	11	1	Minor Arterial	1250	40
4660	2497	2189	0.326	11	1	Minor Arterial	1250	40
4661	2199	2178	2.834	12	2	Freeway	4100	55
4662	2193	2198	0.431	11	1	Minor Arterial	1700	40
4663	2198	2193	0.431	11	1	Minor Arterial	1700	40
4664	2198	2200	0.249	11	1	Collector / Local Road	1700	40
4665	2200	2198	0.249	11	1	Collector / Local Road	1700	40
4666	2191	2217	0.846	11	1	Minor Arterial	1250	45
4667	2217	2191	0.846	11	1	Minor Arterial	1250	45
4668	2199	2204	1.335	11	1	Minor Arterial	1700	40
4669	2204	2199	1.335	11	1	Minor Arterial	1700	40
4670	2181	2202	1.668	11	1	Major Arterial	1700	45
4671	2202	2181	1.668	11	1	Major Arterial	1700	45
4672	2196	2206	1.275	10	1	Collector / Local Road	800	15
4673	2206	2196	1.275	10	1	Collector / Local Road	800	15
4674	2192	2207	1.172	12	1	Minor Arterial	1700	35
4675	2207	2192	1.172	12	1	Minor Arterial	1700	35
4676	2204	2208	1.1	11	1	Minor Arterial	1700	40
4677	2208	2204	1.1	11	1	Minor Arterial	1700	40
4678	2191	2216	1.204	11	1	Minor Arterial	1250	40
4679	2216	2191	1.204	11	1	Minor Arterial	1250	40
4680	2204	2210	1.921	11	1	Minor Arterial	1700	40
4681	2210	2204	1.921	11	1	Minor Arterial	1700	40
4682	2219	2224	0.425	11	1	Minor Arterial	1250	40
4683	2224	2219	0.425	11	1	Minor Arterial	1250	40
4684	2218	2301	1.328	11	1	Minor Arterial	1700	40
4685	2301	2218	1.328	11	1	Minor Arterial	1700	40
4686	2210	2229	0.891	11	1	Major Arterial	1700	45
4687	2229	2210	0.891	11	1	Major Arterial	1700	45
4688	2172	2312	3.976	11	1	Minor Arterial	1700	40
4689	2312	2172	3.976	11	1	Minor Arterial	1700	40
4690	2224	2339	0.893	10	1	Collector / Local Road	800	15
4691	2339	2224	0.893	10	1	Collector / Local Road	800	15
4692	2228	2312	0.376	11	1	Major Arterial	1700	45
4693	2312	2228	0.376	11	1	Major Arterial	1700	45
4694	2327	2250	0.927	11	2	Principal Arterial	3700	55
4695	2202	2233	3.41	11	1	Major Arterial	1700	45
4696	2233	2202	3.41	11	1	Major Arterial	1700	45
4697	2230	2238	0.752	11	1	Major Arterial	1700	45
4698	2238	2230	0.752	11	1	Major Arterial	1700	45
4699	2229	2242	0.95	11	1	Minor Arterial	1700	40
4700	2242	2229	0.95	11	1	Minor Arterial	1700	40
4701	2217	2335	2.141	11	1	Minor Arterial	1250	40
4702	2335	2217	2.141	11	1	Minor Arterial	1250	40
4703	2239	2241	0.299	11	1	Minor Arterial	1700	40
4704	2241	2239	0.299	11	1	Minor Arterial	1700	40
4705	2245	2301	1.197	10	1	Collector / Local Road	800	15
4706	2301	2245	1.197	10	1	Collector / Local Road	800	15
4707	198	2312	1.152	11	1	Minor Arterial	1700	40
4708	2312	198	1.152	11	1	Minor Arterial	1700	40
4709	2242	2246	0.11	10	1	Collector / Local Road	800	15
4710	2246	2242	0.11	10	1	Collector / Local Road	800	15
4711	2242	2254	1.303	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4712	2254	2242	1.303	11	1	Minor Arterial	1700	40
4713	558	2240	1.287	11	1	Major Arterial	1250	45
4714	2240	558	1.287	11	1	Major Arterial	1250	45
4715	2249	2302	0.3	11	1	Collector / Local Road	1700	40
4716	2302	2249	0.3	11	1	Collector / Local Road	1700	40
4717	2250	2252	0.351	11	1	Minor Arterial	1700	40
4718	2252	2250	0.351	11	1	Minor Arterial	1700	40
4719	2249	2253	0.227	11	1	Major Arterial	1700	40
4720	2253	2249	0.227	11	1	Major Arterial	1700	40
4721	2239	2256	0.761	11	1	Major Arterial	1700	45
4722	2256	2239	0.761	11	1	Major Arterial	1700	45
4723	2255	2302	0.914	11	1	Minor Arterial	1700	40
4724	2302	2255	0.914	11	1	Minor Arterial	1700	40
4725	2245	2258	0.732	10	1	Collector / Local Road	800	15
4726	2258	2245	0.732	10	1	Collector / Local Road	800	15
4727	2252	2258	1.06	11	1	Collector / Local Road	1700	40
4728	2258	2252	1.06	11	1	Collector / Local Road	1700	40
4729	2253	2260	0.206	12	1	Major Arterial	1700	35
4730	2260	2253	0.206	12	1	Major Arterial	1700	35
4731	2257	2337	0.397	11	1	Collector / Local Road	1700	40
4732	2337	2257	0.397	11	1	Collector / Local Road	1700	40
4733	2260	2262	0.178	11	1	Major Arterial	1700	45
4734	2262	2260	0.178	11	1	Major Arterial	1700	45
4735	542	2261	1.056	11	1	Minor Arterial	1250	40
4736	2261	542	1.056	11	1	Minor Arterial	1250	40
4737	2262	2265	0.509	11	1	Collector / Local Road	1700	40
4738	2265	2262	0.509	11	1	Collector / Local Road	1700	40
4739	2263	2266	0.331	10	1	Collector / Local Road	800	15
4740	2266	2263	0.331	10	1	Collector / Local Road	800	15
4741	2262	2267	0.428	11	1	Major Arterial	1700	45
4742	2267	2262	0.428	11	1	Major Arterial	1700	45
4743	2266	2271	0.367	11	1	Collector / Local Road	1700	40
4744	2271	2266	0.367	11	1	Collector / Local Road	1700	40
4745	2271	2275	0.431	11	1	Collector / Local Road	1700	40
4746	2275	2271	0.431	11	1	Collector / Local Road	1700	40
4747	2321	2322	0.558	11	2	Minor Arterial	3200	40
4748	2322	2321	0.558	11	2	Minor Arterial	3200	40
4749	2272	2279	0.838	11	1	Collector / Local Road	1700	40
4750	2279	2272	0.838	11	1	Collector / Local Road	1700	40
4751	2274	2278	0.748	11	1	Major Arterial	1700	45
4752	2278	2274	0.748	11	1	Major Arterial	1700	45
4753	2279	2280	0.324	11	1	Major Arterial	1700	45
4754	2280	2279	0.324	11	1	Major Arterial	1700	45
4755	543	2284	0.707	11	1	Minor Arterial	1700	40
4756	2284	543	0.707	11	1	Minor Arterial	1700	40
4757	2273	2285	0.843	11	2	Minor Arterial	3200	40
4758	2285	2273	0.843	11	2	Minor Arterial	3200	40
4759	2282	2283	0.495	11	1	Minor Arterial	1700	40
4760	2283	2282	0.495	11	1	Minor Arterial	1700	40
4761	2286	2460	1.08	11	2	Minor Arterial	3200	40
4762	2460	2286	1.08	11	2	Minor Arterial	3200	40
4763	2285	2286	0.747	11	2	Minor Arterial	3200	40
4764	2286	2285	0.747	11	2	Minor Arterial	3200	40
4765	1638	2293	3.006	12	2	Freeway	4100	55
4766	2234	2300	0.643	11	1	Minor Arterial	1700	40
4767	2300	2234	0.643	11	1	Minor Arterial	1700	40
4768	2264	2266	0.38	11	1	Collector / Local Road	1700	40
4769	2266	2264	0.38	11	1	Collector / Local Road	1700	40
4770	2264	2286	1.071	12	1	Minor Arterial	1700	35
4771	2286	2264	1.071	12	1	Minor Arterial	1700	35
4772	2207	2747	0.587	10	1	Collector / Local Road	800	15
4773	2747	2207	0.587	10	1	Collector / Local Road	800	15

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4774	2060	2066	0.324	11	1	Minor Arterial	1700	40
4775	2066	2060	0.324	11	1	Minor Arterial	1700	40
4776	2067	2068	0.083	11	1	Collector / Local Road	1700	40
4777	2068	2067	0.083	11	1	Collector / Local Road	1700	40
4778	540	2256	0.512	11	1	Collector / Local Road	1700	40
4779	2256	540	0.512	11	1	Collector / Local Road	1700	40
4780	2044	2305	0.272	11	1	Minor Arterial	1700	40
4781	2305	2044	0.272	11	1	Minor Arterial	1700	40
4782	2134	2150	0.622	12	1	Major Arterial	1700	25
4783	2150	2134	0.622	12	1	Major Arterial	1700	25
4784	2202	2226	1.887	11	1	Major Arterial	1700	45
4785	2226	2202	1.887	11	1	Major Arterial	1700	45
4786	2281	2282	0.824	11	1	Minor Arterial	1700	40
4787	2282	2281	0.824	11	1	Minor Arterial	1700	40
4788	2278	2279	0.555	11	1	Major Arterial	1700	45
4789	2279	2278	0.555	11	1	Major Arterial	1700	45
4790	2282	2287	0.484	11	2	Collector / Local Road	3200	40
4791	2287	2282	0.484	11	2	Collector / Local Road	3200	40
4792	1566	2287	1.339	11	1	Minor Arterial	1700	40
4793	2287	1566	1.339	11	1	Minor Arterial	1700	40
4794	2267	2280	0.573	11	1	Major Arterial	1700	45
4795	2280	2267	0.573	11	1	Major Arterial	1700	45
4796	2258	2262	0.242	11	1	Collector / Local Road	1700	40
4797	2262	2258	0.242	11	1	Collector / Local Road	1700	40
4798	2269	2278	0.385	11	1	Minor Arterial	1700	40
4799	2278	2269	0.385	11	1	Minor Arterial	1700	40
4800	2133	2149	0.512	12	1	Major Arterial	1700	25
4801	2149	2133	0.512	12	1	Major Arterial	1700	25
4802	2040	2061	2.484	11	1	Minor Arterial	1250	40
4803	2061	2040	2.484	11	1	Minor Arterial	1250	40
4804	2053	2063	0.564	11	1	Minor Arterial	1250	40
4805	2063	2053	0.564	11	1	Minor Arterial	1250	40
4806	158	1985	2.358	11	2	Principal Arterial	3700	55
4807	1985	158	2.358	11	2	Principal Arterial	3700	55
4808	2009	2019	1.304	11	1	Principal Arterial	1600	55
4809	2019	2009	1.304	11	1	Principal Arterial	1600	55
4810	2066	2303	0.084	11	1	Minor Arterial	1700	40
4811	2303	2066	0.084	11	1	Minor Arterial	1700	40
4812	2079	2081	0.744	11	1	Major Arterial	1700	45
4813	2081	2079	0.744	11	1	Major Arterial	1700	45
4814	2031	2038	2.074	11	1	Minor Arterial	1250	40
4815	2038	2031	2.074	11	1	Minor Arterial	1250	40
4816	2075	2311	0.58	11	1	Minor Arterial	1250	40
4817	2311	2075	0.58	11	1	Minor Arterial	1250	40
4818	2079	2111	1.628	11	1	Minor Arterial	1700	40
4819	2111	2079	1.628	11	1	Minor Arterial	1700	40
4820	2111	2119	0.362	11	1	Major Arterial	1700	45
4821	2119	2111	0.362	11	1	Major Arterial	1700	45
4822	2004	2021	2.462	11	1	Minor Arterial	1250	40
4823	2021	2004	2.462	11	1	Minor Arterial	1250	40
4824	2088	2102	1.248	11	1	Minor Arterial	1700	40
4825	2102	2088	1.248	11	1	Minor Arterial	1700	40
4826	2113	2137	0.628	11	1	Minor Arterial	1700	40
4827	2137	2113	0.628	11	1	Minor Arterial	1700	40
4828	2102	2121	1.089	11	1	Collector / Local Road	1700	40
4829	2121	2102	1.089	11	1	Collector / Local Road	1700	40
4830	2032	2036	0.965	11	1	Minor Arterial	1250	40
4831	2036	2032	0.965	11	1	Minor Arterial	1250	40
4832	1565	2284	0.715	11	1	Collector / Local Road	1700	40
4833	2284	1565	0.715	11	1	Collector / Local Road	1700	40
4834	2313	2159	0.636	11	1	Collector / Local Road	1700	40
4835	2313	2314	0.262	11	1	Principal Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4836	2314	2313	0.262	11	1	Principal Arterial	1700	45
4837	199	2233	1.979	11	1	Major Arterial	1700	45
4838	2233	199	1.979	11	1	Major Arterial	1700	45
4839	2186	2316	1.163	11	1	Minor Arterial	1700	40
4840	2316	2186	1.163	11	1	Minor Arterial	1700	40
4841	2190	2318	1.765	12	1	Minor Arterial	1200	35
4842	2318	2190	1.765	12	1	Minor Arterial	1200	35
4843	2141	2155	0.331	11	1	Minor Arterial	1700	40
4844	2155	2141	0.331	11	1	Minor Arterial	1700	40
4845	2142	2143	0.741	11	1	Major Arterial	1250	45
4846	2143	2142	0.741	11	1	Major Arterial	1250	45
4847	2101	2108	0.284	11	1	Major Arterial	1700	45
4848	2108	2101	0.284	11	1	Major Arterial	1700	45
4849	2200	2228	1.563	11	1	Major Arterial	1700	45
4850	2228	2200	1.563	11	1	Major Arterial	1700	45
4851	2324	2326	2.864	12	2	Freeway	4100	55
4852	2148	2324	3.795	12	2	Freeway	4100	55
4853	2182	2202	1.521	11	1	Major Arterial	1700	45
4854	2202	2182	1.521	11	1	Major Arterial	1700	45
4855	2193	2330	1.43	11	1	Minor Arterial	1700	40
4856	2330	2193	1.43	11	1	Minor Arterial	1700	40
4857	2158	2332	1.484	11	1	Minor Arterial	1700	40
4858	2332	2158	1.484	11	1	Minor Arterial	1700	40
4859	2208	2218	1.178	11	1	Minor Arterial	1700	40
4860	2218	2208	1.178	11	1	Minor Arterial	1700	40
4861	2237	2249	0.388	11	1	Major Arterial	1700	40
4862	2249	2237	0.388	11	1	Major Arterial	1700	40
4863	2016	2017	0.871	11	1	Minor Arterial	1250	40
4864	2017	2016	0.871	11	1	Minor Arterial	1250	40
4865	2268	2275	0.358	11	2	Principal Arterial	3300	45
4866	2275	2268	0.358	11	2	Principal Arterial	3300	45
4867	2231	2735	1.303	10	1	Collector / Local Road	800	15
4868	2735	2231	1.303	10	1	Collector / Local Road	800	15
4869	2222	2232	0.962	11	1	Minor Arterial	1250	40
4870	2232	2222	0.962	11	1	Minor Arterial	1250	40
4871	1998	2726	0.862	11	1	Principal Arterial	1700	45
4872	2726	1998	0.862	11	1	Principal Arterial	1700	45
4873	2006	2013	1.064	11	1	Minor Arterial	1250	40
4874	2013	2006	1.064	11	1	Minor Arterial	1250	40
4875	2294	1649	2.09	12	2	Freeway	4100	55
4876	2293	2290	1.288	12	2	Freeway	4100	55
4877	2229	2236	0.878	11	1	Major Arterial	1700	40
4878	2236	2229	0.878	11	1	Major Arterial	1700	40
4879	2001	2346	1.123	11	1	Minor Arterial	1250	40
4880	2346	2001	1.123	11	1	Minor Arterial	1250	40
4881	2336	2337	0.422	11	1	Minor Arterial	1700	40
4882	2337	2336	0.422	11	1	Minor Arterial	1700	40
4883	545	2336	1.379	11	1	Minor Arterial	1700	40
4884	2336	545	1.379	11	1	Minor Arterial	1700	40
4885	2030	2048	1.298	11	1	Minor Arterial	1250	40
4886	2048	2030	1.298	11	1	Minor Arterial	1250	40
4887	2341	2347	0.06	11	1	Minor Arterial	1700	40
4888	2347	2341	0.06	11	1	Minor Arterial	1700	40
4889	2018	2025	0.702	11	1	Collector / Local Road	1700	40
4890	2025	2018	0.702	11	1	Collector / Local Road	1700	40
4891	2065	2345	1.334	11	1	Minor Arterial	1250	40
4892	2345	2065	1.334	11	1	Minor Arterial	1250	40
4893	2344	2348	0.129	10	1	Collector / Local Road	800	15
4894	2348	2344	0.129	10	1	Collector / Local Road	800	15
4895	2347	2348	0.064	10	1	Collector / Local Road	800	15
4896	2348	2347	0.064	10	1	Collector / Local Road	800	15
4897	2348	2349	0.191	10	1	Collector / Local Road	800	15

