

WNP-1, 2 TEN MILE EPZ EVACUATION TIME ASSESSMENT STUDY

Prepared by Robert D. Mogle

April 1987

Revision 2A



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

DISTRIBUTION

WNP-1, 2 Ten Mile EPZ
Evacuation Time Assessment Study
April 1987
Revision 2

No. of Copies

Internal

1	CM Powers - Plant Manager Copy
1	RL Corcoran - Control Room Copy
1	KD Cowan - TSC Copy
1	RA Chitwood - Emerg. Plng. Copy
1	RD Mogle - Author's Copy
1	DE Larson - MUDAC Copy
1	GC Sorensen - Licensing
1	PL Powell - Licensing
1	GD Bouchey - SSDC Copy
1	Files 93.2.5
<u>1</u>	Files - PSF Records Room
11	

External

4	NRC Licensing - 4 copies (via Sorensen)
	o 1 to Public Doc. Room
	o 1 to Resident Inspector
	o 2 to NRC Region V
1	NRC Region V - G. Good
1	FEMA Region X - R. Donovan
2	DOE-RL - J. Tokarz
2	State DEM - H. Fowler
2	DSHS - A. Mohseni
2	County DEM - D. Somers
<u>1</u>	Westinghouse-RL - R. Heineman
15	
<u>9</u>	Extra
35	TOTAL

TABLE OF CONTENTS

	<u>Page</u>
I. Introduction	
A. Site Location and Emergency Planning Zone	1
B. General Assumptions and Methodology	1
C. Methodology	3
II. Demand Estimation	
A. Permanent Residents	10
B. Transient Population	11
C. Special Facility Populations	14
D. Emergency Planning Zone and Sub-Areas	14
III. Traffic Capacity	
A. Evacuation Roadway Network	16
B. Roadway Segment Characteristics	19
C. Assistance Centers	20
D. Other Considerations	22
IV. Analysis of Evacuation Time	
A. Time Estimates	23
B. Adverse Weather	23
V. Supplementary Information	
A. Evacuation Confirmation Time	25
B. Recommendations	25
C. Review of Study by State and Local Officials	26

References

LIST OF FIGURES, TABLES, AND ATTACHMENTS

Figure 1	Ten-Mile Exposure Emergency Planning Zone
Figure 2	Link Node Maps
Figure 3	Evacuation Routes - Access Control Points, Traffic Control Points, and Assistance Centers
Figure 4	Total Population in the Ten-Mile EPZ, Broken Down into Classifications
Figure 5	Distribution of Transient Population Within the Ten-Mile EPZ
Figure 6	Permanent Resident Passenger Vehicles Within the Ten-Mile Emergency Planning Zone
Figure 7	Total Passenger Vehicles Within the Ten-Mile Emergency Planning Zone
Figure 8	Percent Evacuated vs. Time for Various Populations and Conditions ("S Curves" for Ten-Mile Emergency Planning Zone)
Table 1	Sources Rate Inputs for I-Dynev
Table 2	Permanent Population Distribution
Table 3	Transient Population Distribution
Table 4	Special Facility Population Distribution
Table 5	Maximum Population Distribution
Table 6	Roadway Characteristics
Table 7	Summary of Results of Evacuation Time Analysis
Attachment 1	Example Computer Run

ACKNOWLEDGEMENTS

The author expresses his appreciation to these persons for their assistance.

Birch, Gerald	Technical Illustrator
Donovan, Richard	FEMA, Region X RAC
Feucht, Mary	Word Processor
Jaske, Robert T.	FEMA, IEMIS Project Officer
Newson, Donald A.	Argonne National Lab, IEMIS Consultant

EXECUTIVE SUMMARY

This document provides the evacuation time estimates and other pertinent demographic data utilized in WNP-2's Emergency Plan (FSAR, Volume 13) and, therefore, comes under the annual review requirement as set forth in NUREG-0654, Section II, Part P., Item 4. This review requirement is specifically incorporated by WNP-2's Emergency Plan Implementing Procedure, Volume 13.14.9, Appendix A, Items 16 and 17.

The need for this revision was based on several factors. The primary influencing factor was the change in population values in conjunction with changes in population distribution. Along with significant roadway modifications and earlier discussions with FEMA concerning their preliminary evaluations of these changes (FEMA utilizing a new computer model found their time estimates differing widely from our original times), it is felt in the best interest of the Supply System to commit to a remodeling. The revision was performed on FEMA's new state-of-the-art I-DYNEV computer modeling program. FEMA provided access to this model by allowing the State, thus the Supply System, to link to the Integrated Emergency Management Information System (IEMIS) in Washington, D. C. Therefore, pursuant to guidance given in NUREG-0654, Appendix 4, this document was revised.

To meet future review requirements the empirical data solicited during the annual 25% population poll of EBS radio holders will be examined. Further revisions will primarily be based on this annual review, however, revisions are not expected to be needed any more frequently than on a four year basis. By that time approximately 100% of the 10-Mile EPZ will have been routinely surveyed and a decision will be made as to whether a reassessment will be necessary.

The attached table, Summary of Results of Evacuation Times Analysis, presents the key findings and data useful in developing protective action recommendations (PAR's).

DESCRIPTION	TOTAL WITHIN 2 MILES	AREAS WITHIN 5 MILES				AREAS WITHIN 10 MILES			
		I	II	III	TOTAL	I	II	III	TOTAL
PERMANENT POPULATION	—	45	38	—	83	600	945	435	1,980
PERMANENT POPULATION VEHICLES	—	15	13	—	28	200	316	145	661
TRANSIENT POPULATION	1,125	992	470	644	2,971	1,685	2,388	8,011	12,949
TRANSIENT POPULATION VEHICLES	964	306	212	398	1,763	561	880	5,999	8,262
GENERAL POPULATION	1,125	1,037	508	644	3,054	2,285	3,333	8,446	14,929
TOTAL VEHICLES	964	321	225	398	1,791	761	1,196	6,144	8,923
NOTIFICATION TIME MINUTES	15	30	30	30	30	30	30	30	30
PERMANENT POPULATION EVAC. TIME NORMAL CONDITIONS HOURS MINUTES	—	1:00	1:00	—	1:00	1:30	1:30	1:30	1:30
GENERAL POPULATION EVAC. TIME NORMAL CONDITIONS HOURS MINUTES	1:00	1:00	1:00	1:30	1:30	1:30	1:20	2:15	2:15
PERMANENT POPULATION EVAC. TIME ADVERSE CONDITIONS HOURS MINUTES	—	1:00	1:00	—	1:00	1:30	1:30	1:30	1:30
GENERAL POPULATION EVAC. TIME ADVERSE CONDITIONS HOURS MINUTES	1:30	1:00	1:00	2:00	2:00	1:30	1:30	2:30	2:30
CONFIRMATION TIME MINUTES	30	60	60	60	60	60	60	60	60

870385.5
REV. 2
4/87

SUMMARY OF RESULTS OF EVACUATION TIMES ANALYSIS

SECTION I - INTRODUCTION

A. Site Location & Emergency Planning Zone (EPZ)

Washington Public Power Supply System leases 1089 acres of land north of Richland, Washington, on the Hanford Reservation. This land is under the control of Department of Energy (DOE). The Supply System's portion is approximately 3 miles west of the Columbia River and 12 miles north of the populated area of Richland. Figure 1 shows the Ten-Mile Plume Exposure Emergency Planning Zone Map. This Ten-Mile Emergency Planning Zone (EPZ) is the study area for which evacuation time estimates have been made.

The DOE is recognized as being responsible for the coordination of a Hanford site-wide evacuation. The Supply System, as company landlord for its specific area, is responsible for internal evacuation needs. This evacuation plan has been discussed with DOE and Benton/Franklin County Department of Emergency Management emergency planning representatives. A final copy will be provided to DOE. The strategy herein is provided as the optimum evacuation plan for a Supply System evacuation protective action recommendation. Future changes in this study that could impact the DOE will be brought to the agency's attention.

B. General Assumptions

The evacuation analysis is based on the following assumptions:

- o Initial notification times, both Supply System-to-county and county-to-populace, through the early warning system generally equals a maximum of 30 minutes total (see IV.A for discussion).
- o No significant changes in population land use are expected in Franklin County over the next several years.
- o No significant change in population land use is expected on the Hanford Reservation. No permanent population will reside there.

- o The unincorporated area near Horn Rapids Dam in the SSW sector is expected to be the primary growth area.
- o Evacuation is based on general radial dispersion by the populace. In Franklin County personnel north of the plant will evacuate north toward Mesa/Connell and those in the opposite direction south towards Kennewick/Pasco.
- o Inner sections would evacuate simultaneously with the outer sections.
- o Initial road vehicle population is free of traffic and set at zero.
- o One hour loading period for all populations, even for site industrial workers (which would normally be much quicker).
- o Occupancy loading was assumed to be 3 persons per vehicle for categories other than transient industrial, schools and the ORV Park.
- o Based on the size of the average household, households will evacuate as a unit, using only one vehicle per family.
- o Schools are part of the general population for purposes of evacuation time estimates.
- o Buses to be used for school evacuation will be dispatched within the one-hour loading time frame.
- o Vehicle occupancy of 35 persons per school bus.
- o Evacuation is occurring on a weekday with school in session, during months (April-June) when an additional 100 children of migratory agricultural workers are present.
- o Evacuation is occurring during the workday for areas with high transient worker populations.

- o Evacuation is occurring during the day on a weekend for areas with high numbers of transient recreationists.
- o Evacuation is occurring when WNP-2 is staffed at fully operational levels and the Plant Support Facility is manned (3/87 values).
- o All persons have transportation available to them.
- o Adverse weather conditions reduce both free-flow speeds and roadway capacities by 30% each. (Snow conditions; roads open; side streets passable).
- o Evacuation is complete when the model has concluded that vehicle trips have not changed for more than one time-interval.
- o Confirmation time estimates were not calculated in the model but are estimated as a maximum of one hour (see V.A for discussion). The calculated evacuation time estimate by the model starts at the time of the announcement over the EBS (Emergency Broadcast System) to begin evacuation and runs until the evacuation is complete (last vehicle is out of the Ten-Mile EPZ or at an assembly area).

C. Methodology

This assessment is a complete revision using I-DYNEV (An adaptation of TRAFLOW Level II), a computer program supplied by the Federal Emergency Management Agency (FEMA) through their Integrated Emergency Management Information System (IEMIS).

1. Traffic Assessment Model³

The traffic assignment program which is employed in this study is an elaboration of an existing model developed by Dr. Sang Nguyen. This model is an equilibrium assignment model which employs mathematical programming methodology to search for, and attain, a global optimum solution. The term, "optimum", implies that the solution is unique and that it minimizes a specified cost function.

This cost function, in our application, is expressed directly in terms of aggregate travel time. That is, the model formulation relates travel time to the assigned volumes on each network link according to the following formulation:

$$T_i = T_{o,i} \left(1 + a \frac{V_i}{C_i} \right)^b$$

where

T_i = Travel time on link, i, sec

$T_{o,i}$ = Specified free-flow (zero delay) travel time on link, i, sec

V_i = Volume of traffic on a link, i, vph

C_i = Capacity of link, i, vph

a, b = Specified calibration parameters

The cost function, then, is formulated in terms of travel time along each path from each origin to each respective destination. Minimizing this path-specific travel time (i.e. the so-called User Optimization), all vehicles are assured of being routed along the shortest (in travel time) possible path to their respective destinations.

The computational algorithm assigns traffic over the network in such a way as to minimize this aggregate cost. That is, the allocation of volumes, V , to the network links, $i=1,2,\dots, N$ is accomplished in such a way as to:

- o Satisfy all specified origin-destination demands,
- o Satisfy the minimum-cost (travel time) objective,

- o Satisfy any specified control treatment and turn restrictions designed to:
 - Expedite the evacuation process
 - Minimize radiation exposure of the vehicle occupants.

Most applications of traffic assignment employ constant, estimated, values of link capacity, C_i . It is well known, however, that link capacity is a function of many factors including the (unknown) turn volumes on all links serviced by a common intersection. Consequently, the assumption of constant link capacity compromises the efficacy of the assignment results.

To resolve this problem, KLD expanded the existing TRAFFIC model to incorporate a model, named the TRAFLO CAPACITY model. This model computes accurate estimates of capacity, C_i , that are always consistent with the assigned volumes, V_i , on each link. This capacity model consists of three integrated components.

- o A formulation which calculates the service rates for through and left-turning vehicles in a lane, given, among other data, the proportion of left-turners in the lane,
- o Another formulation for through and right-turner service rates,
- o A formulation which calculates the lateral deployment of traffic on an approach, yielding the proportion of through and turning vehicles in each lane.

These three components are exercised in an iterative manner to produce accurate and self-consistent estimates of service rates for approaches of general configuration and for all types of control devices. Many tests have confirmed that this solution procedure is rapid, accurate and unconditionally convergent.

In summary, the Traffic Assignment Model used in this project represents the latest state-of-the-art and provides accurate estimates of link volumes, stratified by turn movement at the downstream node (intersection). These turn volumes on each link are subsequently input into the Traffic Simulation Program.

Another output provided by the Traffic Assignment model is the estimated travel times on each link. These estimates are not particularly accurate--they are usually optimistic--but they do identify the "hot spots" in the network: those links which are severely congested. This permits the analyst to identify candidate solutions to relieve the congestions and to expedite the flow of traffic.

2. Traffic Simulation Model: I-DYNEV

A model, named I-DYNEV, is an adaptation of the TRAFLO Level II simulation model, developed by KLD for the Federal Highway Administration (FHWA), with extensions in scope to accommodate all types of facilities. This model produces an extensive set of output measures of effectiveness (MOE).

The traffic stream is described in terms of a set of link-specific statistical flow histograms. These histograms describe the platoon structure of the traffic stream on each network link. The simulation logic identifies five types of histograms:

- o The ENTRY histogram which describes the platoon flow at the upstream end of the subject link. This histogram is simply an aggregation of the appropriate OUTPUT turn-movement-specific histograms of all feeder links.

- o The INPUT histograms which describe the platoon flow pattern arriving at the stop line. These are obtained by first disaggregating the ENTRY histogram into turn-movement-specific component ENTRY histograms. Each such component is modified to account for the platoon dispersion which results as traffic traverses the link. The resulting INPUT histograms reflect the specified turn percentages for the subject link.
- o The SERVICE histogram which describe the service rates for each turn movement. These service rates reflect the type of control device servicing traffic on this approach; if it is a signal, then this histogram reflects the specified movement-specific signal phasing. A separate model was developed to estimate service rates for each turn movement, given that the control is GO.
- o The QUEUE histograms which describe the time-varying ebb and growth of the queue formation at the stop line. These histograms are derived from the interaction of the respective IN histograms with the SERVICE histograms.
- o The OUT histograms which describe the pattern of traffic discharging from the subject link. Each of the IN histograms is transformed into an OUT histogram by the control applied to the subject link. Each of these OUT histograms is added into the (aggregate) ENTRY histogram of its receiving link.

Measures of Effectiveness output by I-DYNEV:

<u>Measure</u>	<u>Units</u>
Travel	Vehicles-Miles and Vehicle-Trips
Moving time	Vehicle-Minutes
Delay time	Vehicle-Minutes
Total travel time	Vehicle-Minutes
Efficiency: moving time/ total travel time	Percent
Mean travel time per vehicle	Seconds
Mean delay per vehicle	Seconds
Mean delay per vehicle-mile	Seconds/Mile
Mean occupancy	Vehicles
Mean saturation	Percent
Vehicle stops	Percent

These data are provided for each network link and are also aggregated over the entire network.

3. Specific Application to the Supply System Site on DOE's Hanford Reservation

This model required developing the 10-Mile EPZ road network into link-node diagrams (see Figures 2 and Table 6). These link-nodes were utilized as evaluation schemes for data handling. The 10-Mile EPZ is divided into the sixteen 22-1/2° compass sectors around the center point located midway between Washington Nuclear Projects #1, #2, and #4 (WNP-1, -2, and -4). This center point is 2800 feet east of WNP-2 and has coordinates of longitude 119° 19'18" west, latitude 46° 28'19" north. The assessment considers four approximately 90° sections around the site; the Columbia River, forming a natural boundary between Benton and Franklin Counties, was used for one division and the other division is almost perpendicular to the river. The south-southeast 22-1/2° sector, with populations on both sides of the Columbia River, was divided into two separate areas by this divisioning.

Figure 3 illustrates the evacuation routes, access control points, traffic control points, and assistance centers for the Hanford Site (see Section III, Traffic Capacity, for discussion). Some, but not all of these routes were used to develop the necessary evacuation link-node diagrams. A link-node diagram is a system for connecting road segments to an assembly point or to an exit from the EPZ. Each road link in the evacuation link-node diagram interacts only with other road links connected in that diagram. The evacuation time estimate calculated for a single link-node system may or may not determine the evacuation time estimate for an entire section. The longest evacuation time estimate for a particular section is determined by comparing the times for all the link-node systems within the section and selecting the link-node system which took the longest time to clear that section.

SECTION II - DEMAND ESTIMATION

Figure 4 presents the compass sector population estimates for 1987; this same information is also presented in Tables 2 through 5. Estimates were made relative to the center of the triangle formed by the three reactors. Initial 1980 figures were taken from the WNP-2 Environmental Report⁷ where references and basis are given. Values within the EPZ were since updated by data provided by the Benton County Department of Emergency Management from their radio survey questionnaires. Additionally, updated data was provided by the DOE or DOE contractors for contractor facilities under DOE's jurisdiction on or near the Hanford Site.

A. Permanent Residents

Permanent residents included all people residing in the area, but excluded occupants of institutions (schools). The ten-mile radius around the site is shown in Figure 1. In 1987 an estimated 1980 people were living within the Ten-Mile EPZ. The nearest inhabitants occupy farms which are located east of the Columbia River and are thinly spread over five compass sectors. There are no permanent residents located within three miles of the site. Only about 83 persons reside between the three-mile and the five-mile radii; these are all located east of the Columbia River.

Of the 1980 people residing in the Ten-Mile EPZ, about 1545 live in Franklin County and about 435 in Benton County. None of the residents live in incorporated cities.

There are no significant changes in land use expected in Franklin County over the next several years and, as it is currently irrigated to about the maximum amount practicable, little population increase is foreseen. No significant change in land use on the Hanford Reservation is expected, and no foreseeable population will reside there; however, the unincorporated area near the Horn Rapids Dam on the Yakima River in the SSW sector is expected to be the primary growth area within the Ten-Mile EPZ. Population growth within this area is projected to be about 6% per annum.

Public transportation, although not specifically identified as being needed, is available to the public in a portion of the 10-Mile EPZ. A partial survey (24 percent) of the permanent residents within the 10-Mile EPZ indicated that all of those surveyed had transportation available to them. Transportation was via their own private vehicles, with neighbors providing an alternate means. The survey was performed by the Benton County Department of Emergency Management and validated by the Benton Franklin Government Conference. In addition, the public information brochure provides telephone numbers for points of contact for those persons needing transportation assistance during an emergency. Also, the Benton and Franklin Counties Fixed Nuclear Facility Emergency Response Plan contains a procedure whereby, through a memorandum of understanding, the school administrations will provide school buses for general and specific evacuation purposes. For purposes of this study, it is therefore assumed that all permanent residents of the 10-Mile EPZ have transportation available to them.

B. Transient Population

The transient population is divided into three main subgroups: 1) industrial employees, 2) migratory agricultural workers, and 3) recreationists. Figure 5 illustrates this population location graphically.

1. Industrial Employees

Industrial employees in the Ten-Mile EPZ total 7,581. These are all located in Benton County and form the main population to be evacuated in Benton County.

About 15% of the total industrial employees work at WNP-1, WNP-2, and at the Plant Support Facility. The size of this work force (approximately 1,125) varies considerably with time; as many as 12,000 workers were employed in June 1981 prior to completion of WNP-2, the preservation of WNP-1 and the termination of WNP-4. With WNP-2 operational, day-shift staff employment at WNP-2 is approximate 700, with an additional 165 staff assigned to the Plant Support Facility. Typically, on back-shifts and on weekends at the site there is a maximum of about 10% of the total work force present.

Industrial employment in the Ten-Mile EPZ includes:

WNP-2 (3/87 Operational dayshift value)	700
WNP-1 (3/87 Preservation phase value)	260
Plant Support Facility (3/87)	165
DOE 400 Area, FFTF, Fast Flux Test Facility (3/87)	644
Advanced Nuclear Fuels Inc., Horn Rapids Road (3/87)	750
DOE 300 Area (3/87)	2,427
DOE 3000 Area, Pacific Northwest Laboratory and other contractors in POB area	2,373
Supply System, Downtwon Complex (3/87)	262
TOTAL	7,581

The majority of these employees work days but there may be some shift workers in the DOE figures. Credit is not deducted from the population values due to emergency personnel remaining in place. Therefore, the planning figure of 7,581 to be evacuated is conservatively high.

2. Migratory Agricultural Workers

There may be up to approximately 2,818 migratory farm workers in the Ten-Mile EPZ. The peak season for these workers is May and June; the next highest employment season is during the fall harvest. These workers consist of both permanent and temporary residents of the Tri-Cities area, some living within the Ten-Mile EPZ. The numbers shown on Figure 5 and Table 3 reflect their work locations in Franklin County within the Ten-Mile EPZ, not their residences. Care was taken to avoid double-counting where possible and cost-effective. The small amount of error generated by this double-counting was felt justifiable to alleviate the necessity of an expensive one-on-one poll of each individual to separate the differences. Most migrants who work in the Ten-Mile EPZ live in Pasco. The number of migrants living in the EPZ is minimal based on surveys in the area.

3. Recreationists

Recreationists, consisting of hunters, fishermen, boaters, and off-road sports enthusiasts, enjoy activities throughout various parts of the Ten-Mile EPZ. The primary fishing season is from June through November; the main hunting season being October through January. The heaviest use of the area by recreationists is on weekends and holidays, usually in the early morning hours. On the average, 50 fisherman and 10 hunters are present in the Franklin County portion of the Ten-Mile EPZ during the weekdays. This increases to about 100 fishermen and 50 hunters on weekends and holidays. Recreationists also use the Yakima River with an estimated maximum of 50 at any time in this area. Additionally, there could be about 1500 recreationists at the Horn Rapids Off-Road Vehicle Park for any given event. During peak fishing, hunting, or sports events, up to 2,550 recreationists may be located within the Ten-Mile EPZ.

The main concentration of recreationists fishing are located just south of the Ringold Fish Hatchery spillway on the Franklin County side of the Columbia River. Hunting consists of both water fowl, hunted at the Wahluke Hunting Area on the Franklin County side of the Columbia River, and upland game birds hunted inland on the farm land of Franklin County. To model this part of the transient population from a potential evacuation standpoint, 400 recreationists were assigned to the sector containing the Ringold Fish Hatchery and the Wahluke Hunting Area and the rest distributed inland. Of the total recreationists, 1000 are assigned to Franklin County and 1550 to Benton County (primarily at the Off-Road Vehicle Park).

An automobile occupancy factor of 3, the same as used for permanent residents and non-industrial transients, was used for most recreationists, except for the ORV Park where a factor of 2 was utilized.

C. Special Facility Population

There are no individuals within the Ten-Mile EPZ confined to institutions such as hospitals, nursing homes, or penal institutions. There are three schools all in section 2; the Edwin Markham Elementary School, the Cypress Gardens School, and the Country Christian Center, with a total population of approximately 455 (students and faculty). Although most of these live within the Ten-Mile EPZ, the total amount was added to the general population for this study. Care was taken to avoid double-counting where possible. This study was not looking at precise numbers in terms of absolute accuracy and fixed values. Again, due to the fluxuations in the large transient industrial and agricultural worker populations, this small amount of error by double-counting should not exceed the anticipated variation of the entire study. Buses which would be used for the evaucation are located at the district bus lot in north Pasco.

D. Emergency Planning Zone and Sub-Areas

Sub-areas considered in this study were:

<u>Radius</u>	<u>Area</u>
0-2 miles	entire circumference
0-5 miles	three approximately 90° sections
0-10 miles	three approximately 90° sections
0-10 miles	entire EPZ

The 2-mile radius was not subdivided because it contains no residential population and the only general populations are industrial transients all working in section 3, on contiguous Supply System properties. Only three of the four sections were examined because the fourth section, entirely on the Hanford Reservation, contains no residential, transient nor special populations. These sections are graphically shown on Figures 2 and 3. The Columbia River, as a natural border between Benton and Franklin Counties, was used to form the division between section 2 and section 3. Franklin County was divided, approximately in half, as it was assumed that those north of the plant location would evacuate north toward Mesa/Connell and those in the opposite direction, south towards Pasco.

When making time estimates for the portions of outer sections, it was modeled that the inner portions of the section were being simultaneously evacuated.

SECTION III - TRAFFIC CAPACITY

Figure 3 illustrates the evacuation routes, barricades and assistance centers for the Hanford Site. These routes have been designated as primary, secondary and additional secondary, based on discussions with local traffic and emergency planning officials. These routes were identified as those over which the endangered population could be most expeditiously evacuated to the centers where they may be assisted.

In choosing the traffic flow direction for the computer model, as illustrated in Figures 2 and 3, populations were evacuated toward the closest primary, secondary or additional secondary road in decreasing priority that was headed radially away from the plant. The analyses were simplified due to the rural area and low population values. Permanent resident passenger vehicle numbers and total passenger vehicle numbers are shown in Figures 6 and 7 respectively.

A. Evacuation Roadway Networks

1. Section 1

The primary evacuation route is Russell Road, east to old State Road 17, and north into Mesa. From Mesa, evacuees may continue by:

- o Taking State Highway 17 north to Hendricks, then east on Hendricks Road to Connell.
- o Taking U.S. Highway 395 northeast to Connell.
- o Taking U.S. Highway 395 south to Pasco.

The secondary evacuation route is Route 170 east through Basin City to Mesa.

Additional Secondary Evacuation Routes are:

Mountain Vista Road/Hollingsworth Road
Basin Hill Road
Klamath Road
Ironwood Road

2. Section 2

The primary evacuation route is Eltopia West Road to Glade North Road then south towards Pasco or east to Eltopia and Highway 395.

The secondary evacuation route is Taylor Flats Road south towards Pasco.

Additional Secondary Evacuation Routes are:

Ringold Road
Elm Road
Sagemoor Road
Road 68

3. Section 3 - Residential Traffic

The primary evacuation route for the residents in this section is Harrington Road and Yakima River Drive or Grosscup Road, to Van Giesen and then south and east into Kennewick via Bombing Range Road to Highway 12, to Leslie Road, to Keene Road, to Gage Road, to Quinault, to Columbia Center Boulevard, north on Columbia Center Boulevard to Canal Drive east on Canal Drive to Edison, south on Edison to Kamiakin High School, the assistance center.

The advantage of this route is that it provides direct movement from the Ten-Mile EPZ for residents and would avoid the traffic congestion created by industrial transients.

The secondary evacuation route is Harrington Road and Yakima River Drive, or Grosscup Road to Van Giesen, then to Benton City and the Kiona-Benton Assistance Center via Highway 224 or continue east to Kennewick via Highway 12, continuing as before to Kamiakin High School assistance center. The main advantage of this route is the same as for the primary evacuation route in that it avoids the transient traffic. In addition, this route provides for hard surface access into Kennewick. The disadvantage of this route is that it is much longer than the primary route.

Additional Secondary Evacuation Routes are:

Highway 240 (either towards Benton City or Richland). This route's main disadvantage is that it initially leads deeper into the Ten-Mile EPZ.

Van Giesen (in towards Richland). This route's main disadvantage is that it leads directly into Highway 240 Bypass across traffic created by industrial transients.

4. Section 3 - Transient Traffic

Two primary transient evacuation routes exist for this area - George Washington Way and Stevens Drive.

A portion of the normal daily traffic coming from the Hanford Reservation routinely uses Stevens Drive to the Richland Bypass Highway 240, and on to Highway 240/12 into Kennewick. The other often utilized route into Kennewick is George Washington Way south to the Richland Bypass Highway 240, and to Highway 240/12. These same routes would be used during an emergency evacuation.

Additional Secondary Evacuation Routes are:

- o Highway 240 (toward Richland or Yakima).
- o Horn Rapids west to Highway 240, then southwest on Highway 240 to Richland (Advanced Nuclear Fuels Inc. recommended to evacuate this direction to optimize evacuation time.)

- o Van Giesen (towards Benton City).
- o North on Route 4 South via the Wye Barricade then either north on Route 2 South or northwest on Route 4 south towards Yakima for WNP-1 and 2 and FFTF transients (possibly used if winds are from northeast to southwest with release imminent or occurring).
- o FFTF Access Route west to Route 10 south, south on Horn Rapids to Benton City or southeast on 240 to Richland (FFTF recommended to evacuate this direction vs. east to Route 4 South to optimize evacuation time.)