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4898	2349	2348	0.191	10	1	Collector / Local Road	800	15
4899	2343	2349	0.303	10	1	Collector / Local Road	800	15
4900	2349	2343	0.303	10	1	Collector / Local Road	800	15
4901	2099	2128	1.259	11	1	Minor Arterial	1250	40
4902	2128	2099	1.259	11	1	Minor Arterial	1250	40
4903	2077	2351	1.429	11	1	Minor Arterial	1250	40
4904	2351	2077	1.429	11	1	Minor Arterial	1250	40
4905	2030	2346	1.6	11	1	Minor Arterial	1250	40
4906	2346	2030	1.6	11	1	Minor Arterial	1250	40
4907	2171	2179	0.603	11	1	Minor Arterial	1700	40
4908	2179	2171	0.603	11	1	Minor Arterial	1700	40
4909	2166	2748	1.284	10	1	Collector / Local Road	800	15
4910	2748	2166	1.284	10	1	Collector / Local Road	800	15
4911	1613	2169	1.01	11	1	Principal Arterial	1700	45
4912	2169	1613	1.01	11	1	Principal Arterial	1700	45
4913	2014	2023	0.576	11	1	Major Arterial	1700	45
4914	2023	2014	0.576	11	1	Major Arterial	1700	45
4915	2172	2176	0.875	11	1	Major Arterial	1700	40
4916	2176	2172	0.875	11	1	Major Arterial	1700	40
4917	2017	2038	1.428	11	1	Minor Arterial	1250	40
4918	2038	2017	1.428	11	1	Minor Arterial	1250	40
4919	2071	2075	0.708	11	1	Minor Arterial	1250	40
4920	2075	2071	0.708	11	1	Minor Arterial	1250	40
4921	2354	2209	0.517	12	1	Ramp	1500	35
4922	2054	1582	2.67	12	2	Freeway	4100	55
4923	2051	2058	0.306	12	2	Freeway	4100	55
4924	2059	2054	0.303	12	2	Freeway	4100	55
4925	2058	2080	1.624	12	2	Freeway	4100	55
4926	2080	2085	0.348	12	2	Freeway	4100	55
4927	2082	2059	1.646	12	2	Freeway	4100	55
4928	2086	2082	0.341	12	2	Freeway	4100	55
4929	2124	2125	0.353	12	2	Freeway	4100	55
4930	2129	2120	0.366	12	2	Freeway	4100	55
4931	2125	2161	0.913	12	2	Freeway	4100	55
4932	2015	2018	0.262	11	1	Collector / Local Road	1700	40
4933	2018	2015	0.262	11	1	Collector / Local Road	1700	40
4934	2186	2193	0.345	11	1	Minor Arterial	1700	40
4935	2193	2186	0.345	11	1	Minor Arterial	1700	40
4936	194	2200	3.623	11	1	Major Arterial	1700	45
4937	2200	194	3.623	11	1	Major Arterial	1700	45
4938	2061	2075	2.181	11	1	Major Arterial	1250	45
4939	2075	2061	2.181	11	1	Major Arterial	1250	45
4940	2315	2162	0.417	11	2	Principal Arterial	3300	45
4941	2137	2158	0.789	11	1	Major Arterial	1700	40
4942	2158	2137	0.789	11	1	Major Arterial	1700	40
4943	2354	2205	1.022	12	2	Freeway	4100	55
4944	2179	2188	1.177	11	1	Minor Arterial	1250	40
4945	2188	2179	1.177	11	1	Minor Arterial	1250	40
4946	2027	2043	1.389	11	1	Major Arterial	1700	45
4947	2043	2027	1.389	11	1	Major Arterial	1700	45
4948	2078	2089	0.603	11	1	Major Arterial	1250	45
4949	2089	2078	0.603	11	1	Major Arterial	1250	45
4950	1376	2359	0.424	11	1	Principal Arterial	1600	45
4951	2359	1376	0.424	11	1	Principal Arterial	1600	45
4952	1446	2360	0.447	11	1	Major Arterial	1250	45
4953	2360	1446	0.447	11	1	Major Arterial	1250	45
4954	1473	1368	5.766	12	2	Freeway	4100	60
4955	2367	2419	0.245	11	1	Major Arterial	1250	45
4956	2419	2367	0.245	11	1	Major Arterial	1250	45
4957	2369	2370	0.353	11	1	Minor Arterial	1700	40
4958	2374	2677	0.505	11	2	Major Arterial	3200	45
4959	2677	2374	0.505	11	2	Major Arterial	3200	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
4960	2372	2427	0.258	11	1	Minor Arterial	1700	40
4961	2427	2372	0.258	11	1	Minor Arterial	1700	40
4962	1387	1356	0.579	11	2	Major Arterial	3600	50
4963	1356	1435	0.435	11	2	Major Arterial	3600	50
4964	2376	2505	0.175	11	1	Major Arterial	1700	45
4965	2505	2376	0.175	11	1	Major Arterial	1700	45
4966	2378	2431	0.763	12	1	Major Arterial	1200	35
4967	2431	2378	0.763	12	1	Major Arterial	1200	35
4968	1292	2474	0.173	11	1	Minor Arterial	1700	40
4969	2474	1292	0.173	11	1	Minor Arterial	1700	40
4970	1343	2380	0.815	11	1	Major Arterial	1250	45
4971	2380	1343	0.815	11	1	Major Arterial	1250	45
4972	1315	2381	0.261	11	1	Major Arterial	1700	45
4973	2381	1315	0.261	11	1	Major Arterial	1700	45
4974	2370	2382	0.555	11	1	Minor Arterial	1700	40
4975	1404	1363	0.5	12	2	Freeway	4100	60
4976	1366	1353	2.915	12	2	Freeway	4100	60
4977	2384	2385	0.238	11	1	Major Arterial	1700	45
4978	2385	2384	0.238	11	1	Major Arterial	1700	45
4979	1339	1318	1.906	12	2	Freeway	4100	60
4980	1319	1336	2.055	12	2	Freeway	4100	60
4981	2388	2389	0.288	11	1	Minor Arterial	1700	40
4982	2389	2388	0.288	11	1	Minor Arterial	1700	40
4983	1472	2394	1.008	12	2	Freeway	4100	60
4984	2394	2395	0.482	12	1	Ramp	1500	35
4985	2394	1401	0.761	12	2	Freeway	4100	60
4986	1444	1473	1.253	12	2	Freeway	4100	60
4987	2403	2404	0.538	12	1	Principal Arterial	1700	35
4988	2404	2403	0.538	12	1	Principal Arterial	1700	35
4989	2408	2409	0.143	11	1	Minor Arterial	1700	40
4990	2409	2408	0.143	11	1	Minor Arterial	1700	40
4991	2408	2463	0.274	11	1	Minor Arterial	1700	40
4992	2463	2408	0.274	11	1	Minor Arterial	1700	40
4993	2417	2482	0.359	10	1	Collector / Local Road	800	15
4994	2482	2417	0.359	10	1	Collector / Local Road	800	15
4995	2416	2418	0.333	11	1	Major Arterial	1250	45
4996	2418	2416	0.333	11	1	Major Arterial	1250	45
4997	2368	2420	0.742	11	1	Minor Arterial	1250	40
4998	2420	2368	0.742	11	1	Minor Arterial	1250	40
4999	1326	1436	0.332	11	2	Principal Arterial	3700	50
5000	2426	2500	0.604	11	1	Major Arterial	1250	55
5001	2500	2426	0.604	11	1	Major Arterial	1250	55
5002	1435	1474	0.579	11	2	Major Arterial	3600	50
5003	1390	1380	0.619	11	2	Major Arterial	3600	55
5004	2427	2501	0.237	11	1	Minor Arterial	1250	40
5005	2501	2427	0.237	11	1	Minor Arterial	1250	40
5006	1434	2428	0.26	11	1	Major Arterial	1700	45
5007	2428	1434	0.26	11	1	Major Arterial	1700	45
5008	2608	2675	1.264	11	1	Principal Arterial	1600	50
5009	2675	2608	1.264	11	1	Principal Arterial	1600	50
5010	2432	2608	0.548	11	1	Principal Arterial	1600	40
5011	2608	2432	0.548	11	1	Principal Arterial	1600	40
5012	1386	2433	0.39	11	2	Principal Arterial	3300	45
5013	2433	1386	0.39	11	2	Principal Arterial	3300	45
5014	1277	2436	0.34	11	1	Principal Arterial	1600	40
5015	2436	1277	0.34	11	1	Principal Arterial	1600	40
5016	1275	1277	0.784	11	1	Principal Arterial	1600	40
5017	1277	1275	0.784	11	1	Principal Arterial	1600	40
5018	1999	2437	0.921	11	2	Major Arterial	3200	45
5019	2437	1999	0.921	11	2	Major Arterial	3200	45
5020	2439	2440	0.084	11	1	Principal Arterial	1700	50
5021	2440	2439	0.084	11	1	Principal Arterial	1700	50

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5022	1311	2442	0.402	12	1	Principal Arterial	1700	25
5023	2442	1311	0.402	12	1	Principal Arterial	1700	25
5024	1567	2443	0.536	12	1	Principal Arterial	1700	25
5025	2443	1567	0.536	12	1	Principal Arterial	1700	25
5026	1311	2443	0.172	12	1	Principal Arterial	1700	25
5027	2443	1311	0.172	12	1	Principal Arterial	1700	25
5028	1316	2448	0.968	11	1	Major Arterial	1250	45
5029	2448	1316	0.968	11	1	Major Arterial	1250	45
5030	2446	2447	0.221	11	1	Major Arterial	1700	45
5031	2447	2446	0.221	11	1	Major Arterial	1700	45
5032	2450	2563	0.219	11	1	Principal Arterial	1700	45
5033	2563	2450	0.219	11	1	Principal Arterial	1700	45
5034	2412	2559	0.578	11	1	Minor Arterial	1700	40
5035	2559	2412	0.578	11	1	Minor Arterial	1700	40
5036	2423	2425	1.727	11	1	Major Arterial	1250	45
5037	2425	2423	1.727	11	1	Major Arterial	1250	45
5038	2476	2661	0.782	11	1	Principal Arterial	1600	45
5039	2661	2476	0.782	11	1	Principal Arterial	1600	45
5040	2441	2480	2.047	11	1	Collector / Local Road	800	40
5041	2480	2441	2.047	11	1	Collector / Local Road	800	40
5042	2488	2572	0.447	11	1	Collector / Local Road	1700	40
5043	2572	2488	0.447	11	1	Collector / Local Road	1700	40
5044	2491	2493	0.194	10	1	Collector / Local Road	800	15
5045	2493	2491	0.194	10	1	Collector / Local Road	800	15
5046	2366	2493	1.245	11	1	Major Arterial	1700	45
5047	2493	2366	1.245	11	1	Major Arterial	1700	45
5048	2367	2494	0.434	11	1	Major Arterial	1700	45
5049	2494	2367	0.434	11	1	Major Arterial	1700	45
5050	2494	2764	0.576	10	1	Collector / Local Road	800	15
5051	2764	2494	0.576	10	1	Collector / Local Road	800	15
5052	2444	2453	1.233	11	1	Collector / Local Road	1250	40
5053	2453	2444	1.233	11	1	Collector / Local Road	1250	40
5054	2365	2420	0.692	10	1	Collector / Local Road	800	15
5055	2420	2365	0.692	10	1	Collector / Local Road	800	15
5056	2374	2495	0.115	11	1	Collector / Local Road	1700	40
5057	2495	2374	0.115	11	1	Collector / Local Road	1700	40
5058	1381	2498	0.507	11	1	Collector / Local Road	1700	40
5059	2498	1381	0.507	11	1	Collector / Local Road	1700	40
5060	2373	2498	1.024	11	1	Collector / Local Road	1700	40
5061	2498	2373	1.024	11	1	Collector / Local Road	1700	40
5062	2375	2663	0.576	11	2	Major Arterial	3200	45
5063	2663	2375	0.576	11	2	Major Arterial	3200	45
5064	2515	2592	0.11	11	1	Minor Arterial	1250	40
5065	2592	2515	0.11	11	1	Minor Arterial	1250	40
5066	2506	2671	0.422	12	1	Major Arterial	1700	35
5067	2671	2506	0.422	12	1	Major Arterial	1700	35
5068	1552	2504	0.962	11	1	Collector / Local Road	1700	40
5069	2504	1552	0.962	11	1	Collector / Local Road	1700	40
5070	2458	2462	1.445	11	3	Major Arterial	5400	55
5071	1415	2610	0.561	11	2	Principal Arterial	3300	45
5072	2577	2576	0.665	11	2	Principal Arterial	3700	50
5073	2461	2499	2.837	10	1	Collector / Local Road	800	15
5074	2499	2461	2.837	10	1	Collector / Local Road	800	15
5075	2430	2514	0.849	11	1	Collector / Local Road	1700	40
5076	2514	2430	0.849	11	1	Collector / Local Road	1700	40
5077	2511	2549	0.933	10	1	Collector / Local Road	800	15
5078	2549	2511	0.933	10	1	Collector / Local Road	800	15
5079	2425	2464	0.654	11	1	Major Arterial	1250	45
5080	2464	2425	0.654	11	1	Major Arterial	1250	45
5081	1338	1333	0.947	12	2	Freeway	4100	60
5082	1363	1472	6.751	12	2	Freeway	4100	60
5083	1267	2519	0.423	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5084	2519	1267	0.423	11	1	Minor Arterial	1700	40
5085	2520	2521	0.389	11	1	Minor Arterial	1700	40
5086	2521	2520	0.389	11	1	Minor Arterial	1700	40
5087	2727	2626	0.265	11	2	Principal Arterial	3300	40
5088	1271	2525	0.441	11	1	Minor Arterial	1700	40
5089	2525	1271	0.441	11	1	Minor Arterial	1700	40
5090	2529	2531	0.233	11	1	Principal Arterial	1600	40
5091	2531	2529	0.233	11	1	Principal Arterial	1600	40
5092	1270	1269	1.049	11	2	Principal Arterial	3300	40
5093	1209	2631	0.129	11	1	Major Arterial	1700	45
5094	2631	1209	0.129	11	1	Major Arterial	1700	45
5095	1230	1459	0.159	11	1	Minor Arterial	1700	40
5096	1266	2540	1.157	11	1	Collector / Local Road	1700	40
5097	2540	1266	1.157	11	1	Collector / Local Road	1700	40
5098	1267	2539	0.031	11	1	Collector / Local Road	1700	40
5099	2539	1267	0.031	11	1	Collector / Local Road	1700	40
5100	2520	2539	0.122	11	1	Collector / Local Road	1700	40
5101	2539	2520	0.122	11	1	Collector / Local Road	1700	40
5102	2519	2540	0.245	11	1	Collector / Local Road	1700	40
5103	2540	2519	0.245	11	1	Collector / Local Road	1700	40
5104	2630	2730	0.223	10	1	Collector / Local Road	800	25
5105	2730	2630	0.223	10	1	Collector / Local Road	800	25
5106	2541	1268	0.709	11	2	Principal Arterial	3300	40
5107	2519	2633	0.504	11	1	Minor Arterial	1700	40
5108	2633	2519	0.504	11	1	Minor Arterial	1700	40
5109	2530	2566	0.11	11	1	Principal Arterial	1700	45
5110	2566	2530	0.11	11	1	Principal Arterial	1700	45
5111	1265	1413	0.442	11	2	Principal Arterial	3300	45
5112	1262	1479	0.4	11	2	Principal Arterial	3300	45
5113	1408	1407	0.418	12	1	Ramp	1500	35
5114	1406	1213	0.356	11	1	Ramp	1500	55
5115	1409	1481	0.249	11	1	Ramp	1500	55
5116	1403	1363	0.451	12	1	Ramp	1500	35
5117	1308	2449	0.431	11	1	Minor Arterial	1700	40
5118	2449	1308	0.431	11	1	Minor Arterial	1700	40
5119	1666	2413	1.32	10	1	Collector / Local Road	800	15
5120	2413	1666	1.32	10	1	Collector / Local Road	800	15
5121	2509	2510	1.268	11	1	Collector / Local Road	800	45
5122	2510	2509	1.268	11	1	Collector / Local Road	800	45
5123	2502	2671	1.54	12	1	Major Arterial	1200	35
5124	2671	2502	1.54	12	1	Major Arterial	1200	35
5125	2664	2665	0.3	10	1	Collector / Local Road	800	15
5126	2665	2664	0.3	10	1	Collector / Local Road	800	15
5127	2448	2489	1.277	10	1	Collector / Local Road	800	15
5128	2489	2448	1.277	10	1	Collector / Local Road	800	15
5129	2552	2672	0.325	11	1	Collector / Local Road	1700	40
5130	2672	2552	0.325	11	1	Collector / Local Road	1700	40
5131	2472	2483	2.864	10	1	Collector / Local Road	800	15
5132	2483	2472	2.864	10	1	Collector / Local Road	800	15
5133	2472	2751	2.706	10	1	Collector / Local Road	800	15
5134	2751	2472	2.706	10	1	Collector / Local Road	800	15
5135	2466	2609	0.937	10	1	Collector / Local Road	800	15
5136	2609	2466	0.937	10	1	Collector / Local Road	800	15
5137	816	824	0.632	11	1	Minor Arterial	1250	40
5138	824	816	0.632	11	1	Minor Arterial	1250	40
5139	2389	2408	0.66	11	1	Minor Arterial	1250	40
5140	2408	2389	0.66	11	1	Minor Arterial	1250	40
5141	2396	2463	0.996	11	1	Minor Arterial	1250	40
5142	2463	2396	0.996	11	1	Minor Arterial	1250	40
5143	2390	2557	0.468	11	1	Minor Arterial	1700	40
5144	2557	2390	0.468	11	1	Minor Arterial	1700	40
5145	1277	2437	0.496	11	2	Major Arterial	3200	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5146	2437	1277	0.496	11	2	Major Arterial	3200	45
5147	1276	2555	1.839	11	1	Minor Arterial	1250	40
5148	2555	1276	1.839	11	1	Minor Arterial	1250	40
5149	1276	1277	3.442	11	1	Minor Arterial	1250	40
5150	1277	1276	3.442	11	1	Minor Arterial	1250	40
5151	2409	2411	0.844	11	1	Minor Arterial	1250	40
5152	2411	2409	0.844	11	1	Minor Arterial	1250	40
5153	2467	2560	0.255	11	1	Minor Arterial	1700	40
5154	2560	2467	0.255	11	1	Minor Arterial	1700	40
5155	2560	2561	0.809	11	1	Minor Arterial	1250	40
5156	2561	2560	0.809	11	1	Minor Arterial	1250	40
5157	2397	2434	3.159	11	1	Minor Arterial	1250	40
5158	2434	2397	3.159	11	1	Minor Arterial	1250	40
5159	1311	2449	0.922	11	1	Minor Arterial	1700	40
5160	2449	1311	0.922	11	1	Minor Arterial	1700	40
5161	1331	1335	1.181	12	2	Freeway	4100	60
5162	1288	2516	0.825	11	2	Major Arterial	3200	45
5163	2528	2566	0.344	11	1	Principal Arterial	1600	45
5164	2566	2528	0.344	11	1	Principal Arterial	1600	45
5165	2529	2530	0.86	11	1	Principal Arterial	1600	45
5166	2530	2529	0.86	11	1	Principal Arterial	1600	45
5167	2567	2569	2.634	11	1	Minor Arterial	1250	40
5168	2569	2567	2.634	11	1	Minor Arterial	1250	40
5169	2437	2570	3.309	11	1	Minor Arterial	1250	40
5170	2570	2437	3.309	11	1	Minor Arterial	1250	40
5171	2534	2570	0.184	11	1	Minor Arterial	1250	40
5172	2570	2534	0.184	11	1	Minor Arterial	1250	40
5173	2572	2369	0.354	11	1	Minor Arterial	1700	40
5174	1351	2380	0.666	11	1	Major Arterial	1700	45
5175	2380	1351	0.666	11	1	Major Arterial	1700	45
5176	2372	2674	1.555	11	1	Collector / Local Road	1700	40
5177	2674	2372	1.555	11	1	Collector / Local Road	1700	40
5178	1348	2387	0.721	11	1	Major Arterial	1250	45
5179	2387	1348	0.721	11	1	Major Arterial	1250	45
5180	2387	2428	0.999	11	1	Major Arterial	1700	45
5181	2428	2387	0.999	11	1	Major Arterial	1700	45
5182	2426	1387	0.127	11	2	Principal Arterial	3700	50
5183	2457	2577	0.122	11	2	Major Arterial	3600	50
5184	2576	1414	0.443	11	2	Minor Arterial	3200	40
5185	2375	2677	0.434	11	3	Major Arterial	4800	45
5186	2677	2375	0.434	11	3	Major Arterial	4800	45
5187	2447	2448	1.072	11	1	Major Arterial	1250	45
5188	2448	2447	1.072	11	1	Major Arterial	1250	45
5189	2365	2418	1.587	11	1	Major Arterial	1250	45
5190	2418	2365	1.587	11	1	Major Arterial	1250	45
5191	2365	2368	0.632	11	1	Major Arterial	1250	45
5192	2368	2365	0.632	11	1	Major Arterial	1250	45
5193	2383	2464	2.213	11	1	Major Arterial	1700	45
5194	2464	2383	2.213	11	1	Major Arterial	1700	45
5195	2398	2561	0.847	11	1	Minor Arterial	1250	40
5196	2561	2398	0.847	11	1	Minor Arterial	1250	40
5197	2393	2398	0.731	11	1	Minor Arterial	1250	40
5198	2398	2393	0.731	11	1	Minor Arterial	1250	40
5199	1378	2497	0.191	11	1	Minor Arterial	1700	40
5200	2497	1378	0.191	11	1	Minor Arterial	1700	40
5201	1317	1378	1.121	11	1	Minor Arterial	1250	40
5202	1378	1317	1.121	11	1	Minor Arterial	1250	40
5203	2454	2456	0.359	12	1	Major Arterial	1200	35
5204	2456	2454	0.359	12	1	Major Arterial	1200	35
5205	2504	2580	0.51	11	1	Collector / Local Road	1700	40
5206	2580	2504	0.51	11	1	Collector / Local Road	1700	40
5207	2536	2543	0.967	11	1	Minor Arterial	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5208	2543	2536	0.967	11	1	Minor Arterial	1250	40
5209	2523	2581	0.545	11	1	Minor Arterial	1250	40
5210	2581	2523	0.545	11	1	Minor Arterial	1250	40
5211	2581	2582	0.276	11	1	Collector / Local Road	1250	40
5212	2582	2581	0.276	11	1	Collector / Local Road	1250	40
5213	2584	2635	0.197	11	1	Collector / Local Road	1700	40
5214	2635	2584	0.197	11	1	Collector / Local Road	1700	40
5215	2524	2525	0.796	11	1	Collector / Local Road	1700	40
5216	2525	2524	0.796	11	1	Collector / Local Road	1700	40
5217	2524	2543	0.423	11	1	Minor Arterial	1700	40
5218	2543	2524	0.423	11	1	Minor Arterial	1700	40
5219	1272	2522	1.25	11	1	Minor Arterial	1250	40
5220	2522	1272	1.25	11	1	Minor Arterial	1250	40
5221	2545	2586	0.093	11	1	Minor Arterial	1700	40
5222	2586	2545	0.093	11	1	Minor Arterial	1700	40
5223	2545	2587	0.495	11	1	Minor Arterial	1250	40
5224	2587	2545	0.495	11	1	Minor Arterial	1250	40
5225	1272	2571	0.48	11	1	Minor Arterial	1700	40
5226	2571	1272	0.48	11	1	Minor Arterial	1700	40
5227	1964	2413	0.843	11	1	Major Arterial	1250	45
5228	2413	1964	0.843	11	1	Major Arterial	1250	45
5229	1266	2518	0.969	11	1	Minor Arterial	1700	40
5230	2518	1266	0.969	11	1	Minor Arterial	1700	40
5231	2376	2662	0.111	11	1	Major Arterial	1250	45
5232	2662	2376	0.111	11	1	Major Arterial	1250	45
5233	2430	2590	0.442	11	1	Major Arterial	1700	45
5234	2590	2430	0.442	11	1	Major Arterial	1700	45
5235	2362	2429	3.109	11	1	Major Arterial	1250	45
5236	2429	2362	3.109	11	1	Major Arterial	1250	45
5237	2361	2591	0.798	11	1	Major Arterial	1250	45
5238	2591	2361	0.798	11	1	Major Arterial	1250	45
5239	2361	2550	2.878	11	1	Major Arterial	1250	45
5240	2550	2361	2.878	11	1	Major Arterial	1250	45
5241	1948	2549	2.076	11	1	Major Arterial	1250	45
5242	2549	1948	2.076	11	1	Major Arterial	1250	45
5243	2507	2592	0.174	11	1	Minor Arterial	1700	40
5244	2592	2507	0.174	11	1	Minor Arterial	1700	40
5245	2593	2594	0.294	11	1	Major Arterial	1700	45
5246	2594	2593	0.294	11	1	Major Arterial	1700	45
5247	2594	2595	0.446	11	1	Major Arterial	1250	45
5248	2595	2594	0.446	11	1	Major Arterial	1250	45
5249	2428	2595	0.332	11	1	Major Arterial	1700	45
5250	2595	2428	0.332	11	1	Major Arterial	1700	45
5251	1369	2386	1.144	11	1	Major Arterial	1250	45
5252	2386	1369	1.144	11	1	Major Arterial	1250	45
5253	1369	2358	2.43	11	1	Major Arterial	1250	45
5254	2358	1369	2.43	11	1	Major Arterial	1250	45
5255	1472	1377	1.482	11	2	Ramp	3000	40
5256	1383	2364	2.899	11	1	Minor Arterial	1250	40
5257	2364	1383	2.899	11	1	Minor Arterial	1250	40
5258	2552	2600	0.058	11	1	Minor Arterial	1700	40
5259	2600	2552	0.058	11	1	Minor Arterial	1700	40
5260	2477	2603	0.344	11	1	Collector / Local Road	1250	40
5261	2603	2477	0.344	11	1	Collector / Local Road	1250	40
5262	2478	2491	2.099	11	1	Collector / Local Road	1250	40
5263	2491	2478	2.099	11	1	Collector / Local Road	1250	40
5264	2363	2600	0.357	11	1	Minor Arterial	1700	40
5265	2600	2363	0.357	11	1	Minor Arterial	1700	40
5266	2604	2676	1.939	11	1	Collector / Local Road	1250	40
5267	2676	2604	1.939	11	1	Collector / Local Road	1250	40
5268	2604	2605	0.152	11	1	Collector / Local Road	1700	40
5269	2605	2604	0.152	11	1	Collector / Local Road	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5270	2473	2605	0.25	11	1	Collector / Local Road	1250	40
5271	2605	2473	0.25	11	1	Collector / Local Road	1250	40
5272	2377	2514	1.013	11	1	Major Arterial	1700	45
5273	2514	2377	1.013	11	1	Major Arterial	1700	45
5274	1370	2514	0.489	11	1	Major Arterial	1700	45
5275	2514	1370	0.489	11	1	Major Arterial	1700	45
5276	1370	2606	0.691	11	1	Major Arterial	1250	45
5277	2606	1370	0.691	11	1	Major Arterial	1250	45
5278	2561	2609	0.656	11	1	Minor Arterial	1250	40
5279	2609	2561	0.656	11	1	Minor Arterial	1250	40
5280	2397	2609	3.296	11	1	Minor Arterial	1250	40
5281	2609	2397	3.296	11	1	Minor Arterial	1250	40
5282	2382	2572	0.556	11	1	Minor Arterial	1700	40
5283	2610	2458	0.4	11	2	Major Arterial	3200	45
5284	2612	2613	0.223	10	1	Collector / Local Road	800	15
5285	2613	2612	0.223	10	1	Collector / Local Road	800	15
5286	554	2615	0.244	11	1	Minor Arterial	1700	40
5287	2615	554	0.244	11	1	Minor Arterial	1700	40
5288	568	1573	0.679	11	1	Minor Arterial	1700	40
5289	1573	568	0.679	11	1	Minor Arterial	1700	40
5290	2618	2619	0.164	12	1	Ramp	1500	35
5291	2000	2002	1.297	11	1	Minor Arterial	1250	40
5292	2002	2000	1.297	11	1	Minor Arterial	1250	40
5293	163	306	1.844	11	1	Principal Arterial	1700	45
5294	306	163	1.844	11	1	Principal Arterial	1700	45
5295	830	835	0.793	11	1	Collector / Local Road	1250	40
5296	835	830	0.793	11	1	Collector / Local Road	1250	40
5297	809	830	1.918	11	1	Collector / Local Road	1700	40
5298	830	809	1.918	11	1	Collector / Local Road	1700	40
5299	913	2704	0.862	11	1	Ramp	1500	55
5300	916	2619	0.987	11	1	Collector / Local Road	1700	40
5301	2619	916	0.987	11	1	Collector / Local Road	1700	40
5302	2623	2624	0.099	11	1	Ramp	1500	55
5303	881	898	0.591	12	2	Freeway	4100	65
5304	196	2228	1.628	11	1	Major Arterial	1700	45
5305	2228	196	1.628	11	1	Major Arterial	1700	45
5306	1043	1085	2.125	12	1	Minor Arterial	1700	35
5307	1085	1043	2.125	12	1	Minor Arterial	1700	35
5308	1059	1093	3.009	11	1	Minor Arterial	1700	40
5309	1093	1059	3.009	11	1	Minor Arterial	1700	40
5310	865	912	1.713	11	1	Minor Arterial	1250	40
5311	912	865	1.713	11	1	Minor Arterial	1250	40
5312	975	990	0.246	10	1	Collector / Local Road	800	15
5313	990	975	0.246	10	1	Collector / Local Road	800	15
5314	972	975	0.508	11	1	Major Arterial	1700	45
5315	975	972	0.508	11	1	Major Arterial	1700	45
5316	1969	1973	0.429	11	2	Major Arterial	3600	50
5317	1973	1969	0.429	11	2	Major Arterial	3600	50
5318	199	200	0.439	11	1	Principal Arterial	1700	45
5319	200	199	0.439	11	1	Principal Arterial	1700	45
5320	200	2312	1.656	11	1	Major Arterial	1700	45
5321	2312	200	1.656	11	1	Major Arterial	1700	45
5322	1624	1927	0.423	11	1	Collector / Local Road	1700	40
5323	1927	1624	0.423	11	1	Collector / Local Road	1700	40
5324	1820	1932	0.332	10	1	Collector / Local Road	800	15
5325	1932	1820	0.332	10	1	Collector / Local Road	800	15
5326	1844	1871	0.877	11	1	Collector / Local Road	1700	40
5327	1871	1844	0.877	11	1	Collector / Local Road	1700	40
5328	1839	1859	1.482	11	1	Principal Arterial	1700	45
5329	1859	1839	1.482	11	1	Principal Arterial	1700	45
5330	1833	1838	0.764	11	1	Minor Arterial	1700	40
5331	1838	1833	0.764	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5332	1568	1839	0.988	11	1	Collector / Local Road	1700	40
5333	1839	1568	0.988	11	1	Collector / Local Road	1700	40
5334	1812	1833	1.161	11	1	Minor Arterial	1700	40
5335	1833	1812	1.161	11	1	Minor Arterial	1700	40
5336	554	584	0.901	11	1	Minor Arterial	1250	40
5337	584	554	0.901	11	1	Minor Arterial	1250	40
5338	276	714	2.127	12	1	Major Arterial	1700	35
5339	714	276	2.127	12	1	Major Arterial	1700	35
5340	317	340	0.568	11	1	Collector / Local Road	1700	40
5341	340	317	0.568	11	1	Collector / Local Road	1700	40
5342	1898	1900	4.244	11	1	Major Arterial	1700	45
5343	1900	1898	4.244	11	1	Major Arterial	1700	45
5344	1218	2535	0.632	11	2	Major Arterial	3600	50
5345	2535	1218	0.632	11	2	Major Arterial	3600	50
5346	1771	2554	2.177	11	1	Principal Arterial	1600	45
5347	2554	1771	2.177	11	1	Principal Arterial	1600	45
5348	1271	1984	0.923	12	2	Principal Arterial	2750	35
5349	1984	1270	0.919	12	2	Principal Arterial	2750	35
5350	2626	2729	0.376	10	1	Collector / Local Road	800	15
5351	2729	2626	0.376	10	1	Collector / Local Road	800	15
5352	1269	2538	0.491	12	2	Freeway	4100	55
5353	2538	1269	0.491	12	2	Freeway	4100	55
5354	2632	1262	0.256	11	2	Principal Arterial	3300	45
5355	1260	2632	0.25	11	2	Principal Arterial	3300	45
5356	2531	2586	0.836	11	1	Minor Arterial	1250	40
5357	2586	2531	0.836	11	1	Minor Arterial	1250	40
5358	2544	2628	1.561	11	1	Principal Arterial	1700	40
5359	2628	2544	1.561	11	1	Principal Arterial	1700	40
5360	1257	1417	0.122	11	1	Major Arterial	1700	50
5361	1417	1257	0.122	11	1	Major Arterial	1700	50
5362	2522	2588	1.755	11	1	Minor Arterial	1250	40
5363	2588	2522	1.755	11	1	Minor Arterial	1250	40
5364	2584	2629	0.49	11	1	Minor Arterial	1700	40
5365	2629	2584	0.49	11	1	Minor Arterial	1700	40
5366	2521	2522	1.342	11	1	Minor Arterial	1250	40
5367	2522	2521	1.342	11	1	Minor Arterial	1250	40
5368	1255	1266	1.034	11	1	Minor Arterial	1700	40
5369	1266	1255	1.034	11	1	Minor Arterial	1700	40
5370	1246	1266	1.358	11	1	Minor Arterial	1700	40
5371	1266	1246	1.358	11	1	Minor Arterial	1700	40
5372	2570	2571	3.185	11	1	Minor Arterial	1250	40
5373	2571	2570	3.185	11	1	Minor Arterial	1250	40
5374	2009	2534	3.41	11	1	Minor Arterial	1250	40
5375	2534	2009	3.41	11	1	Minor Arterial	1250	40
5376	2535	2566	4.366	11	1	Minor Arterial	1700	40
5377	2566	2535	4.366	11	1	Minor Arterial	1700	40
5378	2540	2730	0.165	10	1	Collector / Local Road	800	25
5379	2730	2540	0.165	10	1	Collector / Local Road	800	25
5380	2588	2632	3.73	11	1	Minor Arterial	1250	40
5381	2632	2588	3.73	11	1	Minor Arterial	1250	40
5382	1479	2526	1.582	11	2	Principal Arterial	3300	45
5383	2527	1265	1.486	11	2	Principal Arterial	3300	45
5384	1268	1271	0.983	11	2	Principal Arterial	3300	40
5385	1240	2630	2.749	11	1	Principal Arterial	1700	45
5386	2630	1240	2.749	11	1	Principal Arterial	1700	45
5387	2535	2636	0.101	11	2	Major Arterial	3600	50
5388	2636	2535	0.101	11	2	Major Arterial	3600	50
5389	2542	2628	0.444	11	1	Principal Arterial	1700	40
5390	2628	2542	0.444	11	1	Principal Arterial	1700	40
5391	1379	2567	0.448	11	1	Minor Arterial	1700	40
5392	2567	1379	0.448	11	1	Minor Arterial	1700	40
5393	1379	2528	0.825	11	1	Principal Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5394	2528	1379	0.825	11	1	Principal Arterial	1700	45
5395	1272	2585	0.217	11	1	Minor Arterial	1700	40
5396	2585	1272	0.217	11	1	Minor Arterial	1700	40
5397	1227	1480	1.53	12	2	Freeway	4100	65
5398	1275	2599	1.984	11	1	Principal Arterial	1600	45
5399	2599	1275	1.984	11	1	Principal Arterial	1600	45
5400	1276	2531	4.681	11	1	Minor Arterial	1250	40
5401	2531	1276	4.681	11	1	Minor Arterial	1250	40
5402	2630	2634	0.2	12	1	Principal Arterial	1700	25
5403	2634	2630	0.2	12	1	Principal Arterial	1700	25
5404	1459	1231	0.197	11	1	Minor Arterial	1700	40
5405	627	631	0.564	11	1	Major Arterial	1250	45
5406	631	627	0.564	11	1	Major Arterial	1250	45
5407	2175	2190	1.503	11	1	Major Arterial	1250	45
5408	2190	2175	1.503	11	1	Major Arterial	1250	45
5409	204	212	1.034	11	1	Major Arterial	1700	45
5410	212	204	1.034	11	1	Major Arterial	1700	45
5411	206	221	1.653	11	1	Collector / Local Road	1700	40
5412	221	206	1.653	11	1	Collector / Local Road	1700	40
5413	200	224	3.062	11	1	Collector / Local Road	1700	40
5414	224	200	3.062	11	1	Collector / Local Road	1700	40
5415	1541	1575	2.978	11	1	Minor Arterial	1250	40
5416	1575	1541	2.978	11	1	Minor Arterial	1250	40
5417	1761	1773	1.835	11	1	Major Arterial	1250	45
5418	1773	1761	1.835	11	1	Major Arterial	1250	45
5419	1742	1752	2.198	11	1	Minor Arterial	1250	40
5420	1752	1742	2.198	11	1	Minor Arterial	1250	40
5421	2646	945	0.069	11	1	Minor Arterial	1700	40
5422	2531	2533	0.828	11	1	Principal Arterial	1600	40
5423	2533	2531	0.828	11	1	Principal Arterial	1600	40
5424	1612	1755	1.477	11	1	Minor Arterial	1250	40
5425	1755	1612	1.477	11	1	Minor Arterial	1250	40
5426	1734	1955	0.817	11	1	Principal Arterial	1600	45
5427	1955	1734	0.817	11	1	Principal Arterial	1600	45
5428	2047	2399	1.643	11	1	Minor Arterial	1250	40
5429	2399	2047	1.643	11	1	Minor Arterial	1250	40
5430	1276	2558	1.823	11	1	Minor Arterial	1250	40
5431	2558	1276	1.823	11	1	Minor Arterial	1250	40
5432	1247	1245	1.111	12	2	Freeway	4100	65
5433	1411	1249	1.327	12	2	Freeway	4100	65
5434	1412	1247	0.621	12	2	Freeway	4100	65
5435	1249	1264	1.053	12	2	Freeway	4100	65
5436	2410	2412	0.613	11	1	Minor Arterial	1250	40
5437	2412	2410	0.613	11	1	Minor Arterial	1250	40
5438	2420	2422	1.848	11	1	Minor Arterial	1250	40
5439	2422	2420	1.848	11	1	Minor Arterial	1250	40
5440	2453	2580	1.305	11	1	Collector / Local Road	1250	40
5441	2580	2453	1.305	11	1	Collector / Local Road	1250	40
5442	2455	2458	0.746	11	1	Major Arterial	1250	45
5443	2458	2455	0.746	11	1	Major Arterial	1250	45
5444	2418	2579	1.773	11	1	Major Arterial	1250	45
5445	2579	2418	1.773	11	1	Major Arterial	1250	45
5446	1410	1233	1.429	12	2	Freeway	4100	65
5447	1759	1967	1.159	11	1	Minor Arterial	1250	40
5448	1967	1759	1.159	11	1	Minor Arterial	1250	40
5449	1769	1770	2.216	11	1	Minor Arterial	1250	40
5450	1770	1769	2.216	11	1	Minor Arterial	1250	40
5451	1784	1925	0.974	11	1	Minor Arterial	1250	40
5452	1925	1784	0.974	11	1	Minor Arterial	1250	40
5453	1675	1949	0.495	11	1	Collector / Local Road	1700	40
5454	1949	1675	0.495	11	1	Collector / Local Road	1700	40
5455	1676	1949	0.749	11	1	Collector / Local Road	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5456	1949	1676	0.749	11	1	Collector / Local Road	1250	40
5457	1646	1597	1.74	12	2	Freeway	4100	55
5458	1655	2660	0.438	11	1	Major Arterial	1700	45
5459	2660	1655	0.438	11	1	Major Arterial	1700	45
5460	1658	2660	0.444	12	1	Major Arterial	1700	35
5461	2660	1658	0.444	12	1	Major Arterial	1700	35
5462	2557	2562	1.051	11	1	Minor Arterial	1250	40
5463	2562	2557	1.051	11	1	Minor Arterial	1250	40
5464	1760	1768	2.227	12	1	Minor Arterial	1200	35
5465	1768	1760	2.227	12	1	Minor Arterial	1200	35
5466	2445	2446	1.318	11	1	Major Arterial	1250	45
5467	2446	2445	1.318	11	1	Major Arterial	1250	45
5468	2441	2442	0.695	11	1	Principal Arterial	1700	45
5469	2442	2441	0.695	11	1	Principal Arterial	1700	45
5470	208	213	0.759	11	1	Principal Arterial	1700	45
5471	213	208	0.759	11	1	Principal Arterial	1700	45
5472	219	1418	0.68	11	1	Collector / Local Road	1700	40
5473	1418	219	0.68	11	1	Collector / Local Road	1700	40
5474	2471	2472	0.239	11	1	Principal Arterial	1600	45
5475	2472	2471	0.239	11	1	Principal Arterial	1600	45
5476	2472	2475	1.854	11	1	Principal Arterial	1600	45
5477	2475	2472	1.854	11	1	Principal Arterial	1600	45
5478	2361	2762	1.602	10	1	Collector / Local Road	800	15
5479	2762	2361	1.602	10	1	Collector / Local Road	800	15
5480	2606	2762	1.861	10	1	Collector / Local Road	800	15
5481	2762	2606	1.861	10	1	Collector / Local Road	800	15
5482	1362	2662	0.084	12	1	Major Arterial	1700	30
5483	2662	1362	0.084	12	1	Major Arterial	1700	30
5484	1362	2590	0.408	11	1	Major Arterial	1700	45
5485	2590	1362	0.408	11	1	Major Arterial	1700	45
5486	1362	2377	0.569	12	1	Major Arterial	1700	30
5487	2377	1362	0.569	12	1	Major Arterial	1700	30
5488	1066	1079	0.569	11	2	Principal Arterial	3700	50
5489	1850	1870	0.686	11	1	Minor Arterial	1700	40
5490	1870	1850	0.686	11	1	Minor Arterial	1700	40
5491	2565	1062	0.402	11	2	Principal Arterial	3700	50
5492	1068	1091	1.869	11	1	Collector / Local Road	1700	40
5493	1091	1068	1.869	11	1	Collector / Local Road	1700	40
5494	443	963	1.399	11	1	Minor Arterial	1700	40
5495	963	443	1.399	11	1	Minor Arterial	1700	40
5496	941	948	0.62	11	1	Collector / Local Road	1700	40
5497	948	941	0.62	11	1	Collector / Local Road	1700	40
5498	1944	1961	0.58	11	1	Minor Arterial	1700	40
5499	1961	1944	0.58	11	1	Minor Arterial	1700	40
5500	2391	2392	5.331	11	1	Minor Arterial	1250	40
5501	2392	2391	5.331	11	1	Minor Arterial	1250	40
5502	2597	2607	1.588	11	1	Major Arterial	1250	45
5503	2607	2597	1.588	11	1	Major Arterial	1250	45
5504	2358	2360	4.291	11	1	Major Arterial	1250	45
5505	2360	2358	4.291	11	1	Major Arterial	1250	45
5506	2360	2550	1.362	10	1	Collector / Local Road	800	15
5507	2550	2360	1.362	10	1	Collector / Local Road	800	15
5508	2359	2395	0.799	11	1	Principal Arterial	1600	45
5509	2395	2359	0.799	11	1	Principal Arterial	1600	45
5510	2390	2559	2.817	11	1	Minor Arterial	1250	40
5511	2559	2390	2.817	11	1	Minor Arterial	1250	40
5512	1060	1071	1.465	11	1	Minor Arterial	1700	40
5513	1071	1060	1.465	11	1	Minor Arterial	1700	40
5514	2414	2552	2.123	11	1	Minor Arterial	1700	40
5515	2552	2414	2.123	11	1	Minor Arterial	1700	40
5516	1315	2366	0.473	11	1	Major Arterial	1700	45
5517	2366	1315	0.473	11	1	Major Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5518	1312	1315	0.562	11	1	Major Arterial	1700	45
5519	1315	1312	0.562	11	1	Major Arterial	1700	45
5520	1313	2382	0.432	11	1	Minor Arterial	1700	40
5521	2382	1313	0.432	11	1	Minor Arterial	1700	40
5522	1392	1399	0.035	11	1	Ramp	1500	55
5523	1401	1396	0.017	11	1	Ramp	1500	55
5524	1333	1326	0.826	12	2	Freeway	4100	60
5525	1327	1331	0.959	12	2	Freeway	4100	60
5526	2290	2574	1.936	12	2	Freeway	4100	55
5527	2575	2295	2.28	12	2	Freeway	4100	55
5528	1453	2423	2.118	11	1	Major Arterial	1250	45
5529	2423	1453	2.118	11	1	Major Arterial	1250	45
5530	2479	2485	0.703	11	1	Collector / Local Road	1250	40
5531	2485	2479	0.703	11	1	Collector / Local Road	1250	40
5532	2601	2673	1.461	11	1	Collector / Local Road	1250	40
5533	2673	2601	1.461	11	1	Collector / Local Road	1250	40
5534	2672	2673	0.214	11	1	Collector / Local Road	1700	40
5535	2673	2672	0.214	11	1	Collector / Local Road	1700	40
5536	2602	2603	0.144	11	1	Collector / Local Road	1700	40
5537	2603	2602	0.144	11	1	Collector / Local Road	1700	40
5538	2414	2602	0.192	11	1	Collector / Local Road	1700	40
5539	2602	2414	0.192	11	1	Collector / Local Road	1700	40
5540	2367	2491	0.236	11	1	Collector / Local Road	1250	40
5541	2491	2367	0.236	11	1	Collector / Local Road	1250	40
5542	2381	2498	2.097	11	1	Collector / Local Road	1700	40
5543	2498	2381	2.097	11	1	Collector / Local Road	1700	40
5544	1321	1329	0.511	11	1	Minor Arterial	1700	40
5545	1329	1321	0.511	11	1	Minor Arterial	1700	40
5546	1350	1358	1.989	11	2	Major Arterial	3200	45
5547	1358	1350	1.989	11	2	Major Arterial	3200	45
5548	2373	2374	1.033	11	1	Minor Arterial	1700	40
5549	2374	2373	1.033	11	1	Minor Arterial	1700	40
5550	2375	2674	0.352	11	1	Collector / Local Road	1700	40
5551	2674	2375	0.352	11	1	Collector / Local Road	1700	40
5552	1355	2426	0.117	11	1	Principal Arterial	1600	55
5553	2505	2674	2.575	11	1	Collector / Local Road	1700	40
5554	2674	2505	2.575	11	1	Collector / Local Road	1700	40
5555	1321	2381	0.972	11	1	Major Arterial	1700	45
5556	2381	1321	0.972	11	1	Major Arterial	1700	45
5557	2558	2562	7.426	11	1	Minor Arterial	1250	40
5558	2562	2558	7.426	11	1	Minor Arterial	1250	40
5559	1372	2591	0.707	11	1	Major Arterial	1250	45
5560	2591	1372	0.707	11	1	Major Arterial	1250	45
5561	1372	2358	3.301	11	1	Minor Arterial	1250	40
5562	2358	1372	3.301	11	1	Minor Arterial	1250	40
5563	2362	2507	3.403	11	1	Minor Arterial	1250	40
5564	2507	2362	3.403	11	1	Minor Arterial	1250	40
5565	1360	2384	1.023	11	1	Major Arterial	1250	45
5566	2384	1360	1.023	11	1	Major Arterial	1250	45
5567	1281	2425	2.222	11	2	Principal Arterial	3300	45
5568	2425	1281	2.222	11	2	Principal Arterial	3300	45
5569	1470	2564	2.147	12	2	Freeway	4100	60
5570	1079	1471	2.162	12	2	Freeway	4100	60
5571	1546	2359	1.857	11	1	Principal Arterial	1600	45
5572	2359	1546	1.857	11	1	Principal Arterial	1600	45
5573	2388	2555	2.109	11	1	Minor Arterial	1250	40
5574	2555	2388	2.109	11	1	Minor Arterial	1250	40
5575	1382	2415	2.977	11	1	Major Arterial	1250	45
5576	2415	1382	2.977	11	1	Major Arterial	1250	45
5577	2369	2600	0.58	11	1	Minor Arterial	1700	40
5578	2600	2369	0.58	11	1	Minor Arterial	1700	40
5579	2368	2578	2.239	11	1	Major Arterial	1250	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5580	2578	2368	2.239	11	1	Major Arterial	1250	45
5581	2391	2423	4.376	11	1	Major Arterial	1250	45
5582	2423	2391	4.376	11	1	Major Arterial	1250	45
5583	2391	2562	1.138	11	1	Minor Arterial	1250	40
5584	2562	2391	1.138	11	1	Minor Arterial	1250	40
5585	1779	1780	0.527	11	1	Minor Arterial	1250	40
5586	1780	1779	0.527	11	1	Minor Arterial	1250	40
5587	2486	2488	0.026	11	1	Collector / Local Road	1700	40
5588	2488	2486	0.026	11	1	Collector / Local Road	1700	40
5589	234	2697	0.994	11	2	Principal Arterial	3300	45
5590	2697	234	0.994	11	2	Principal Arterial	3300	45
5591	2084	2098	1.044	11	1	Minor Arterial	1700	40
5592	2098	2084	1.044	11	1	Minor Arterial	1700	40
5593	2076	2103	1.419	11	1	Minor Arterial	1250	40
5594	2103	2076	1.419	11	1	Minor Arterial	1250	40
5595	238	251	1.373	11	1	Minor Arterial	1700	40
5596	251	238	1.373	11	1	Minor Arterial	1700	40
5597	1596	2291	0.749	10	1	Collector / Local Road	800	15
5598	2291	1596	0.749	10	1	Collector / Local Road	800	15
5599	1771	2598	4.687	11	1	Principal Arterial	1600	45
5600	2598	1771	4.687	11	1	Principal Arterial	1600	45
5601	1732	1735	1.116	11	1	Principal Arterial	1600	45
5602	1735	1732	1.116	11	1	Principal Arterial	1600	45
5603	1732	1741	0.976	11	1	Major Arterial	1250	45
5604	1741	1732	0.976	11	1	Major Arterial	1250	45
5605	1736	1741	2.3	11	1	Major Arterial	1250	45
5606	1741	1736	2.3	11	1	Major Arterial	1250	45
5607	1736	1948	0.474	11	1	Major Arterial	1250	45
5608	1948	1736	0.474	11	1	Major Arterial	1250	45
5609	2683	908	1.797	12	2	Freeway	4100	60
5610	2680	2683	0.472	12	2	Freeway	4100	60
5611	911	2685	0.232	11	1	Ramp	1500	55
5612	2624	2681	0.241	11	1	Ramp	1500	55
5613	2681	902	0.686	12	2	Freeway	4100	60
5614	902	1524	0.491	12	2	Freeway	4100	60
5615	1525	894	0.043	11	2	Principal Arterial	3300	45
5616	1523	1526	0.164	12	2	Freeway	4100	55
5617	901	2682	1.178	12	2	Freeway	4100	65
5618	1080	1074	0.087	11	1	Major Arterial	1700	45
5619	1532	1521	0.959	11	1	Ramp	1500	55
5620	1532	1533	1.494	11	1	Ramp	1500	55
5621	1791	1982	1.032	12	2	Freeway	4100	65
5622	1789	1793	1.147	12	2	Freeway	4100	65
5623	1796	1928	0.757	11	1	Ramp	1500	55
5624	1928	1796	0.757	11	1	Ramp	1500	55
5625	2714	372	0.508	11	1	Ramp	1500	55
5626	2714	497	0.369	12	2	Freeway	4100	60
5627	1194	1477	0.233	11	1	Ramp	1500	55
5628	1626	1909	1.198	11	1	Minor Arterial	1700	40
5629	1909	1626	1.198	11	1	Minor Arterial	1700	40
5630	1756	1760	1.619	11	1	Major Arterial	1250	45
5631	1760	1756	1.619	11	1	Major Arterial	1250	45
5632	2692	2355	11.592	12	2	Freeway	4100	60
5633	1836	1962	2.741	11	1	Minor Arterial	1700	40
5634	1962	1836	2.741	11	1	Minor Arterial	1700	40
5635	1935	1845	1.15	12	2	Freeway	4100	60
5636	915	917	2.194	11	1	Collector / Local Road	1250	40
5637	917	915	2.194	11	1	Collector / Local Road	1250	40
5638	1192	2203	1.29	11	1	Principal Arterial	1700	45
5639	2203	1192	1.29	11	1	Principal Arterial	1700	45
5640	1558	1487	0.426	12	1	Ramp	1500	35
5641	2095	2351	2.084	11	1	Minor Arterial	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5642	2351	2095	2.084	11	1	Minor Arterial	1250	40
5643	544	2259	0.87	11	1	Major Arterial	1250	45
5644	2259	544	0.87	11	1	Major Arterial	1250	45
5645	2033	2305	0.694	11	1	Minor Arterial	1250	40
5646	2305	2033	0.694	11	1	Minor Arterial	1250	40
5647	2011	2342	0.363	11	1	Collector / Local Road	1700	40
5648	2342	2011	0.363	11	1	Collector / Local Road	1700	40
5649	2062	2073	0.589	11	1	Collector / Local Road	1250	40
5650	2073	2062	0.589	11	1	Collector / Local Road	1250	40
5651	563	579	6.947	12	2	Freeway	4100	60
5652	592	2695	3.181	12	2	Freeway	4100	60
5653	1563	2277	0.521	11	2	Principal Arterial	3300	45
5654	2277	1563	0.521	11	2	Principal Arterial	3300	45
5655	567	563	0.799	12	2	Freeway	4100	60
5656	2281	2321	0.657	11	1	Minor Arterial	1700	40
5657	2321	2281	0.657	11	1	Minor Arterial	1700	40
5658	2696	237	1.609	12	2	Freeway	4100	55
5659	258	461	0.709	12	2	Freeway	4100	55
5660	250	253	0.045	11	1	Major Arterial	1700	50
5661	253	250	0.045	11	1	Major Arterial	1700	50
5662	163	309	1.149	11	1	Minor Arterial	1700	40
5663	309	163	1.149	11	1	Minor Arterial	1700	40
5664	257	2697	1.098	11	1	Principal Arterial	1700	45
5665	2697	257	1.098	11	1	Principal Arterial	1700	45
5666	489	492	0.102	12	2	Freeway	4100	55
5667	323	258	2.403	12	2	Freeway	4100	55
5668	463	487	2.533	12	2	Freeway	4100	55
5669	461	1535	1.569	12	2	Freeway	4100	55
5670	237	463	0.724	12	2	Freeway	4100	55
5671	1509	442	1.522	12	2	Freeway	4100	65
5672	1517	1511	1.197	12	2	Freeway	4100	60
5673	2698	1516	0.327	12	2	Freeway	4100	60
5674	425	2700	1.229	12	2	Freeway	4100	65
5675	1516	439	0.567	12	2	Freeway	4100	65
5676	434	2712	0.606	11	1	Minor Arterial	1700	40
5677	2704	2682	2.945	11	1	Ramp	1500	55
5678	821	828	0.069	11	1	Major Arterial	1250	45
5679	828	821	0.069	11	1	Major Arterial	1250	45
5680	369	384	0.423	11	1	Principal Arterial	1600	45
5681	1508	370	0.422	11	1	Major Arterial	1250	50
5682	535	532	2.631	12	2	Freeway	4100	65
5683	391	411	2.385	11	1	Major Arterial	1700	45
5684	411	391	2.385	11	1	Major Arterial	1700	45
5685	867	878	1.372	11	1	Major Arterial	1700	45
5686	878	867	1.372	11	1	Major Arterial	1700	45
5687	868	867	0.768	12	1	Ramp	1500	35
5688	867	871	1.312	12	1	Ramp	1500	35
5689	861	867	0.611	11	1	Major Arterial	1700	45
5690	867	861	0.611	11	1	Major Arterial	1700	45
5691	392	1204	0.183	11	2	Minor Arterial	3200	40
5692	2689	877	0.792	12	2	Freeway	4100	65
5693	896	877	0.58	11	1	Ramp	1500	55
5694	843	860	0.825	12	2	Freeway	4100	50
5695	402	891	2.132	11	1	Principal Arterial	1700	45
5696	892	407	2.134	11	1	Principal Arterial	1700	45
5697	1521	508	10.483	12	2	Freeway	4100	65
5698	519	2686	2.316	12	2	Freeway	4100	65
5699	442	1515	3.253	12	2	Freeway	4100	65
5700	395	2737	0.218	10	1	Collector / Local Road	800	15
5701	2737	395	0.218	10	1	Collector / Local Road	800	15
5702	494	197	12.08	12	2	Freeway	4100	60
5703	593	596	0.336	10	1	Collector / Local Road	800	15