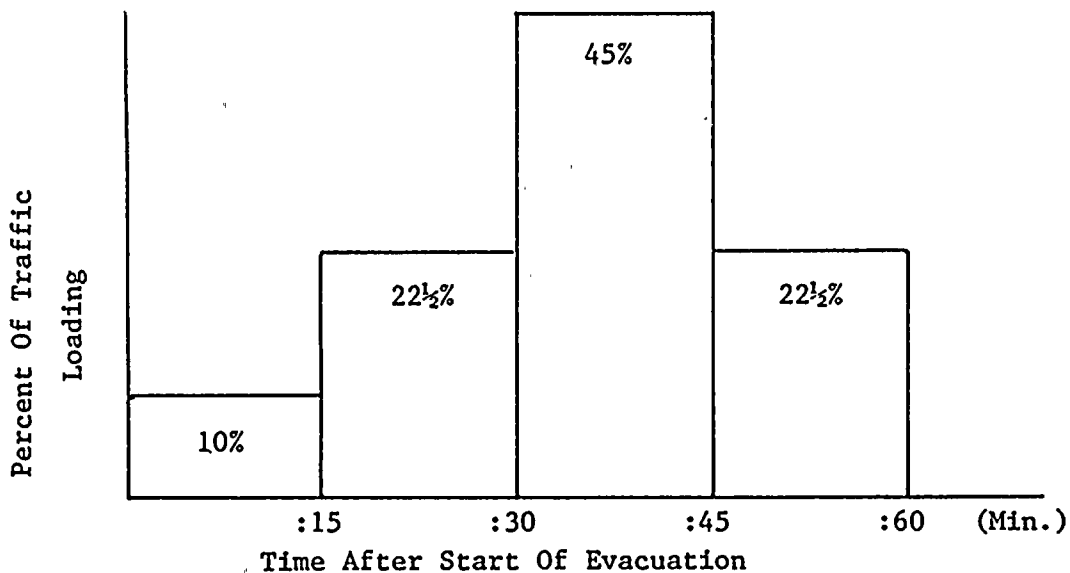
B. Roadway Segment Characteristics

Table 6 indicates link-node characteristics for all roadway segments used in the evacuation assessment.

In the congested traffic environment which is characteristic of an evacuation process, travel time on a roadway section is, to a large extent, determined by the capacity of that section. Roadway capacities were based upon the type of roadway considered and the presence of traffic control. The following table presents the per-lane capacities utilized:

<u>Roadway Type</u>	<u>Per-lane Capacity (Veh/hr)</u>
Freeway	1800
Arterial/Rural Road	1500
Local Street	1200

This study also required a set of baseline conditions. Included in these conditions is an assumed one-hour loading period. This loading period is considered to be a conservative estimate and includes preparation times. At each source point, traffic is introduced to the evacuation network in accordance with the following histogram:



C. Assistance Centers

Assistance centers have been selected by local emergency planning officers.⁶ Criteria for selection included that these locations be at least 15 miles from the plants, in the path of normal travel, having adequate facilities, and readily available.

Residents evacuated from the Ten-Mile EPZ would be sent to the centers for registration, assistance in obtaining meals and lodging and to receive updated information.

Assistance Centers include:

1. Mesa Elementary School, Mesa

This school is located on Highway 17, approximately seventeen miles from the plants. The school has adequate facilities for the number of persons in Section I but parking is limited.

2. Connell High School, Connell

This facility could be used as an alternate assistance center for the northern area. The Connell High School, is approximately 28 miles from the Hanford site. Adequate facilities and parking are available.

Motels available in this direction include the M & M Motel and the Tumbleweed Motel, both in Connell, with a combined capacity of 70 rooms and over 250 beds.

Section 2

1. Isaac Stevens Junior High School, Pasco

Isaac Stevens Junior High School, located at 1120 North 22nd, Pasco, can be used as an assistant center for evacuees.

Motels in Pasco have a combined total capacity of 804 rooms and 1,729 beds.

Section 3

1. Kamiakin High School, Kennewick

This shcool is located on Edison and Metaline, approximately 21 miles from the Hanford site.

Kennewick motels have a combined capacity of 726 rooms and 1,741 beds. An addition of 400 motel beds is projected by the end of 1981 which could result in a total capacity for 2,141 evacuees.

In addition, the Kennewick School System has a potential for sheltering over 9,000 persons and the Pasco School System over 7,000, for a combined capacity of at least 15,000 persons.

If an extended evacuation was warranted, Columbia Center, a large shopping mall in Kennewick, located on Columbia Center Boulevard, could serve as a staging area. The paved parking area can hold 4,600 cars and an additional 5,000 cars could be parked in adjacent areas.

2. Kiona-Benton City School District No. 52, Benton City

The schools in this district serving as an assistance center for evacuees are located in Benton City, approximately 16 miles from the Hanford site.

D. Other Considerations

Yakima or Walla Walla could serve as host areas with ample motel and school facilities to house the entire evacuated populations. Massive use of such facilities appears highly unlikely. Past evacuations demonstrated that relatively few people use rooms provided by assistance centers, preferring instead to stay with friends or relatives.

If employees or their vehicles at the site were contaminated, they would, radiological conditions permitting, be decontaminated prior to evacuation. If this was not possible because of pending hazardous situations, then remote decontamination would take place at either the old Hanford town site, located in the north section of Section 4, or at the DOE contractor's bus barn located on Stevens Drive (1100 Area). These areas provide adequate space for the monitoring and decontamination of vehicles evacuated from within the 2-mile area.

SECTION IV - ANALYSIS OF EVACUATION TIMES

A. Time Estimates

The Supply System has provided an early warning system capable of notifying the public within the Ten-Mile EPZ to take protective measures during an emergency. This system was designed to enable the county to notify the public within 15 minutes from the time the decision to evacuate is made by county officials. The Supply System has established procedures to notify the county officials within 15 minutes of an incident which would require protective actions by the public. After the completion of the traffic assignment, the simulation studies were begun. Two scenarios were developed for presentation here:

Case 1: Good weather, one-hour loading period.

Case 2: Adverse weather, one-hour loading period.

Other "what if" cases were looked at and are stored on the computer system for additional real situational decision making assistance depending on variables at that time.

Evacuation time estimates for the Supply System Hanford site are shown in Table 7. The Figure 8 series illustrates "S-Curves" for various evacuation populations and conditions. Notification time generally varies from 15 minutes for Supply System facilities to 30 minutes for the general populace. Confirmation time is estimated at 30 minutes for Supply System employees and 60 minutes for the general populace (see V.A. for discussion).

B. Adverse Weather

Table 7 presents evacuation time estimates under two conditions: normal and adverse weather. Severe weather conditions such as blizzards, heavy rain storms, flooding, fog, or high winds could hamper evacuation. However, historical records indicate that severe conditions of this nature have occurred rarely in the past.

Because of the effect of weather on the capacity of roadway and the fact that capacity is a controlling factor in deriving evacuation times, it is necessary to adjust capacity figures to represent estimated road conditions during adverse weather. Based on limited empirical data, weather conditions such as heavy rain reduce the values of capacity for the highways utilized as evacuation routes by approximately 20 percent. For adverse conditions during the winter months, we have estimated capacity reductions and free-flow speed reductions of 30 percent each, relative to normal weather conditions.

A wind-direction-effects computer test run was conducted. A wind direction and resultant plume vector were assumed which would require the use of a secondary evacuation route for the Supply System site under good weather conditions. The secondary evacuation route time for general population (2 hr:30 min) did not differ significantly from the primary evacuation route time (2 hr:15 min); therefore, it is concluded that wind direction does not adversely effect the evacuation. Meteorological data will be available to those responsible for the decision process such that secondary evacuation routes will be a viable alternative.

It was assumed that only a few of the secondary routes were utilized at any one time. Inclusion of more of these secondary routes in the computer model could lower the evacuation time estimate.

SECTION V - OTHER REQUIREMENTS

A. Evacuation Confirmation Times

Visual confirmation of evacuation will be made by local sheriff's departments for permanent residents. Counties estimated that this can be accomplished within one hour. The Supply System will be responsible for personnel accountability at Supply System facilities. It is estimated that this will take a maximum of 30 minutes.

B. Recommendations

It was assumed that the road network was initially free of traffic in the areas of the evacuation. This would generally be true. If a Supply System evacuation was required during a shift change at DOE's facilities on the Hanford Site but outside the 10 Mile EPZ, this could place many additional vehicles vying for space on Route 4 south. DOE has agreed not to send transient vehicles into the 10 Mile EPZ during a Supply System evacuation situation. Vehicles could be re-directed at the Wye Barricade (or sooner).

- o FFTF for optimum time cost, it is recommended that FFTF be directed to evacuate west to Route 10 South verses accessing Route 4 South. This decreases the loading through the always congestive 300 Area.
- o DOE 300 Area - Traffic control strategy suggests recommending an officer be stationed at the intersection of Route 4 South and the Main 300 Area Parking outlet onto Route 4 South to control traffic flow. DOE has been advised to balance outlet traffic volume going onto Stevens (Route 4 South) with traffic south out of the 300 Area onto George Washington Way.
- o Advanced Nuclear Fuels, Inc. - To further decrease loading on Stevens, it is recommended that this facility be directed to evacuate west on Horn Rapids and then back into Richland by heading southeast on Highway 240 verses accessing Stevens Drive.

- o DOE 3000 Area - Battelle and other DOE contractors between George Washington Way and Stevens Drive should be directed to evacuate using Stevens Drive. The stationing of a traffic control officer is suggested at the Battelle Boulevard and Stevens Drive intersection.
- o Plans, implementing procedures, and public education documents should be revised to reflect the traffic control points as indicated in Figure 3.

C. Review of Study by State and Local Officials

The revision to this study was submitted for review to the principal state and local officials involved in emergency response for the site. Their comments were solicited and a copy of their response follows:

RICHARD J. THOMPSON
Director



STATE OF WASHINGTON
DEPARTMENT OF COMMUNITY DEVELOPMENT
DIVISION OF EMERGENCY MANAGEMENT

4220 E. Martin Way, PT-11 • Olympia, Washington 98504-8611 • (206) 753-5255 • SCAN 234-5255

May 21, 1987

Mr. Ronald A. Chitwood, Manager
Emergency Planning and
Environmental Programs
Washington Public Power Supply System
Post Office Box 968
3000 George Washington Way
Richland, Washington 99352

Dear Mr. Chitwood: *Ron*

My staff has reviewed the Hanford Site Evaluation Time Assessment, Revision 2, draft and find the document to meet all the requirements of NUREG 0654/FEMA REP 1.

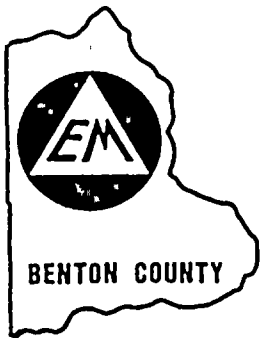
Thank you for the opportunity to review this document.

Sincerely,

A handwritten signature in dark ink, appearing to read "H. H. Fowler".

Hugh H. Fowler
Assistant Director
Division of Emergency Management

HHF:MAP:1f



BENTON COUNTY
DEPARTMENT OF EMERGENCY MANAGEMENT

Kennewick City Hall
P. O. Box 6144
Kennewick, Washington 99336-0144

June 2, 1987

R.A. Chitwood, Manager
Emergency Planning &
Environmental Programs
Washington Public Power Supply System
3000 George Washington Way
Richland, WA 99352.

Dear Mr. Chitwood:

I have reviewed the Hanford Site Evacuation Time Assessment Study, Revision 2, prepared by Robert D. Mogle.

Benton County Emergency Management concurs with the data, assumptions and methodology used. We have no comments.

Sincerely,

A handwritten signature in cursive script that reads 'Donna J. Somers'.

Donna J. Somers
Director

DJS/clc

REFERENCES

1. Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, NUREG-0654, FEMA-REP-1, Rev. 1, November 1980.
2. IEMIS User's Manual, PNL, Federal Emergency Management Agency.
3. Application of the I-DYNEV System, KLD Associates, Inc., and Argonne National Lab, Federal Emergency Management Agency REP-8, December 1984.
4. PREDYN/IDYNEV Training Guide, KLD Associates, Inc., prepared for Federal Emergency Management Agency.
5. Exercise Evaluation and Simulation Facility Evacuation Events Model, Part I, II, and III User's Manuals, KLD Associates, Inc., FEMA-REP-6 and 7 April 1984.
6. Feasibility of Ten-Mile Emergency Planning Zone Evacuation, Hanford Site, Warren Hanson & Associates, December 1980.
7. WNP-2 Environmental Report--Operating License Stage Amendment #5, July 17, 1981.

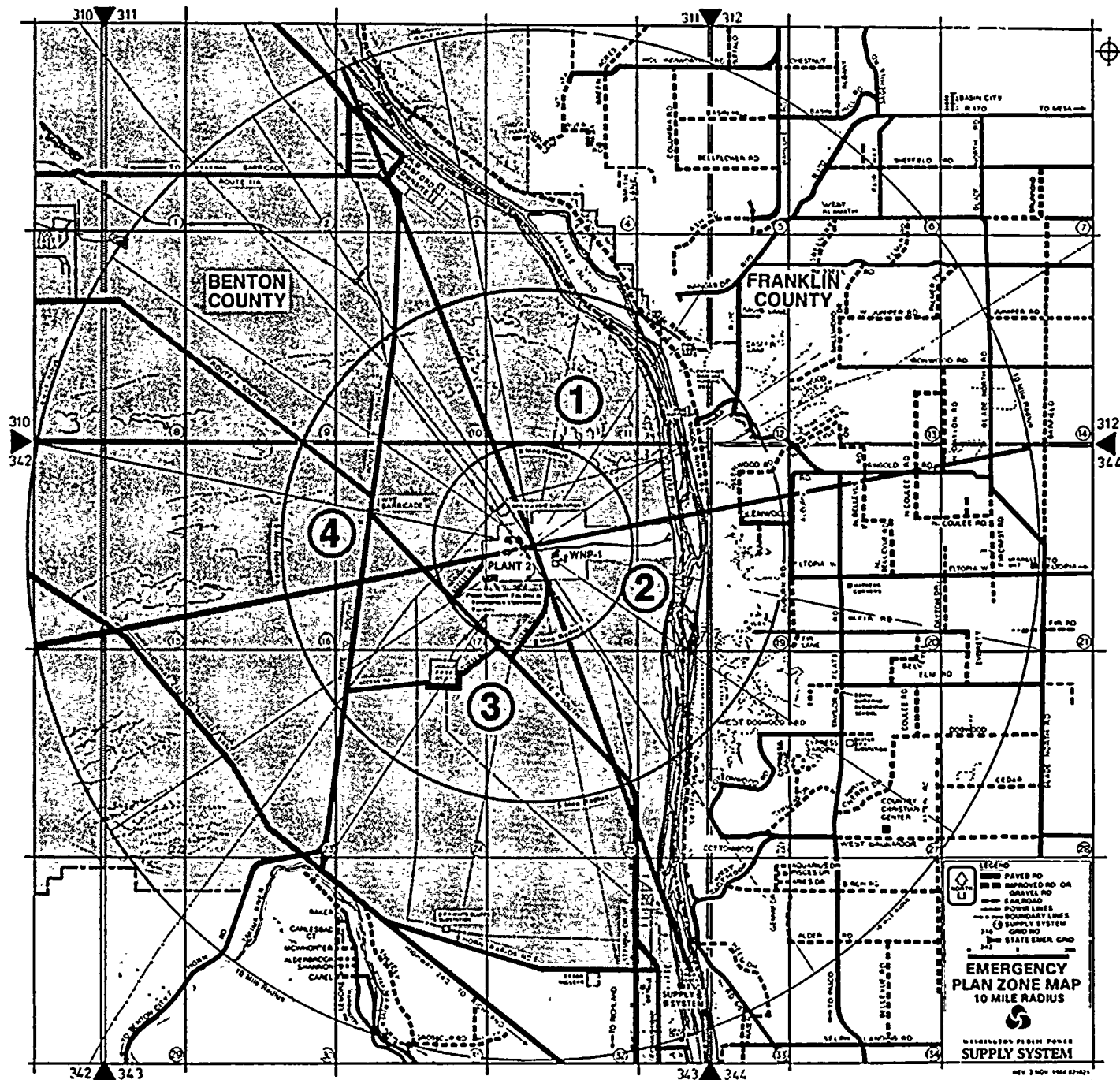
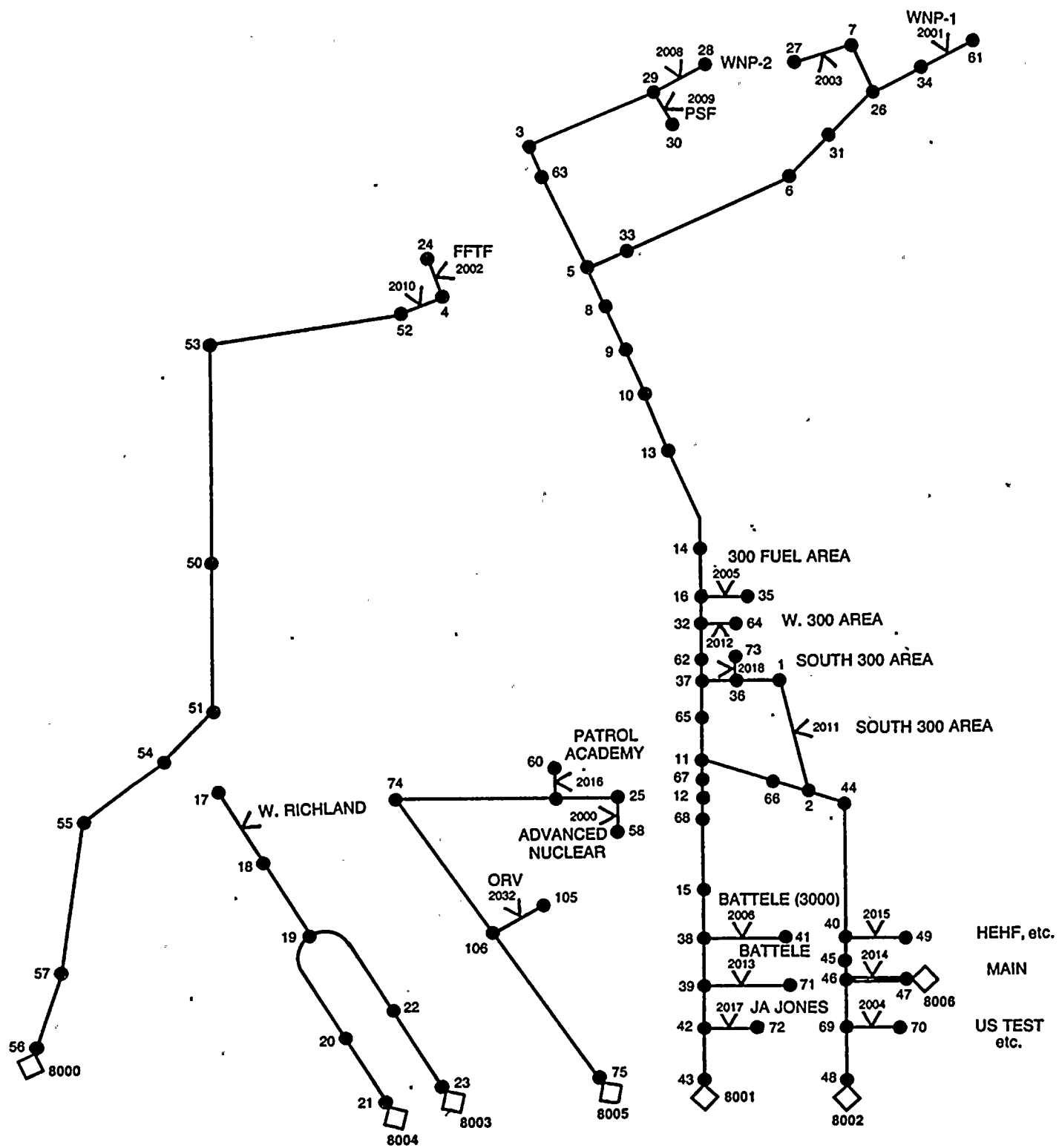
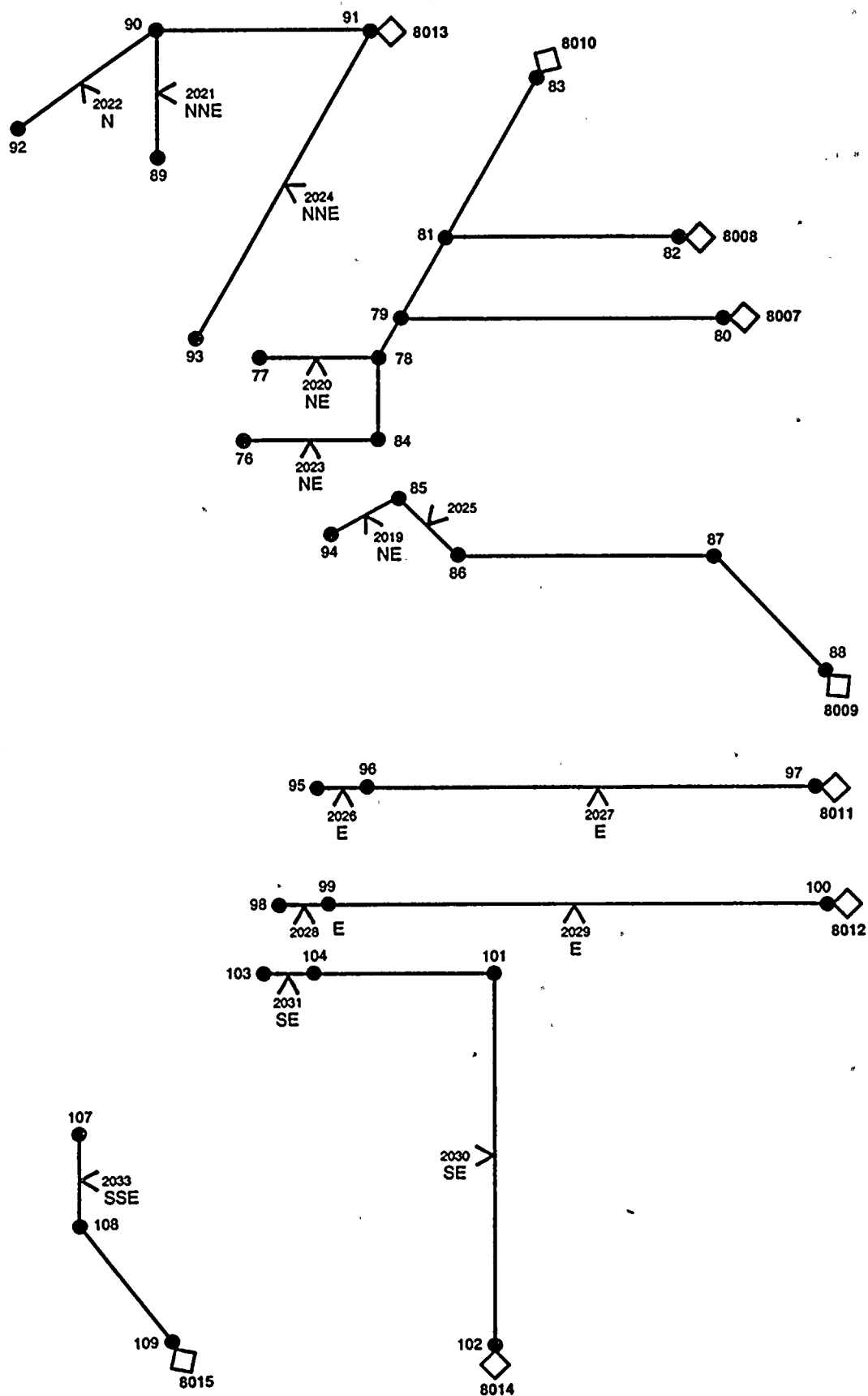


FIGURE 1 TEN MILE EMERGENCY PLANNING ZONE



870385.1

FIGURE 2(a) BENTON COUNTY LINK-NODE DIAGRAMS



870385.6

FIGURE 2(b) FRANKLIN COUNTY LINK-NODE DIAGRAMS

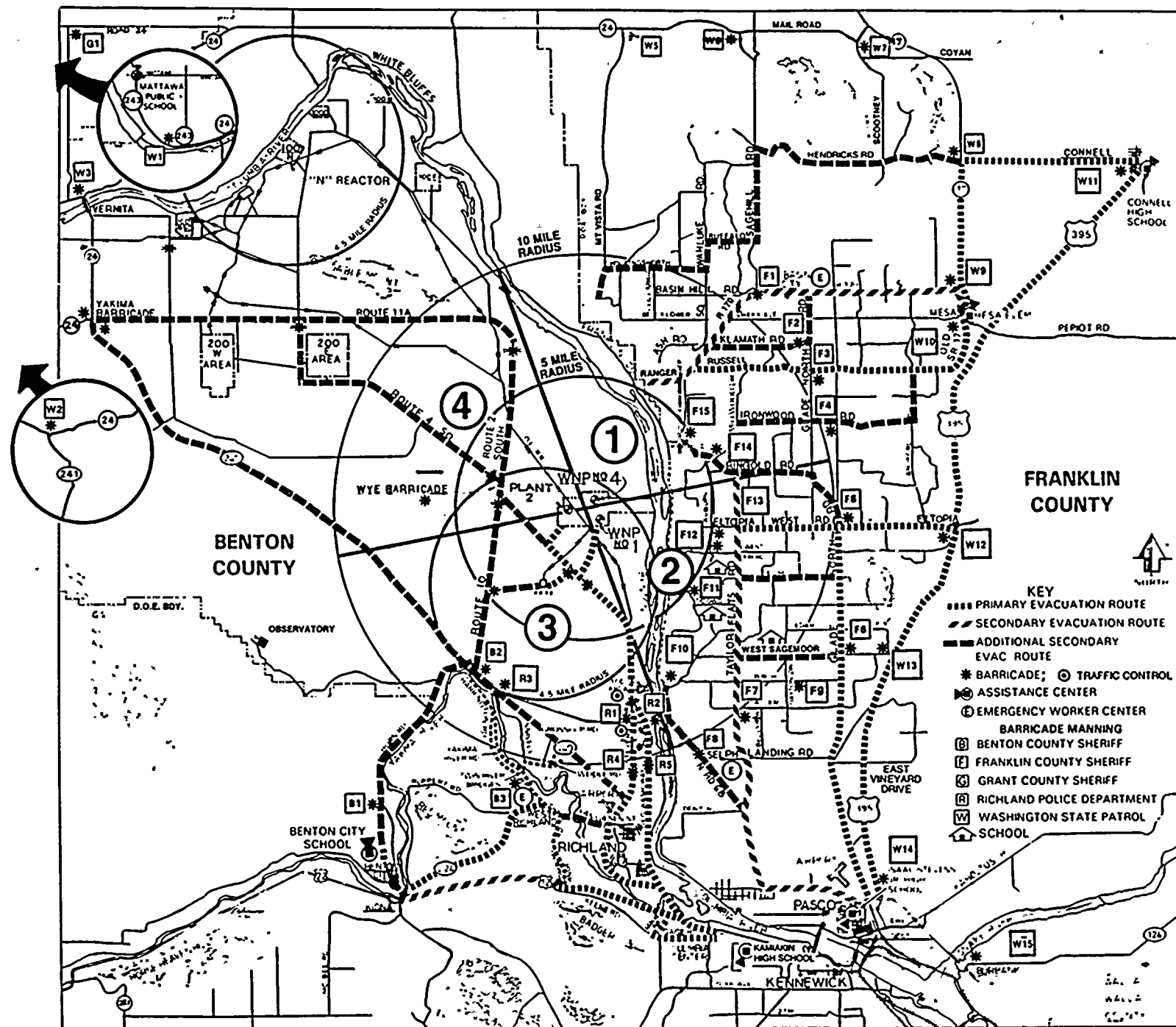
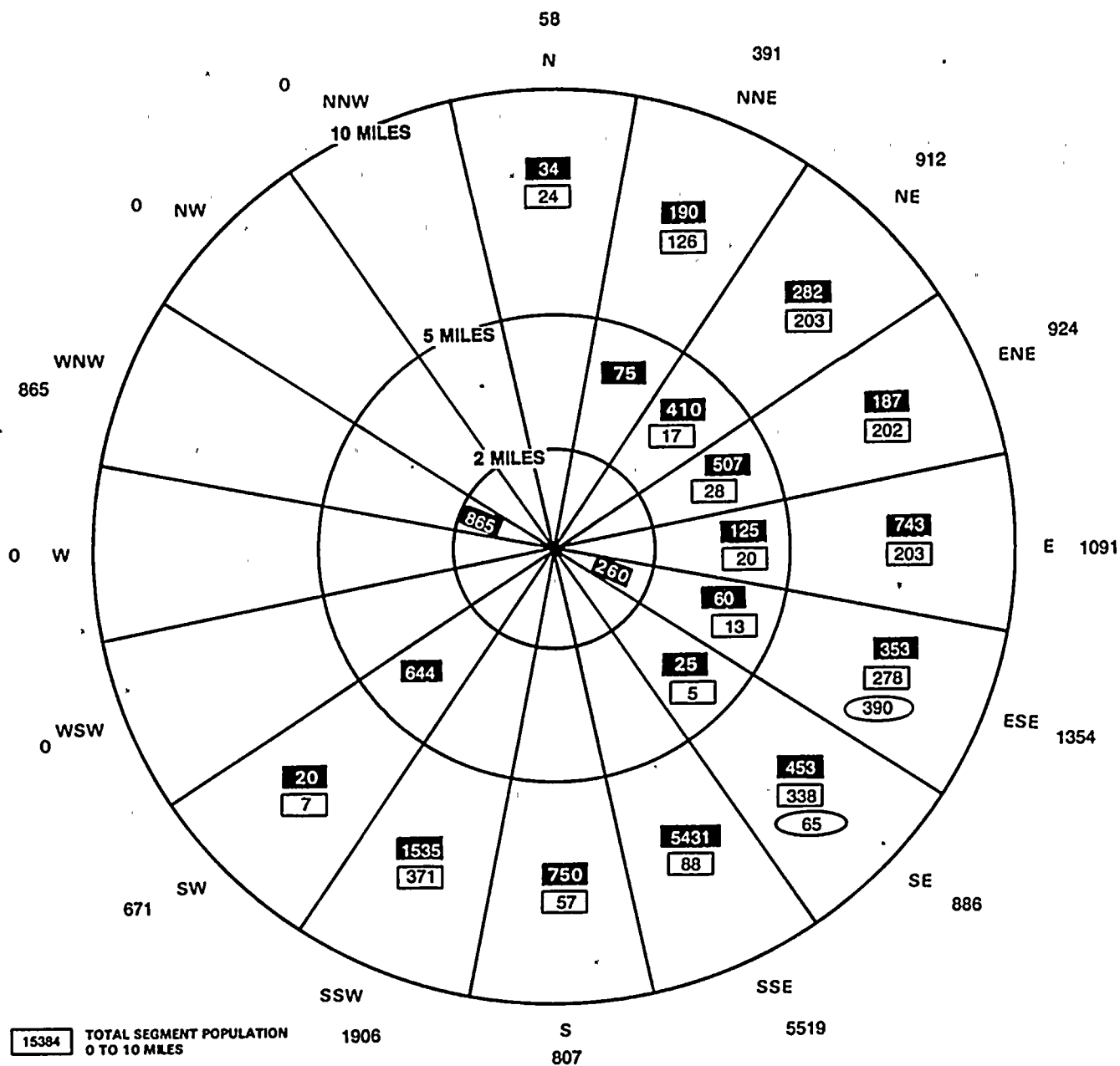


FIGURE 3 EVACUATION ROUTES, TRAFFIC CONTROL POINTS, ACCESS CONTROL POINTS AND ASSISTANCE CENTERS



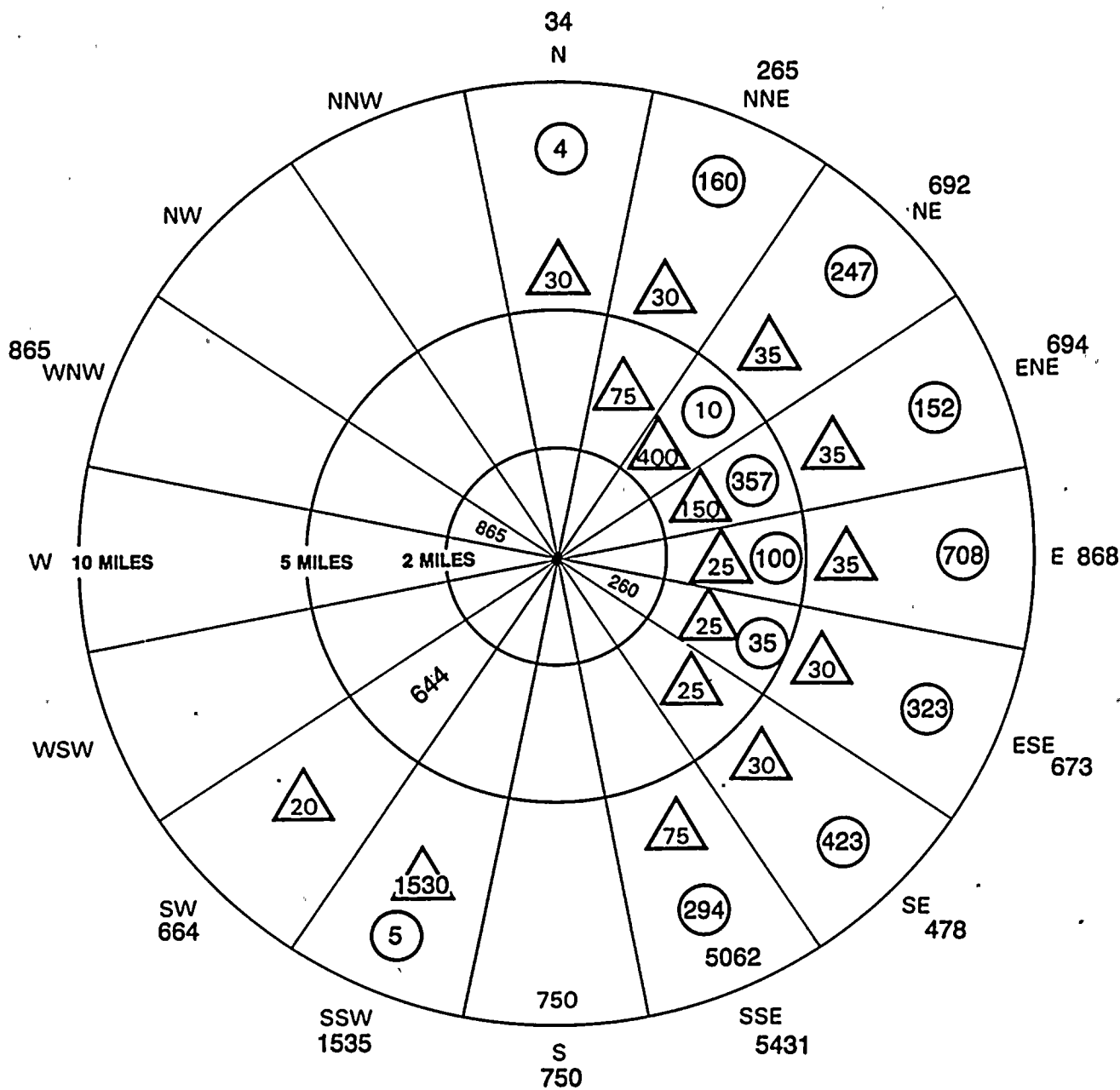
POPULATION TOTALS—PERMANENT			
RING, MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	0	0-2	0
2-5	83	0-5	83
5-10	1897	0-10	1980

POPULATION TOTALS—TRANSIENT			
RING, MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	1125	0-2	1125
2-5	1846	0-5	2971
5-10	9978	0-10	12949

POPULATION TOTALS—SPECIAL			
RING, MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	0	0-2	0
2-5	0	0-5	0
5-10	455	0-10	455

POPULATION TOTALS			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	1125	0-2	1125
2-5	1929	0-5	3054
5-10	12330	0-10	15384

FIGURE 4 TOTAL POPULATION WITHIN THE 10 MILE EPZ BROKEN DOWN INTO CLASSIFICATIONS



KEY

Industrial Employees

Migratory Agricultural Workers

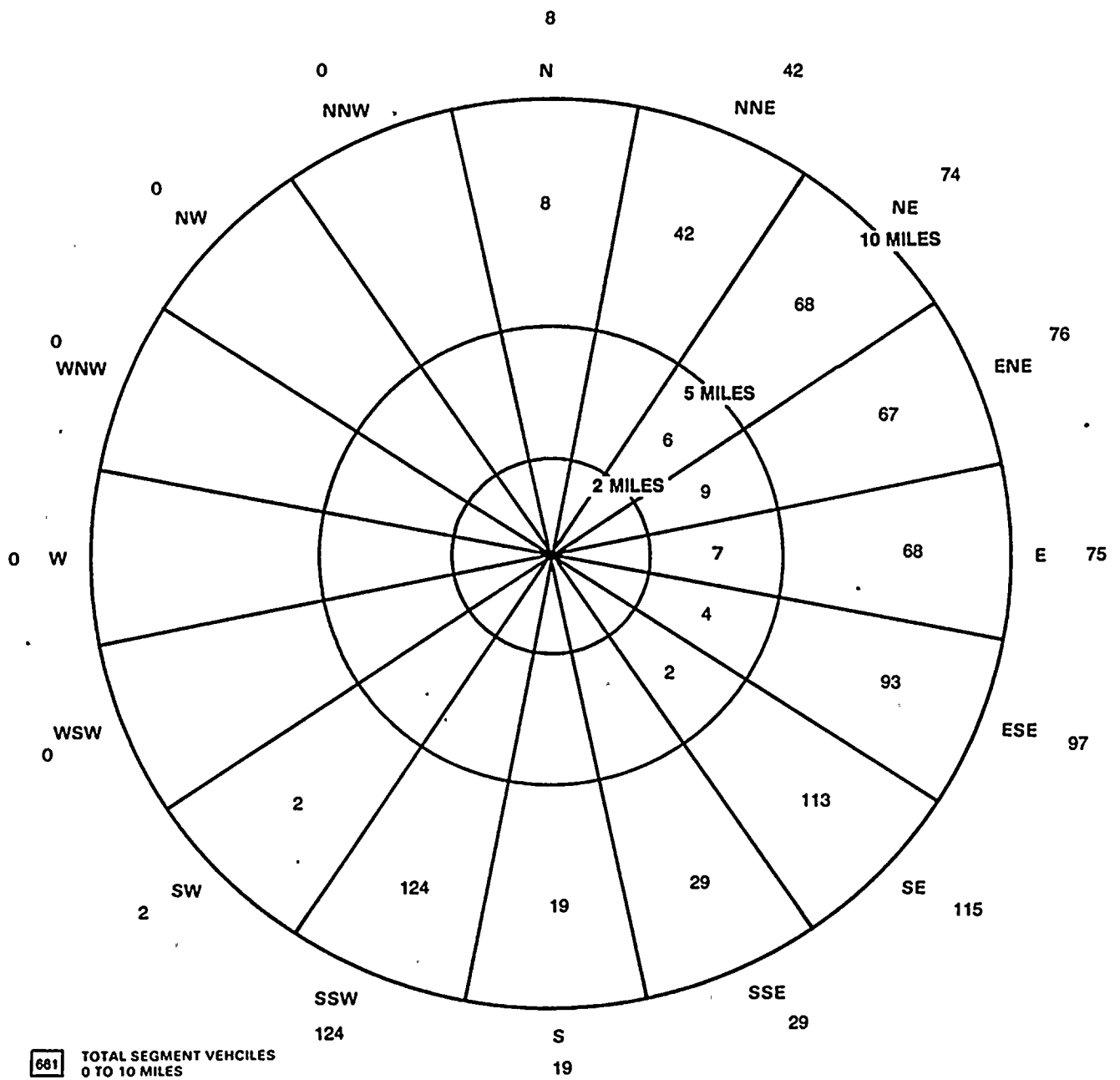
Recreationists

865

152

25

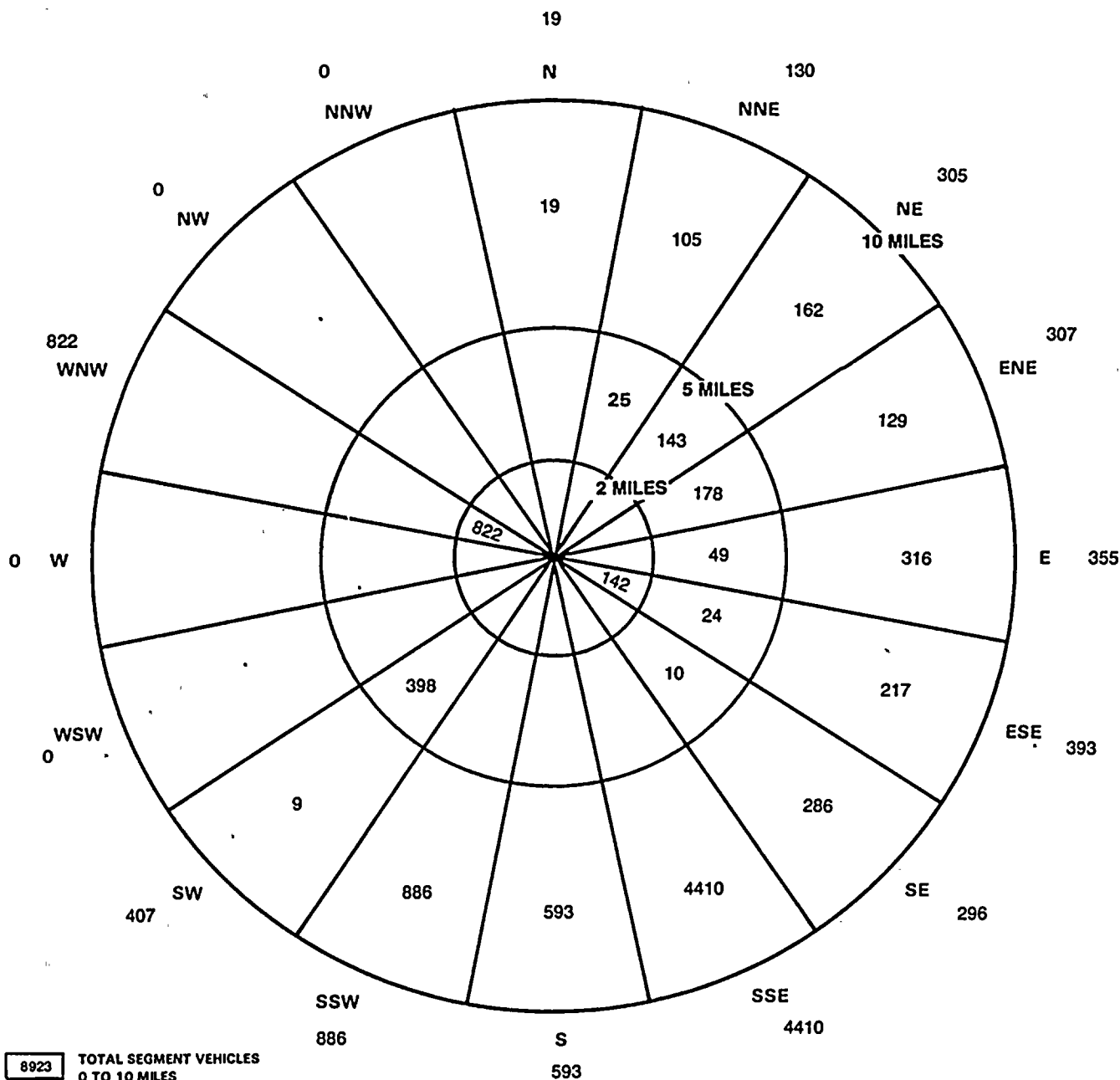
**FIGURE 5 DISTRIBUTION OF TRANSIENT POPULATION
WITHIN 10 MILE EPZ**



PERMANENT VEHICLES			
RING MILES	RING VEHICLES	TOTAL MILES	CUMULATIVE VEHICLES
0 - 2	0	0 - 2	0
2 - 5	28	0 - 5	28
5 - 10	633	0 - 10	661

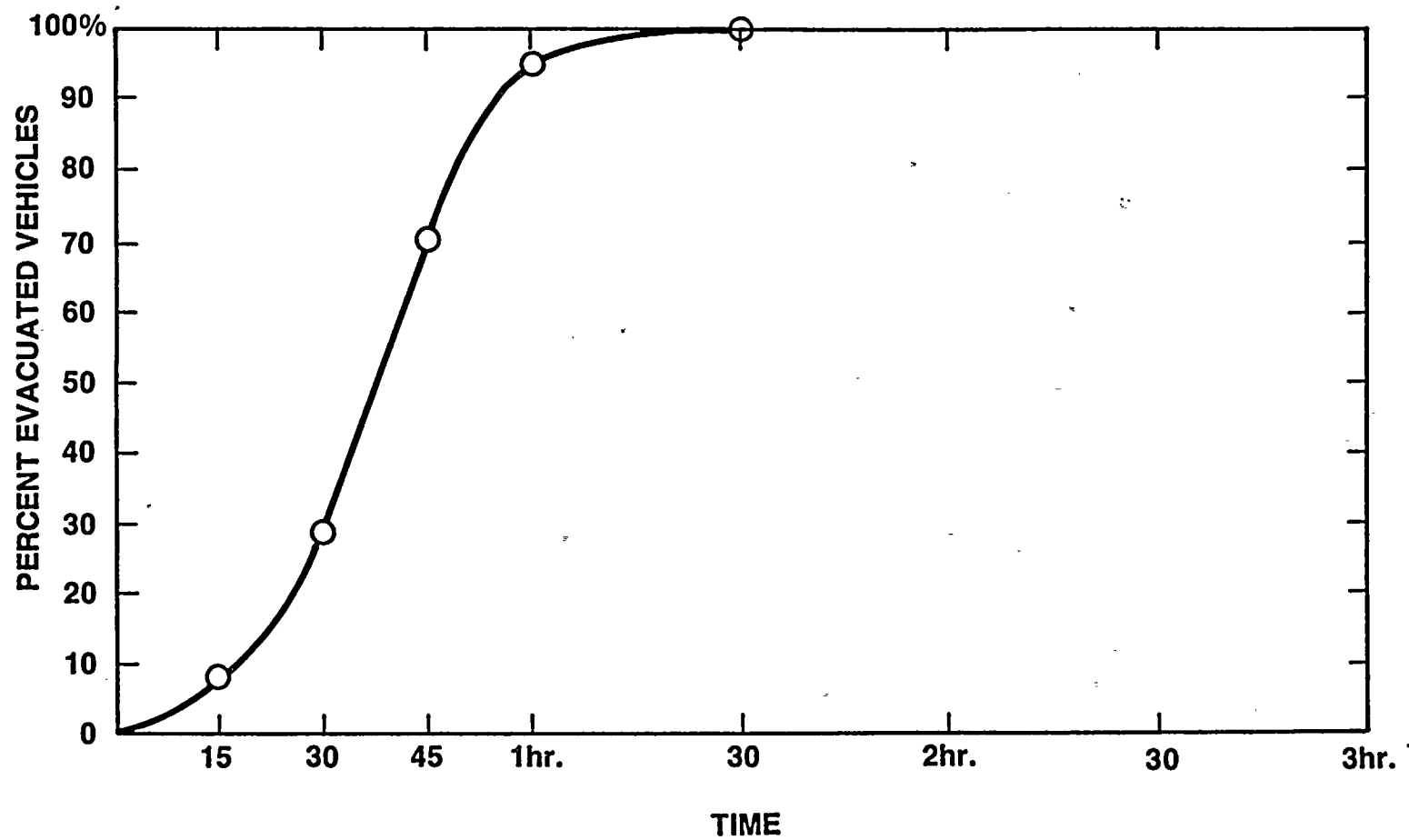
870385.4
REV. 2
4/87

FIGURE 6 PERMANENT RESIDENT PASSENGER VEHICLES WITHIN 10 MILE EMERGENCY PLANNING ZONE



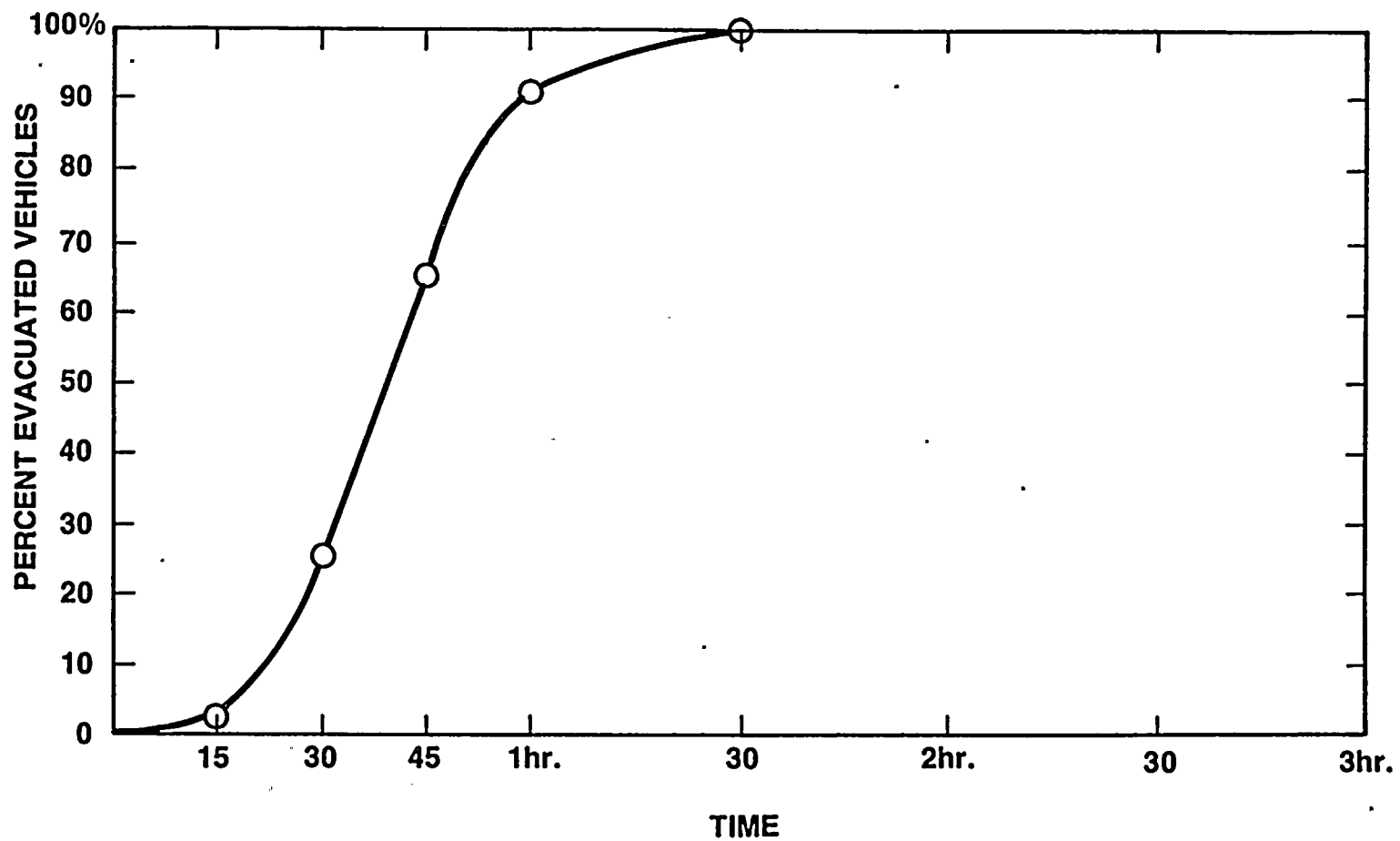
870385.3
REV. 2
4/87

**FIGURE 7 TOTAL VEHICLES WITHIN THE 10 MILE
EMERGENCY PLANNING ZONE**



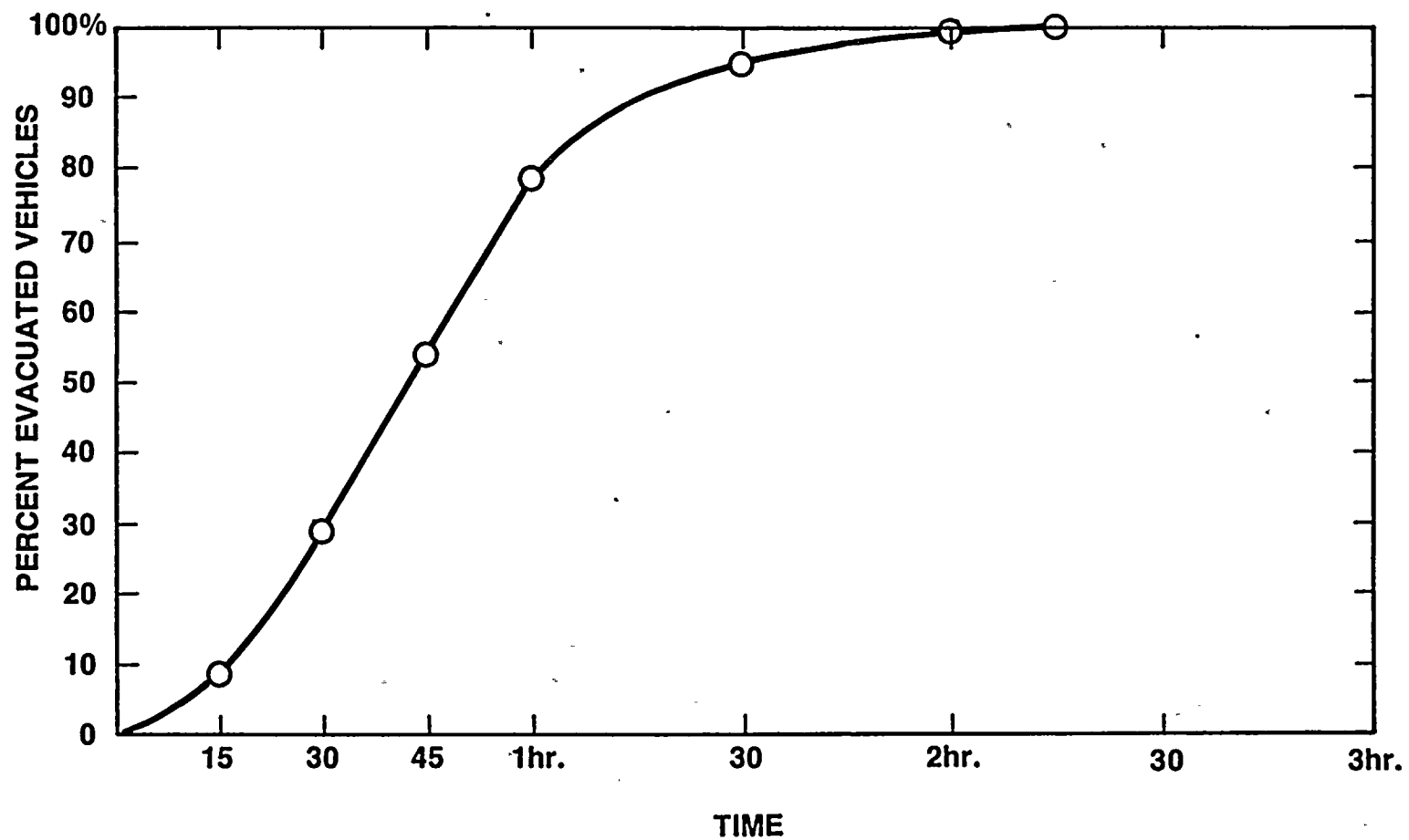
870385.3
Rev 2
April 1987

FIGURE 8.A. PERMANENT POPULATION—NORMAL CONDITIONS



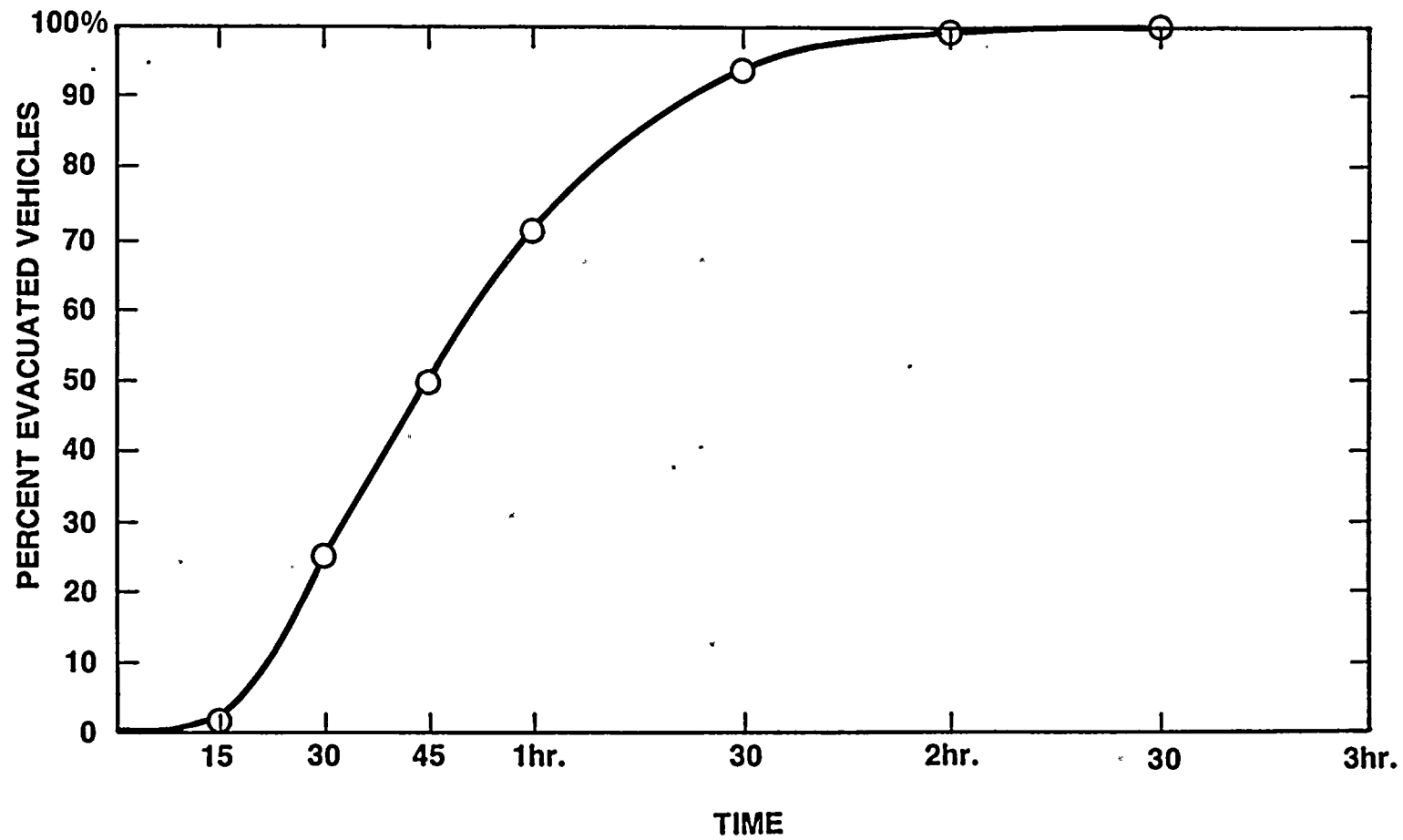
870385 4
Rev 2
April 1987

FIGURE 8.B. PERMANENT POPULATION—ADVERSE CONDITIONS



870385.5
Rev 2
April 1987

FIGURE 8.C. GENERAL POPULATION—NORMAL CONDITIONS



870385.2
Rev 2
April 1987

FIGURE 8.D. GENERAL POPULATION—ADVERSE CONDITIONS

SOURCE/SINK FLOW RATES

CENTROID NUMBER	LINK	SOURCE/SINK RATE (VEH/HR)
2000	(58, 25)	220
2001	(61, 34)	57
2002	(24, 4)	99
2003	(27, 7)	139
2004	(70, 69)	172
2005	(35, 16)	100
2006	(41, 38)	192
2007	(17, 18)	58
2008	(28, 29)	100
2009	(30, 29)	90
2010	(4, 52)	60
2011	(1, 2)	273
2012	(64, 32)	50
2013	(71, 39)	103
2014	(47, 46)	135
2015	(49, 40)	311
2016	(60, 59)	18
2017	(72, 42)	118
2018	(73, 36)	250
2019	(94, 85)	71
2020	(77, 78)	65
2021	(89, 90)	42
2022	(92, 90)	8
2023	(76, 84)	57
2024	(93, 91)	10
2025	(85, 86)	52
2026	(95, 96)	20
2027	(96, 97)	126
2028	(98, 99)	10
2029	(99, 100)	87
2030	(101, 102)	114
2031	(103, 104)	4
2032	(105, 106)	300
2033	(107, 108)	61