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5704	596	593	0.336	10	1	Collector / Local Road	800	15
5705	626	628	0.15	11	1	Major Arterial	1250	45
5706	628	626	0.15	11	1	Major Arterial	1250	45
5707	760	766	0.351	11	2	Minor Arterial	3200	40
5708	766	760	0.351	11	2	Minor Arterial	3200	40
5709	1498	772	3.215	12	2	Freeway	4100	55
5710	778	761	1.412	12	2	Freeway	4100	55
5711	1487	496	10.181	12	2	Freeway	4100	60
5712	1083	1094	1.225	11	1	Principal Arterial	1600	45
5713	1081	1075	0.306	11	1	Principal Arterial	1600	45
5714	521	518	6.832	12	2	Freeway	4100	65
5715	516	1509	2.625	12	2	Freeway	4100	65
5716	388	394	0.272	11	2	Collector / Local Road	3200	40
5717	394	388	0.272	11	2	Collector / Local Road	3200	40
5718	510	1504	0.323	12	2	Freeway	4100	65
5719	1196	190	0.376	12	2	Freeway	4100	55
5720	182	1196	0.481	12	2	Freeway	4100	55
5721	185	183	0.454	12	2	Freeway	4100	55
5722	179	337	1.07	12	2	Freeway	4100	55
5723	1499	1195	3.883	12	2	Freeway	4100	65
5724	490	366	3.922	12	2	Freeway	4100	65
5725	1519	2715	0.128	11	2	Minor Arterial	3200	40
5726	2715	1519	0.128	11	2	Minor Arterial	3200	40
5727	503	1519	0.159	11	1	Ramp	1500	55
5728	2690	1503	1.157	12	2	Freeway	4100	65
5729	2715	1505	0.109	12	2	Freeway	4100	40
5730	1452	2715	0.174	11	2	Major Arterial	3200	40
5731	1506	1522	7.069	12	2	Freeway	4100	65
5732	1513	2711	3.955	12	2	Freeway	4100	60
5733	2710	1512	4.293	12	2	Freeway	4100	60
5734	2716	1503	0.363	11	1	Ramp	1500	55
5735	2085	2124	1.547	12	2	Freeway	4100	55
5736	2120	2086	1.533	12	2	Freeway	4100	55
5737	1988	2357	0.237	12	1	Ramp	1500	35
5738	1986	1988	0.223	12	1	Ramp	1500	35
5739	1988	1986	0.223	12	1	Ramp	1500	35
5740	1987	2691	11.587	12	2	Freeway	4100	60
5741	437	531	0.362	11	1	Minor Arterial	1700	40
5742	531	437	0.362	11	1	Minor Arterial	1700	40
5743	2719	478	0.49	11	1	Ramp	1500	55
5744	1482	473	0.448	11	1	Ramp	1500	55
5745	476	303	0.419	11	1	Ramp	1500	55
5746	477	1477	0.416	12	2	Freeway	4100	65
5747	471	1538	0.88	12	2	Freeway	4100	60
5748	285	308	0.734	11	1	Minor Arterial	1700	40
5749	308	285	0.734	11	1	Minor Arterial	1700	40
5750	470	290	0.094	11	1	Collector / Local Road	1700	40
5751	2719	1484	0.312	12	2	Freeway	4100	65
5752	1536	2719	12.489	12	2	Freeway	4100	65
5753	1477	484	12.401	12	2	Freeway	4100	65
5754	319	316	0.199	11	1	Principal Arterial	1700	45
5755	298	2739	0.206	10	1	Collector / Local Road	800	10
5756	2739	298	0.206	10	1	Collector / Local Road	800	10
5757	292	298	0.4	11	1	Collector / Local Road	1700	40
5758	298	292	0.4	11	1	Collector / Local Road	1700	40
5759	1053	1058	1.83	11	1	Major Arterial	1700	45
5760	1058	1053	1.83	11	1	Major Arterial	1700	45
5761	1771	1795	4.605	11	1	Principal Arterial	1600	45
5762	1795	1771	4.605	11	1	Principal Arterial	1600	45
5763	2250	2268	0.949	11	2	Principal Arterial	3700	55
5764	2268	2250	0.949	11	2	Principal Arterial	3700	55
5765	243	251	0.496	11	1	Major Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5766	251	243	0.496	11	1	Major Arterial	1700	45
5767	947	1530	0.246	11	1	Major Arterial	1700	45
5768	938	947	0.973	11	1	Major Arterial	1700	45
5769	947	938	0.973	11	1	Major Arterial	1700	45
5770	2712	424	0.2	11	1	Minor Arterial	1700	40
5771	424	2702	0.201	11	1	Minor Arterial	1700	40
5772	2212	2220	0.803	12	1	Major Arterial	1700	35
5773	2220	2212	0.803	12	1	Major Arterial	1700	35
5774	2220	2221	0.516	11	1	Major Arterial	1700	45
5775	2221	2220	0.516	11	1	Major Arterial	1700	45
5776	277	287	0.567	12	1	Major Arterial	1700	35
5777	287	277	0.567	12	1	Major Arterial	1700	35
5778	278	317	1.216	11	1	Collector / Local Road	1700	40
5779	317	278	1.216	11	1	Collector / Local Road	1700	40
5780	358	364	0.867	11	1	Minor Arterial	1700	40
5781	364	358	0.867	11	1	Minor Arterial	1700	40
5782	368	358	1.268	10	1	Collector / Local Road	800	15
5783	544	589	6.287	11	1	Major Arterial	1250	45
5784	589	544	6.287	11	1	Major Arterial	1250	45
5785	545	557	1.973	11	1	Minor Arterial	1700	40
5786	557	545	1.973	11	1	Minor Arterial	1700	40
5787	560	2284	0.69	11	1	Minor Arterial	1700	40
5788	2284	560	0.69	11	1	Minor Arterial	1700	40
5789	555	570	0.536	11	1	Collector / Local Road	1700	40
5790	570	555	0.536	11	1	Collector / Local Road	1700	40
5791	599	1574	3.664	10	1	Collector / Local Road	800	15
5792	1574	599	3.664	10	1	Collector / Local Road	800	15
5793	601	1580	2.063	11	1	Minor Arterial	1700	45
5794	1580	601	2.063	11	1	Minor Arterial	1700	45
5795	599	2612	0.972	11	1	Collector / Local Road	1700	40
5796	2612	599	0.972	11	1	Collector / Local Road	1700	40
5797	594	2612	1.424	11	1	Collector / Local Road	1700	40
5798	2612	594	1.424	11	1	Collector / Local Road	1700	40
5799	224	600	1.176	11	1	Major Arterial	1250	45
5800	600	224	1.176	11	1	Major Arterial	1250	45
5801	599	619	1.223	11	1	Minor Arterial	1700	40
5802	619	599	1.223	11	1	Minor Arterial	1700	40
5803	596	625	1.852	11	1	Major Arterial	1700	45
5804	625	596	1.852	11	1	Major Arterial	1700	45
5805	621	1579	0.538	11	1	Collector / Local Road	1250	40
5806	1579	621	0.538	11	1	Collector / Local Road	1250	40
5807	634	640	0.596	11	1	Collector / Local Road	1250	40
5808	640	634	0.596	11	1	Collector / Local Road	1250	40
5809	625	664	1.891	11	1	Major Arterial	1700	45
5810	664	625	1.891	11	1	Major Arterial	1700	45
5811	619	642	2.99	12	1	Minor Arterial	1700	35
5812	642	619	2.99	12	1	Minor Arterial	1700	35
5813	641	662	0.985	11	1	Major Arterial	1250	45
5814	662	641	0.985	11	1	Major Arterial	1250	45
5815	665	676	1.027	11	1	Collector / Local Road	1700	40
5816	676	665	1.027	11	1	Collector / Local Road	1700	40
5817	685	1547	0.78	10	1	Collector / Local Road	800	15
5818	1547	685	0.78	10	1	Collector / Local Road	800	15
5819	685	713	1.279	11	1	Collector / Local Road	1250	40
5820	713	685	1.279	11	1	Collector / Local Road	1250	40
5821	688	702	1.006	12	1	Major Arterial	1200	35
5822	702	688	1.006	12	1	Major Arterial	1200	35
5823	710	746	2.453	11	1	Major Arterial	1250	45
5824	746	710	2.453	11	1	Major Arterial	1250	45
5825	724	735	1.732	11	1	Collector / Local Road	1700	40
5826	735	724	1.732	11	1	Collector / Local Road	1700	40
5827	714	740	2.102	11	1	Major Arterial	1700	45