Table 1A

Source Rate Inputs for I-DYNEV

Case: General Population

Time Period 1 (1st 15 minutes)

SOURCE/SINK FLOW RATES

CENTROID NUMBER	LINK	SOURCE/SINK RATE (VEH/HR)
2000	(58, 25)	494
2001	(61, 34)	128
2002	(24, 4)	223
2003	(27, 7)	312
2004	(70, 69)	388
2005	(35, 16)	225
2006	(41, 38)	431
2007	(17, 18)	131
2008	(28, 29)	225
2009	(30, 29)	203
2010	(4, 52)	135
2011	(1, 2)	614
2012	(64, 32)	112
2013	(71, 39)	232
2014	(47, 46)	303
2015	(49, 40)	699
2016	(60, 59)	40
2017	(72, 42)	266
2018	(73, 36)	563
2019	(94, 85)	160
2020	(77, 78)	146
2021	(89, 90)	95
2022	(92, 90)	17
2023	(76, 84)	129
2024	(93, 91)	23
2025	(85, 86)	116
2026	(95, 96)	44
2027	(96, 97)	284
2028	(98, 99)	22
2029	(99, 100)	195
2030	(101, 102)	257
2031	(103, 104)	9
2032	(105, 106)	675
2033	(107, 108)	137

Table 1B

Source Rate Inputs for I-DYNEV

Case: General Population

Time Periods 2 and 4 (2nd and 4th 15 minutes)

SOURCE/SINK FLOW RATES

CENTROID NUMBER	LINK	SOURCE/SINK RATE (VEH/HR)
2000	(58, 25)	988
2001	(61, 34)	256
2002	(24, 4)	446
2003	(27, 7)	625
2004	(70, 69)	1125
2005	(35, 16)	450
2006	(41, 38)	862
2007	(17, 18)	261
2008	(28, 29)	450
2009	(30, 29)	405
2010	(4, 52)	270
2011	(1, 2)	1228
2012	(64, 32)	223
2013	(71, 39)	464
2014	(47, 46)	607
2015	(49, 40)	1399
2016	(60, 59)	79
2017	(72, 42)	531
2018	(73, 36)	1125
2019	(94, 85)	320
2020	(77, 78)	292
2021	(89, 90)	189
2022	(92, 90)	34
2023	(76, 84)	257
2024	(93, 91)	45
2025	(85, 86)	232
2026	(95, 96)	88
2027	(96, 97)	569
2028	(98, 99)	43
2029	(99, 100)	391
2030	(101, 102)	515
2031	(103, 104)	18
2032	(105, 106)	1350
2033	(107, 108)	274

Table 1C

Source Rate Inputs for I-DYNEV

Case: General Population

Time Period 3 (3rd 15 minutes)

Mile	1	2	3	4	5	6	7	8	9	10	15	20	25	30	35	40	45	50	TOTAL
Sector N								3	7	14	138	194	675	826	454	526	2904	14968	20709
NNE						8	10	23	32	53	136	192	481	5278	732	2466	423	470	10304
NE				4	13	27	20	57	29	70	166	233	430	1585	355	295	130	796	4210
ENE				8	20	32	63	19	33	55	184	608	296	1421	90	331	100	113	3373
E				2	18	39	41	42	27	54	192	269	68	83	59	69	114	127	1204
ESE				5	8	40	48	72	53	65	80	112	69	84	77	90	280	584	1667
SE					5	14	84	50	84	106	547	3608	2762	3376	215	249	984	1100	13184
SSE							9	33	32	14	7588	41590	22902	1214	275	317	821	919	75714
S										57	25922	3021	84	103	567	4113	2050	14490	50407
SSW									120	249	1298	294	393	482	42	214	164	2446	5704
SW								4	3		494	2612	875	5290	219	254	199	222	10172
WSW											396	554	732	894	4478	17393	382	427	25256
W													536	655	1660	1918	6077	12438	23284
WNW													83	102	649	750	822	920	3326
NW													18	22	187	516	383	429	1555
NNW													82	100	318	1257	251	281	2289
Total				19	64	160	275	305	420	737	37141	53287	30486	21515	10377	30758	16084	50730	252358
Accumulated Total				19	83	243	518	823	1243	1980	39121	92408	122894	144409	154786	185544	201628	252358	

870385.7
Rev.2
4/87

TABLE 2 PERMANENT POPULATION DISTRIBUTION

Mile		1	2	3	4	5	6	7	8	9	10	15	20	25	30	35	40	45	50	TOTAL
Sector	N							30	1	3										34
	NNE					75	20	10	1	70	89									265
	NE				400	10	35	77	64	50	56									692
	ENE				467	40	40	28	48	44	27									694
	E				25	100	260	108	218	102	55									868
	ESE	260			40	20	87	46	202	6	12									673
	SE					25	70	262	21	50	50									478
	SSE							165	2627	2377	262									5431
	S									750										750
	SSW									1500	35									1535
	SW				644					10	10									664
	WSW																			
	W																			
	WNW	865										1779	1361							4005
	NW												993							993
	NNW																			
	Total	1125			1576	270	512	726	3182	4962	596	1779	2354							17082
Accumulated	Total	1125			2701	2971	3483	4209	7391	12353	12949	14728	17082							

870385.9
REV. 2
4/87

TABLE 3 TRANSIENT POPULATION DISTRIBUTION

Mile	1	2	3	4	5	6	7	8	9	10	TOTAL
Sector N											
NNE											
NE											
ENE											
E											
ESE							390				390
SE							43	22			65
SSE											
S											
SSW											
SW											
WSW											
W											
WNW											
NW											
NNW											
Total							433	22			455
Accumulated Total							433	455			

870385.10
REV. 2
4/87

TABLE 4 SPECIAL FACILITY POPULATION DISTRIBUTION

Mile	1	2	3	4	5	6	7	8	9	10	15	20	25	30	35	40	45	50	TOTAL
Sector N							30	4	10	14	138	194	675	826	454	526	2904	14968	20743
NNE					75	28	20	24	102	142	136	192	481	5278	732	2466	423	470	10569
NE				404	23	62	97	121	79	126	166	233	430	1585	355	295	130	796	4902
ENE				475	60	72	91	67	77	82	184	608	296	1421	90	331	100	113	4067
E				27	118	299	149	260	129	109	192	269	68	83	59	69	114	127	2072
ESE	260			45	28	127	484	274	59	77	80	112	69	84	77	90	280	584	2730
SE					30	89	389	93	134	156	547	3608	2762	3376	215	249	984	1100	13732
SSE							174	2660	2402	276	7588	41590	22902	1214	275	317	821	919	81138
S									750	57	25922	3021	84	103	567	4113	2050	14490	51157
SSW								2	1620	284	1298	294	393	482	42	214	164	2446	7239
SW				644				4	13	10	494	2612	875	5290	219	254	199	222	10836
WSW											396	554	732	894	4478	17393	382	427	25256
W													536	655	1660	1918	6077	12438	23284
WNW	865										1779	1361	83	102	649	750	822	920	7331
NW												993	18	22	187	516	383	429	2548
NNW													82	100	318	1257	251	281	2289
Total	1125			1595	334	677	1434	3509	5375	1333	38920	55641	30486	21515	10377	30758	16084	50730	269893
Accumulated Total	1125			2720	3054	3731	5165	8674	14049	15382	54302	109943	140429	161944	172321	203079	219163	269893	

870385.8
REV. 2
4/87

TABLE 5 TOTAL POPULATION DISTRIBUTION

DYNEV LINKS

LINK	LENGTH MI*100	PKT LENGTH FEET		FULL LANES	PKT LANES		GRD	LANE CHAN						DESTINATION NODES		OPP. NODE	LOST TIME SEC	Q DIS HDWY. SEC		FREE SPD MPH	RTOR CODE	PED CODE		
		L	R		L	R		1	2	3	4	5	6	LEFT	THRU	RIGHT	DIAG							
(17, 18)	112	0	0	1	0	0	0	0	0	0	0	0	0	0	19	0	0	0	2.5*	4.8	30	0	0	
(18, 19)	62	0	0	1	0	0	0	0	0	0	0	0	0	0	20	0	-22	0	2.5*	4.0	30	0	0	
(19, 20)	62	0	0	1	0	0	0	0	0	0	0	0	0	0	21	0	0	0	2.5*	4.0	30	0	0	
(20, 21)	100	0	0	1	0	0	0	0	0	0	0	0	0	0	8004	0	0	0	2.5*	4.0	30	0	0	
(19, 22)	62	0	0	1	0	0	0	0	0	0	0	0	0	0	23	0	0	0	2.5*	4.0	30	0	0	
(22, 23)	106	0	0	1	0	0	0	0	0	0	0	0	0	0	8003	0	0	0	2.5*	4.0	30	0	0	
(26, 31)	10	0	0	2	0	0	0	0	0	0	0	0	0	0	6	0	0	0	2.5*	2.2*	55	0	0	
(28, 29)	38	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2.5*	2.2*	25	0	0	
(30, 29)	26	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2.5*	2.2*	20	0	0	
(34, 26)	20	0	0	2	0	0	0	0	0	0	0	0	0	0	31	0	0	0	2.5*	2.2*	45	0	0	
(33, 5)	20	0	0	1	1	0	0	0	0	0	0	0	0	8	0	0	0	0	2.5*	2.2*	40	0	0	
(24, 4)	42	0	0	1	0	0	0	0	0	0	0	0	0	0	0	52	0	0	2.5*	2.2*	25	0	1	
(4, 52)	65	0	0	1	0	0	0	0	0	0	0	0	0	0	53	0	0	0	2.5*	2.2*	35	0	0	
(1, 2)	36	0	0	1	0	0	0	0	0	0	0	0	0	44	0	0	0	0	2.5*	2.2*	35	0	0	
(7, 26)	80	0	0	1	0	0	0	0	0	0	0	0	0	0	0	31	0	0	2.5*	2.2*	45	0	0	
(5, 8)	10	0	0	2	2	0	0	0	0	0	0	0	0	0	9	0	0	0	2.5*	2.2*	55	0	0	
(8, 9)	37	0	0	2	1	0	0	0	0	0	0	0	0	0	10	0	0	0	2.5*	2.2*	55	0	0	
(9, 10)	51	0	0	2	0	0	0	0	0	0	0	0	0	0	13	0	0	0	2.5*	2.2*	55	0	0	
(10, 13)	150	0	0	2	0	0	0	0	0	0	0	0	0	0	14	0	0	0	2.5*	2.2*	55	0	0	
(13, 14)	150	0	0	2	0	0	0	0	0	0	0	0	0	0	16	0	0	0	2.5*	2.2*	55	0	0	
(14, 16)	70	0	0	2	0	0	0	0	0	0	0	0	0	0	32	0	0	0	2.5*	2.2*	55	0	0	
(35, 16)	10	0	0	1	0	0	0	0	0	0	0	0	0	32	0	0	0	0	2.5*	2.2*	25	0	0	
(15, 38)	25	0	0	2	0	0	0	0	0	0	0	0	0	0	39	0	0	0	2.5*	2.2*	55	0	0	
(38, 39)	30	0	0	2	1	0	0	0	0	0	0	0	0	0	42	0	0	0	2.5*	2.2*	55	0	0	
(41, 38)	33	0	0	1	0	0	0	0	0	0	0	0	0	39	0	0	0	0	2.5*	2.2*	35	0	0	
(39, 42)	25	0	0	2	0	0	0	0	0	0	0	0	0	0	43	0	0	0	2.5*	2.2*	50	0	0	
(42, 43)	40	0	0	2	0	0	0	0	0	0	0	0	0	0	8001	0	0	0	2.5*	2.2*	50	0	0	
(44, 40)	42	0	0	2	0	0	0	0	0	0	0	0	0	0	45	0	0	0	2.5*	2.2*	50	0	0	
(40, 45)	30	0	0	2	0	0	0	0	0	0	0	0	0	0	46	0	0	0	2.5*	2.2*	50	0	0	
(45, 46)	10	0	0	2	1	0	0	0	0	0	0	0	0	47	69	0	0	0	2.5*	2.2*	50	0	0	
(47, 46)	20	0	0	1	0	0	0	0	0	0	0	0	0	69	0	0	0	0	2.5*	2.2*	25	0	0	
(49, 40)	20	0	0	1	0	0	0	0	0	0	0	0	0	45	0	0	0	0	2.5*	2.2*	25	0	0	
(53, 50)	157	0	0	1	0	0	0	0	0	0	0	0	0	0	51	0	0	0	2.5*	2.2*	55	0	0	
(50, 51)	138	0	0	1	0	0	0	0	0	0	0	0	0	0	54	0	0	0	2.5*	2.2*	55	0	0	
(51, 54)	45	0	0	1	0	0	0	0	0	0	0	0	0	0	55	0	0	0	2.5*	2.2*	55	0	0	
(54, 55)	257	0	0	1	0	0	0	0	0	0	0	0	0	0	57	0	0	0	2.5*	2.2*	55	0	0	
(55, 57)	277	0	0	1	0	0	0	0	0	0	0	0	0	0	56	0	0	0	2.5*	2.2*	55	0	0	
(57, 56)	92	0	0	1	0	0	0	0	0	0	0	0	0	0	8000	0	0	0	2.5*	2.2*	55	0	0	
(58, 25)	10	0	0	1	0	0	0	0	0	0	0	0	0	59	0	0	0	0	2.5*	2.2*	15	0	0	
(25, 59)	51	0	0	1	0	0	0	0	0	0	0	0	0	0	74	0	0	0	2.5*	2.2*	50	0	0	
(60, 59)	50	0	0	1	0	0	0	0	0	0	0	0	0	0	0	74	0	0	0	2.5*	2.2*	35	0	0
(27, 7)	45	0	0	1	0	0	0	0	0	0	0	0	0	0	26	0	0	0	2.5*	2.2*	25	0	0	
(61, 34)	10	0	0	1	0	0	0	0	0	0	0	0	0	0	26	0	0	0	2.5*	2.2*	25	0	0	
(3, 63)	20	0	0	2	1	0	0	0	0	0	0	0	0	0	5	0	0	0	2.5*	2.2*	55	0	0	
(63, 5)	152	0	0	2	0	0	0	0	0	0	0	0	0	0	8	0	0	0	2.5*	2.2*	55	0	0	
(29, 3)	80	0	0	1	0	0	0	0	0	0	0	0	0	63	0	0	0	0	2.5*	2.2*	25	0	0	
(6, 33)	148	0	0	1	0	0	0	0	0	0	0	0	0	0	5	0	0	0	2.5*	2.2*	55	0	0	
(31, 6)	22	0	0	1	0	0	0	0	0	0	0	0	0	0	33	0	0	0	2.5*	2.2*	55	0	0	

TABLE 6. ROADWAY CHARACTERISTICS

DYNEV LINKS (CONT.)

LINK	LENGTH MI*100	PKT LENGTH FEET		FULL LANES	PKT LANES			LANE CHAN						DESTINATION NODES				OPP. NODE	LOST TIME SEC	Q DIS HDWY. SEC	FREE SPD MPH	RTOR CODE	PED CODE
		L	R		L	R	GRD	1	2	3	4	5	6	LEFT	THRU	RIGHT	DIAG						
(16, 32)	40	0	0	2	1	0	0	0	0	0	0	0	0	0	62	0	0	0	2.5*	2.2*	55	0	0
(32, 62)	10	0	0	3	0	0	0	0	0	0	0	0	0	0	37	0	0	0	2.5*	2.2*	55	0	0
(64, 32)	18	0	0	1	0	0	0	0	0	0	0	0	0	62	0	0	0	0	2.5*	2.2*	15	0	0
(62, 37)	20	0	0	2	0	0	0	0	0	0	0	0	0	0	65	0	0	0	2.5*	2.2*	55	0	0
(37, 65)	30	0	0	2	2	0	0	0	0	0	0	0	0	0	11	0	0	0	2.5*	2.2*	55	0	0
(65, 11)	20	0	0	2	1	0	0	0	0	0	0	0	0	66	67	0	0	0	2.5*	2.2*	55	0	0
(11, 66)	50	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2.5*	2.2*	50	0	0
(66, 2)	12	0	0	2	0	0	0	0	0	0	0	0	0	0	44	0	0	0	2.5*	2.2*	50	0	0
(2, 44)	10	0	0	2	0	0	0	0	0	0	0	0	0	0	40	0	0	0	2.5*	2.2*	50	0	0
(12, 68)	10	0	0	2	1	1	0	0	0	0	0	0	0	0	15	0	0	0	2.5*	2.2*	55	0	0
(68, 15)	25	0	0	2	1	0	0	0	0	0	0	0	0	0	38	0	0	0	2.5*	2.2*	55	0	0
(11, 67)	46	0	0	2	0	0	0	0	0	0	0	0	0	0	12	0	0	0	2.5*	2.2*	55	0	0
(67, 12)	5	0	0	2	1	0	0	0	0	0	0	0	0	0	68	0	0	0	2.5*	2.2*	55	0	0
(52, 53)	156	0	0	1	0	0	0	0	0	0	0	0	0	50	0	0	0	0	2.5*	2.2*	50	0	0
(46, 69)	17	0	0	2	0	0	0	0	0	0	0	0	0	0	48	0	0	0	2.5*	2.2*	50	0	0
(69, 48)	28	0	0	2	0	0	0	0	0	0	0	0	0	0	8002	0	0	0	2.5*	2.2*	50	0	0
(70, 69)	22	0	0	1	0	0	0	0	0	0	0	0	0	48	0	0	0	0	2.5*	2.2*	25	0	0
(71, 39)	28	0	0	1	0	0	0	0	0	0	0	0	0	42	0	0	0	0	2.5*	2.2*	25	0	0
(72, 42)	20	0	0	1	0	0	0	0	0	0	0	0	0	43	0	0	0	0	2.5*	2.2*	25	0	0
(36, 1)	17	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2.5*	2.2*	25	0	1
(36, 37)	20	0	0	1	1	0	0	0	0	0	0	0	0	65	0	0	0	0	2.5*	2.2*	25	0	1
(73, 36)	12	0	0	1	0	0	0	0	0	0	0	0	0	1	0	37	0	0	2.5*	2.2*	25	0	1
(59, 74)	353	0	0	1	0	0	0	0	0	0	0	0	0	106	0	0	0	0	2.5*	2.2*	50	0	0
(46, 47)	36	0	0	1	0	0	0	0	0	0	0	0	0	0	8006	0	0	0	2.5*	2.2*	25	0	0
(77, 78)	147	0	0	1	0	0	0	0	0	0	0	0	0	79	0	0	0	0	2.5*	2.2*	40	0	0
(78, 79)	56	0	0	1	0	0	0	0	0	0	0	0	0	0	81	0	80	0	2.5*	2.2*	40	0	0
(79, 80)	408	0	0	1	0	0	0	0	0	0	0	0	0	0	8007	0	0	0	2.5*	2.2*	45	0	0
(79, 81)	113	0	0	1	0	0	0	0	0	0	0	0	0	0	83	82	0	0	2.5*	2.2*	45	0	0
(81, 82)	301	0	0	1	0	0	0	0	0	0	0	0	0	0	8008	0	0	0	2.5*	2.2*	45	0	0
(81, 83)	235	0	0	1	0	0	0	0	0	0	0	0	0	0	8010	0	0	0	2.5*	2.2*	45	0	0
(84, 78)	102	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	79	0	2.5*	2.2*	45	0	0
(85, 86)	106	0	0	1	0	0	0	0	0	0	0	0	0	0	87	0	0	0	2.5*	2.2*	45	0	0
(86, 87)	322	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	88	0	2.5*	2.2*	30*	0	0
(87, 88)	198	0	0	1	0	0	0	0	0	0	0	0	0	0	8009	0	0	0	2.5*	2.2*	40	0	0
(76, 84)	152	0	0	1	0	0	0	0	0	0	0	0	0	78	0	0	0	0	2.5*	2.2*	30*	0	0
(89, 90)	166	0	0	1	0	0	0	0	0	0	0	0	0	0	0	91	0	0	2.5*	2.2*	30	0	0
(90, 91)	267	0	0	1	0	0	0	0	0	0	0	0	0	0	8013	0	0	0	2.5*	2.2*	45	0	0
(92, 90)	208	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	91	0	2.5*	2.2*	30	0	0
(93, 91)	451	0	0	1	0	0	0	0	0	0	0	0	0	0	8013	0	0	0	2.5*	2.2*	30	0	0
(94, 85)	97	0	0	1	0	0	0	0	0	0	0	0	0	0	0	86	0	0	2.5*	2.2*	30	0	0
(95, 96)	71	0	0	1	0	0	0	0	0	0	0	0	0	0	97	0	0	0	2.5*	2.2*	45	0	0
(96, 97)	556	0	0	1	0	0	0	0	0	0	0	0	0	0	8011	0	0	0	2.5*	2.2*	45	0	0
(98, 99)	37	0	0	1	0	0	0	0	0	0	0	0	0	0	100	0	0	0	2.5*	2.2*	30	0	0
(99, 100)	632	0	0	1	0	0	0	0	0	0	0	0	0	0	8012	0	0	0	2.5*	2.2*	45	0	0
(101, 102)	478	0	0	1	0	0	0	0	0	0	0	0	0	0	8014	0	0	0	2.5*	2.2*	50	0	0
(103, 104)	37	0	0	1	0	0	0	0	0	0	0	0	0	0	101	0	0	0	2.5*	2.2*	50	0	0
(104, 101)	237	0	0	1	0	0	0	0	0	0	0	0	0	0	0	102	0	0	2.5*	2.2*	50	0	0
(74, 106)	163	0	0	1	0	0	0	0	0	0	0	0	0	0	75	0	0	0	2.5*	2.2*	55	0	0
(105, 106)	22	0	0	1	0	0	0	0	0	0	0	0	0	75	0	0	0	0	2.5*	2.2*	25	0	0
(106, 75)	222	0	0	1	0	0	0	0	0	0	0	0	0	0	8005	0	0	0	2.5*	2.2*	55	0	0
(107, 108)	116	0	0	1	0	0	0	0	0	0	0	0	0	0	109	0	0	0	2.5*	2.2*	55	0	0
(108, 109)	152	0	0	1	0	0	0	0	0	0	0	0	0	0	8015	0	0	0	2.5*	2.2*	55	0	0

TABLE 6. (continued)

DESCRIPTION	TOTAL WITHIN 2 MILES	AREAS WITHIN 5 MILES				AREAS WITHIN 10 MILES			
		I	II	III	TOTAL	I	II	III	TOTAL
PERMANENT POPULATION	—	45	38	—	83	600	945	435	1,980
PERMANENT POPULATION VEHICLES	—	15	13	—	28	200	316	145	661
TRANSIENT POPULATION	1,125	992	470	644	2,971	1,685	2,388	8,011	12,949
TRANSIENT POPULATION VEHICLES	964	306	212	398	1,763	561	880	5,999	8,262
GENERAL POPULATION	1,125	1,037	508	644	3,054	2,285	3,333	8,446	14,929
TOTAL VEHICLES	964	321	225	398	1,791	761	1,196	6,144	8,923
NOTIFICATION TIME MINUTES	15	30	30	30	30	30	30	30	30
PERMANENT POPULATION EVAC. TIME NORMAL CONDITIONS HOURS MINUTES	—	1:00	1:00	—	1:00	1:30	1:30	1:30	1:30
GENERAL POPULATION EVAC. TIME NORMAL CONDITIONS HOURS MINUTES	1:00	1:00	1:00	1:30	1:30	1:30	1:20	2:15	2:15
PERMANENT POPULATION EVAC. TIME ADVERSE CONDITIONS HOURS MINUTES	—	1:00	1:00	—	1:00	1:30	1:30	1:30	1:30
GENERAL POPULATION EVAC. TIME ADVERSE CONDITIONS HOURS MINUTES	1:30	1:00	1:00	2:00	2:00	1:30	1:30	2:30	2:30
CONFIRMATION TIME MINUTES	30	60	60	60	60	60	60	60	60

870385.5
REV. 2
4/87

TABLE 7 SUMMARY OF RESULTS OF EVACUATION TIMES ANALYSIS

ATTACHMENT 1

This attachment is a copy of the DYNEV Computer run for General Population - Normal Conditions.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
DYNEV EVACUATION MODEL

DEVELOPED BY

K L D ASSOCIATES, INC.
300 BROADWAY
HUNTINGTON STATION, NY 11746

START OF CASE 1

CARD FILE LIST

WNP 2 TRAFFIC SIMULATION W/ TOTAL VEHICLE POPS ALL QUADS AND
 NOMINAL WEATHER AND LOADING CONDITIONS
 MODIFIED BY RDM - CASE 107
 INCLUDES ORV PARK. OPTIMUM WITH TRAFFIC CONTROL OFFICERS AT
 300 AND 3000 AREAS. FFTF OUT RT 10SOUTH AND ADVANCED NUCLEAR
 W ON HORN RAPIDS
 VEHICLE POP BYCONTRACTOR AND FIELD COUNTS 3/27/87.

ROBERT MOBLE 12 12 86WPPSS WNP2 EP via STATE 001

1 0015

1 81300

01500150015001501800

225

0008

17	1800113	1	19	00480030	11
18	19 63	1	20 - 22	40 30	11
19	20 63	1	21	40 30	11
20	2100100	1	8004	00400030	11
19	22 63	1	23	40 30	11
22	23 106	1	8003	40 30	11
26	3100010	2	6	0055	11
28	2900039	1	3	0025	11
30	2900026	1	3	0020	11
34	2600020	2	31	0045	11
33	500020	1 1	8	0040	11
24	400042	1	52	0025	11
4	5200065	1	53	0035	11
1	200036	1	44	0035	11
7	2600080	1	31	0045	11
5	800010	2 2	9	0055	11
8	9 37	2 1	10	0055	11
9	10 51	2	13	0055	11
10	1300150	2	14	0055	11
13	1400150	2	16	0055	11
14	1600070	2	32	0055	11
35	1600010	1	32	0025	11
15	3800025	2	39	0055	11
38	3900030	2 1 0	42	0055	11
41	3800034	1	39	0035	11
39	4200025	2	43	0050	11
42	4300040	2	8001	0050	11
44	4000043	2	45	0050	11
40	4500030	2 0	46	0050	11
45	4600010	2 1	47 69	0050	11
47	4600020	1	69	0025	11
49	4000020	1	45	0025	11
53	5000158	1	51	0055	11
50	5100139	1	54	0055	11
51	5400045	1	55	0055	11
54	5500257	1	57	0055	11
55	5700277	1	56	0055	11
57	5600093	1	8000	0055	11
58	2500010	1	59	0015	11
25	5900051	1	74	0050	11
60	5900050	1	74	0035	11
27	700045	1	26	0025	11
61	3400010	1	26	0025	11
3	6300020	2 1	5	0055	11
63	500153	2	8	0055	11
29	300080	1	63	0025	11
6	3300149	1	5	0055	11

TIME PERIOD 3 - DYNEV DATA FOR SUBNETWORK 1

52	8200010	3	
64	32 19	1	
62	3700020	2	
37	6500030	2 2	
65	1100020	2 1	
11	6600050	1	
66	200013	2	
2	4400010	2	
12	6800010	2 1 1	
68	1500025	2 1	
11	6700046	2	
67	1200005	2 1	
52	5300156	1	
46	6900018	2	
69	4800029	2	
70	6900023	1	
71	3900029	1	
72	4200020	1	
36	100017	1	
36	3700020	1 1 0	00
73	3600012	1	
59	7400354	1 0	
46	4700036	1	
77	7800147	1	
78	7900056	1	
79	8000409	1	
79	8100114	1	
81	8200301	1	
81	8300235	1	
84	7800103	1	
85	86 106	1	
86	87 322	1	
87	88 199	1	
76	8400152	1	
89	9000166	1	
90	9100268	1	
92	9000209	1	
93	9100451	1	
94	8500097	1	
95	96 71	1	
96	9700556	1	
98	9900038	1	
99	10000633	1	
101	10200479	1	
103	10400038	1	
104	10100237	1	
74	10600164	1	
105	10600022	1	
106	7500223	1	
107	10800116	1	
108	10900153	1	

18	19 000 050 000 050
20	21 0 100 0 0
22	23 0 100 0 0
26	31 0 100 0 0
30	29 100 0 0 0
33	5 100 0 0 0
4	52 0 100 0 0
7	26 0 0 100 0
8	9 0 100 0 0
10	13 0 100 0 0
14	16 0 100 0 0
15	38 0 100 0 0
41	38 100 0 0 0

37			
62			
65			
11			
66	67		
2			
44			
40			
15			
38			
12			
68			
50			
48			
8002			
48			
42			
43			
2			
65			
1	37		
106			
8006			
79			
81	80		
8007			
83	82		
8008			
8010			
87	79		
88			
8009			
78			
91			
8013			
8013	91		
86			
97			
8011			
100			
8012			
8014			
101			
102			
75			
75			
8005			
109			
8015			

19	20	0	100	0	0
19	22	0	100	0	0
17	18	0	100	0	0
28	29	0	100	0	0
34	26	0	100	0	0
24	4	0	0	100	0
1	2	100	0	0	0
5	8	0	100	0	0
9	10	0	100	0	0
13	14	0	100	0	0
35	16	100	0	0	0
38	39	0	100	0	0
39	42	0	100	0	0
41	46	0	100	0	0

0055	11
0015	11
0055	11
0055	11
0055	11
0050	11
0050	11
0050	11
0055	11
0055	11
0055	11
0055	11
0050	11
0050	11
0050	11
0025	11
0025	11
0025	11
0025	1 11
0025	1 11
0025	1 11
0050	11
0025	11
0040	11
0040	11
0045	11
0045	11
0045	11
0045	11
0045	11
0045	11
0040	11
0030	11
0045	11
0030	11
0030	11
0030	11
0045	11
0045	11
0030	11
0045	11
0050	11
0050	11
0055	11
0025	11
0055	11
0055	11
0055	11

98	
99	98
100	99
101	104
102	101
103	
104	103
105	
106	74 105
107	
108	107
109	108
3 5	
5 15	00
7 1	
9 1	
11 1	
17	
18 1	
19 1	
20 1	
21 1	
22 1	
23 1	
24	
25 50	
28	
29 15	
52 1	
53 5	
56 1	
30	
26 01	
31 1	
33 1	
34 1	
4 5	
1 1	
2 51	
8 1	
10 1	
13 1	
14 1	
16 15	
35	
37 12	21
38 12	21
39 1	
41	
42 1	
43	
44 1	
45 1	
46 12	21
47 1	
48 1	
49	
50 1	
51 1	
54 5	
55 1	
57 1	
58	
59 51	

	35
	35
	35
	35
	35
	35
	35
	35
	35
	35
	35
0140601371	36
0130101274	36
0159301495	36
1539 1233	36
0173300718	36
0109400869	36
0110600787	36
0112500725	36
0113100650	36
0115600563	36
0116300669	36
0116900569	36
0137101270	36
0161000676	36
1520 1479	36
0140501460	36
0132701227	36
0117201208	36
851 659	36
0150301441	36
0162201455	36
0161401430	36
0151401293	36
0164401476	36
0137201228	36
0176700761	36
0176900683	36
0151301260	36
0157501196	36
0163801129	36
0173801009	36
0173700820	36
0176300819	36
0173500760	36
0173100597	36
0173100565	36
0176500596	36
0173100540	36
0173100500	36
0178400668	36
0178500565	36
0178500550	36
0182100550	36
0178500503	36
0181800595	36
0114701051	36
0112500913	36
0108100900	36
0099100885	36
0092500716	36
0161000649	36
0155900677	36

61								0165601407	36
63 1								0141701357	36
6 1								0161001408	36
32 15								0173500802	36
62 1								0173500777	36
64								1754 802	36
65 1								0173300735	36
66								0175900692	36
67 1								0173000684	36
68 1								0173000660	36
69 1								0178400532	36
70								0180700532	36
71								0176000565	36
72								0175100539	36
12 1								0173000671	36
15 1								0173100638	36
40 12	21							0178500595	36
36 0								0175000759	36
73								0175000771	36
74 5								0122100784	36
75 1								0152000538	36
77 0								0186101976	36
78 15								0200801976	36
79 1								0203302027	36
80 1								0244202027	36
81 10								0208402129	36
82 1								0238502129	36
83 1								0219902334	36
84 1								0200801873	36
85								2033 1797	36
86 1								2107 1721	36
87 1								0242901720	36
88 1								2564 1573	36
76								0183901869	36
89								0173302231	36
90 1								0173302397	36
91 1								2001 2397	36
92								0156702270	36
93								0178402001	36
94								0195001746	36
95								0193701426	36
96 1								2008 1426	36
97 1								0256401420	36
98								1899 1273	36
99 1								0193701273	36
100 1								0257001273	36
101								0215501183	36
102								0215500704	36
103								0188001183	36
104 1								0191801183	36
105								0136200697	36
106 15								0134000680	36
107								0184800818	36
108 1								0185600702	36
109 1								0196000589	36
2000 58	2502202001	61	3400572002	24	400992003	27	70139		51
2004 70	6901722005	35	1601002006	41	3801922007	17	180058		51
2008 28	2901002009	30	2900902010	4	5200602011	1	20273		51
2012 64	3200502013	71	3901032014	47	4601352015	49	400311		51
2016 60	5900182017	72	4201182018	73	3602502019	94	850071		51
2020 77	7800652021	89	9000422022	92	9000082023	76	840057		51
2024 93	9100102025	85	860						

2000	58	2504942001	61	3401282002	24	402232003	27	70312	51
2004	70	6903882005	35	1602252006	41	3804312007	17	180131	51
2008	28	2902252009	30	2902032010	4	5201352011	1	20614	51
2012	64	3201122013	71	3902322014	47	4603032015	49	400699	51
2016	60	5900402017	72	4202662018	73	3605632019	94	850160	51
2020	77	7801462021	89	9000952022	92	9000172023	76	840129	51
2024	93	9100232025	85	8601162026	95	9600442027	96	970284	51
2028	98	9900222029	99	10001952030	101	10202572031	103	1040009	51
2032	105	10606752033	107	1080137					51
0	0								170
8	1								210
2000	58	2509882001	61	3402562002	24	404462003	27	70625	51
2004	70	6911252005	35	1604502006	41	3808622007	17	180261	51
2008	28	2904502009	30	2904052010	4	5202702011	1	21228	51
2012	64	3202232013	71	3904642014	47	4606072015	49	401399	51
2016	60	5900792017	72	4205312018	73	3611252019	94	850320	51
2020	77	7802922021	89	9001892022	92	9000342023	76	840257	51
2024	93	9100452025	85	8602322026	95	9600882027	96	970569	51
2028	98	9900432029	99	10003912030	101	10205152031	103	1040018	51
2032	105	10613502033	107	1080274					51
0	0								170
8	1								210
2000	58	2504942001	61	3401282002	24	402232003	27	70312	51
2004	70	6903882005	35	1602252006	41	3804312007	17	180131	51
2008	28	2902252009	30	2902032010	4	5201352011	1	20614	51
2012	64	3201122013	71	3902322014	47	4603032015	49	400699	51
2016	60	5900402017	72	4202662018	73	3605632019	94	850160	51
2020	77	7801462021	89	9000952022	92	9000172023	76	840129	51
2024	93	9100232025	85	8601162026	95	9600442027	96	970284	51
2028	98	9900222029	99	10001952030	101	10202572031	103	1040009	51
2032	105	10606752033	107	1080137					51
0	0								170
8	1								210
2000	58	2500002001	61	3400002002	24	4000002003	27	70000	51
2004	70	6900002005	35	1600002006	41	3800002007	17	180000	51
2008	28	2900002009	30	2900002010	4	5200002011	1	20000	51
2012	64	3200002013	71	3900002014	47	4600002015	49	400000	51
2016	60	5900002017	72	4200002018	73	3600002019	94	850000	51
2020	77	7800002021	89	9000002022	92	9000002023	76	840000	51
2024	93	9100002025	85	8600002026	95	9600002027	96	970000	51
2028	98	9900002029	99	10000002030	101	10200002031	103	1040000	51
2032	105	106	2033	107	1080000				51
0	0								170
1									210

**** WARNING - MESSAGE NUMBER 618, ROUTINE TVD , PARAMETER(S) - P1 = 8

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
DYNEV EVACUATION MODEL

DEVELOPED BY

K L D ASSOCIATES, INC.
300 BROADWAY
HUNTINGTON STATION, NY 11746

START OF CASE 1

WNP 2 TRAFFIC SIMULATION W/ TOTAL VEHICLE POPS ALL QUADS AND
NOMINAL WEATHER AND LOADING CONDITIONS
MODIFIED BY RDM - CASE 107
INCLUDES ORV PARK. OPTIMUM WITH TRAFFIC CONTROL OFFICERS AT
300 AND 3000 AREAS. FFTF OUT RT 10SOUTH AND ADVANCED NUCLEAR
W ON HORN RAPIDS THEN SE ON 240 TO RICHLAND.
VEHICLE POP BYCONTRACTOR AND FIELD COUNTS 3/27/87.

DATE = 12/ 12/ 86

USER = ROBERT MOGLE

AGENCY = WPPSS WNP2 EP via STATE

RUN CONTROL DATA

VALUE	RUN PARAMETERS AND OPTIONS
1	RUN IDENTIFICATION NUMBER
0	NEXT CASE CODE = (0,1) IF ANOTHER CASE (DOES NOT, DOES) FOLLOW
1	RUN TYPE CODE = (1, 2) IF (SIMULATION, TRAF. ASSIGNMENT) TO BE EXECUTED (-1, -2) IF ONLY DIAGNOSTICS ARE BEING PERFORMED ON (SIMULATION, TRAF. ASSIGNMENT) DATA
1300	CLOCK TIME AT START OF SIMULATION, HOURS AND MINUTES
7581	RANDOM NUMBER SEED
900	DURATION (SEC) OF TIME PERIOD NO. 1
900	DURATION (SEC) OF TIME PERIOD NO. 2
900	DURATION (SEC) OF TIME PERIOD NO. 3
900	DURATION (SEC) OF TIME PERIOD NO. 4
10800	DURATION (SEC) OF TIME PERIOD NO. 5
225	LENGTH OF A TIME INTERVAL, SECONDS
4	MAXIMUM INITIALIZATION TIME, NUMBER OF TIME INTERVALS
8	NUMBER OF TIME INTERVALS BETWEEN SUCCESSIVE STANDARD OUTPUTS
0	NUMBER OF TIME INTERVALS BETWEEN SUCCESSIVE INTERMEDIATE OUTPUTS FOR MACROSCOPIC MODELS

TIME PERIOD 1 - DYNEV DATA FOR SUBNETWORK 1

* INDICATES DEFAULT VALUES WERE SPECIFIED

LANE CHANNELIZATION
CODES

- 0 UNRESTRICTED
- 1 LEFT TURNS ONLY
- 2 BUSES ONLY
- 3 CLOSED
- 4 RIGHT TURNS ONLY
- 5 CAR - POOLS
- 6 CAR - POOLS + BUSES

RTOR
CODES

- 0 RTOR PERMITTED
- 1 RTOR PROHIBITED

PEDESTRIAN
CODES

- 0 NO PEDESTRIANS
- 1 LIGHT
- 2 MODERATE
- 3 HEAVY

LINK	TURN MOVEMENT PERCENTAGES				TURN MOVEMENT POSSIBLE				CAPACITY REDUCTION (PERCENT)
	LEFT	THROUGH	RIGHT	DIAGONAL	LEFT	THROUGH	RIGHT	DIAGONAL	
(18, 19)	0	50	0	50	NO	YES	NO	YES	0
(19, 20)	0	100	0	0	NO	YES	NO	NO	0
(20, 21)	0	100	0	0	NO	YES	NO	NO	0
(19, 22)	0	100	0	0	NO	YES	NO	NO	0
(22, 23)	0	100	0	0	NO	YES	NO	NO	0
(17, 18)	0	100	0	0	NO	YES	NO	NO	0
(26, 31)	0	100	0	0	NO	YES	NO	NO	0
(28, 29)	0	100	0	0	NO	YES	NO	NO	0
(30, 29)	100	0	0	0	YES	NO	NO	NO	0
(34, 26)	0	100	0	0	NO	YES	NO	NO	0
(33, 5)	100	0	0	0	YES	NO	NO	NO	0
(24, 4)	0	0	100	0	NO	NO	YES	NO	0
(4, 52)	0	100	0	0	NO	YES	NO	NO	0
(1, 2)	100	0	0	0	YES	NO	NO	NO	0
(7, 26)	0	0	100	0	NO	NO	YES	NO	0
(5, 8)	0	100	0	0	NO	YES	NO	NO	0
(8, 9)	0	100	0	0	NO	YES	NO	NO	0
(9, 10)	0	100	0	0	NO	YES	NO	NO	0
(10, 13)	0	100	0	0	NO	YES	NO	NO	0
(13, 14)	0	100	0	0	NO	YES	NO	NO	0
(14, 16)	0	100	0	0	NO	YES	NO	NO	0
(35, 16)	100	0	0	0	YES	NO	NO	NO	0
(15, 38)	0	100	0	0	NO	YES	NO	NO	0
(38, 39)	0	100	0	0	NO	YES	NO	NO	0
(41, 38)	100	0	0	0	YES	NO	NO	NO	0
(39, 42)	0	100	0	0	NO	YES	NO	NO	0
(42, 43)	0	100	0	0	NO	YES	NO	NO	0
(44, 40)	0	100	0	0	NO	YES	NO	NO	0
(40, 45)	0	100	0	0	NO	YES	NO	NO	0
(45, 46)	35	65	0	0	YES	YES	NO	NO	0
(47, 46)	100	0	0	0	YES	NO	NO	NO	0
(49, 40)	100	0	0	0	YES	NO	NO	NO	0
(53, 50)	0	100	0	0	NO	YES	NO	NO	0
(50, 51)	0	100	0	0	NO	YES	NO	NO	0
(51, 54)	0	100	0	0	NO	YES	NO	NO	0
(54, 55)	0	100	0	0	NO	YES	NO	NO	0
(55, 57)	0	100	0	0	NO	YES	NO	NO	0
(57, 56)	0	100	0	0	NO	YES	NO	NO	0
(58, 25)	100	0	0	0	YES	NO	NO	NO	0
(25, 59)	0	100	0	0	NO	YES	NO	NO	0
(60, 59)	0	0	100	0	NO	NO	YES	NO	0
(27, 7)	0	100	0	0	NO	YES	NO	NO	0
(61, 34)	0	100	0	0	NO	YES	NO	NO	0
(3, 63)	0	100	0	0	NO	YES	NO	NO	0
(63, 5)	0	100	0	0	NO	YES	NO	NO	0
(29, 3)	100	0	0	0	YES	NO	NO	NO	0
(6, 33)	0	100	0	0	NO	YES	NO	NO	0
(31, 6)	0	100	0	0	NO	YES	NO	NO	0
(16, 32)	0	100	0	0	NO	YES	NO	NO	0
(32, 62)	0	100	0	0	NO	YES	NO	NO	0
(64, 32)	100	0	0	0	YES	NO	NO	NO	0
(62, 37)	0	100	0	0	NO	YES	NO	NO	0
(37, 65)	0	100	0	0	NO	YES	NO	NO	0
(65, 11)	39	61	0	0	YES	YES	NO	NO	0
(11, 66)	0	100	0	0	NO	YES	NO	NO	0
(66, 2)	0	100	0	0	NO	YES	NO	NO	0
(2, 44)	0	100	0	0	NO	YES	NO	NO	0
(12, 68)	0	100	0	0	NO	YES	NO	NO	0
(68, 15)	0	100	0	0	NO	YES	NO	NO	0
(15, 11)	0	100	0	0	NO	YES	NO	NO	0

(52, 53)	100	0	0	0	YES	NO	NO	NO	0
(46, 69)	0	100	0	0	NO	YES	NO	NO	0
(69, 48)	0	100	0	0	NO	YES	NO	NO	0
(70, 69)	100	0	0	0	YES	NO	NO	NO	0
(71, 39)	100	0	0	0	YES	NO	NO	NO	0
(72, 42)	100	0	0	0	YES	NO	NO	NO	0
(36, 1)	0	0	100	0	NO	NO	YES	NO	0
(36, 37)	100	0	0	0	YES	NO	NO	NO	0
(73, 36)	5	0	95	0	YES	NO	YES	NO	0
(59, 74)	100	0	0	0	YES	NO	NO	NO	0
(46, 47)	0	100	0	0	NO	YES	NO	NO	0
(77, 78)	100	0	0	0	YES	NO	NO	NO	0
(78, 79)	0	40	0	60	NO	YES	NO	YES	0
(79, 80)	0	100	0	0	NO	YES	NO	NO	0
(79, 81)	0	40	60	0	NO	YES	YES	NO	0
(81, 82)	0	100	0	0	NO	YES	NO	NO	0
(81, 83)	0	100	0	0	NO	YES	NO	NO	0
(84, 78)	0	0	0	100	NO	NO	NO	YES	0
(85, 86)	0	100	0	0	NO	YES	NO	NO	0
(86, 87)	0	0	0	100	NO	NO	NO	YES	0
(87, 88)	0	100	0	0	NO	YES	NO	NO	0
(76, 84)	100	0	0	0	YES	NO	NO	NO	0
(89, 90)	0	0	100	0	NO	NO	YES	NO	0
(90, 91)	0	100	0	0	NO	YES	NO	NO	0
(92, 90)	0	0	0	100	NO	NO	NO	YES	0
(93, 91)	0	100	0	0	NO	YES	NO	NO	0
(94, 85)	0	0	100	0	NO	NO	YES	NO	0
(95, 96)	0	100	0	0	NO	YES	NO	NO	0
(96, 97)	0	100	0	0	NO	YES	NO	NO	0
(98, 99)	0	100	0	0	NO	YES	NO	NO	0
(99, 100)	0	100	0	0	NO	YES	NO	NO	0
(101, 102)	0	100	0	0	NO	YES	NO	NO	0
(103, 104)	0	100	0	0	NO	YES	NO	NO	0
(104, 101)	0	0	100	0	NO	NO	YES	NO	0
(74, 106)	0	100	0	0	NO	YES	NO	NO	0
(105, 106)	100	0	0	0	YES	NO	NO	NO	0
(106, 75)	0	100	0	0	NO	YES	NO	NO	0
(107, 108)	0	100	0	0	NO	YES	NO	NO	0
(108, 109)	0	100	0	0	NO	YES	NO	NO	0

NODE COORDINATE TABLE

NODE	X	Y	NODE	X	Y	NODE	X	Y	NODE	X	Y	NODE	X	Y
(1)	1764	760	(2)	1768	680	(3)	1404	1368	(4)	1372	1228	(5)	1500	1272
(6)	1608	1408	(7)	1592	1492	(8)	1512	1260	(9)	1536	1232	(10)	1572	1196
(11)	1732	716	(12)	1728	668	(13)	1636	1128	(14)	1736	1008	(15)	1728	636
(16)	1736	820	(17)	1092	868	(18)	1104	784	(19)	1124	724	(20)	1128	648
(21)	1156	560	(22)	1160	668	(23)	1168	568	(24)	1368	1268	(25)	1608	676
(26)	1620	1452	(27)	1572	1484	(28)	1520	1476	(29)	1484	1460	(30)	1500	1440
(31)	1612	1428	(32)	1732	800	(33)	1512	1292	(34)	1644	1476	(35)	1760	816
(36)	1748	756	(37)	1732	760	(38)	1728	596	(39)	1728	564	(40)	1784	592
(41)	1764	596	(42)	1728	540	(43)	1728	500	(44)	1784	568	(45)	1784	564
(46)	1784	548	(47)	1820	548	(48)	1784	500	(49)	1816	592	(50)	1144	1048
(51)	1124	912	(52)	1324	1224	(53)	1172	1208	(54)	1080	900	(55)	988	884
(56)	848	656	(57)	924	716	(58)	1608	648	(59)	1556	676	(60)	1560	696
(61)	1656	1484	(62)	1732	776	(63)	1416	1356	(64)	1752	800	(65)	1732	732
(66)	1756	692	(67)	1728	684	(68)	1728	660	(69)	1784	532	(70)	1804	532
(71)	1760	564	(72)	1748	536	(73)	1748	768	(74)	1220	784	(75)	1520	536
(76)	1836	1868	(77)	1860	1976	(78)	2008	1976	(79)	2032	2024	(80)	2440	2024
(81)	2084	2128	(82)	2384	2128	(83)	2196	2332	(84)	2008	1872	(85)	2032	1796
(86)	2104	1720	(87)	2428	1720	(88)	2564	1572	(89)	1732	2228	(90)	1732	2396
(91)	2000	2396	(92)	1564	2268	(93)	1784	2000	(94)	1948	1744	(95)	1936	1424
(96)	2008	1424	(97)	2564	1420	(98)	1896	1272	(99)	1936	1272	(100)	2568	1272
(101)	2152	1180	(102)	2152	704	(103)	1880	1180	(104)	1916	1180	(105)	1360	696
(106)	1348	680	(107)	1848	816	(108)	1856	700	(109)	1960	588	(

ALL COORDINATES EXPRESSED IN UNITS OF MILES*100

SPECIFIED FIXED-TIME SIGNAL CONTROL, AND SIGN CONTROL, CODES

NODE 1 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	+ - - - - - APPROACHES - - - - - +
1	0 100	(36, 1) 1

NODE 2 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	+ - - - - - APPROACHES - - - - - +
1	0 100	(1, 2) (66, 2) 5 1

NODE 3 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	+ - - - - - APPROACHES - - - - - +
1	0 100	(29, 3) 5

NODE 4 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	+ - - - - - APPROACHES - - - - - +
1	0 100	(24, 4) 5

NODE 5 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	+ - - - - - APPROACHES - - - - - +
1	0 100	(63, 5) (33, 5) 1 5

NODE 6 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	+ - - - - - APPROACHES - - - - - +
1	0 100	(31, 6) 1

NODE 7 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	+ - - - - - APPROACHES - - - - - +
1	0 100	(27, 7) 1

NODE 8 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	+ - - - - - APPROACHES - - - - - +
1	0 100	(5, 8) 1

NODE 9 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	+ - - - - - APPROACHES - - - - - +
1	0 100	(8, 9) 1

NODE 10 IS UNDER SIGN CONTROL .

INTERVAL NUMBER	DURATION (SEC) (PCT)	+ - - - - - APPROACHES - - - - - +
1	0 100	(9, 10) 1

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	1

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	(67, 12)

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	1

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	1

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	1

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES			
			(14,	16)	(35,	16)
1	0	100	1		5	

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	(17, 18)

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(18, 19)

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	(19, 20)

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	(20, 21)

INTERVAL NUMBER	DURATION (SEC) (PCT)	APPROACHES
1	0 100	(19, 22) 1

NODE 23 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	+ - - - - - APPROACHES - - - - - +
1	0 100	(22, 23)

NODE 24 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	

NODE 25 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	APPROACHES
1	0 100	5

NODE 26 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	PCT	+ - - - - APPROACHES - - - - -
1	0	100	(7, 26) (34, 26) 0 1

NODE 27 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	APPROACHES
1	0 100	

NODE: 28 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	APPROACHES
1	0 100	

NODE 29 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	1

NODE 30 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	APPROACHES
1	0 100	

NODE 31 IS UNDER SIGN CONTROL.

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(26, 31)

NODE 32 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	+ - - - - APPROACHES - - - - -
1	0	100	(16, 32) (64, 32) . 1 5

NODE 34 IS UNDER SIGN CONTROL .

NODE 35 IS UNDER SIGN CONTROL

NODE 36 IS UNDER SIGN CONTROL

OFFSET 0 SEC NODE 37 CYCLE LENGTH 75 SEC

OFFSET 0 SEC NODE 38 CYCLE LENGTH 70 SEC

NODE 39 IS UNDER SIGN CONTROL

OFFSET 0 SEC

NODE 40

CYCLE LENGTH 75 SEC

NODE 41 IS UNDER SIGN CONTROL

NODE 42 IS UNDER SIGN CONTROL.

INTERVAL	DURATION									
NUMBER	(SEC)	(PCT)	(	39,	42)	(	72,	42)	APPROACHES
1	0	100	1			0				

INTERVAL	DURATION		APPROACHES	
NUMBER	(SEC)	(PCT)	()
1	0	100	(42,	43)

NODE 44 IS UNDER SIGN CONTROL

INTERVAL	DURATION		APPROACHES	
NUMBER	(SEC)	(PCT)	()
1	0	100	(2,	44)

NODE 45 IS UNDER SIGN CONTROL

INTERVAL	DURATION		APPROACHES	
NUMBER	(SEC)	(PCT)	()
1	0	100	(40,	45)

NODE 46

OFFSET 0 SEC

CYCLE LENGTH 75 SEC

INTERVAL	DURATION		APPROACHES	
NUMBER	(SEC)	(PCT)	()
1	35	46	(45,	46)
2	40	53	(47,	46)

NODE 47 IS UNDER SIGN CONTROL

INTERVAL	DURATION		APPROACHES	
NUMBER	(SEC)	(PCT)	()
1	0	100	(46,	47)

NODE 48 IS UNDER SIGN CONTROL

INTERVAL	DURATION		APPROACHES	
NUMBER	(SEC)	(PCT)	()
1	0	100	(49,	48)

NODE 49 IS UNDER SIGN CONTROL

INTERVAL	DURATION		APPROACHES	
NUMBER	(SEC)	(PCT)	()
1	0	100		

NODE 50 IS UNDER SIGN CONTROL

INTERVAL	DURATION		APPROACHES	
NUMBER	(SEC)	(PCT)	()
1	0	100	(53,	50)

NODE 51 IS UNDER SIGN CONTROL

INTERVAL	DURATION		APPROACHES	
NUMBER	(SEC)	(PCT)	()
1	0	100	(50,	51)

NODE 52 IS UNDER SIGN CONTROL

INTERVAL	DURATION		APPROACHES	
NUMBER	(SEC)	(PCT)	()
1	0	100	(51,	52)

NODE 53 IS UNDER SIGN CONTROL

INTERVAL	DURATION		APPROACHES	
NUMBER	(SEC)	(PCT)	()

NODE 54 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(51, 54) 5

NODE 55 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(54, 55) 1

NODE 56 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(57, 56) 1

NODE 57 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(55, 57) 1

NODE 58 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

NODE 59 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(60, 59) (25, 59) 3 1

NODE 60 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

NODE 61 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

NODE 62 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(32, 62) 1

NODE 63 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(3, 63) 1

NODE 64 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES

NODE 65 IS UNDER SIGN CONTROL.

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	(37, 65)

NODE 66 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	(11, 66)

NODE 67 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(11, 67)

NODE 68 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	(12, 68)

NODE 69 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES	
1	0	100	(46, 69)	(70, 69)

NODE 70 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	

NODE 71 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	

NODE 72 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	

NODE 73 IS UNDER SIGN CONTROL.