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5828	740	714	2.102	11	1	Major Arterial	1700	45
5829	740	743	1.135	11	1	Major Arterial	1700	45
5830	743	740	1.135	11	1	Major Arterial	1700	45
5831	748	755	1.506	11	1	Major Arterial	1250	45
5832	755	748	1.506	11	1	Major Arterial	1250	45
5833	751	758	1.323	10	1	Collector / Local Road	800	15
5834	758	751	1.323	10	1	Collector / Local Road	800	15
5835	756	767	2.154	11	1	Minor Arterial	1250	40
5836	767	756	2.154	11	1	Minor Arterial	1250	40
5837	751	790	0.717	11	1	Collector / Local Road	800	45
5838	790	751	0.717	11	1	Collector / Local Road	800	45
5839	755	779	1.288	11	1	Major Arterial	1700	45
5840	779	755	1.288	11	1	Major Arterial	1700	45
5841	776	783	2.142	11	1	Minor Arterial	1700	40
5842	783	776	2.142	11	1	Minor Arterial	1700	40
5843	766	783	1.44	11	1	Minor Arterial	1700	40
5844	783	766	1.44	11	1	Minor Arterial	1700	40
5845	774	801	3.557	11	1	Collector / Local Road	1250	40
5846	801	774	3.557	11	1	Collector / Local Road	1250	40
5847	789	793	1.322	11	1	Major Arterial	1700	45
5848	793	789	1.322	11	1	Major Arterial	1700	45
5849	779	789	1.335	11	1	Major Arterial	1700	45
5850	789	779	1.335	11	1	Major Arterial	1700	45
5851	789	808	1.268	11	1	Collector / Local Road	1700	40
5852	808	789	1.268	11	1	Collector / Local Road	1700	40
5853	770	805	1.084	11	1	Principal Arterial	1700	45
5854	805	770	1.084	11	1	Principal Arterial	1700	45
5855	805	813	1.428	12	1	Major Arterial	1700	35
5856	813	805	1.428	12	1	Major Arterial	1700	35
5857	813	817	1.359	11	1	Major Arterial	1700	45
5858	817	813	1.359	11	1	Major Arterial	1700	45
5859	846	2622	2.48	11	1	Major Arterial	1250	55
5860	2622	846	2.48	11	1	Major Arterial	1250	55
5861	858	882	3.515	12	1	Major Arterial	1200	35
5862	882	858	3.515	12	1	Major Arterial	1200	35
5863	1793	872	13.999	12	2	Freeway	4100	65
5864	975	979	1.01	11	1	Major Arterial	1250	45
5865	979	975	1.01	11	1	Major Arterial	1250	45
5866	1039	1040	1.091	11	1	Principal Arterial	1700	45
5867	1040	1039	1.091	11	1	Principal Arterial	1700	45
5868	825	778	3.593	12	2	Freeway	4100	55
5869	782	1602	4.567	12	2	Freeway	4100	55
5870	365	362	0.205	11	1	Major Arterial	1700	50
5871	362	364	0.203	11	1	Principal Arterial	1700	45
5872	1426	1428	0.279	12	2	Freeway	4100	60
5873	1483	1421	0.531	12	2	Freeway	4100	60
5874	1533	1791	18.86	12	2	Freeway	4100	65
5875	590	1659	1.244	12	2	Freeway	4100	55
5876	1545	591	0.484	12	2	Freeway	4100	55
5877	2640	927	0.796	12	2	Freeway	4100	60
5878	1683	1952	1.512	11	1	Principal Arterial	1700	45
5879	1952	1683	1.512	11	1	Principal Arterial	1700	45
5880	1688	1923	1.754	11	1	Minor Arterial	1250	40
5881	1923	1688	1.754	11	1	Minor Arterial	1250	40
5882	1693	1977	0.709	11	1	Minor Arterial	1250	40
5883	1977	1693	0.709	11	1	Minor Arterial	1250	40
5884	1694	1698	1.118	11	1	Minor Arterial	1250	40
5885	1698	1694	1.118	11	1	Minor Arterial	1250	40
5886	1699	1701	0.293	11	1	Minor Arterial	1700	40
5887	1701	1699	0.293	11	1	Minor Arterial	1700	40
5888	1720	2757	1.402	11	1	Minor Arterial	1250	40
5889	2757	1720	1.402	11	1	Minor Arterial	1250	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5890	1723	1734	1.168	11	1	Principal Arterial	1600	45
5891	1734	1723	1.168	11	1	Principal Arterial	1600	45
5892	1734	1958	1.526	11	1	Collector / Local Road	1250	40
5893	1958	1734	1.526	11	1	Collector / Local Road	1250	40
5894	1737	1738	0.999	11	1	Minor Arterial	1250	40
5895	1738	1737	0.999	11	1	Minor Arterial	1250	40
5896	1397	1789	13.107	12	2	Freeway	4100	65
5897	1807	1817	2.195	11	1	Major Arterial	1700	45
5898	1817	1807	2.195	11	1	Major Arterial	1700	45
5899	1982	1391	13.814	12	2	Freeway	4100	65
5900	2037	2049	0.681	11	1	Principal Arterial	1600	55
5901	2049	2037	0.681	11	1	Principal Arterial	1600	55
5902	2056	2077	5.143	11	1	Minor Arterial	1250	40
5903	2077	2056	5.143	11	1	Minor Arterial	1250	40
5904	2045	2074	1.268	11	1	Major Arterial	1700	45
5905	2074	2045	1.268	11	1	Major Arterial	1700	45
5906	2092	2345	1.373	11	1	Minor Arterial	1700	40
5907	2345	2092	1.373	11	1	Minor Arterial	1700	40
5908	2092	2099	2.211	11	1	Minor Arterial	1700	40
5909	2099	2092	2.211	11	1	Minor Arterial	1700	40
5910	1298	2749	1.31	10	1	Collector / Local Road	800	15
5911	2749	1298	1.31	10	1	Collector / Local Road	800	15
5912	2140	2167	1.308	12	1	Minor Arterial	1200	35
5913	2167	2140	1.308	12	1	Minor Arterial	1200	35
5914	2128	2175	1.611	11	1	Minor Arterial	1250	40
5915	2175	2128	1.611	11	1	Minor Arterial	1250	40
5916	2138	2164	0.939	12	1	Principal Arterial	1700	35
5917	2164	2138	0.939	12	1	Principal Arterial	1700	35
5918	2165	2188	4.132	11	1	Major Arterial	1250	45
5919	2188	2165	4.132	11	1	Major Arterial	1250	45
5920	2189	2215	1.095	11	1	Minor Arterial	1700	40
5921	2215	2189	1.095	11	1	Minor Arterial	1700	40
5922	2201	2210	0.55	11	1	Major Arterial	1700	45
5923	2210	2201	0.55	11	1	Major Arterial	1700	45
5924	2254	2257	0.967	11	1	Minor Arterial	1700	40
5925	2257	2254	0.967	11	1	Minor Arterial	1700	40
5926	541	2255	1.229	11	1	Minor Arterial	1700	40
5927	2255	541	1.229	11	1	Minor Arterial	1700	40
5928	2267	2306	0.862	10	1	Collector / Local Road	800	15
5929	2306	2267	0.862	10	1	Collector / Local Road	800	15
5930	2283	2284	1.325	11	1	Minor Arterial	1700	40
5931	2284	2283	1.325	11	1	Minor Arterial	1700	40
5932	1566	2309	0.44	10	1	Collector / Local Road	800	15
5933	2309	1566	0.44	10	1	Collector / Local Road	800	15
5934	2185	2204	1.185	11	1	Minor Arterial	1700	40
5935	2204	2185	1.185	11	1	Minor Arterial	1700	40
5936	543	2265	0.91	11	1	Minor Arterial	1700	40
5937	2265	543	0.91	11	1	Minor Arterial	1700	40
5938	2257	2338	0.421	10	1	Collector / Local Road	800	15
5939	2338	2257	0.421	10	1	Collector / Local Road	800	15
5940	2157	2175	1.592	11	1	Major Arterial	1250	45
5941	2175	2157	1.592	11	1	Major Arterial	1250	45
5942	1613	2165	3.246	11	1	Principal Arterial	1600	45
5943	2165	1613	3.246	11	1	Principal Arterial	1600	45
5944	2201	2353	0.685	10	1	Collector / Local Road	800	15
5945	2353	2201	0.685	10	1	Collector / Local Road	800	15
5946	2175	2219	2.585	11	1	Minor Arterial	1250	40
5947	2219	2175	2.585	11	1	Minor Arterial	1250	40
5948	1309	2136	3.336	12	2	Freeway	4100	55
5949	2214	2327	0.758	12	2	Freeway	4100	55
5950	2655	1389	1.927	11	2	Principal Arterial	3700	55
5951	1388	2513	1.941	11	2	Principal Arterial	3700	50

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
5952	2669	2675	0.502	11	1	Principal Arterial	1600	40
5953	2675	2669	0.502	11	1	Principal Arterial	1600	40
5954	2399	2563	2.145	11	1	Principal Arterial	1600	45
5955	2563	2399	2.145	11	1	Principal Arterial	1600	45
5956	2435	2436	1.54	11	1	Principal Arterial	1600	55
5957	2436	2435	1.54	11	1	Principal Arterial	1600	55
5958	2444	2445	0.608	11	1	Major Arterial	1700	45
5959	2445	2444	0.608	11	1	Major Arterial	1700	45
5960	2459	2457	1.639	11	2	Major Arterial	3600	50
5961	2443	2492	0.448	10	1	Collector / Local Road	800	15
5962	2492	2443	0.448	10	1	Collector / Local Road	800	15
5963	2444	2551	0.291	11	1	Major Arterial	1700	45
5964	2551	2444	0.291	11	1	Major Arterial	1700	45
5965	2664	2764	1.632	10	1	Collector / Local Road	800	15
5966	2764	2664	1.632	10	1	Collector / Local Road	800	15
5967	2419	2495	1.571	11	1	Collector / Local Road	1700	40
5968	2495	2419	1.571	11	1	Collector / Local Road	1700	40
5969	1297	2451	1.385	11	1	Principal Arterial	1700	45
5970	2451	1297	1.385	11	1	Principal Arterial	1700	45
5971	2415	2416	1.149	11	1	Major Arterial	1250	45
5972	2416	2415	1.149	11	1	Major Arterial	1250	45
5973	1429	913	1.028	12	2	Freeway	4100	60
5974	2418	2551	1.098	11	1	Major Arterial	1250	45
5975	2551	2418	1.098	11	1	Major Arterial	1250	45
5976	2377	2378	0.894	12	1	Major Arterial	1700	35
5977	2378	2377	0.894	12	1	Major Arterial	1700	35
5978	1783	1787	1.086	12	1	Principal Arterial	1700	35
5979	1787	1783	1.086	12	1	Principal Arterial	1700	35
5980	2682	426	3.005	12	2	Freeway	4100	65
5981	2686	2689	1.305	12	2	Freeway	4100	65
5982	2357	1295	13.256	12	2	Freeway	4100	60
5983	1560	1990	13.576	12	2	Freeway	4100	60
5984	2209	2218	0.949	11	1	Minor Arterial	1700	40
5985	2218	2209	0.949	11	1	Minor Arterial	1700	40
5986	2227	2354	2.009	12	2	Freeway	4100	55
5987	2441	2661	1.02	11	1	Principal Arterial	1700	45
5988	2661	2441	1.02	11	1	Principal Arterial	1700	45
5989	1311	1317	1.121	11	1	Major Arterial	1700	45
5990	1317	1311	1.121	11	1	Major Arterial	1700	45
5991	1976	2767	0.316	11	2	Major Arterial	3200	45
5992	2767	1976	0.316	11	2	Major Arterial	3200	45
5993	1805	2767	0.607	11	2	Major Arterial	3200	45
5994	2767	1805	0.607	11	2	Major Arterial	3200	45
5995	1971	2768	1.6	11	2	Major Arterial	3600	50
5996	2768	1971	1.6	11	2	Major Arterial	3600	50
5997	1805	2768	0.581	11	2	Major Arterial	3600	50
5998	2768	1805	0.581	11	2	Major Arterial	3600	50
5999	2767	2768	1.669	12	1	Minor Arterial	1800	30
6000	2768	2767	1.669	12	1	Minor Arterial	1800	30
6001	1777	1910	0.81	11	1	Minor Arterial	1250	40
6002	1910	1777	0.81	11	1	Minor Arterial	1250	40
6003	1768	1780	2.802	12	1	Principal Arterial	1600	35
6004	1780	1768	2.802	12	1	Principal Arterial	1600	35
6005	1798	1802	0.699	11	1	Collector / Local Road	1700	40
6006	1802	1798	0.699	11	1	Collector / Local Road	1700	40
6007	1672	2752	2.439	10	1	Collector / Local Road	800	15
6008	2752	1672	2.439	10	1	Collector / Local Road	800	15
6009	1665	1670	2.833	11	1	Minor Arterial	1700	40
6010	1670	1665	2.833	11	1	Minor Arterial	1700	40
6011	1663	1668	0.855	10	1	Collector / Local Road	800	15
6012	1668	1663	0.855	10	1	Collector / Local Road	800	15
6013	1673	1682	0.921	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
6014	1682	1673	0.921	11	1	Minor Arterial	1700	40
6015	2431	2769	0.101	11	1	Major Arterial	1250	40
6016	2769	2431	0.101	11	1	Major Arterial	1250	40
6017	2589	2769	0.362	11	1	Major Arterial	1250	40
6018	2769	2589	0.362	11	1	Major Arterial	1250	40
6019	2509	2769	3.339	11	1	Collector / Local Road	800	45
6020	2769	2509	3.339	11	1	Collector / Local Road	800	45
6021	1705	2606	4.809	11	1	Major Arterial	1250	45
6022	2606	1705	4.809	11	1	Major Arterial	1250	45
6023	2508	2513	0.727	10	1	Collector / Local Road	800	15
6024	2513	2508	0.727	10	1	Collector / Local Road	800	15
6025	2413	2589	2.876	11	1	Major Arterial	1250	45
6026	2589	2413	2.876	11	1	Major Arterial	1250	45
6027	608	639	2.844	11	1	Major Arterial	1250	45
6028	639	608	2.844	11	1	Major Arterial	1250	45
6029	632	2743	2.024	10	1	Collector / Local Road	800	15
6030	2743	632	2.024	10	1	Collector / Local Road	800	15
6031	619	643	6.076	11	1	Minor Arterial	1700	40
6032	643	619	6.076	11	1	Minor Arterial	1700	40
6033	637	659	3.048	10	1	Collector / Local Road	800	15
6034	659	637	3.048	10	1	Collector / Local Road	800	15
6035	657	690	1.213	11	1	Collector / Local Road	1250	40
6036	690	657	1.213	11	1	Collector / Local Road	1250	40
6037	1701	2742	1.374	10	1	Collector / Local Road	800	15
6038	2742	1701	1.374	10	1	Collector / Local Road	800	15
6039	658	690	1.458	11	1	Minor Arterial	1250	40
6040	690	658	1.458	11	1	Minor Arterial	1250	40
6041	675	705	1.343	11	1	Principal Arterial	1700	45
6042	705	675	1.343	11	1	Principal Arterial	1700	45
6043	1540	1686	0.783	11	1	Minor Arterial	1250	40
6044	1686	1540	0.783	11	1	Minor Arterial	1250	40
6045	1712	1719	1.16	11	1	Principal Arterial	1600	40
6046	1719	1712	1.16	11	1	Principal Arterial	1600	40
6047	1700	1953	0.91	10	1	Collector / Local Road	800	15
6048	1953	1700	0.91	10	1	Collector / Local Road	800	15
6049	2195	2251	3.715	11	1	Minor Arterial	1250	40
6050	2251	2195	3.715	11	1	Minor Arterial	1250	40
6051	2258	2272	1.671	11	1	Collector / Local Road	1700	40
6052	2272	2258	1.671	11	1	Collector / Local Road	1700	40
6053	2264	2269	2.534	11	1	Minor Arterial	1700	40
6054	2269	2264	2.534	11	1	Minor Arterial	1700	40
6055	2455	2456	2.031	11	1	Major Arterial	1700	45
6056	2456	2455	2.031	11	1	Major Arterial	1700	45
6057	2393	2449	2.803	11	1	Minor Arterial	1700	40
6058	2449	2393	2.803	11	1	Minor Arterial	1700	40
6059	1455	2611	2.447	10	1	Collector / Local Road	800	15
6060	2611	1455	2.447	10	1	Collector / Local Road	800	15
6061	2658	2659	0.506	10	1	Collector / Local Road	800	15
6062	2659	2658	0.506	10	1	Collector / Local Road	800	15
6063	683	695	1.018	11	1	Collector / Local Road	1700	40
6064	695	683	1.018	11	1	Collector / Local Road	1700	40
6065	720	744	2.278	11	1	Collector / Local Road	1250	40
6066	744	720	2.278	11	1	Collector / Local Road	1250	40
6067	728	735	2.702	10	1	Collector / Local Road	800	15
6068	735	728	2.702	10	1	Collector / Local Road	800	15
6069	711	737	5.219	11	1	Collector / Local Road	1700	40
6070	737	711	5.219	11	1	Collector / Local Road	1700	40
6071	910	929	0.734	11	1	Major Arterial	1700	40
6072	929	910	0.734	11	1	Major Arterial	1700	40
6073	983	955	0.898	11	2	Principal Arterial	3300	45
6074	873	1454	3.727	10	1	Collector / Local Road	800	15
6075	1454	873	3.727	10	1	Collector / Local Road	800	15

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
6076	684	2770	1.182	10	1	Collector / Local Road	1200	30
6077	2770	684	1.182	10	1	Collector / Local Road	1200	30
6078	571	587	1.191	10	1	Collector / Local Road	800	15
6079	587	571	1.191	10	1	Collector / Local Road	800	15
6080	627	628	0.139	11	1	Major Arterial	1700	45
6081	628	627	0.139	11	1	Major Arterial	1700	45
6082	670	677	1.217	12	1	Major Arterial	1700	35
6083	677	670	1.217	12	1	Major Arterial	1700	35
6084	642	660	1.263	11	1	Major Arterial	1700	40
6085	660	642	1.263	11	1	Major Arterial	1700	40
6086	653	661	1.136	10	1	Collector / Local Road	800	15
6087	661	653	1.136	10	1	Collector / Local Road	800	15
6088	726	740	1.481	11	1	Minor Arterial	1700	45
6089	740	726	1.481	11	1	Minor Arterial	1700	45
6090	741	742	2.468	10	1	Collector / Local Road	800	15
6091	742	741	2.468	10	1	Collector / Local Road	800	15
6092	2248	2251	3.16	10	1	Collector / Local Road	800	15
6093	2251	2248	3.16	10	1	Collector / Local Road	800	15
6094	2224	2336	3.777	11	1	Minor Arterial	1700	40
6095	2336	2224	3.777	11	1	Minor Arterial	1700	40
6096	633	656	1.48	11	1	Collector / Local Road	1700	40
6097	656	633	1.48	11	1	Collector / Local Road	1700	40
6098	652	659	1.09	11	1	Minor Arterial	1700	40
6099	659	652	1.09	11	1	Minor Arterial	1700	40
6100	676	687	0.78	11	1	Collector / Local Road	1700	40
6101	687	676	0.78	11	1	Collector / Local Road	1700	40
6102	589	600	1.696	11	1	Major Arterial	1700	45
6103	600	589	1.696	11	1	Major Arterial	1700	45
6104	2233	2247	1.32	10	1	Collector / Local Road	800	15
6105	2247	2233	1.32	10	1	Collector / Local Road	800	15
6106	2177	2191	3.174	11	1	Minor Arterial	1250	45
6107	2191	2177	3.174	11	1	Minor Arterial	1250	45
6108	2182	2329	1.112	10	1	Collector / Local Road	800	15
6109	2329	2182	1.112	10	1	Collector / Local Road	800	15
6110	2167	2319	1.055	10	1	Collector / Local Road	800	15
6111	2319	2167	1.055	10	1	Collector / Local Road	800	15
6112	2144	2194	1.887	11	1	Major Arterial	1700	45
6113	2194	2144	1.887	11	1	Major Arterial	1700	45
6114	2195	2221	2.152	11	1	Major Arterial	1250	45
6115	2221	2195	2.152	11	1	Major Arterial	1250	45
6116	2036	2105	3.098	11	1	Minor Arterial	1250	40
6117	2105	2036	3.098	11	1	Minor Arterial	1250	40
6118	2095	2097	0.22	11	1	Major Arterial	1700	45
6119	2097	2095	0.22	11	1	Major Arterial	1700	45
6120	2035	2105	3.163	11	1	Minor Arterial	1250	40
6121	2105	2035	3.163	11	1	Minor Arterial	1250	40
6122	2155	2191	2.144	11	1	Minor Arterial	1250	40
6123	2191	2155	2.144	11	1	Minor Arterial	1250	40
6124	2173	2328	1.499	10	1	Collector / Local Road	800	15
6125	2328	2173	1.499	10	1	Collector / Local Road	800	15
6126	2220	2304	0.738	11	1	Major Arterial	1700	45
6127	2304	2220	0.738	11	1	Major Arterial	1700	45
6128	2223	2235	3.316	10	1	Collector / Local Road	800	15
6129	2235	2223	3.316	10	1	Collector / Local Road	800	15
6130	2534	2629	4.807	11	1	Minor Arterial	1250	40
6131	2629	2534	4.807	11	1	Minor Arterial	1250	40
6132	2269	2270	0.81	10	1	Collector / Local Road	800	31
6133	2270	2269	0.81	10	1	Collector / Local Road	800	31
6134	604	606	0.576	11	1	Collector / Local Road	1700	40
6135	606	604	0.576	11	1	Collector / Local Road	1700	40
6136	1952	1977	0.658	11	1	Minor Arterial	1700	40
6137	1977	1952	0.658	11	1	Minor Arterial	1700	40

Link #	U-Node	D-Node	Length (mi)	Lane Width (ft)	Number of Lanes	Roadway Type	Saturation Flow Rate (veh/hr)	FFS (mph)
6138	2208	2211	1.283	10	1	Collector / Local Road	800	15
6139	2211	2208	1.283	10	1	Collector / Local Road	800	15
6140	2241	2261	3.087	11	1	Minor Arterial	1250	40
6141	2261	2241	3.087	11	1	Minor Arterial	1250	40
6142	2207	2213	0.909	10	1	Collector / Local Road	800	15
6143	2213	2207	0.909	10	1	Collector / Local Road	800	15
6144	542	2225	3.497	11	1	Minor Arterial	1250	40
6145	2225	542	3.497	11	1	Minor Arterial	1250	40

Note: Coordinates in NAD83 State Plane Pennsylvania South

Node #	X-Coord	Y-Coord	Control Type
197	2639432.8	342708.8	Diverge - Uncontrolled
199	2640378.5	341790.77	Signalized - Flashing
200	2641289.5	341136.02	Signalized - Flashing
224	2633458.3	329226.4	Signalized - Flashing
225	2635167.9	328405.3	Two-way stop
235	2639790	325301.7	Signalized - Flashing
255	2635519.5	317471.2	Signalized - Flashing
361	2657365.5	295805	Diverge - Uncontrolled
367	2661885.7	294176.09	Diverge - Uncontrolled
371	2660077.9	293650.4	Diverge - Uncontrolled
372	2661300.1	293976.2	Two-way yield
396	2653578.6	288339.63	Two-way yield
398	2655067.1	288184.27	Two-way yield
399	2655143	288383.18	Signalized - Flashing
400	2653809.3	288201.85	Diverge - Uncontrolled
404	2654296.3	287839.78	Two-way yield
405	2654065.6	288009.6	Diverge - Uncontrolled
408	2654911.5	287420.04	Signalized - Flashing
409	2657631.3	286779.87	Signalized - Flashing
421	2650884.9	277472.85	Two-way yield
422	2651061.3	277456.05	Diverge - Uncontrolled
424	2650980.4	277337.41	Signalized - Flashing
433	2649307.3	276646.33	Signalized - Flashing
434	2649849.6	276774.22	Diverge - Uncontrolled
437	2646950.1	276016.6	Signalized - Flashing
439	2646237.7	275485.12	Two-way yield
440	2647631	275482.63	Diverge - Uncontrolled
442	2646742	273868.51	Two-way yield
493	2660745.4	293993.7	Diverge - Uncontrolled
494	2659820.8	294547.33	Two-way yield
495	2659018	293413.5	Two-way yield
496	2659704.2	294813.6	Diverge - Uncontrolled
497	2659853.9	293578.72	Two-way yield
498	2659657.1	293387.11	Diverge - Uncontrolled
499	2659536.4	293504.1	Two-way yield
500	2658423.2	292535.88	Diverge - Uncontrolled
501	2657457.7	292400.2	Two-way yield
503	2657616.9	292400.8	Diverge - Uncontrolled
504	2658687.9	292324.84	Two-way yield
505	2656836	292313.6	Diverge - Uncontrolled
506	2657326.2	292920.58	Two-way yield
507	2656644.1	292286	Two-way yield

Node #	X-Coord	Y-Coord	Control Type
508	2655139.7	292307.33	Diverge - Uncontrolled
512	2654959.2	288354.7	Diverge - Uncontrolled
513	2654866.7	288567.1	Diverge - Uncontrolled
514	2654379.3	288284	Diverge - Uncontrolled
515	2654059.2	288272.34	Two-way yield
516	2652928.2	287275.85	Two-way yield
517	2653426.6	287612.5	Two-way yield
518	2652723.1	286824.07	Diverge - Uncontrolled
520	2648236.3	277030.07	Two-way yield
521	2648073.6	277495.98	Two-way yield
523	2649299.7	276533.77	Diverge - Uncontrolled
524	2648134.6	275344.06	Diverge - Uncontrolled
525	2649171.4	276044.13	Two-way yield
527	2648590.7	276098.63	Two-way yield
528	2648240	276350.86	Diverge - Uncontrolled
529	2647435.7	276119.6	Diverge - Uncontrolled
530	2647312.9	275210.46	Two-way yield
531	2645945.3	275432.68	Signalized - Flashing
532	2647611.4	274490.08	Diverge - Uncontrolled
533	2647275.2	274362.31	Two-way yield
541	2562518.3	341079.91	Two-way stop
542	2586942.1	340726.88	Signalized - Actuated
543	2562034.5	340442.44	All-way stop
544	2609894.5	339465	Signalized - Flashing
545	2569442.7	339413.32	Signalized - Actuated
548	2575940.5	339151.5	Signalized - Actuated
549	2576253	339135.05	Diverge - Uncontrolled
554	2588371.5	338958.2	Two-way stop
555	2564826.8	338963.83	Signalized - Actuated
559	2608762.6	338750.5	Two-way stop
561	2575934.3	338611.9	Signalized - Actuated
563	2574421.3	338469.28	Two-way yield
564	2575580.9	338392.89	Signalized - Flashing
565	2584453.2	338196.7	Two-way stop
566	2575155	338049.8	Signalized - Flashing
567	2576466.6	337859.9	Diverge - Uncontrolled
569	2576717.5	337574.86	Two-way yield
571	2586244.7	336922.73	Signalized - Flashing
575	2563964.6	335683.92	Two-way yield
576	2563259.2	335533.2	Diverge - Uncontrolled
577	2563377.5	335492.48	Two-way yield
578	2564153.7	335461.31	Diverge - Uncontrolled
579	2564403.1	335598.55	Diverge - Uncontrolled
580	2563919.4	335444.57	Signalized - Actuated

Node #	X-Coord	Y-Coord	Control Type
581	2563497.5	335459.1	Two-way stop
582	2563348	335408.24	Two-way yield
583	2563406.1	335205.1	Diverge - Uncontrolled
584	2589760.6	335181.23	Signalized - Flashing
585	2589030.1	335432.7	Signalized - Flashing
589	2622996.9	334811.43	Signalized - Flashing
590	2562836.6	334740.97	Two-way yield
591	2562884.1	334715.4	Diverge - Uncontrolled
592	2563357.5	334858.13	Two-way yield
594	2609668.4	333153.62	Two-way stop
595	2609736.5	333200.3	Two-way stop
596	2609753.7	333069.7	Two-way stop
597	2562249.7	332833.78	Diverge - Uncontrolled
599	2599514.7	332760.84	Signalized - Flashing
603	2562697.2	332502.7	Two-way stop
604	2562628.7	332422.91	Two-way yield
609	2584392.5	330079.42	Two-way yield
610	2583686.4	331096.44	Two-way yield
611	2584511.6	330050	Two-way yield
613	2584449.8	329950.25	Signalized - Actuated
614	2584518.6	329881.44	Diverge - Uncontrolled
615	2584124	329570.3	Diverge - Uncontrolled
616	2583738	330780.96	Diverge - Uncontrolled
617	2584212.6	329551.04	Two-way stop
618	2584148.6	329411.6	Two-way yield
619	2596888	329165.61	Signalized - Flashing
620	2584074.5	329132.43	Signalized - Actuated
622	2563142.8	329012.28	Two-way stop
623	2584833	328797.79	Diverge - Uncontrolled
624	2584946.4	328413.9	Two-way yield
625	2609898.4	327522.57	Signalized - Flashing
631	2614955.1	326879.4	Two-way stop
632	2563070.1	326438.39	All-way stop
636	2629175.9	323990.9	All-way stop
639	2573494.8	323125.27	Signalized - Actuated
642	2605057.4	322703.42	Signalized - Flashing
643	2590358.9	322216.78	Two-way yield
644	2590008.5	322165.59	Two-way yield
645	2589269.3	322368.33	Two-way yield
646	2590179.1	322022.54	Signalized - Flashing
647	2590392.4	321834.5	Diverge - Uncontrolled
648	2589773.6	321749.56	Diverge - Uncontrolled
649	2589135.9	322336.21	Diverge - Uncontrolled
650	2589868.1	321668.45	Signalized - Actuated

Node #	X-Coord	Y-Coord	Control Type
651	2589957.3	321579.21	Two-way yield
652	2589758.9	321541.41	Two-way yield
654	2590685.7	321114.35	Two-way yield
655	2590801.2	321102.54	Diverge - Uncontrolled
659	2588065.6	320236.79	Signalized - Flashing
663	2610858.6	318677.9	Signalized - Flashing
666	2611303.6	318501.64	Signalized - Actuated
671	2612187.4	318257.57	Signalized - Flashing
676	2585293.3	317339.29	Two-way stop
677	2618725.2	317197.7	Two-way stop
679	2578132.9	316875.3	Two-way stop
682	2582987.5	316737.81	Two-way stop
683	2583553.5	316563.29	Signalized - Flashing
684	2613913.9	316590.1	Two-way stop
685	2573128.5	316256.4	Two-way stop
687	2586239.3	315827.1	Two-way stop
688	2622055	315587.3	Two-way stop
690	2566768.9	315496.4	Two-way stop
694	2566035.3	315077.8	Two-way stop
699	2580651.1	314133.62	Signalized - Actuated
700	2564041.4	313877.06	Two-way stop
701	2562625.5	314041.34	Two-way stop
703	2597728.9	312267.43	Signalized - Actuated
708	2619531.8	312027.85	Two-way stop
709	2567848.8	311652.8	Two-way stop
711	2604389.1	311362.87	Signalized - Actuated
713	2569223.7	310753.5	Two-way stop
714	2630877	310671.56	Signalized - Flashing
715	2601373.5	310490.81	Diverge - Uncontrolled
716	2603225.5	310210.44	Two-way yield
717	2602771.1	310124.5	Two-way yield
718	2601677.9	310439.54	Two-way yield
719	2603045.7	309962.38	Signalized - Actuated
720	2570471.5	309909.3	Two-way stop
721	2570803.7	309819	Two-way stop
722	2603243.8	309794.1	Diverge - Uncontrolled
724	2622932.7	309696.71	Signalized - Flashing
725	2593324.7	309628.84	Two-way stop
727	2602238.8	309367.95	Diverge - Uncontrolled
729	2602616.2	309380.25	Diverge - Uncontrolled
730	2602275.7	309376.15	Two-way yield
731	2604053	309206.2	Diverge - Uncontrolled
732	2602489.6	309200.05	Signalized - Flashing
733	2602355.7	309029.59	Two-way yield