INTERVAL NUMBER	DURATION (SEC) (PCT)	APPROACHES
1	0 100	

NODE 74 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	APPROACHES
1	0 100	(59, 74) 5

NODE 75 IS UNDER SIGN CONTROL

INTERVAL	DURATION	APPROACHES
1	10	1
2	10	1
3	10	1
4	10	1
5	10	1
6	10	1
7	10	1
8	10	1
9	10	1
10	10	1
11	10	1
12	10	1
13	10	1
14	10	1
15	10	1
16	10	1
17	10	1
18	10	1
19	10	1
20	10	1
21	10	1
22	10	1
23	10	1
24	10	1
25	10	1
26	10	1
27	10	1
28	10	1
29	10	1
30	10	1
31	10	1
32	10	1
33	10	1
34	10	1
35	10	1
36	10	1
37	10	1
38	10	1
39	10	1
40	10	1
41	10	1
42	10	1
43	10	1
44	10	1
45	10	1
46	10	1
47	10	1
48	10	1
49	10	1
50	10	1
51	10	1
52	10	1
53	10	1
54	10	1
55	10	1
56	10	1
57	10	1
58	10	1
59	10	1
60	10	1
61	10	1
62	10	1
63	10	1
64	10	1
65	10	1
66	10	1
67	10	1
68	10	1
69	10	1
70	10	1
71	10	1
72	10	1
73	10	1
74	10	1
75	10	1
76	10	1
77	10	1
78	10	1
79	10	1
80	10	1
81	10	1
82	10	1
83	10	1
84	10	1
85	10	1
86	10	1
87	10	1
88	10	1
89	10	1
90	10	1
91	10	1
92	10	1
93	10	1
94	10	1
95	10	1
96	10	1
97	10	1
98	10	1
99	10	1
100	10	1

NODE 76 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)
1	0	100

+ - - - - - APPROACHES - - - - - +

NODE 77 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)
1	0	100

+ - - - - - APPROACHES - - - - - +

NODE 78 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)
1	0	100

+ - - - - - APPROACHES - - - - - +
(77, 78) (84, 78)
1 5

NODE 79 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)
1	0	100

+ - - - - - APPROACHES - - - - - +
(78, 79)
1

NODE 80 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)
1	0	100

+ - - - - - APPROACHES - - - - - +
(79, 80)
1

NODE 81 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)
1	0	100

+ - - - - - APPROACHES - - - - - +
(79, 81)
1

NODE 82 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)
1	0	100

+ - - - - - APPROACHES - - - - - +
(81, 82)
1

NODE 83 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)
1	0	100

+ - - - - - APPROACHES - - - - - +
(81, 83)
1

NODE 84 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)
1	0	100

+ - - - - - APPROACHES - - - - - +
(76, 84)
1

NODE 85 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)
1	0	100

+ - - - - - APPROACHES - - - - - +
(94, 85)
0

NODE 86 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)
--------------------	-------------------	-------

+ - - - - - APPROACHES - - - - - +

NODE 87 IS UNDER SIGN CONTROL.

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	(86, 87)

MODE 88 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	(87, 88)

NODE 89 IS UNDER SIGN CONTROL.

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	

NODE 90 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	(89, 90) (92, 90)

NODE 91 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES	
			(90, 91)	(93, 91)
1	0	100	1	0

NODE 92 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	DURATION (PCT)	APPROACHES
1	0	100	

NODE 93 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

NODE 94 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

MODE 95 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

NODE 96 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC) (PCT)	APPROACHES
1	0 100	(95, 96)

NODE 97 IS UNDER SIGN CONTROL.

INTERVAL	DURATION	+ - = > < >> << >>> <<< APPROACHES
0-10	10	
10-20	20	
20-30	30	
30-40	40	
40-50	50	
50-60	60	
60-70	70	
70-80	80	
80-90	90	
90-100	100	

NODE 98 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

NODE 99 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(98, 99) 1

NODE 100 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(99, 100) 1

NODE 101 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(104, 101) 0

NODE 102 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(101, 102) 0

NODE 103 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

NODE 104 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(103, 104) 1

NODE 105 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

NODE 106 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	(74, 106) (105, 106) 1 5

NODE 107 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

NODE 108 IS UNDER SIGN CONTROL

INTERVAL NUMBER	DURATION (SEC)	(PCT)	APPROACHES
1	0	100	

NODE 109 IS UNDER SIGN CONTROL.

INTERVAL NUMBER	DURATION (SEC)	(PCT)	+ - - - - - APPROACHES - - - - - +
1	0	100	(108, 109) 1

INTERPRETATION OF SIGNAL CODES

0	YIELD OR AMBER
1	GREEN
2	RED
3	RED WITH GREEN RIGHT ARROW
4	RED WITH GREEN LEFT ARROW
5	STOP
6	RED WITH GREEN DIAGONAL ARROW
7	NO TURNS-GREEN THRU ARROW
8	RED WITH LEFT AND RIGHT GREEN ARROW
9	NO LEFT TURN-GREEN THRU AND RIGHT

NODE	7	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(27, 7)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				
NODE	8	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(5, 8)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				
NODE	9	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(8, 9)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				
NODE	10	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(9, 10)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				
NODE	11	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(45, 11)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		PROT	GO			
NODE	12	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(67, 12)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				
NODE	13	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(10, 13)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				

PHASE DURATION	-----		APPROACHES	-----	
	(13, 14)				
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
NODE 15	SIGN CONTROL				
PHASE DURATION	-----		APPROACHES	-----	
	(68, 15)				
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
NODE 16	SIGN CONTROL				
PHASE DURATION	-----		APPROACHES	-----	
	(14, 16)		(35, 16)		
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG STOP	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
NODE 17	SIGN CONTROL				
	NO APPROACHES TO THIS NODE				
NODE 18	SIGN CONTROL				
PHASE DURATION	-----		APPROACHES	-----	
	(17, 18)				
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
NODE 19	SIGN CONTROL				
PHASE DURATION	-----		APPROACHES	-----	
	(18, 19)				
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
NODE 20	SIGN CONTROL				
PHASE DURATION	-----		APPROACHES	-----	
	(19, 20)				
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
NODE 21	SIGN CONTROL				
PHASE DURATION	-----		APPROACHES	-----	
	(20, 21)				
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 22 SIGN CONTROL

PHASE DURATION		APPROACHES				
(19, 22)						
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				

NODE 23 SIGN CONTROL

PHASE DURATION		APPROACHES				
(22, 23)						
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				

NODE 24 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 25 SIGN CONTROL

PHASE DURATION		APPROACHES				
(58, 25)						
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		STOP				

NODE 26 SIGN CONTROL

PHASE DURATION		APPROACHES				
(7, 26) (34, 26)						
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		YLD	GO			

NODE 27 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 28 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 29 SIGN CONTROL

PHASE DURATION		APPROACHES				
(28, 29) (30, 29)						
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO	STOP			

NODE 30 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE	31	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(26, 31)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				
NODE	32	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(16, 32)	(64, 32)			
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO	STOP			
NODE	33	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(6, 33)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				
NODE	34	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(61, 34)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				
NODE	35	SIGN CONTROL				
		NO APPROACHES TO THIS NODE				
NODE	36	SIGN CONTROL				
PHASE DURATION		----- APPROACHES -----				
		(73, 36)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		YLD	YLD			
NODE	37	FIXED TIME CONTROL OFFSET = 0 SECONDS CYCLE LENGTH = 75 SECONDS				
PHASE DURATION		----- APPROACHES -----				
		(62, 37)	(36, 37)			
1	45	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
2	30	GO	NOGO			
		NOGO	PROT			
NODE	38	FIXED TIME CONTROL OFFSET = 0 SECONDS CYCLE LENGTH = 70 SECONDS				
PHASE DURATION		----- APPROACHES -----				
		(15, 38)	(41, 38)			
		LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 39 SIGN CONTROL

PHASE DURATION		APPROACHES				
		(38, 39)	(71, 39)	:		
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG YLD	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 40 FIXED TIME CONTROL OFFSET = 0 SECONDS CYCLE LENGTH = 75 SECONDS

PHASE DURATION		APPROACHES				
		(44, 40)	(49, 40)			
1	30	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG NOGO	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
2	45	NOGO	PROT			

NODE 41 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 42 SIGN CONTROL

PHASE DURATION		APPROACHES				
		(39, 42)	(72, 42)			
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG YLD	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 43 SIGN CONTROL

PHASE DURATION		APPROACHES				
		(42, 43)				
1	0	LEFT THRU RITE DIAG YLD	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 44 SIGN CONTROL

PHASE DURATION		APPROACHES				
		(2, 44)				
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 45 SIGN CONTROL

PHASE DURATION		APPROACHES				
		(40, 45)				
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

PHASE DURATION		APPROACHES				
		(45, 46)	(47, 46)			
1	35	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
2	40	PROT GO	NOGO			
		NOGO NOGO	PROT			

NODE 47 SIGN CONTROL

PHASE DURATION		APPROACHES				
		(46, 47)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				

NODE 48 SIGN CONTROL

PHASE DURATION		APPROACHES				
		(69, 48)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				

NODE 49 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 50 SIGN CONTROL

PHASE DURATION		APPROACHES				
		(53, 50)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				

NODE 51 SIGN CONTROL

PHASE DURATION		APPROACHES				
		(50, 51)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				

NODE 52 SIGN CONTROL

PHASE DURATION		APPROACHES				
		(4, 52)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		GO				

NODE 53 SIGN CONTROL

PHASE DURATION		APPROACHES				
		(52, 53)				
1	0	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG
		STOP				

SOURCE/SINK FLOW RATES

CENTROID NUMBER	LINK	SOURCE/SINK RATE (VEH/HR)
2000	(58, 25)	988
2001	(61, 34)	256
2002	(24, 4)	446
2003	(27, 7)	625
2004	(70, 69)	1125
2005	(35, 16)	450
2006	(41, 38)	862
2007	(17, 18)	261
2008	(28, 29)	450
2009	(30, 29)	405
2010	(4, 52)	270
2011	(1, 2)	1228
2012	(64, 32)	223
2013	(71, 39)	464
2014	(47, 46)	607
2015	(49, 40)	1399
2016	(60, 59)	79
2017	(72, 42)	531
2018	(73, 36)	1125
2019	(94, 85)	320
2020	(77, 78)	292
2021	(89, 90)	189
2022	(92, 90)	34
2023	(76, 84)	257
2024	(93, 91)	45
2025	(85, 86)	232
2026	(95, 96)	88
2027	(96, 97)	569
2028	(98, 99)	43
2029	(99, 100)	391
2030	(101, 102)	515
2031	(103, 104)	18
2032	(105, 106)	1350
2033	(107, 108)	274

TIME PERIOD 4 - DYNEV DATA FOR SUBNETWORK 1

SOURCE/SINK FLOW RATES

CENTROID NUMBER	LINK	SOURCE/SINK RATE (VEH/HR)
2000	(58, 25)	494
2001	(61, 34)	128
2002	(24, 4)	223
2003	(27, 7)	312
2004	(70, 69)	388
2005	(35, 16)	225
2006	(41, 38)	431
2007	(17, 18)	131
2008	(28, 29)	225
2009	(30, 29)	203
2010	(4, 52)	135
2011	(1, 2)	614
2012	(64, 32)	112
2013	(71, 39)	232
2014	(47, 46)	303
2015	(49, 40)	699
2016	(60, 59)	40
2017	(72, 42)	266
2018	(73, 36)	563
2019	(94, 85)	160
2020	(77, 78)	146
2021	(89, 90)	95
2022	(92, 90)	17
2023	(76, 84)	129
2024	(93, 91)	23
2025	(85, 86)	116
2026	(95, 96)	44
2027	(96, 97)	284
2028	(98, 99)	22
2029	(99, 100)	195
2030	(101, 102)	257
2031	(103, 104)	9
2032	(105, 106)	675
2033	(107, 108)	137

SOURCE/SINK FLOW RATES

CENTROID NUMBER	LINK	SOURCE/SINK RATE (VEH/HR)
2000	(58, 25)	0
2001	(61, 34)	0
2002	(24, 4)	0
2003	(27, 7)	0
2004	(70, 69)	0
2005	(35, 14)	0
2006	(41, 38)	0
2007	(17, 18)	0
2008	(28, 29)	0
2009	(30, 29)	0
2010	(4, 52)	0
2011	(1, 2)	0
2012	(64, 32)	0
2013	(71, 39)	0
2014	(47, 46)	0
2015	(49, 40)	0
2016	(60, 59)	0
2017	(72, 42)	0
2018	(73, 36)	0
2019	(94, 85)	0
2020	(77, 78)	0
2021	(89, 90)	0
2022	(92, 90)	0
2023	(76, 84)	0
2024	(93, 91)	0
2025	(85, 86)	0
2026	(95, 96)	0
2027	(96, 97)	0
2028	(98, 99)	0
2029	(99, 100)	0
2030	(101, 102)	0
2031	(103, 104)	0
2032	(105, 106)	0
2033	(107, 108)	0

INITIALIZATION STATISTICS				
TIME INTERVAL	SUBNETWORK	PRIOR CONTENT	CURRENT CONTENT	PERCENT DIFFERENCE
NUMBER	TYPE	(VEHICLES)	(VEHICLES)	
1	1	0	127	10000
2	1	127	198	55
3	1	198	242	22
4	1	242	263	8

INITIALIZATION TIME EXHAUSTED, SIMULATION WILL BE PERFORMED ANYWAY

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 13 15 0, ELAPSED SIMULATED TIME IS 0 HOURS, 15 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
1(	18, 19)	9.1	14	0.99	76.1	29.8	1.	A	2(	19, 20)	4.5	7	0.99	76.0	29.8	1.	A
3(	20, 21)	7.2	7	1.00	120.0	30.0	1.	A	4(	19, 22)	4.5	7	0.99	76.0	29.8	1.	A
5(	22, 23)	7.6	7	1.00	127.2	30.0	1.	A	6(	17, 18)	8.1	14	1.00	135.6	30.0	0.	A
7(	26, 31)	4.9	49	1.00	6.5	55.2	0.	A	8(	28, 29)	4.9	25	1.00	55.6	25.2	0.	A
9(	30, 29)	2.9	22	1.00	47.3	19.8	0.	A	10(	34, 26)	2.9	14	1.00	16.0	45.0	0.	A
11(	33, 5)	9.8	49	1.00	17.9	40.2	1.	A	12(	24, 4)	5.3	25	1.00	59.9	25.2	0.	A
13(	4, 52)	21.3	40	1.00	67.3	34.8	2.	A	14(	1, 2)	13.3	71	1.00	37.3	34.8	0.	A
15(	7, 26)	27.8	35	1.00	64.0	45.0	2.	A	16(	5, 8)	9.7	97	1.00	6.5	55.1	1.	A
17(	8, 9)	35.9	97	1.00	24.1	55.2	3.	A	18(	9, 10)	49.5	97	1.00	33.2	55.2	4.	A
19(	10, 13)	145.2	97	1.00	98.3	55.0	11.	A	20(	13, 14)	144.0	96	1.00	98.2	55.0	11.	A
21(	14, 16)	66.5	95	1.00	45.7	55.2	5.	A	22(	35, 16)	1.3	25	1.00	14.3	25.2	0.	A
23(	15, 38)	28.4	114	1.00	16.3	55.2	2.	A	24(	38, 39)	48.2	161	1.00	19.6	55.2	4.	A
25(	41, 38)	8.1	48	1.00	35.2	34.8	0.	A	26(	39, 42)	46.6	186	1.00	18.1	49.8	4.	A
27(	42, 43)	86.0	215	1.00	28.9	49.8	7.	A	28(	44, 40)	61.9	144	1.00	31.1	49.8	5.	A
29(	40, 45)	66.2	221	1.00	21.7	49.7	5.	A	30(	45, 46)	22.1	221	1.00	7.2	49.8	2.	A
31(	47, 46)	3.4	34	1.00	28.5	25.2	0.	A	32(	49, 40)	7.7	77	1.00	28.5	25.2	0.	A
33(	53, 50)	63.8	40	1.00	103.5	55.0	5.	A	34(	50, 51)	56.2	40	0.99	91.2	54.9	4.	A
35(	51, 54)	18.2	40	1.00	29.3	55.2	1.	A	36(	54, 55)	103.1	40	0.99	169.3	54.7	8.	A
37(	55, 57)	107.2	39	0.99	182.3	54.7	8.	A	38(	57, 56)	34.9	38	1.00	60.7	55.2	3.	A
39(	58, 25)	2.7	55	1.00	24.0	15.0	0.	A	40(	25, 59)	28.0	55	1.00	36.9	49.8	2.	A
41(	60, 59)	1.1	4	1.00	51.8	34.8	0.	A	42(	27, 7)	7.8	35	1.00	64.2	25.2	0.	A
43(	61, 34)	0.7	14	1.00	14.3	25.2	0.	A	44(	3, 63)	9.5	48	1.00	13.0	55.2	1.	A
45(	63, 5)	72.8	48	0.99	100.3	54.9	5.	A	46(	29, 3)	38.1	48	1.00	114.2	25.2	6.	A
47(	6, 33)	73.3	49	1.00	97.1	55.2	5.	A	48(	31, 6)	10.8	49	1.00	14.3	55.2	1.	A
49(	16, 32)	47.8	120	1.00	26.1	55.2	4.	A	50(	32, 62)	13.2	132	1.00	6.5	55.1	1.	A
51(	64, 32)	1.2	12	1.00	45.6	15.0	0.	A	52(	62, 37)	26.3	132	1.00	13.0	55.2	2.	A
53(	37, 65)	56.9	190	1.00	19.6	55.2	4.	A	54(	65, 11)	37.9	189	1.00	13.0	55.2	3.	A
55(	11, 66)	36.6	73	1.00	36.2	49.8	3.	A	56(	66, 2)	9.5	73	1.00	9.4	49.8	1.	A
57(	2, 44)	14.4	145	1.00	7.2	49.8	1.	A	58(	12, 68)	11.4	114	1.00	6.5	55.1	1.	A
59(	68, 15)	28.5	114	1.00	16.3	55.2	2.	A	60(	11, 67)	52.8	115	1.00	30.0	55.2	4.	A
61(	67, 12)	5.7	115	1.00	3.3	55.2	0.	A	62(	52, 53)	63.0	40	0.99	113.4	49.5	5.	A
63(	46, 69)	31.9	177	1.00	13.0	49.8	3.	A	64(	69, 48)	63.8	220	1.00	21.0	49.8	5.	A
65(	70, 69)	5.0	43	1.00	32.8	25.2	0.	A	66(	71, 39)	3.8	26	1.00	41.4	25.2	0.	A
67(	72, 42)	3.0	30	1.00	28.5	25.2	0.	A	68(	36, 1)	0.5	3	1.00	24.3	25.2	0.	A
69(	36, 37)	11.8	59	1.00	28.6	25.2	2.	A	70(	73, 36)	3.7	62	1.00	17.1	25.2	0.	A
71(	59, 74)	209.6	59	1.00	256.1	49.8	17.	A	72(	46, 47)	27.7	77	1.00	51.4	25.2	4.	A
73(	77, 78)	11.8	16	1.00	131.6	40.2	0.	A	74(	78, 79)	17.0	30	1.00	50.1	40.2	2.	A
75(	79, 80)	73.6	18	0.99	330.8	44.5	7.	A	76(	79, 81)	13.7	12	1.00	91.2	45.0	1.	A
77(	81, 82)	21.7	7	1.00	240.8	45.0	2.	A	78(	81, 83)	11.3	5	1.00	188.0	45.0	1.	A
79(	84, 78)	14.8	14	1.00	82.4	45.0	1.	A	80(	85, 86)	25.7	30	1.00	84.8	45.0	2.	A
81(	86, 87)	97.9	30	1.00	386.4	30.0	13.	A	82(	87, 88)	60.5	30	1.00	178.1	40.2	6.	A
83(	76, 84)	10.9	14	1.00	182.4	30.0	0.	A	84(	89, 90)	9.0	11	1.00	199.2	30.0	0.	A
85(	90, 91)	33.2	12	1.00	214.4	45.0	3.	A	86(	92, 90)	1.7	2	1.00	250.8	30.0	0.	A
87(	93, 91)	5.4	2	1.00	541.2	30.0	0.	A	88(	94, 85)	8.7	18	1.00	116.4	30.0	0.	A
89(	95, 96)	1.8	5	1.00	56.8	45.0	0.	A	90(	96, 97)	117.9	37	1.00	444.8	45.0	3.	A
91(	98, 99)	0.5	2	1.00	45.6	30.0	0.	A	92(	99, 100)	83.6	24	1.00	507.1	44.9	2.	A

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 13 15 0, ELAPSED SIMULATED TIME IS 0 HOURS, 15 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
93	(101, 102)	72.8	30	1.00	346.5	49.8	0.	A	94	(103, 104)	0.2	1	1.00	27.5	49.8	0.	A
95	(104, 101)	1.9	1	1.00	171.4	49.8	0.	A	96	(74, 106)	97.1	59	1.00	107.4	55.0	7.	A
97	(105, 106)	8.2	74	1.00	31.4	25.2	0.	A	98	(106, 75)	298.1	134	1.00	145.4	55.2	22.	A
99	(107, 108)	8.8	15	1.00	75.6	55.2	0.	A	100	(108, 109)	23.3	15	0.99	100.3	54.9	2.	A

DYNEV SUBNETWORK STATISTICS

VEHICLE-MILES = 3490.29 VEHICLE-MINUTES = 4419.22 VEHICLE-TRIPS(EST.) = 882

PCT OF VEHs THAT STOPPED = 0.000 MOVING/TOTAL TRIP TIME = 0.998 AVG. SPEED(MPH) = 47.39

AVG. QUEUE CONTENT = 0.0 VEH. AVG DELAY/VEH = 0.08 SEC. TOTAL DELAY = 7.9 MIN.

DELAY/VEH-MILE = 0.00 MIN/V-MILE TRAVEL TIME/VEH-MILE = 1.27 MIN/V-MILE

DYNEV SUBNETWORK NO. 1 PERSON MEASURES OF EFFECTIVENESS

LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN
(18, 19)	11.8	18.7	23.7	(19, 20)	5.9	9.4	11.9	(20, 21)	9.4	9.4	18.7
(19, 22)	5.9	9.4	11.9	(22, 23)	9.9	9.4	19.8	(17, 18)	10.6	9.4	21.2
(26, 31)	6.4	64.0	7.0	(28, 29)	6.4	16.4	15.2	(30, 29)	3.8	14.6	11.5
(34, 26)	3.7	18.7	5.0	(33, 5)	12.8	64.0	19.1	(24, 4)	6.9	16.4	16.4
(4, 52)	27.7	42.6	47.8	(1, 2)	17.3	48.1	29.9	(7, 26)	36.2	45.2	48.3
(5, 8)	12.6	126.4	13.8	(8, 9)	46.7	126.2	50.8	(9, 10)	64.3	126.1	69.9
(10, 13)	188.8	125.8	206.1	(13, 14)	187.2	124.8	204.3	(14, 16)	86.4	123.5	94.0
(35, 16)	1.6	16.4	3.9	(15, 38)	37.0	147.8	40.1	(38, 39)	62.7	208.9	68.2
(41, 38)	10.5	30.9	18.1	(39, 42)	60.6	242.3	73.0	(42, 43)	111.9	279.6	134.9
(44, 40)	80.4	187.1	97.0	(40, 45)	86.1	287.0	103.9	(45, 46)	28.7	286.9	34.6
(47, 46)	4.4	22.1	10.5	(49, 40)	10.0	50.2	23.9	(53, 50)	83.0	52.5	90.6
(50, 51)	73.0	52.5	79.8	(51, 54)	23.6	52.5	25.7	(54, 55)	134.0	52.1	147.1
(55, 57)	139.4	50.3	152.8	(57, 56)	45.3	48.8	49.3	(58, 25)	3.6	35.6	14.2
(25, 59)	36.3	71.2	43.8	(60, 59)	1.4	2.9	2.5	(27, 7)	10.2	22.6	24.2
(61, 34)	0.9	9.4	2.2	(3, 63)	12.4	61.9	13.4	(63, 5)	94.7	61.9	103.4
(29, 3)	49.5	61.9	117.7	(6, 33)	95.3	64.0	103.5	(31, 6)	14.1	64.0	15.3
(16, 32)	62.1	155.3	67.5	(32, 62)	17.1	171.5	18.7	(64, 32)	1.5	8.1	6.1
(62, 37)	34.2	170.9	37.1	(37, 65)	74.0	246.7	80.5	(65, 11)	49.2	246.2	53.5
(11, 66)	47.6	95.2	57.4	(66, 2)	12.3	94.9	14.9	(2, 44)	18.8	187.8	22.6
(12, 68)	14.9	148.7	16.2	(68, 15)	37.1	148.3	40.3	(11, 67)	68.7	149.2	74.6
(67, 12)	7.5	149.1	8.1	(52, 53)	81.9	52.5	99.3	(46, 69)	41.5	230.6	50.0
(69, 48)	83.0	286.3	100.1	(70, 69)	6.5	28.1	15.4	(71, 39)	4.9	16.9	11.7
(72, 42)	3.8	19.2	9.2	(36, 1)	0.6	3.6	1.5	(36, 37)	15.3	76.4	36.4
(73, 36)	4.8	40.3	11.5	(59, 74)	272.5	77.0	328.4	(46, 47)	36.0	100.0	85.6
(77, 78)	15.3	10.4	22.8	(78, 79)	22.1	39.5	33.0	(79, 80)	95.7	23.4	129.0
(79, 81)	17.8	15.6	23.7	(81, 82)	28.2	9.4	37.6	(81, 83)	14.7	6.2	19.6
(84, 78)	19.3	18.7	25.7	(85, 86)	33.3	31.5	44.5	(86, 87)	127.3	39.5	254.5
(87, 88)	78.6	39.5	117.3	(76, 84)	14.2	9.4	28.5	(89, 90)	11.7	7.0	23.3
(90, 91)	43.2	16.1	57.6	(92, 90)	2.2	1.0	4.3	(93, 91)	7.0	1.6	14.1
(94, 85)	11.3	11.7	22.7	(95, 96)	2.4	3.4	3.2	(96, 97)	153.2	27.6	204.3
(98, 99)	0.6	1.6	1.2	(99, 100)	108.6	17.2	145.0	(101, 102)	94.7	19.8	114.1
(103, 104)	0.2	0.5	0.2	(104, 101)	2.5	1.0	3.0	(74, 106)	126.2	77.0	137.8
(105, 106)	10.6	48.4	25.3	(106, 75)	387.6	173.8	421.1	(107, 108)	11.5	9.9	12.5
(108, 109)	30.2	19.8	33.0								

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 13 30 0, ELAPSED SIMULATED TIME IS 0 HOURS, 30 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
1(	18, 19)	28.5	45	0.99	76.0	29.8	3.	A	2(	19, 20)	13.6	22	0.99	76.0	29.8	1.	A
3(	20, 21)	20.5	21	1.00	120.0	30.0	2.	A	4(	19, 22)	13.6	22	0.99	76.0	29.8	1.	A
5(	22, 23)	21.7	21	1.00	127.2	30.0	2.	A	6(	17, 18)	26.4	47	1.00	135.6	30.0	0.	A
7(	26, 31)	15.6	156	1.00	6.5	55.1	1.	A	8(	28, 29)	15.9	82	1.00	55.6	25.2	0.	A
9(	30, 29)	9.5	73	1.00	47.3	19.8	0.	A	10(	34, 26)	9.3	46	1.00	16.0	45.0	1.	A
11(	33, 5)	26.9	134	1.00	17.9	40.2	2.	A	12(	24, 4)	17.0	81	1.00	59.9	25.2	0.	A
13(	4, 52)	67.3	128	1.00	67.3	34.8	4.	A	14(	1, 2)	39.5	220	0.91	40.7	31.8	12.	C
15(	7, 26)	87.8	110	1.00	64.0	45.0	6.	A	16(	5, 8)	27.4	274	1.00	6.5	55.1	2.	A
17(	8, 9)	100.0	270	1.00	24.1	55.2	6.	A	18(	9, 10)	135.6	266	1.00	33.2	55.2	8.	A
19(	10, 13)	378.8	253	1.00	98.1	55.0	24.	A	20(	13, 14)	359.3	240	1.00	98.1	55.0	23.	A
21(	14, 16)	163.4	234	1.00	45.7	55.2	10.	A	22(	35, 16)	4.1	82	1.00	14.3	25.2	0.	A
23(	15, 38)	75.1	300	1.00	16.3	55.2	4.	A	24(	38, 39)	135.4	452	1.00	19.6	55.2	8.	A
25(	41, 38)	26.4	156	1.00	35.2	34.8	0.	A	26(	39, 42)	132.6	531	1.00	18.1	49.8	8.	B
27(	42, 43)	247.3	618	1.00	28.9	49.8	15.	B	28(	44, 40)	176.3	410	1.00	31.1	49.8	10.	A
29(	40, 45)	196.6	656	1.00	21.7	49.7	12.	B	30(	45, 46)	65.3	654	1.00	7.2	49.8	4.	A
31(	47, 46)	11.0	110	1.00	28.5	25.2	0.	A	32(	49, 40)	25.2	252	1.00	28.5	25.2	0.	A
33(	53, 50)	183.3	116	1.00	103.4	55.0	10.	A	34(	50, 51)	154.1	111	1.00	91.0	55.0	9.	A
35(	51, 54)	49.2	109	1.00	29.3	55.2	3.	A	36(	54, 55)	257.0	100	0.99	168.9	54.8	17.	A
37(	55, 57)	249.6	90	0.99	182.0	54.8	17.	A	38(	57, 56)	80.9	87	1.00	60.7	55.2	5.	A
39(	58, 25)	8.9	178	1.00	24.0	15.0	0.	A	40(	25, 59)	89.4	175	1.00	36.9	49.8	5.	A
41(	60, 59)	3.5	14	1.00	51.8	34.8	0.	A	42(	27, 7)	25.4	113	1.00	64.2	25.2	0.	A
43(	61, 34)	2.3	47	1.00	14.3	25.2	0.	A	44(	3, 63)	29.2	146	1.00	13.0	55.2	2.	A
45(	63, 5)	213.3	139	1.00	100.2	55.0	12.	A	46(	29, 3)	117.5	147	1.00	114.2	25.2	14.	B
47(	6, 33)	204.7	137	1.00	97.1	55.2	12.	A	48(	31, 6)	34.1	155	1.00	14.3	55.2	2.	A
49(	16, 32)	124.5	311	1.00	26.1	55.2	7.	A	50(	32, 62)	35.0	350	1.00	6.5	55.2	2.	A
51(	64, 32)	3.8	40	1.00	45.6	15.0	0.	A	52(	62, 37)	69.6	348	1.00	13.0	55.2	4.	A
53(	37, 65)	159.8	533	1.00	19.6	55.2	9.	A	54(	65, 11)	105.9	530	1.00	13.0	55.2	6.	A
55(	11, 66)	101.3	203	1.00	36.2	49.8	6.	A	56(	66, 2)	26.2	202	1.00	9.4	49.8	2.	A
57(	2, 44)	42.1	421	1.00	7.2	49.8	2.	A	58(	12, 68)	30.9	309	1.00	6.5	55.2	2.	A
59(	68, 15)	76.5	306	1.00	16.3	55.2	4.	A	60(	11, 67)	146.4	318	1.00	30.0	55.2	8.	A
61(	67, 12)	15.9	318	1.00	3.3	55.2	1.	A	62(	52, 53)	190.0	122	1.00	113.3	49.5	11.	A
63(	46, 69)	95.6	531	1.00	13.0	49.8	6.	A	64(	69, 48)	192.8	665	1.00	21.0	49.8	12.	B
65(	70, 69)	16.1	140	1.00	32.8	25.2	0.	A	66(	71, 39)	12.1	84	1.00	41.4	25.2	0.	A
67(	72, 42)	9.6	96	1.00	28.5	25.2	0.	A	68(	36, 1)	1.6	10	1.00	24.3	25.2	0.	A
69(	36, 37)	37.9	190	1.00	28.6	25.2	4.	A	70(	73, 36)	12.2	202	1.00	17.1	25.2	0.	A
71(	59, 74)	596.2	168	1.00	256.1	49.8	38.	A	72(	46, 47)	80.3	223	1.00	51.5	25.2	10.	C
73(	77, 78)	38.8	53	1.00	131.6	40.2	0.	A	74(	78, 79)	53.6	96	1.00	50.1	40.2	4.	A
75(	79, 80)	198.4	49	0.99	330.3	44.6	15.	A	76(	79, 81)	41.5	36	1.00	91.2	45.0	3.	A
77(	81, 82)	58.4	19	1.00	240.8	45.0	4.	A	78(	81, 83)	31.0	13	1.00	188.0	45.0	2.	A
79(	84, 78)	46.4	45	1.00	82.4	45.0	3.	A	80(	85, 86)	80.7	97	1.00	84.8	45.0	4.	A
81(	86, 87)	258.6	80	1.00	386.4	30.0	29.	A	82(	87, 88)	144.7	73	1.00	178.1	40.2	14.	A
83(	76, 84)	35.6	47	1.00	182.4	30.0	0.	A	84(	89, 90)	28.2	34	1.00	199.2	30.0	0.	A
85(	90, 91)	97.5	36	1.00	214.4	45.0	7.	A	86(	92, 90)	6.3	6	1.00	250.8	30.0	0.	A
87(	93, 91)	17.1	8	1.00	841.2	30.0	0.	A	88(	94, 85)	27.9	58	1.00	116.4	30.0	0.	A
89(	95, 96)	5.7	16	1.00	56.8	45.0	0.	A	90(	96, 97)	360.3	116	1.00	444.8	45.0	5.	A
91(	98, 99)	1.4	8	1.00	45.6	30.0	0.	A	92(	99, 100)	262.1	76	1.00	507.0	45.0	3.	A

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 13 30 0, ELAPSED SIMULATED TIME IS 0 HOURS, 30 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
93	(101, 102)	233.8	95	1.00	346.5	49.8	1.	A	94	(103, 104)	0.6	3	1.00	27.5	49.8	0.	A
95	(104, 101)	6.9	3	1.00	171.4	49.8	1.	A	96	(74, 106)	261.6	160	1.00	107.3	55.0	16.	A
97	(105, 106)	25.5	232	0.91	34.4	23.0	12.	E	98	(106, 75)	809.0	363	0.98	147.7	54.4	50.	B
99	(107, 108)	28.5	49	1.00	75.6	55.2	0.	A	100	(108, 109)	72.1	47	0.99	100.3	54.9	4.	A

DYNEV SUBNETWORK STATISTICS

VEHICLE-MILES = 9789.64 VEHICLE-MINUTES = 12520.46 VEHICLE-TRIPS(EST.) = 2536

PCT OF VEHs THAT STOPPED = 0.371 MOVING/TOTAL TRIP TIME = 0.997 AVG. SPEED(MPH) = 46.91

AVG. QUEUE CONTENT = 7.5 VEH. AVG DELAY/VEH = 0.16 SEC. TOTAL DELAY = 43.5 MIN.

DELAY/VEH-MILE = 0.00 MIN/V-MILE TRAVEL TIME/VEH-MILE = 1.28 MIN/V-MILE

DYNEV SUBNETWORK NO. 1 PERSON MEASURES OF EFFECTIVENESS

LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN
(18, 19)	37.0	58.8	74.5	(19, 20)	17.7	28.1	35.6	(20, 21)	26.6	26.6	53.3
(19, 22)	17.7	28.1	35.6	(22, 23)	28.3	26.6	56.5	(17, 18)	34.4	30.4	68.7
(26, 31)	20.3	202.5	22.0	(28, 29)	20.7	53.0	49.2	(30, 29)	12.3	47.3	37.3
(34, 26)	12.1	60.3	16.1	(33, 5)	34.9	174.7	52.1	(24, 4)	22.1	52.5	52.5
(4, 52)	87.5	134.5	150.9	(1, 2)	51.4	142.7	96.9	(7, 26)	114.2	142.7	152.3
(5, 8)	35.6	355.7	38.7	(8, 9)	130.0	351.3	141.2	(9, 10)	176.2	345.5	191.5
(10, 13)	492.4	328.3	536.9	(13, 14)	467.0	311.3	509.2	(14, 16)	212.5	303.5	231.1
(35, 16)	5.3	53.0	12.6	(15, 38)	97.6	390.4	106.0	(38, 39)	176.1	586.9	191.5
(41, 38)	34.4	101.1	59.3	(39, 42)	172.4	689.6	207.8	(42, 43)	321.5	803.7	387.6
(44, 40)	229.1	533.0	276.2	(40, 45)	255.6	852.1	308.4	(45, 46)	85.0	849.5	102.4
(47, 46)	14.2	71.2	33.9	(49, 40)	32.7	163.5	77.8	(53, 50)	238.3	150.8	259.8
(50, 51)	200.4	144.2	218.7	(51, 54)	63.9	142.1	69.5	(54, 55)	334.1	130.0	365.9
(55, 57)	324.5	117.1	355.3	(57, 56)	105.2	113.1	114.4	(58, 25)	11.6	115.7	46.3
(25, 59)	116.2	227.8	140.1	(60, 59)	4.5	9.1	7.9	(27, 7)	33.0	73.3	78.5
(61, 34)	3.0	30.4	7.2	(3, 63)	38.0	189.9	41.3	(63, 5)	277.3	181.2	302.6
(29, 3)	152.8	191.0	363.4	(6, 33)	266.1	178.6	289.1	(31, 6)	44.3	201.2	48.1
(16, 32)	161.8	404.6	175.8	(32, 62)	45.6	455.5	49.5	(64, 32)	4.9	26.0	19.8
(62, 37)	90.5	452.4	98.3	(37, 65)	207.8	692.6	226.0	(65, 11)	137.7	688.3	149.6
(11, 66)	131.7	263.4	158.7	(66, 2)	34.1	262.2	41.1	(2, 44)	54.7	546.8	65.9
(12, 68)	40.1	401.2	43.6	(68, 15)	99.5	397.9	108.1	(11, 67)	190.3	413.7	206.7
(67, 12)	20.6	412.9	22.4	(52, 53)	247.0	158.3	299.1	(46, 69)	124.3	690.7	149.8
(69, 48)	250.7	864.5	302.3	(70, 69)	21.0	91.3	49.9	(71, 39)	15.8	54.3	37.5
(72, 42)	12.5	62.4	29.7	(36, 1)	2.1	12.3	5.0	(36, 37)	49.3	246.5	117.5
(73, 36)	15.8	131.6	37.6	(59, 74)	775.0	218.9	934.3	(46, 47)	104.4	289.9	248.6
(77, 78)	50.5	34.3	75.3	(78, 79)	69.7	124.4	103.9	(79, 80)	257.9	63.0	347.1
(79, 81)	53.9	47.3	71.9	(81, 82)	75.9	25.2	101.2	(81, 83)	40.3	17.2	53.8
(84, 78)	60.4	58.6	80.5	(85, 86)	104.9	98.9	139.8	(86, 87)	336.1	104.4	672.3
(87, 88)	188.1	94.5	280.5	(76, 84)	46.2	30.4	92.5	(89, 90)	36.7	22.1	73.4
(90, 91)	126.8	47.3	169.1	(92, 90)	8.2	3.9	16.3	(93, 91)	22.3	4.9	44.6
(94, 85)	36.3	37.4	72.6	(95, 96)	7.4	10.4	9.8	(96, 97)	468.4	84.2	624.5
(98, 99)	1.9	4.9	3.8	(99, 100)	340.7	53.8	454.7	(101, 102)	303.9	63.4	366.3
(103, 104)	0.8	2.1	1.0	(104, 101)	8.9	3.8	10.8	(74, 106)	340.0	207.3	370.7
(105, 106)	33.1	150.5	86.3	(106, 75)	1051.7	471.6	1160.9	(107, 108)	37.1	32.0	40.3
(108, 109)	93.7	61.2	102.3	(

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 13 45 0, ELAPSED SIMULATED TIME IS 0 HOURS, 45 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
1(	18, 19)	68.0	108	0.99	76.0	29.8	6.	A	2(	19, 20)	32.4	52	0.99	76.0	29.8	3.	A
3(	20, 21)	48.1	48	1.00	120.0	30.0	4.	A	4(	19, 22)	32.4	52	0.99	76.0	29.8	3.	A
5(	22, 23)	50.9	48	1.00	127.2	30.0	5.	A	6(	17, 18)	63.5	112	1.00	135.6	30.0	0.	A
7(	26, 31)	36.9	369	1.00	6.5	55.1	2.	A	8(	28, 29)	37.8	194	1.00	55.6	25.2	0.	A
9(	30, 29)	22.7	174	1.00	47.3	19.8	0.	A	10(	34, 26)	21.9	110	1.00	16.0	45.0	1.	A
11(	33, 5)	54.9	275	0.45	40.1	18.0	39.	F	12(	24, 4)	40.4	192	1.00	59.9	25.2	0.	A
13(	4, 52)	159.0	303	1.00	67.3	34.8	8.	A	14(	1, 2)	60.1	334	0.06	621.0	2.1	208.	F
15(	7, 26)	208.5	261	1.00	64.0	45.0	11.	A	16(	5, 8)	59.9	599	1.00	6.5	55.1	3.	A
17(	8, 9)	218.9	591	1.00	24.1	55.2	10.	A	18(	9, 10)	296.6	582	1.00	33.2	55.2	13.	A
19(	10, 13)	828.2	552	1.00	98.1	55.0	40.	A	20(	13, 14)	783.9	523	1.00	98.1	55.0	39.	A
21(	14, 16)	356.2	509	1.00	45.7	55.2	18.	A	22(	35, 16)	9.7	194	1.00	14.3	25.2	0.	A
23(	15, 38)	155.4	621	0.99	16.5	54.6	15.	C	24(	38, 39)	294.5	982	1.00	19.6	55.2	13.	A
25(	41, 38)	62.8	370	1.00	35.2	34.8	1.	A	26(	39, 42)	279.7	1119	0.93	19.5	46.3	44.	F
27(	42, 43)	477.5	1194	0.71	40.5	35.6	95.	F	28(	44, 40)	313.7	730	0.99	31.4	49.3	20.	B
29(	40, 45)	359.3	1198	1.00	21.8	49.6	14.	B	30(	45, 46)	117.6	1176	0.92	7.9	45.7	23.	F
31(	47, 46)	26.2	262	1.00	28.5	25.2	0.	A	32(	49, 40)	47.6	476	0.12	236.7	3.0	125.	F
33(	53, 50)	425.3	269	1.00	103.3	55.0	21.	A	34(	50, 51)	354.4	255	1.00	91.0	55.0	18.	A
35(	51, 54)	112.7	251	1.00	29.3	55.2	6.	A	36(	54, 55)	577.5	225	0.99	168.7	54.8	33.	A
37(	55, 57)	548.8	198	0.99	181.8	54.8	33.	A	38(	57, 56)	176.7	190	1.00	60.7	55.2	10.	A
39(	58, 25)	20.1	403	0.77	31.2	11.6	22.	F	40(	25, 59)	201.9	396	1.00	36.9	49.8	9.	B
41(	60, 59)	8.4	34	1.00	51.8	34.8	0.	A	42(	27, 7)	60.6	269	1.00	64.2	25.2	0.	A
43(	61, 34)	5.5	110	1.00	14.3	25.2	0.	A	44(	3, 63)	68.7	343	1.00	13.0	55.2	3.	A
45(	63, 5)	496.6	325	1.00	100.2	55.0	24.	A	46(	29, 3)	276.6	346	0.98	116.2	24.8	29.	D
47(	6, 33)	473.5	318	1.00	97.1	55.2	24.	B	48(	31, 6)	80.7	367	1.00	14.3	55.2	3.	B
49(	16, 32)	277.2	693	1.00	26.1	55.2	13.	A	50(	32, 62)	78.6	786	1.00	6.5	55.2	4.	A
51(	64, 32)	9.1	96	1.00	45.6	15.0	0.	A	52(	62, 37)	155.6	778	1.00	13.0	55.2	10.	B
53(	37, 65)	332.2	1107	1.00	19.6	55.2	14.	A	54(	65, 11)	220.1	1101	1.00	13.0	55.2	9.	A
55(	11, 66)	210.4	421	1.00	36.2	49.7	10.	B	56(	66, 2)	54.5	419	1.00	9.4	49.8	2.	A
57(	2, 44)	75.2	752	1.00	7.2	49.8	3.	A	58(	12, 68)	64.8	648	1.00	6.5	55.2	3.	A
59(	68, 15)	160.6	643	1.00	16.3	55.2	7.	A	60(	11, 67)	304.4	662	1.00	30.0	55.2	13.	A
61(	67, 12)	33.0	661	1.00	3.3	55.2	1.	A	62(	52, 53)	444.9	285	1.00	113.3	49.6	23.	A
63(	46, 69)	185.3	1030	1.00	13.0	49.8	7.	B	64(	69, 48)	356.9	1231	1.00	21.0	49.6	15.	B
65(	70, 69)	24.2	211	0.03	980.9	0.8	211.	F	66(	71, 39)	25.8	178	0.52	79.1	13.2	22.	F
67(	72, 42)	16.4	164	0.09	312.5	2.3	65.	F	68(	36, 1)	2.2	13	0.08	308.9	2.0	11.	E
69(	36, 37)	67.9	340	0.22	129.1	5.6	53.	F	70(	73, 36)	24.9	415	0.20	86.4	5.0	69.	F
71(	59, 74)	1297.5	367	0.98	261.4	48.8	80.	B	72(	46, 47)	143.0	397	1.00	51.6	25.1	10.	C
73(	77, 78)	92.3	126	1.00	131.6	40.2	0.	A	74(	78, 79)	126.5	226	1.00	50.1	40.2	8.	A
75(	79, 80)	456.1	112	0.99	330.1	44.6	30.	A	76(	79, 81)	97.5	86	1.00	91.2	45.0	6.	A
77(	81, 82)	133.7	44	1.00	240.8	45.0	9.	A	78(	81, 83)	71.7	31	1.00	188.0	45.0	5.	A
79(	84, 78)	109.1	106	1.00	82.4	45.0	6.	A	80(	85, 86)	191.9	230	1.00	84.8	45.0	8.	A
81(	86, 87)	593.1	184	1.00	386.4	30.0	59.	B	82(	87, 88)	324.0	163	1.00	178.1	40.2	27.	A
83(	76, 84)	83.9	110	1.00	182.4	30.0	0.	A	84(	89, 90)	67.7	82	1.00	199.2	30.0	0.	A
85(	90, 91)	228.9	85	1.00	214.4	45.0	13.	A	86(	92, 90)	14.6	14	1.00	250.8	30.0	0.	A
87(	93, 91)	43.3	19	1.00	541.2	30.0	0.	A	88(	94, 85)	66.7	138	1.00	116.4	30.0	0.	A
89(	95, 96)	13.3	38	1.00	56.8	45.0	0.	A	90(	96, 97)	845.7	274	1.00	444.8	45.0	11.	A
91(	98, 99)	3.5	18	1.00	45.6	30.0	0.	A	92(	99, 100)	620.4	182	1.00	506.9	45.0	6.	A

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 13 45 0, ELAPSED SIMULATED TIME IS 0 HOURS, 45 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
93	(101, 102)	558.5	227	1.00	346.5	49.8	2.	A	94	(103, 104)	1.4	8	1.00	27.5	49.8	0.	A
95	(104, 101)	16.4	7	1.00	171.4	49.8	1.	A	96	(74, 106)	568.4	347	1.00	107.3	55.0	27.	B
97	(105, 106)	39.5	359	0.05	635.6	1.2	221.	F	98	(106, 75)	1474.9	661	0.95	152.5	52.6	67.	C
99	(107, 108)	68.2	118	1.00	75.6	55.2	0.	A	100	(108, 109)	170.7	112	0.99	100.3	54.9	8.	A

DYNEV SUBNETWORK STATISTICS

VEHICLE-MILES = 21159.58 VEHICLE-MINUTES = 34836.01 VEHICLE-TRIPS(EST.) = 5028

PCT OF VEHs THAT STOPPED = 5.565 MOVING/TOTAL TRIP TIME = 0.776 AVG. SPEED(MPH) = 36.44

AVG. QUEUE CONTENT = 223.3 VEH. AVG DELAY/VEH = 14.15 SEC. TOTAL DELAY = 7797.8 MIN.

DELAY/VEH-MILE = 0.37 MIN/V-MILE TRAVEL TIME/VEH-MILE = 1.65 MIN/V-MILE

DYNEV SUBNETWORK NO. 1 PERSON MEASURES OF EFFECTIVENESS

LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN
(18, 19)	88.4	140.3	177.8	(19, 20)	42.2	66.9	84.8	(20, 21)	62.5	62.5	125.1
(19, 22)	42.2	66.9	84.8	(22, 23)	66.1	62.4	132.3	(17, 18)	82.6	73.1	165.1
(26, 31)	48.0	480.0	52.2	(28, 29)	49.2	126.1	117.0	(30, 29)	29.5	113.4	89.5
(34, 26)	28.5	142.3	38.0	(33, 5)	71.4	356.8	238.4	(24, 4)	52.5	125.1	124.9
(4, 52)	206.7	318.0	356.6	(1, 2)	78.2	217.1	2247.2	(7, 26)	271.0	338.8	361.4
(5, 8)	77.8	778.3	84.7	(8, 9)	284.5	768.8	309.1	(9, 10)	385.6	755.9	418.9
(10, 13)	1076.6	717.7	1173.5	(13, 14)	1019.1	679.4	1110.7	(14, 16)	463.0	661.4	503.5
(35, 16)	12.6	126.1	30.0	(15, 38)	202.0	807.8	222.0	(38, 39)	382.8	1276.1	416.4
(41, 38)	81.7	240.2	141.0	(39, 42)	363.6	1454.3	471.5	(42, 43)	620.8	1551.9	1047.1
(44, 40)	407.8	948.6	495.9	(40, 45)	467.1	1556.9	564.5	(45, 46)	152.9	1529.3	200.7
(47, 46)	34.0	170.0	80.9	(49, 40)	61.9	309.7	1221.7	(53, 50)	552.9	350.0	602.7
(50, 51)	460.8	331.5	502.5	(51, 54)	146.5	325.6	159.2	(54, 55)	750.7	292.1	821.4
(55, 57)	713.4	257.5	780.5	(57, 56)	229.7	247.0	249.8	(58, 25)	26.2	261.8	136.0
(25, 59)	262.4	514.5	316.5	(60, 59)	10.9	21.8	18.8	(27, 7)	78.7	175.0	187.3
(61, 34)	7.2	71.8	17.1	(3, 63)	89.3	446.3	97.0	(63, 5)	645.6	422.0	704.4
(29, 3)	359.5	449.4	870.0	(6, 33)	615.6	413.1	668.8	(31, 6)	104.9	476.4	113.9
(16, 32)	360.4	901.0	391.6	(32, 62)	102.2	1022.1	111.2	(64, 32)	11.8	62.1	47.2
(62, 37)	202.3	1011.5	220.0	(37, 65)	431.9	1439.6	469.7	(65, 11)	286.2	1430.9	310.9
(11, 66)	273.6	547.2	330.1	(66, 2)	70.8	544.8	85.3	(2, 44)	97.8	977.6	117.8
(12, 68)	84.2	841.7	91.6	(68, 15)	208.8	835.2	226.9	(11, 67)	395.7	860.1	429.9
(67, 12)	42.9	858.8	46.6	(52, 53)	578.4	370.8	700.3	(46, 69)	240.8	1338.5	290.3
(69, 48)	464.0	1600.2	561.4	(70, 69)	31.5	136.9	2237.9	(71, 39)	33.5	115.7	152.6
(72, 42)	21.3	106.3	553.5	(36, 1)	2.8	16.6	85.7	(36, 37)	88.3	441.5	949.7
(73, 36)	32.4	269.8	388.5	(59, 74)	1686.7	476.4	2075.9	(46, 47)	185.9	516.4	443.8
(77, 78)	120.0	81.6	179.0	(78, 79)	164.4	293.5	245.2	(79, 80)	592.9	144.9	797.5
(79, 81)	126.7	111.1	168.9	(81, 82)	173.8	57.7	231.7	(81, 83)	93.2	39.6	124.2
(84, 78)	141.8	137.7	189.1	(85, 86)	249.4	235.3	332.6	(86, 87)	771.1	239.5	1542.2
(87, 88)	421.2	211.6	628.2	(76, 84)	109.1	71.8	218.2	(89, 90)	88.0	53.0	176.1
(90, 91)	297.5	111.0	396.7	(92, 90)	19.0	9.1	38.0	(93, 91)	56.3	12.5	112.6
(94, 85)	86.8	89.4	173.5	(95, 96)	17.4	24.4	23.1	(96, 97)	1099.4	197.7	1465.9
(98, 99)	4.5	12.0	9.1	(99, 100)	806.5	127.4	1076.4	(101, 102)	726.1	151.6	875.3
(103, 104)	1.9	4.9	2.3	(104, 101)	21.3	9.0	25.6	(74, 106)	738.9	450.6	805.5
(105, 106)	51.4	233.6	2474.9	(106, 75)	1917.3	859.8	2185.4	(107, 108)	88.7	76.4	96.3
(108, 109)	222.0	145.1	242.4								

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 14 0 0, ELAPSED SIMULATED TIME IS 1 HOURS, 0 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
1(	18, 19)	90.1	143	0.98	76.8	29.5	3.	A	2(	19, 20)	44.3	70	0.99	76.6	29.6	1.	A
3(	20, 21)	69.2	69	0.99	121.0	29.7	2.	A	4(	19, 22)	44.3	70	0.99	76.6	29.6	1.	A
5(	22, 23)	73.4	69	0.99	128.2	29.8	2.	A	6(	17, 18)	81.8	145	1.00	135.6	30.0	0.	A
7(	26, 31)	48.7	487	1.00	6.5	55.1	1.	A	8(	28, 29)	48.8	250	1.00	55.6	25.2	0.	A
9(	30, 29)	29.2	225	1.00	47.3	19.8	0.	A	10(	34, 26)	28.5	142	1.00	16.1	44.9	1.	A
11(	33, 5)	76.0	380	0.13	133.2	5.4	41.	F	12(	24, 4)	52.1	248	1.00	59.9	25.2	0.	A
13(	4, 52)	209.1	397	1.00	67.3	34.8	4.	A	14(	1, 2)	76.6	426	0.02	1514.6	0.9	270.	F
15(	7, 26)	275.4	344	0.99	64.6	44.6	6.	A	16(	5, 8)	84.1	841	1.00	6.5	55.1	2.	A
17(	8, 9)	310.0	838	1.00	24.2	55.1	6.	A	18(	9, 10)	425.1	833	1.00	33.3	55.1	8.	A
19(	10, 13)	1230.4	820	0.99	98.8	54.7	24.	A	20(	13, 14)	1209.4	806	0.99	98.7	54.7	24.	A
21(	14, 16)	559.0	799	1.00	45.8	55.0	12.	A	22(	35, 16)	12.5	250	1.00	14.3	25.2	0.	A
23(	15, 38)	234.7	939	0.60	27.2	33.1	10.	B	24(	38, 39)	423.2	1411	0.71	27.5	39.3	10.	A
25(	41, 38)	81.4	479	1.00	35.2	34.7	0.	A	26(	39, 42)	402.5	1610	0.69	26.3	34.2	14.	C
27(	42, 43)	681.5	1704	0.49	58.6	24.6	108.	F	28(	44, 40)	450.5	1048	0.95	32.7	47.4	10.	A
29(	40, 45)	517.8	1726	0.98	22.2	48.6	29.	E	30(	45, 46)	169.3	1693	0.63	11.5	31.4	35.	F
31(	47, 46)	33.7	337	1.00	28.5	25.2	0.	A	32(	49, 40)	70.1	701	0.07	402.5	1.8	75.	F
33(	53, 50)	607.8	385	0.99	104.2	54.6	10.	A	34(	50, 51)	527.6	380	0.99	91.8	54.5	9.	A
35(	51, 54)	170.1	378	1.00	29.4	55.0	3.	A	36(	54, 55)	945.0	368	0.99	169.9	54.5	18.	A
37(	55, 57)	978.4	353	0.99	182.7	54.6	21.	A	38(	57, 56)	321.9	346	1.00	60.9	55.0	9.	A
39(	58, 25)	27.4	548	0.75	32.0	11.3	0.	A	40(	25, 59)	277.8	545	0.99	37.1	49.5	5.	A
41(	60, 59)	10.8	43	1.00	51.8	34.8	0.	A	42(	27, 7)	78.1	347	1.00	64.2	25.2	0.	A
43(	61, 34)	7.1	143	1.00	14.3	25.2	0.	A	44(	3, 63)	93.4	467	1.00	13.1	55.1	2.	A
45(	63, 5)	704.1	460	0.99	101.1	54.5	12.	A	46(	29, 3)	374.2	468	0.98	116.9	24.6	14.	B
47(	6, 33)	632.9	425	0.60	161.8	33.2	55.	D	48(	31, 6)	106.9	486	1.00	14.4	55.1	2.	A
49(	16, 32)	417.7	1044	1.00	26.1	55.1	8.	A	50(	32, 62)	116.7	1167	1.00	6.5	55.1	3.	A
51(	64, 32)	11.7	123	1.00	45.6	15.0	0.	A	52(	62, 37)	232.7	1164	1.00	13.1	55.0	5.	A
53(	37, 65)	494.0	1647	1.00	19.6	55.1	11.	A	54(	65, 11)	328.4	1642	1.00	13.0	55.2	7.	A
55(	11, 66)	317.5	635	1.00	36.3	49.6	7.	A	56(	66, 2)	82.3	634	1.00	9.4	49.8	2.	A
57(	2, 44)	105.9	1059	1.00	7.2	49.8	2.	A	58(	12, 68)	98.3	983	1.00	6.5	55.1	2.	A
59(	68, 15)	237.9	952	0.86	18.9	47.6	33.	D	60(	11, 67)	457.7	995	1.00	30.0	55.1	10.	A
61(	67, 12)	49.7	994	1.00	3.3	55.2	1.	A	62(	52, 53)	609.4	391	0.99	114.3	49.1	11.	A
63(	46, 69)	260.6	1448	1.00	13.0	49.7	6.	B	64(	69, 48)	492.1	1697	0.99	21.1	49.5	10.	B
65(	70, 69)	29.2	254	0.01	2551.3	0.3	265.	F	66(	71, 39)	30.5	210	0.11	364.0	2.9	47.	F
67(	72, 42)	19.5	195	0.03	1053.7	0.7	101.	F	68(	36, 1)	2.2	13	0.02	1421.6	0.4	20.	F
69(	36, 37)	97.9	490	0.15	194.9	3.7	58.	F	70(	73, 36)	34.8	579	0.08	225.4	1.9	45.	F
71(	59, 74)	2009.4	568	0.95	270.8	47.1	38.	A	72(	46, 47)	205.9	572	1.00	51.6	25.1	10.	C
73(	77, 78)	119.4	162	1.00	131.6	40.2	0.	A	74(	78, 79)	168.9	302	0.99	50.5	40.0	4.	A
75(	79, 80)	702.7	172	0.98	332.2	44.3	15.	A	76(	79, 81)	135.0	118	0.99	91.9	44.6	3.	A
77(	81, 82)	205.6	68	0.99	242.7	44.7	4.	A	78(	81, 83)	107.9	46	1.00	188.8	44.8	2.	A
79(	84, 78)	145.3	141	0.99	83.2	44.6	3.	A	80(	85, 86)	253.1	303	1.00	84.8	45.0	4.	A
81(	86, 87)	920.9	286	1.00	387.9	29.9	29.	A	82(	87, 88)	553.8	278	0.99	179.0	40.0	14.	A
83(	76, 84)	108.5	143	1.00	182.4	30.0	0.	A	84(	89, 90)	87.0	105	1.00	199.2	30.0	0.	A
85(	90, 91)	320.8	120	1.00	214.7	44.9	7.	A	86(	92, 90)	19.2	18	1.00	250.8	30.0	0.	A
87(	93, 91)	55.0	24	1.00	541.2	30.0	0.	A	88(	94, 85)	85.9	177	1.00	116.4	30.0	0.	A
89(	95, 96)	17.2	48	1.00	56.8	45.0	0.	A	90(	96, 97)	1132.6	361	1.00	444.8	45.0	5.	A
91(	98, 99)	4.5	24	1.00	45.6	30.0	0.	A	92(	99, 100)	827.3	239	1.00	507.3	44.9	3.	A

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 14 0 0, ELAPSED SIMULATED TIME IS 1 HOURS, 0 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
93(	101, 102)	729.1	294	1.00	346.5	49.8	1.	A	94(	103, 104)	1.9	10	1.00	27.5	49.8	0.	A
95(	104, 101)	23.0	10	1.00	172.2	49.5	1.	A	96(	74, 106)	915.3	558	0.99	108.0	54.7	17.	A
97(	105, 106)	50.8	461	0.02	1524.1	0.5	289.	F	98(	106, 75)	2215.0	993	0.94	154.9	51.8	48.	B
99(	107, 108)	87.9	152	1.00	75.6	55.2	0.	A	100(	108, 109)	228.6	149	0.98	101.3	54.4	4.	A

DYNEV SUBNETWORK STATISTICS

VEHICLE-MILES = 30970.65 VEHICLE-MINUTES = 66044.44 VEHICLE-TRIPS(EST.) = 7216

PCT OF VEHs THAT STOPPED = 7.886 MOVING/TOTAL TRIP TIME = 0.595 AVG. SPEED(MPH) = 28.14

AVG. QUEUE CONTENT = 484.7 VEH. AVG DELAY/VEH = 33.61 SEC. TOTAL DELAY = 26717.9 MIN.