Node #	X-Coord	Y-Coord	Control Type
735	2619930.7	307498.56	Two-way stop
736	2576182.6	307542.4	Two-way yield
737	2617532.5	305549.07	Signalized - Actuated
738	2563879.5	305380.4	All-way stop
740	2626714.5	305123.7	Signalized - Flashing
742	2623286	303745.91	Two-way stop
743	2628274.4	303491.26	Signalized - Flashing
744	2567708.5	303295.85	Two-way stop
746	2583882.5	302943.85	Two-way stop
747	2583800.4	302880.28	Two-way stop
748	2583907.1	302773.65	Two-way stop
749	2617379.7	301770.65	Two-way stop
750	2596770.2	301507.64	Two-way stop
752	2604398.7	301103.5	Two-way stop
759	2618240.2	300239.53	Two-way stop
760	2612572.4	300176.5	Signalized - Actuated
761	2612046.2	301387.16	Two-way yield
763	2631571	300090.6	Signalized - Flashing
764	2611707.6	300030.93	Signalized - Actuated
765	2612094.6	300139.59	Two-way yield
766	2613636	299947.6	Two-way stop
769	2611788.8	299782.6	Diverge - Uncontrolled
770	2594090.7	299724.16	Signalized - Actuated
772	2612262.7	299844.3	Diverge - Uncontrolled
773	2592385.8	299438.86	Signalized - Actuated
774	2572026.8	299354.2	Two-way stop
776	2625128.3	299256.61	Signalized - Actuated
778	2612046.9	298981.48	Diverge - Uncontrolled
779	2587808.6	298730.09	Signalized - Flashing
782	2611495.8	298228.51	Two-way yield
783	2616729.6	298111.08	Signalized - Flashing
785	2589779	297870.61	Two-way yield
786	2590065.1	297761.4	Diverge - Uncontrolled
787	2590146.8	297741.4	Diverge - Uncontrolled
788	2589988.2	297727.02	Signalized - Actuated
789	2584091.5	297776.04	Signalized - Flashing
791	2590054.6	297678.16	Diverge - Uncontrolled
795	2615817.6	296904.61	Two-way stop
798	2593097.2	296332.5	Diverge - Uncontrolled
799	2593031.7	296301.86	Two-way yield
800	2593122	296264.23	Signalized - Actuated
801	2563045.7	296238.29	Two-way stop
802	2577609.9	296159.92	Signalized - Flashing
804	2594075.6	295800.1	Diverge - Uncontrolled

Node #	X-Coord	Y-Coord	Control Type
805	2594143.4	295773.93	Signalized - Actuated
806	2594094.8	295705.68	Two-way yield
808	2587006.2	295456.05	Diverge - Uncontrolled
809	2587120.6	295371.01	Signalized - Actuated
810	2587038.7	295277.56	Two-way yield
811	2586601.9	294755.5	Two-way stop
817	2601252.5	293773.65	Signalized - Actuated
818	2604715.2	293560.66	All-way stop
830	2591529.9	292186.39	Signalized - Actuated
832	2584482.7	292122.7	Two-way stop
833	2602884.6	291892.69	Signalized - Actuated
836	2594420.1	290819.37	Signalized - Flashing
839	2594360.7	290339.02	Signalized - Flashing
843	2620213.8	289361.33	Diverge - Uncontrolled
845	2620261.8	289367.9	Two-way yield
846	2568573.4	288756.74	Two-way stop
847	2621568.8	288731.8	Diverge - Uncontrolled
848	2621258.9	288623.1	Diverge - Uncontrolled
849	2621260.5	288585.36	Two-way yield
850	2620546.9	288523.02	Diverge - Uncontrolled
851	2620793	288441	Two-way yield
852	2620801.4	288395.52	Diverge - Uncontrolled
857	2620670.1	288208.64	Two-way yield
858	2608584.7	287570.7	Signalized - Flashing
860	2620734.5	287321.5	Two-way yield
862	2620837	287067.22	Diverge - Uncontrolled
867	2621080.5	286044.09	Signalized - Flashing
868	2620841.8	285943.03	Diverge - Uncontrolled
869	2599144.6	281359.45	Two-way stop
871	2621470.7	284730.75	Two-way yield
872	2622105	284459.68	Diverge - Uncontrolled
873	2576034.8	283928.16	Two-way stop
875	2624455.6	283898.32	Two-way yield
877	2625814.3	283115.02	Two-way yield
878	2624856.8	283156.1	Two-way yield
879	2625384.2	283321.17	Diverge - Uncontrolled
880	2625482.5	282986.8	Two-way yield
881	2625827.2	283057.2	Two-way yield
882	2610301	282944.62	All-way stop
884	2625256.2	282898.07	Two-way yield
889	2625724.4	282730.8	Diverge - Uncontrolled
895	2627326.7	282222.51	Diverge - Uncontrolled
896	2626822.2	282509.05	Two-way yield
897	2627117.5	282246.8	Two-way yield

Node #	X-Coord	Y-Coord	Control Type
898	2626630.6	282548.26	Diverge - Uncontrolled
899	2627155.3	281985.69	Diverge - Uncontrolled
900	2623355.2	281801.14	Two-way yield
901	2627792.6	281847.43	Diverge - Uncontrolled
902	2627280.7	281886.8	Two-way yield
905	2599008.7	281336.38	Two-way stop
907	2599083	281169.77	Two-way stop
908	2622887.2	279831	Two-way yield
909	2623498.8	281427.92	Diverge - Uncontrolled
911	2624399.8	280749.8	Diverge - Uncontrolled
912	2584900.2	280098.84	Two-way stop
913	2622884	279722.06	Diverge - Uncontrolled
915	2603992.9	279618.62	Two-way stop
917	2599190.7	278931.99	Two-way stop
918	2587137.1	278814.53	Signalized - Flashing
922	2587436.5	278677.14	Signalized - Flashing
923	2587947.4	277801.31	Signalized - Flashing
978	2590436.5	270044.22	Diverge - Uncontrolled
982	2593874.5	269904.37	Diverge - Uncontrolled
987	2589773.5	269753.4	Diverge - Uncontrolled
988	2589264.6	269752.76	Diverge - Uncontrolled
989	2590315.8	269697.74	Two-way yield
992	2587695.8	269550.26	Two-way yield
993	2590048.9	269475.92	Diverge - Uncontrolled
994	2591775.8	269433.36	Two-way yield
1000	2588737.7	269170.67	Diverge - Uncontrolled
1001	2591040.6	269200.36	Two-way yield
1002	2589909.6	269402.22	Diverge - Uncontrolled
1006	2592329.4	269001.7	Diverge - Uncontrolled
1007	2593235.7	269596.7	Two-way yield
1008	2591404.1	269359.67	Diverge - Uncontrolled
1011	2588812.2	269452.5	Two-way yield
1031	2591812	266974.31	Two-way yield
1032	2591720.3	266723.2	Signalized - Flashing
1033	2592026.1	266705.4	Diverge - Uncontrolled
1202	2649008.7	275883.49	Diverge - Uncontrolled
1295	2638552.7	344695.5	Diverge - Uncontrolled
1296	2560308.8	377120.3	Two-way yield
1297	2560143.3	377440.18	Diverge - Uncontrolled
1299	2560979.1	376496.48	Two-way yield
1300	2561042.7	376612.06	Two-way yield
1301	2560716	376302.8	Diverge - Uncontrolled
1302	2560961.8	376635.18	Diverge - Uncontrolled
1303	2560702.1	376029.32	Two-way yield

Node #	X-Coord	Y-Coord	Control Type
1304	2560596.6	376064	Diverge - Uncontrolled
1305	2560511.4	376550.88	Diverge - Uncontrolled
1306	2560602.4	375860.29	Diverge - Uncontrolled
1307	2560664.6	375962.86	Diverge - Uncontrolled
1308	2560537.4	375750.48	Two-way yield
1309	2561121.1	375366.18	Two-way yield
1310	2560742.6	375851.62	Diverge - Uncontrolled
1311	2557394.8	371438.6	Signalized - Actuated
1317	2553028.4	367654	Two-way stop
1364	2639699.2	343498.9	Two-way yield
1414	2535605	341866.67	Diverge - Uncontrolled
1452	2657939.3	292781.6	Diverge - Uncontrolled
1455	2601513	317795.99	Signalized - Actuated
1456	2601414.2	307724.56	Signalized - Flashing
1457	2601511.9	307879.95	Diverge - Uncontrolled
1458	2601374.3	307878.9	Two-way yield
1487	2639229.6	343083.54	Two-way yield
1498	2603096.1	309635.53	Two-way yield
1503	2656717.6	290951.27	Two-way yield
1506	2656503.3	292733.46	Two-way yield
1507	2657788.8	293092.53	Diverge - Uncontrolled
1509	2648031.6	277136.38	Diverge - Uncontrolled
1510	2650192.4	276391.73	Diverge - Uncontrolled
1511	2649855.9	276240.54	Two-way yield
1512	2651557.8	276755.76	Diverge - Uncontrolled
1513	2651213.3	276628.62	Two-way yield
1516	2647703.6	275753.3	Two-way yield
1517	2648034.2	275617.02	Two-way yield
1521	2624410.2	285300.77	Two-way yield
1522	2625061.8	285544.9	Diverge - Uncontrolled
1523	2628605.9	282486.64	Diverge - Uncontrolled
1524	2628022.3	282155.85	Diverge - Uncontrolled
1525	2628519.4	282357.1	Two-way yield
1526	2628216.1	282298.1	Diverge - Uncontrolled
1532	2624027.5	284236.67	Diverge - Uncontrolled
1533	2623143.2	284885.19	Two-way yield
1540	2561773.9	327119.01	Two-way yield
1541	2558302	294347.4	Two-way yield
1542	2561943.9	327393.61	Two-way stop
1545	2561308.7	334237.44	Two-way yield
1551	2528527	345209.03	Signalized - Flashing
1552	2528461.4	345409.99	Signalized - Flashing
1554	2563402.8	335332.8	Diverge - Uncontrolled
1555	2563444	335472.3	Two-way stop

Node #	X-Coord	Y-Coord	Control Type
1556	2539630.4	287583.95	Two-way stop
1558	2638612.4	343738.6	Diverge - Uncontrolled
1559	2639672.1	343544.05	Diverge - Uncontrolled
1560	2638805.2	344169.36	Two-way yield
1561	2607335.8	342631.56	Signalized - Flashing
1563	2551713.5	339389.3	Two-way yield
1564	2558848.4	336236.3	Two-way stop
1565	2559184.3	336674.2	Two-way stop
1566	2556585	337117.1	Two-way stop
1575	2554607.8	291312.75	Two-way stop
1591	2552237.4	336873.4	Diverge - Uncontrolled
1592	2552241.5	337142.38	Two-way yield
1593	2554178.7	336259.7	Diverge - Uncontrolled
1594	2554234.8	336665.36	Two-way stop
1595	2558807.5	334537.04	Two-way stop
1596	2558930.9	334861.33	Two-way stop
1597	2558167.2	334907.36	Diverge - Uncontrolled
1598	2560135.3	334391.42	Two-way yield
1599	2558219.6	334972.22	Two-way yield
1600	2560888.5	333962.94	Diverge - Uncontrolled
1601	2560522	334475.11	Diverge - Uncontrolled
1609	2549287.8	278221.2	Two-way stop
1612	2546334.1	296177.8	Two-way stop
1614	2540945.8	324604.73	Two-way stop
1616	2604005.6	289960.7	Two-way stop
1618	2551700.9	333401	Diverge - Uncontrolled
1619	2551811.1	334341.7	Two-way yield
1620	2551676.5	332950.2	Signalized - Actuated
1621	2552027.5	334764.31	Signalized - Flashing
1622	2552271.9	334785.34	Diverge - Uncontrolled
1625	2547965.7	275282.3	Signalized - Flashing
1626	2537393.9	279445.6	Two-way stop
1634	2554324.5	337758.94	Signalized - Actuated
1637	2552216.8	337320.8	Two-way yield
1638	2551631	337234.2	Two-way yield
1639	2551955.3	337124.14	Diverge - Uncontrolled
1640	2552482.5	336948.39	Two-way yield
1641	2552877.8	336830.1	Diverge - Uncontrolled
1642	2552978	336723.1	Two-way yield
1643	2552420.9	336879.94	Diverge - Uncontrolled
1644	2552063.4	336995.09	Two-way yield
1645	2552225.4	336692.47	Two-way yield
1646	2553914.7	336516.82	Two-way yield
1647	2555105.1	336255.29	Diverge - Uncontrolled

Node #	X-Coord	Y-Coord	Control Type
1648	2552178.6	336337.64	Two-way yield
1649	2551703.6	337119.2	Diverge - Uncontrolled
1650	2553964.2	336179.07	Two-way yield
1651	2554134.5	336120.2	Diverge - Uncontrolled
1653	2550461.1	335938.5	Two-way stop
1655	2554919.3	334823.6	Two-way stop
1656	2553662.1	334841.1	Signalized - Flashing
1657	2549644.9	334782.4	Signalized - Flashing
1658	2558759.3	334396.86	Signalized - Actuated
1659	2560599	334257.52	Diverge - Uncontrolled
1660	2560414.9	334245.81	Diverge - Uncontrolled
1662	2560886.9	333775.48	Two-way stop
1663	2549953.7	333405	Two-way stop
1664	2549844.3	333544.5	Two-way stop
1665	2553312.7	332854	Signalized - Actuated
1666	2538491.4	332850.81	Two-way stop
1667	2540962	332200.33	Two-way stop
1669	2539381.8	331050.41	Two-way stop
1672	2552773.5	329515.7	Two-way stop
1673	2552585.7	328972.16	Two-way stop
1674	2559831.8	328655.1	Two-way stop
1676	2541361.4	327782.67	Two-way stop
1677	2552161.2	327113	Two-way stop
1678	2552454.1	327574.36	Diverge - Uncontrolled
1679	2552137.6	327634.43	Diverge - Uncontrolled
1680	2552083.1	327026.93	Two-way yield
1681	2552165.1	326791.1	Diverge - Uncontrolled
1682	2550823.1	326400	Two-way stop
1683	2552132	325986.4	Diverge - Uncontrolled
1684	2550703.6	325905.2	Two-way stop
1685	2550896.3	325665.8	Two-way stop
1688	2549712.8	323717.4	Two-way stop
1690	2551588.6	320393.89	Two-way stop
1692	2549586	320714.62	Two-way stop
1693	2555863.9	319154.29	Two-way stop
1694	2555957.8	319011.8	Two-way stop
1695	2551236.6	319087.52	Two-way stop
1696	2531932.6	318808.3	Two-way stop
1697	2532172.3	318839.4	Two-way stop
1700	2547241	316783.4	Two-way stop
1701	2558629.9	315606.4	All-way stop
1702	2526512.8	316775.7	Two-way stop
1703	2560055.9	314656.8	Two-way stop
1705	2517531.7	315980.4	Two-way stop

Node #	X-Coord	Y-Coord	Control Type
1706	2558475.6	314232.7	Two-way yield
1709	2545074.1	314429.7	Two-way stop
1711	2543210.5	314630.4	Two-way stop
1712	2551757.7	313466.74	Signalized - Flashing
1713	2552078.5	315153.36	Signalized - Flashing
1716	2541268.6	312923.5	Two-way stop
1717	2543448.4	312824.9	Two-way stop
1718	2545648.5	312697.6	Two-way stop
1719	2547512.4	313072.9	Two-way stop
1721	2534047.6	312006.5	Two-way stop
1723	2550865.2	310524.6	Two-way stop
1725	2517932.8	309135.2	Two-way stop
1726	2526764.8	309085.7	Two-way yield
1728	2557532.5	308540.2	Two-way stop
1729	2520922.3	308455.1	Two-way stop
1732	2516197.9	307570	Two-way stop
1733	2537614.3	305817.4	Two-way stop
1734	2549755.8	304937.9	Two-way stop
1737	2537248.9	302267	Two-way stop
1738	2540228.1	301121.46	All-way stop
1739	2530779.2	301357.3	Two-way stop
1740	2519857.2	301074.6	Two-way stop
1741	2515362	302526.7	All-way stop
1742	2540924.7	300038.3	All-way stop
1743	2522352.6	299159.1	Two-way stop
1744	2558402.1	297529.25	Two-way stop
1745	2559015.3	297155.7	Two-way stop
1747	2544157.1	296932.2	Two-way stop
1748	2548705.7	295832.7	Two-way stop
1750	2537902.3	294305.9	Two-way stop
1751	2534649.3	294045.3	Two-way stop
1752	2543319.3	293334.33	Two-way stop
1753	2553299.8	292719.8	Two-way stop
1754	2536122	292410.1	Two-way stop
1755	2543381.9	292121.82	Two-way stop
1756	2543366.3	291707.22	Signalized - Flashing
1760	2548505.6	289232.7	Two-way stop
1761	2550941.1	288112.8	Two-way yield
1764	2541752	285234.2	Two-way stop
1765	2543365.3	284164.04	Two-way stop
1768	2544019.1	282296.12	Signalized - Actuated
1773	2557037.7	281315.9	Two-way stop
1782	2560489.3	278551.19	Signalized - Flashing
1783	2545655	277753.34	Signalized - Flashing

Node #	X-Coord	Y-Coord	Control Type
1789	2550064.3	274836.1	Diverge - Uncontrolled
1790	2552023.2	274634.5	Diverge - Uncontrolled
1791	2552765.1	274154.19	Diverge - Uncontrolled
1792	2551264	274126.3	Diverge - Uncontrolled
1793	2552599.4	274157.47	Two-way yield
1794	2551088.4	273955.69	Two-way yield
1796	2550569	273426.61	Diverge - Uncontrolled
1797	2549851.2	273503.51	Two-way yield
1799	2551469.3	271875.81	Two-way yield
1800	2550841.3	272500.62	Diverge - Uncontrolled
1805	2554267.7	270466.38	Signalized - Flashing
1908	2538402.3	289365.5	Two-way stop
1912	2551176.8	334733.04	Two-way stop
1913	2551412.1	334736.31	Two-way yield
1914	2551844.9	334564.8	Diverge - Uncontrolled
1915	2551954.8	335171.09	Diverge - Uncontrolled
1916	2552017.5	335481.68	Two-way yield
1917	2552059.4	335040.33	Two-way yield
1918	2551549.4	334742.85	Two-way yield
1919	2551198.7	334502.1	Diverge - Uncontrolled
1920	2551637.7	334425.75	Diverge - Uncontrolled
1922	2542614	316963.2	Two-way stop
1923	2541444.1	321261	Two-way stop
1928	2550107.6	272484.6	Diverge - Uncontrolled
1929	2550383.1	272965.22	Diverge - Uncontrolled
1950	2544162.3	312779.7	Two-way stop
1951	2540244.3	301039.2	All-way stop
1952	2551979.5	323566.8	Two-way stop
1954	2546020.4	302769.4	Two-way stop
1955	2546160.5	302878.5	Two-way stop
1956	2545950.3	302902.8	Two-way stop
1982	2551162.6	274585.95	Two-way yield
2047	2573479.2	389185.93	Two-way stop
2056	2575383.9	388008.72	Two-way stop
2065	2575004.7	385939.4	Two-way stop
2077	2586674.2	380516.2	Signalized - Flashing
2092	2572107.8	378001.46	Two-way stop
2095	2602998.6	375257.7	Two-way stop
2097	2603555.6	374572.91	Two-way stop
2105	2607990	376104.9	All-way stop
2112	2609245.7	370714.9	Two-way stop
2128	2579576.4	369854.7	Signalized - Flashing
2135	2561552.8	369206.87	Signalized - Actuated
2136	2561816.2	370081.06	Diverge - Uncontrolled

Node #	X-Coord	Y-Coord	Control Type
2138	2561765	369143.66	Signalized - Flashing
2139	2561863.6	370076.54	Two-way yield
2142	2611394.8	367888.5	Two-way stop
2143	2615020.5	366941.3	Two-way stop
2147	2561491.1	368175.79	Diverge - Uncontrolled
2148	2561441.5	368191.59	Two-way yield
2156	2614107.8	365372.2	Two-way stop
2164	2565140.1	366552.6	Signalized - Flashing
2165	2576317.5	366050.49	Two-way yield
2166	2576556.7	366205.3	Two-way yield
2167	2597087.6	365073.8	Two-way stop
2169	2566208	365104.41	Diverge - Uncontrolled
2170	2566054.5	365163.1	Two-way yield
2171	2566131.2	365020.6	Signalized - Actuated
2175	2585050.9	363734.5	Signalized - Flashing
2177	2619944.7	360912.4	Signalized - Flashing
2178	2558301.7	363013.69	Signalized - Flashing
2182	2630818.5	359238.1	Signalized - Flashing
2183	2561365.6	361596.8	Two-way stop
2185	2563368.1	361273.5	Two-way stop
2188	2572268.4	359359.12	Signalized - Flashing
2190	2590880.1	358367.8	Two-way stop
2191	2616520.5	357217.8	Two-way stop
2195	2591568.2	357532.2	Two-way stop
2199	2557842.9	357606.55	Signalized - Flashing
2202	2626238.2	354566.27	Signalized - Flashing
2204	2560862.1	356762.85	Two-way stop
2205	2556649.4	355801.88	Two-way yield
2206	2601406.7	354190.1	Two-way stop
2208	2558644	355373	Two-way stop
2209	2556281	355114.18	Two-way stop
2210	2568598.7	354527.9	Two-way stop
2214	2555973.2	354557.95	Two-way yield
2215	2556132.2	355439.25	Two-way stop
2218	2556933.6	353770.05	Signalized - Flashing
2219	2576793.6	352881.2	Signalized - Actuated
2220	2601756	351974.06	Two-way yield
2223	2604016.4	350070.2	Two-way stop
2224	2578094.8	351058.5	Two-way yield
2231	2622395.2	346794.2	Two-way stop
2232	2622417.1	346867.03	Two-way stop
2233	2634282	346212.67	Two-way stop
2234	2562117.6	348562.2	Two-way stop
2236	2562754.7	348074.8	Two-way yield

Node #	X-Coord	Y-Coord	Control Type
2237	2561590.9	347831.7	Two-way yield
2238	2606205.1	346060	Signalized - Flashing
2239	2606177.1	345960.8	Signalized - Flashing
2242	2566368.8	346839.4	Two-way stop
2249	2560346.3	346194.6	Signalized - Flashing
2250	2554581.3	346450.3	Signalized - Actuated
2251	2590439.1	344669.4	Two-way stop
2254	2564731.1	344624.44	Signalized - Actuated
2255	2564672.8	344556.94	Signalized - Flashing
2256	2606702.7	343102.06	Signalized - Flashing
2257	2568662.6	344351.7	Two-way stop
2258	2557106.2	344528.4	Signalized - Flashing
2261	2589550	343058.2	Two-way stop
2262	2558180.3	343847	Signalized - Flashing
2264	2546704.7	343673.7	Two-way stop
2266	2548464.4	342690.9	Two-way stop
2267	2556569.9	342314.8	Two-way stop
2271	2549263.8	340997.3	Two-way stop
2273	2549355.1	340621.3	Signalized - Actuated
2274	2551620	340405.85	Two-way yield
2275	2551468.5	340448.1	Signalized - Flashing
2276	2551499.8	340299.4	Diverge - Uncontrolled
2277	2551518.8	340204.8	Diverge - Uncontrolled
2278	2553193.1	339902.3	Signalized - Flashing
2279	2554596.3	339694.63	Signalized - Flashing
2280	2555381.2	339593.5	Signalized - Actuated
2281	2553099	339534.71	Signalized - Actuated
2282	2554544	339323.26	Signalized - Flashing
2283	2555333.8	339216.04	Signalized - Actuated
2284	2560882.4	338940.57	Signalized - Actuated
2285	2546457	339484.7	Signalized - Actuated
2286	2544006	339283.78	Signalized - Flashing
2287	2554398.5	338307.34	Signalized - Actuated
2288	2542867.3	337262.58	Diverge - Uncontrolled
2290	2542599.3	337177.93	Two-way yield
2291	2559367.3	335985.32	Two-way stop
2292	2543863.2	336453.29	Two-way yield
2293	2544838.4	336263.67	Diverge - Uncontrolled
2294	2543917.3	336153.06	Two-way yield
2295	2543343.9	336451.04	Diverge - Uncontrolled
2296	2543593.5	335959.4	Diverge - Uncontrolled
2301	2559907.4	351562.5	Two-way stop
2309	2557400.3	337586.4	Two-way stop
2318	2597038.8	365021.5	Two-way stop

Node #	X-Coord	Y-Coord	Control Type
2321	2551177.4	340145.54	Two-way yield
2322	2550316.7	340402.32	Diverge - Uncontrolled
2324	2558255.5	363035.36	Signalized - Flashing
2325	2556577.3	355804.8	Diverge - Uncontrolled
2326	2557798.5	357613.95	Signalized - Flashing
2336	2571779.4	342671.08	Two-way stop
2351	2592993.8	376565	Two-way stop
2354	2556010.8	354331.13	Diverge - Uncontrolled
2399	2568814.1	393039.4	Signalized - Flashing
2413	2537289.5	338910.6	Two-way yield
2418	2524801.3	366912.4	Signalized - Flashing
2441	2552338.5	372630.1	Two-way yield
2443	2558056.4	370813.2	Signalized - Actuated
2444	2531830.3	364922.6	Two-way stop
2448	2548219.5	365423.2	Two-way stop
2449	2560138.9	375184.19	Two-way stop
2453	2530014.3	358693.9	Signalized - Actuated
2457	2533080.7	342610.7	Two-way stop
2458	2533249.8	343366.22	Signalized - Flashing
2461	2536910.8	341525.3	Two-way yield
2504	2529172	349484.8	Two-way stop
2513	2525993.1	345666.7	Signalized - Flashing
2576	2534852.1	342033.28	Diverge - Uncontrolled
2612	2604033.3	332302	Two-way stop
2617	2626595.6	281815.97	Two-way yield
2618	2624718.2	281097.1	Diverge - Uncontrolled
2619	2623945	281229.5	Signalized - Flashing
2624	2624443.5	280269.8	Diverge - Uncontrolled
2655	2526006	345710.9	Signalized - Flashing
2678	2628880	281560.93	Diverge - Uncontrolled
2679	2627710.6	282594.91	Diverge - Uncontrolled
2680	2627767.4	282118.3	Two-way yield
2681	2625099.6	281176.4	Two-way yield
2682	2629590.4	281247.56	Two-way yield
2683	2626671.7	281754.29	Two-way yield
2684	2626862.4	281892.24	Two-way yield
2686	2631169.1	280899.59	Diverge - Uncontrolled
2687	2628012.3	282775.37	Two-way yield
2688	2628142.5	282506.59	Two-way yield
2689	2628086.7	281791.6	Two-way yield
2690	2659591.6	293208.44	Two-way yield
2695	2575429.7	338225.74	Diverge - Uncontrolled
2698	2648207.6	275901.34	Diverge - Uncontrolled
2699	2648971.4	276438.83	Two-way yield

Node #	X-Coord	Y-Coord	Control Type
2700	2646753.5	275374.51	Diverge - Uncontrolled
2701	2647828.8	276430.5	Diverge - Uncontrolled
2702	2650729.4	277135.13	Diverge - Uncontrolled
2703	2626726.2	282320.2	Diverge - Uncontrolled
2704	2625028.2	280365.21	Two-way yield
2712	2650768.3	277096.17	Two-way yield
2715	2658212.6	292336.06	Diverge - Uncontrolled
2716	2657225.4	291901.8	Two-way yield
2766	2552138.4	337632.5	Diverge - Uncontrolled
2769	2521670.3	342402.46	Two-way yield

Note: Coordinates in NAD83 State Plane Pennsylvania South
Nodes which reflect changes in roadway properties (number of lanes, speed limit, capacity, etc.) at points along the link are omitted from this list.

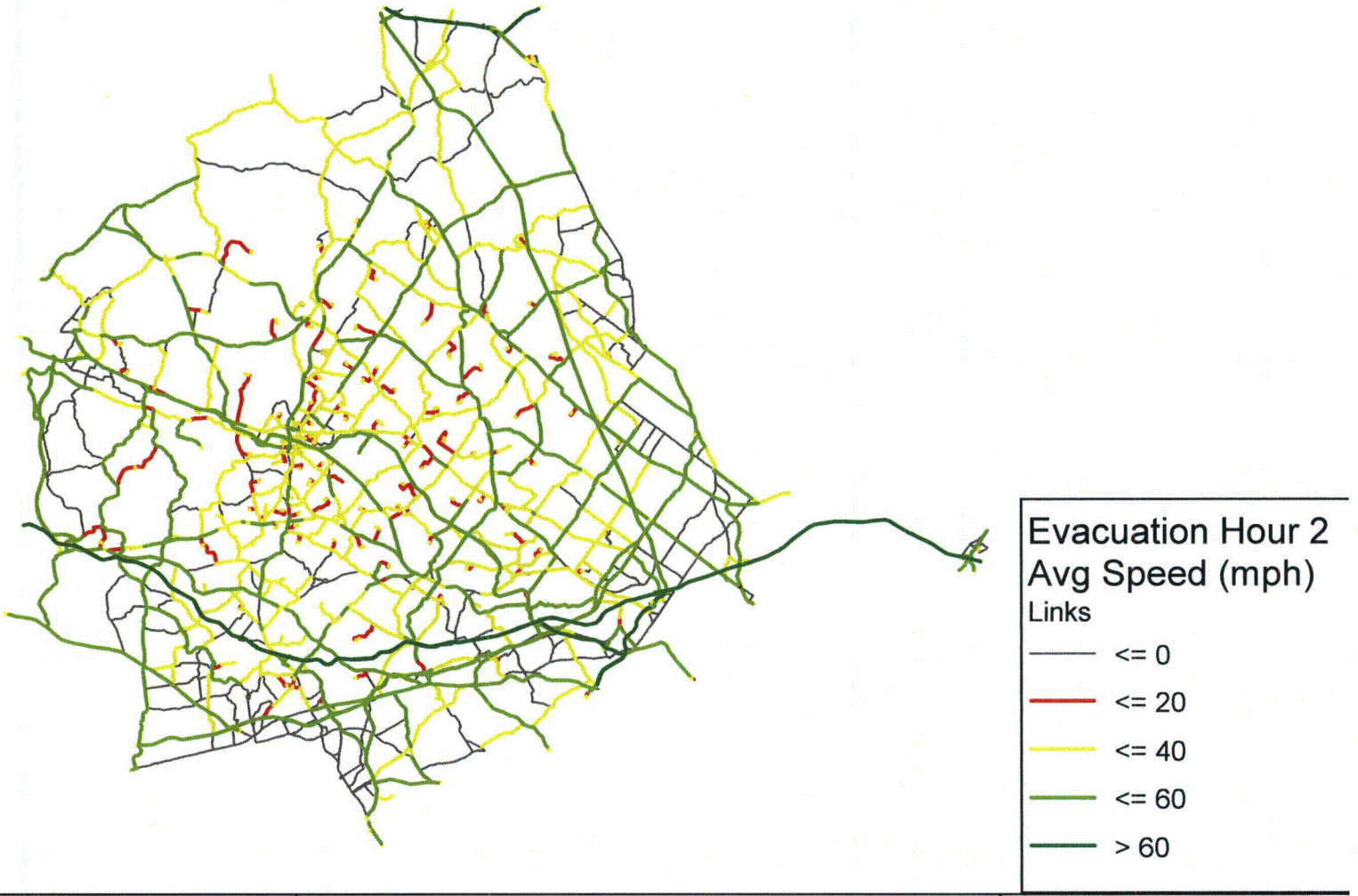
ARCADIS

Appendix D

Maps of Average Speed by Hour for Road Network

Evacuation Hour 1
Avg Speed (mph)
Links
<= 0
<= 20
<= 40
<= 60
> 60

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012



VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

Evacuation Hour 3
Avg Speed (mph)
Links
<= 0
<= 20
<= 40
<= 60
> 60

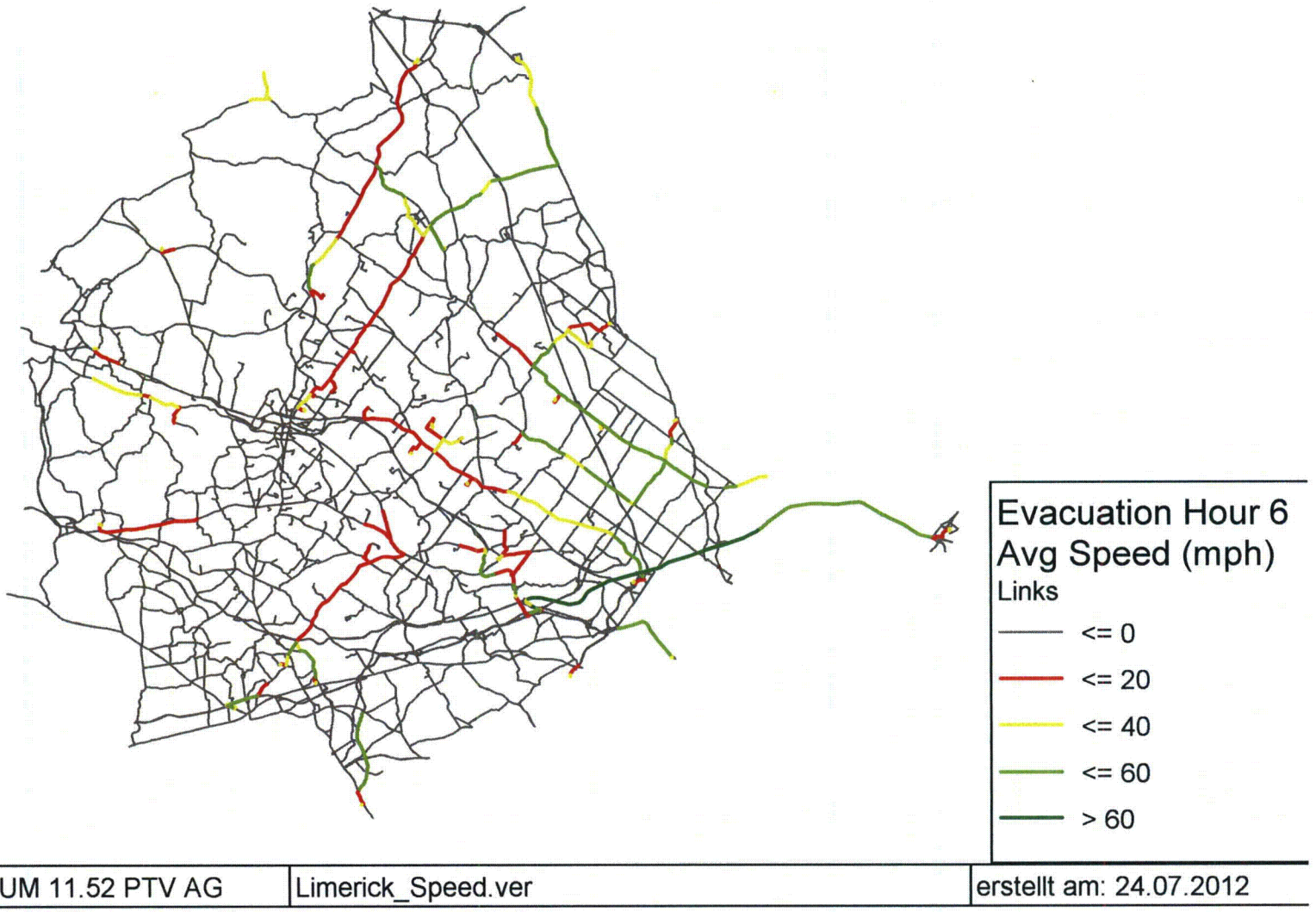
VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

Evacuation Hour 4
Avg Speed (mph)
Links
<= 0
<= 20
<= 40
<= 60
> 60

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

Evacuation Hour 5
Avg Speed (mph)
Links
<= 0
<= 20
<= 40
<= 60
> 60

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012



VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

Evacuation Hour 9
Avg Speed (mph)
Links
<= 0
<= 20
<= 40
<= 60
> 60

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

Evacuation Hour 10
Avg Speed (mph)
Links
<= 0
<= 20
<= 40
<= 60
> 60

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

Evacuation Hour 11
Avg Speed (mph)
Links

- <= 0
- <= 20
- <= 40
- <= 60
- > 60

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

Evacuation Hour 12
Avg Speed (mph)
Links

<= 0
<= 20
<= 40
<= 60
> 60

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

Evacuation Hour 13
Avg Speed (mph)
Links
<= 0
<= 20
<= 40
<= 60
> 60

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

Evacuation Hour 14
Avg Speed (mph)
Links

<= 0
<= 20
<= 40
<= 60
> 60

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

Evacuation Hour 15
Avg Speed (mph)
Links
<= 0
<= 20
<= 40
<= 60
> 60

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012

Evacuation Hour 16
Avg Speed (mph)
Links
<= 0
<= 20
<= 40
<= 60
> 60

VISUM 11.52 PTV AG	Limerick_Speed.ver	erstellt am: 24.07.2012