DELAY/VEH-MILE = 0.86 MIN/V-MILE TRAVEL TIME/VEH-MILE = 2.13 MIN/V-MILE

DYNEV SUBNETWORK NO. 1 PERSON MEASURES OF EFFECTIVENESS

LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN
(18, 19)	117.2	186.0	238.1	(19, 20)	57.7	91.5	116.9	(20, 21)	90.0	90.0	181.4
(19, 22)	57.7	91.5	116.9	(22, 23)	95.4	90.0	192.3	(17, 18)	106.3	94.1	212.7
(26, 31)	63.3	632.6	68.9	(28, 29)	63.5	162.8	151.0	(30, 29)	38.0	146.1	115.3
(34, 26)	37.0	185.1	49.5	(33, 5)	98.8	494.1	1096.7	(24, 4)	67.7	161.2	161.1
(4, 52)	271.8	418.2	469.3	(1, 2)	99.6	276.6	6983.4	(7, 26)	358.0	447.5	481.6
(5, '8)	109.3	1093.3	119.1	(8, 9)	403.1	1089.1	439.0	(9, 10)	552.6	1083.4	602.2
(10, 13)	1599.6	1066.4	1755.5	(13, 14)	1572.3	1048.2	1725.1	(14, 16)	726.7	1038.2	793.2
(35, 16)	16.3	162.8	38.7	(15, 38)	305.1	1220.6	553.9	(38, 39)	550.2	1833.9	839.3
(41, 38)	105.8	311.2	182.7	(39, 42)	523.3	2093.3	919.2	(42, 43)	886.0	2214.9	2162.9
(44, 40)	585.6	1362.1	742.0	(40, 45)	673.1	2243.7	830.2	(45, 46)	220.1	2200.8	420.3
(47, 46)	43.8	219.2	104.3	(49, 40)	91.2	455.8	3057.8	(53, 50)	790.1	500.1	868.8
(50, 51)	685.9	493.5	754.8	(51, 54)	221.1	491.3	241.0	(54, 55)	1228.5	478.0	1353.4
(55, 57)	1271.9	459.2	1398.5	(57, 56)	418.5	450.1	456.8	(58, 25)	35.6	355.9	189.6
(25, 59)	361.2	708.1	437.6	(60, 59)	14.0	28.1	24.2	(27, 7)	101.6	225.7	241.5
(61, 34)	9.3	92.8	22.1	(3, 63)	121.4	607.0	132.2	(63, 5)	915.3	598.3	1007.7
(29, 3)	486.5	608.1	1184.5	(6, 33)	822.8	552.2	1488.9	(31, 6)	138.9	631.3	151.3
(16, 32)	543.0	1357.6	591.2	(32, 62)	151.7	1516.8	165.2	(64, 32)	15.2	80.1	60.8
(62, 37)	302.5	1512.7	330.0	(37, 65)	642.1	2140.4	699.4	(65, 11)	427.0	2134.9	464.2
(11, 66)	412.8	825.5	499.5	(66, 2)	107.0	823.7	129.0	(2, 44)	137.7	1376.6	166.0
(12, 68)	127.8	1277.5	139.1	(68, 15)	309.3	1237.2	390.1	(11, 67)	595.0	1293.4	647.4
(67, 12)	64.6	1292.6	70.2	(52, 53)	792.2	507.8	967.7	(46, 69)	338.7	1882.7	408.6
(69, 48)	639.8	2206.4	775.1	(70, 69)	37.9	165.0	7014.8	(71, 39)	39.6	136.6	828.5
(72, 42)	25.3	126.5	2221.3	(36, 1)	2.8	16.6	394.3	(36, 37)	127.3	636.5	2068.0
(73, 36)	45.2	376.3	1413.8	(59, 74)	2612.2	737.9	3330.2	(46, 47)	267.7	743.6	639.8
(77, 78)	155.2	105.6	231.5	(78, 79)	219.6	392.1	329.7	(79, 80)	913.5	223.3	1236.7
(79, 81)	175.5	153.9	235.8	(81, 82)	267.3	88.8	359.1	(81, 83)	140.2	59.7	187.7
(84, 78)	188.9	183.4	254.2	(85, 86)	329.1	310.4	438.8	(86, 87)	1197.2	371.8	2403.4
(87, 88)	719.9	361.8	1079.6	(76, 84)	141.1	92.8	282.2	(89, 90)	113.1	68.1	226.2
(90, 91)	417.0	155.6	556.7	(92, 90)	25.0	12.0	50.0	(93, 91)	71.5	15.9	143.1
(94, 85)	111.7	115.2	223.5	(95, 96)	22.3	31.5	29.8	(96, 97)	1472.4	264.8	1963.3
(98, 99)	5.8	15.3	11.7	(99, 100)	1075.5	169.9	1436.7	(101, 102)	947.8	197.9	1142.7
(103, 104)	2.5	6.5	3.0	(104, 101)	29.9	12.6	36.2	(74, 106)	1189.8	725.5	1305.6
(105, 106)	66.0	299.9	7618.4	(106, 75)	2879.5	1291.3	3333.1	(107, 108)	114.3	98.5	124.2
(108, 109)	297.1	194.2	327.8								

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 14 30 0, ELAPSED SIMULATED TIME IS 1 HOURS, 30 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
1(	18, 19)	91.8	146	0.97	78.2	29.0	0.	A	2(	19, 20)	46.0	73	0.97	77.7	29.2	0.	A
3(	20, 21)	74.0	74	0.98	122.2	29.5	0.	A	4(	19, 22)	46.0	73	0.97	77.7	29.2	0.	A
5(	22, 23)	78.5	74	0.98	129.4	29.5	0.	A	6(	17, 18)	81.8	145	1.00	135.6	30.0	0.	A
7(	26, 31)	49.3	494	0.99	6.6	54.5	0.	A	8(	28, 29)	48.8	250	1.00	55.6	25.2	0.	A
9(	30, 29)	29.2	225	1.00	47.3	19.8	0.	A	10(	34, 26)	28.6	143	0.97	16.5	43.7	0.	A
11(	33, 5)	100.9	504	0.10	175.9	4.1	0.	A	12(	24, 4)	52.1	248	1.00	59.9	25.2	0.	A
13(	4, 52)	211.8	401	0.98	68.3	34.2	0.	A	14(	1, 2)	107.1	595	0.02	2171.5	0.6	101.	F
15(	7, 26)	279.8	350	0.97	65.8	43.7	0.	A	16(	5, 8)	99.4	994	0.99	6.6	54.4	0.	A
17(	8, 9)	368.7	996	0.99	24.4	54.6	0.	A	18(	9, 10)	509.9	1000	0.99	33.6	54.7	0.	A
19(	10, 13)	1515.3	1010	0.98	99.6	54.2	0.	A	20(	13, 14)	1530.2	1020	0.98	99.5	54.3	0.	A
21(	14, 16)	716.5	1024	0.99	46.1	54.6	0.	A	22(	35, 16)	12.5	250	1.00	14.3	25.2	0.	A
23(	15, 38)	307.8	1231	0.66	24.8	36.3	0.	A	24(	38, 39)	513.7	1712	0.75	26.1	41.3	0.	A
25(	41, 38)	81.4	479	1.00	35.2	34.7	0.	A	26(	39, 42)	493.1	1973	0.71	25.4	35.4	0.	A
27(	42, 43)	894.8	2237	0.47	61.6	23.4	2.	A	28(	44, 40)	591.8	1377	0.96	32.4	47.8	3.	A
29(	40, 45)	646.8	2156	0.94	23.0	46.9	2.	A	30(	45, 46)	215.7	2157	0.59	12.2	29.6	1.	A
31(	47, 46)	33.7	337	1.00	28.5	25.2	0.	A	32(	49, 40)	77.6	776	0.07	394.1	1.8	0.	A
33(	53, 50)	648.6	411	0.98	105.3	54.0	0.	A	34(	50, 51)	576.1	415	0.98	92.7	54.0	0.	A
35(	51, 54)	187.1	416	0.99	29.6	54.7	0.	A	36(	54, 55)	1087.7	423	0.98	170.8	54.2	0.	A
37(	55, 57)	1191.1	430	0.98	183.6	54.3	0.	A	38(	57, 56)	401.2	431	0.98	61.6	54.4	0.	A
39(	58, 25)	27.4	548	0.75	32.0	11.3	0.	A	40(	25, 59)	280.4	550	0.97	37.9	48.4	0.	A
41(	60, 59)	10.8	43	1.00	51.8	34.8	0.	A	42(	27, 7)	78.1	347	1.00	64.2	25.2	0.	A
43(	61, 34)	7.1	143	1.00	14.3	25.2	0.	A	44(	3, 63)	96.4	482	0.98	13.3	54.3	0.	A
45(	63, 5)	745.4	487	0.98	102.2	53.9	0.	A	46(	29, 3)	385.0	481	0.96	118.4	24.3	0.	A
47(	6, 33)	757.5	508	0.49	196.7	27.3	0.	A	48(	31, 6)	108.8	494	0.99	14.5	54.6	0.	A
49(	16, 32)	511.0	1278	0.99	26.2	54.9	0.	A	50(	32, 62)	140.2	1402	1.00	6.5	55.0	0.	A
51(	64, 32)	11.7	123	1.00	45.6	15.0	0.	A	52(	62, 37)	280.8	1404	0.99	13.1	54.9	0.	A
53(	37, 65)	600.0	2000	0.99	19.7	54.9	0.	A	54(	65, 11)	400.5	2002	1.00	13.1	55.1	0.	A
55(	11, 66)	391.2	782	0.99	36.5	49.4	0.	A	56(	66, 2)	101.7	783	1.00	9.4	49.7	0.	A
57(	2, 44)	137.9	1379	1.00	7.2	49.8	1.	A	58(	12, 68)	121.9	1219	1.00	6.5	55.0	0.	A
59(	68, 15)	305.1	1220	0.83	19.6	45.9	0.	A	60(	11, 67)	563.0	1224	0.99	30.2	54.9	0.	A
61(	67, 12)	61.2	1224	1.00	3.3	55.2	0.	A	62(	52, 53)	633.5	406	0.98	115.7	48.6	0.	A
63(	46, 69)	313.1	1740	1.00	13.0	49.7	1.	A	64(	69, 48)	604.2	2084	0.99	21.1	49.5	3.	A
65(	70, 69)	39.1	340	0.01	4206.8	0.2	178.	F	66(	71, 39)	37.2	257	0.09	475.8	2.2	0.	A
67(	72, 42)	25.8	258	0.02	1770.0	0.4	36.	F	68(	36, 1)	2.2	13	0.01	4217.6	0.1	20.	F
69(	36, 37)	118.6	593	0.14	206.6	3.5	0.	A	70(	73, 36)	37.5	624	0.07	230.1	1.9	0.	A
71(	59, 74)	2160.9	610	0.94	272.4	46.8	0.	A	72(	46, 47)	272.3	756	0.99	51.9	25.0	2.	A
73(	77, 78)	119.4	162	1.00	131.6	40.2	0.	A	74(	78, 79)	172.7	308	0.98	51.2	39.4	0.	A
75(	79, 80)	781.6	191	0.98	334.1	44.1	0.	A	76(	79, 81)	141.1	124	0.98	93.0	44.1	0.	A
77(	81, 82)	228.5	76	0.98	244.8	44.3	0.	A	78(	81, 83)	118.0	50	0.99	189.5	44.6	0.	A
79(	84, 78)	148.3	144	0.97	84.6	43.8	0.	A	80(	85, 86)	257.1	306	0.99	85.9	44.4	0.	A
81(	86, 87)	1027.2	319	0.99	389.1	29.8	0.	A	82(	87, 88)	646.3	325	0.99	179.8	39.8	0.	A
83(	76, 84)	108.5	143	1.00	182.4	30.0	0.	A	84(	89, 90)	87.0	105	1.00	199.2	30.0	0.	A
85(	90, 91)	338.5	126	1.00	214.9	44.9	0.	A	86(	92, 90)	19.2	18	1.00	250.8	30.0	0.	A
87(	93, 91)	55.0	24	1.00	541.2	30.0	0.	A	88(	94, 85)	85.9	177	1.00	116.4	30.0	0.	A
89(	95, 96)	17.2	48	1.00	56.8	45.0	0.	A	90(	96, 97)	1162.1	366	1.00	444.9	45.0	0.	A
91(	98, 99)	4.5	24	1.00	45.6	30.0	0.	A	92(	99, 100)	845.7	242	1.00	508.0	44.9	0.	A

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 14 30 0, ELAPSED SIMULATED TIME IS 1 HOURS, 30 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
93	(101, 102)	735.8	296	1.00	346.7	49.7	0.	A	94	(103, 104)	1.9	10	1.00	27.5	49.8	0.	A
95	(104, 101)	24.2	10	0.99	173.5	49.2	0.	A	96	(74, 106)	1012.5	617	0.98	109.1	54.1	0.	A
97	(105, 106)	71.8	652	0.02	2087.1	0.4	97.	F	98	(106, 75)	2845.6	1276	0.95	153.5	52.3	16.	A
99	(107, 108)	87.9	152	1.00	75.6	55.2	0.	A	100	(108, 109)	234.4	153	0.97	102.8	53.6	0.	A

DYNEV SUBNETWORK STATISTICS

VEHICLE-MILES = 35771.88 VEHICLE-MINUTES = 94588.10 VEHICLE-TRIPS(EST.) = 8799

PCT OF VEHs THAT STOPPED = 7.388 MOVING/TOTAL TRIP TIME = 0.477 AVG. SPEED(MPH) = 22.69

AVG. QUEUE CONTENT = 565.4 VEH. AVG DELAY/VEH = 52.09 SEC. TOTAL DELAY = 49489.2 MIN.

DELAY/VEH-MILE = 1.38 MIN/V-MILE TRAVEL TIME/VEH-MILE = 2.64 MIN/V-MILE

DYNEV SUBNETWORK NO. 1 PERSON MEASURES OF EFFECTIVENESS

LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN
(18, 19)	119.4	189.5	247.0	(19, 20)	59.8	94.9	122.8	(20, 21)	96.2	96.2	195.8
(19, 22)	59.8	94.9	122.8	(22, 23)	102.1	96.3	207.7	(17, 18)	106.3	94.1	212.7
(26, 31)	64.2	641.5	70.6	(28, 29)	63.5	162.8	151.0	(30, 29)	38.0	146.1	115.3
(34, 26)	37.2	185.8	51.0	(33, 5)	131.1	655.7	1922.4	(24, 4)	67.7	161.2	161.1
(4, 52)	275.3	423.5	482.4	(1, 2)	139.2	386.6	13992.3	(7, 26)	363.7	454.6	498.9
(5, 8)	129.2	1292.1	142.4	(8, 9)	479.3	1295.2	526.7	(9, 10)	662.9	1299.7	727.7
(10, 13)	1969.9	1313.3	2180.0	(13, 14)	1989.2	1326.1	2199.6	(14, 16)	931.5	1330.7	1022.7
(35, 16)	16.3	162.8	38.7	(15, 38)	400.1	1600.3	662.0	(38, 39)	667.8	2226.1	970.2
(41, 38)	105.8	311.2	182.7	(39, 42)	641.1	2564.4	1085.6	(42, 43)	1163.3	2908.2	2985.3
(44, 40)	769.4	1789.6	965.6	(40, 45)	840.8	2802.7	1076.3	(45, 46)	280.4	2803.7	568.2
(47, 46)	43.8	219.2	104.3	(49, 40)	100.9	504.3	3312.2	(53, 50)	843.1	533.6	936.9
(50, 51)	749.0	538.8	832.6	(51, 54)	243.2	540.5	266.9	(54, 55)	1414.0	550.2	1565.9
(55, 57)	1548.5	559.0	1710.5	(57, 56)	521.5	560.8	575.3	(58, 25)	35.6	355.9	189.6
(25, 59)	364.5	714.6	451.9	(60, 59)	14.0	28.1	24.2	(27, 7)	101.6	225.7	241.5
(61, 34)	9.3	92.8	22.1	(3, 63)	125.3	626.5	138.4	(63, 5)	969.0	633.4	1079.1
(29, 3)	500.6	625.7	1234.2	(6, 33)	984.7	660.9	2167.0	(31, 6)	141.4	642.6	155.3
(16, 32)	664.3	1660.8	725.9	(32, 62)	182.3	1823.1	198.8	(64, 32)	15.2	80.1	60.8
(62, 37)	365.0	1824.9	398.7	(37, 65)	780.0	2600.1	852.7	(65, 11)	520.6	2603.1	567.2
(11, 66)	508.6	1017.1	618.2	(66, 2)	132.2	1017.5	159.6	(2, 44)	179.3	1792.8	216.2
(12, 68)	158.4	1584.2	172.7	(68, 15)	396.6	1586.5	518.7	(11, 67)	732.0	1591.1	799.9
(67, 12)	79.6	1591.3	86.5	(52, 53)	823.6	527.9	1017.8	(46, 69)	407.1	2262.5	491.9
(69, 48)	785.5	2708.9	952.9	(70, 69)	50.8	220.9	15485.9	(71, 39)	48.4	166.9	1323.7
(72, 42)	33.6	168.0	4954.8	(36, 1)	2.8	16.6	1169.7	(36, 37)	154.2	770.8	2653.8
(73, 36)	48.7	405.7	1555.4	(59, 74)	2809.2	793.5	3602.3	(46, 47)	354.0	983.3	850.9
(77, 78)	155.2	105.6	231.5	(78, 79)	224.5	400.8	342.0	(79, 80)	1016.1	248.4	1383.4
(79, 81)	183.5	160.9	249.5	(81, 82)	297.0	98.7	402.5	(81, 83)	153.4	65.3	206.1
(84, 78)	192.8	187.2	264.0	(85, 86)	334.2	315.3	451.3	(86, 87)	1335.4	414.7	2689.4
(87, 88)	840.2	422.2	1265.4	(76, 84)	141.1	92.8	282.2	(89, 90)	113.1	68.1	226.2
(90, 91)	440.0	164.2	588.2	(92, 90)	25.0	12.0	50.0	(93, 91)	71.5	15.9	143.1
(94, 85)	111.7	115.2	223.5	(95, 96)	22.3	31.5	29.8	(96, 97)	1510.7	271.7	2014.5
(98, 99)	5.8	15.3	11.7	(99, 100)	1099.4	173.7	1470.4	(101, 102)	956.5	199.7	1153.7
(103, 104)	2.5	6.5	3.0	(104, 101)	31.4	13.3	38.3	(74, 106)	1316.3	802.6	1458.9
(105, 106)	93.3	423.9	14746.4	(106, 75)	3699.3	1658.9	4243.7	(107, 108)	114.3	98.5	124.2
(108, 109)	304.7	199.2	341.2	(

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 15 0 0, ELAPSED SIMULATED TIME IS 2 HOURS, 0 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
1(	18, 19)	91.8	146	0.97	78.2	29.0	0.	A	2(	19, 20)	46.0	73	0.97	77.7	29.2	0.	A
3(	20, 21)	74.0	74	0.98	122.2	29.5	0.	A	4(	19, 22)	46.0	73	0.97	77.7	29.2	0.	A
5(	22, 23)	78.5	74	0.98	129.4	29.5	0.	A	6(	17, 18)	81.8	145	1.00	135.6	30.0	0.	A
7(	26, 31)	49.3	494	0.99	6.6	54.5	0.	A	8(	28, 29)	48.8	250	1.00	55.6	25.2	0.	A
9(	30, 29)	29.2	225	1.00	47.3	19.8	0.	A	10(	34, 26)	28.6	143	0.97	16.5	43.7	0.	A
11(	33, 5)	100.9	504	0.10	175.9	4.1	0.	A	12(	24, 4)	52.1	248	1.00	59.9	25.2	0.	A
13(	4, 52)	211.8	401	0.98	68.3	34.2	0.	A	14(	1, 2)	134.6	715	0.02	1877.7	0.7	0.	A
15(	7, 26)	279.8	350	0.97	65.8	43.7	0.	A	16(	5, 8)	99.4	994	0.99	6.6	54.4	0.	A
17(	8, 9)	368.7	996	0.99	24.4	54.6	0.	A	18(	9, 10)	509.9	1000	0.99	33.6	54.7	0.	A
19(	10, 13)	1515.3	1010	0.98	99.6	54.2	0.	A	20(	13, 14)	1530.2	1020	0.98	99.5	54.3	0.	A
21(	14, 16)	716.7	1024	0.99	46.1	54.6	0.	A	22(	35, 16)	12.5	250	1.00	14.3	25.2	0.	A
23(	15, 38)	308.3	1233	0.66	24.8	36.3	0.	A	24(	38, 39)	514.5	1715	0.75	26.1	41.3	0.	A
25(	41, 38)	81.4	479	1.00	35.2	34.7	0.	A	26(	39, 42)	493.9	1975	0.71	25.4	35.4	0.	A
27(	42, 43)	911.3	2278	0.47	61.1	23.6	0.	A	28(	44, 40)	645.7	1502	0.96	32.5	47.7	0.	A
29(	40, 45)	685.1	2284	0.94	23.0	46.9	0.	A	30(	45, 46)	228.5	2285	0.61	11.9	30.3	0.	A
31(	47, 46)	33.7	337	1.00	28.5	25.2	0.	A	32(	49, 40)	77.6	776	0.07	394.1	1.8	0.	A
33(	53, 50)	648.6	411	0.98	105.3	54.0	0.	A	34(	50, 51)	576.1	415	0.98	92.7	54.0	0.	A
35(	51, 54)	187.1	416	0.99	29.6	54.7	0.	A	36(	54, 55)	1087.7	423	0.98	170.8	54.2	0.	A
37(	55, 57)	1191.1	430	0.98	183.6	54.3	0.	A	38(	57, 56)	401.2	431	0.98	61.6	54.4	0.	A
39(	58, 25)	27.4	548	0.75	32.0	11.3	0.	A	40(	25, 59)	280.4	550	0.97	37.9	48.4	0.	A
41(	60, 59)	10.8	43	1.00	51.8	34.8	0.	A	42(	27, 7)	78.1	347	1.00	64.2	25.2	0.	A
43(	61, 34)	7.1	143	1.00	14.3	25.2	0.	A	44(	3, 63)	96.4	482	0.98	13.3	54.3	0.	A
45(	63, 5)	745.4	487	0.98	102.2	53.9	0.	A	46(	29, 3)	385.0	481	0.96	118.4	24.3	0.	A
47(	6, 33)	757.5	508	0.49	196.7	27.3	0.	A	48(	31, 6)	108.8	494	0.99	14.5	54.6	0.	A
49(	16, 32)	511.2	1278	0.99	26.2	54.9	0.	A	50(	32, 62)	140.3	1403	1.00	6.5	55.0	0.	A
51(	64, 32)	11.7	123	1.00	45.6	15.0	0.	A	52(	62, 37)	280.9	1405	0.99	13.1	54.9	0.	A
53(	37, 65)	600.4	2001	0.99	19.7	54.9	0.	A	54(	65, 11)	400.8	2004	1.00	13.1	55.1	0.	A
55(	11, 66)	391.6	783	0.99	36.5	49.3	0.	A	56(	66, 2)	101.8	784	1.00	9.4	49.7	0.	A
57(	2, 44)	150.1	1501	0.99	7.3	49.4	0.	A	58(	12, 68)	122.0	1220	1.00	6.5	55.0	0.	A
59(	68, 15)	305.5	1222	0.83	19.6	45.9	0.	A	60(	11, 67)	563.6	1225	0.99	30.2	54.9	0.	A
61(	67, 12)	61.3	1225	1.00	3.3	55.2	0.	A	62(	52, 53)	633.5	406	0.98	115.7	48.6	0.	A
63(	46, 69)	328.3	1825	1.00	13.1	49.6	0.	A	64(	69, 48)	665.9	2296	0.99	21.1	49.5	2.	A
65(	70, 69)	53.7	467	0.01	3942.1	0.2	51.	F	66(	71, 39)	37.2	257	0.09	475.8	2.2	0.	A
67(	72, 42)	29.5	295	0.02	1645.0	0.4	0.	A	68(	36, 1)	5.5	33	0.01	2063.0	0.3	0.	A
69(	36, 37)	118.6	593	0.14	206.6	3.5	0.	A	70(	73, 36)	37.5	624	0.07	230.1	1.9	0.	A
71(	59, 74)	2160.9	610	0.94	272.4	46.8	0.	A	72(	46, 47)	289.1	803	0.99	52.0	24.9	0.	A
73(	77, 78)	119.4	162	1.00	131.6	40.2	0.	A	74(	78, 79)	172.7	308	0.98	51.2	39.4	0.	A
75(	79, 80)	781.6	191	0.98	334.1	44.1	0.	A	76(	79, 81)	141.1	124	0.98	93.0	44.1	0.	A
77(	81, 82)	228.5	76	0.98	244.8	44.3	0.	A	78(	81, 83)	118.0	50	0.99	189.5	44.6	0.	A
79(	84, 78)	148.3	144	0.97	84.6	43.8	0.	A	80(	85, 86)	257.1	306	0.99	85.9	44.4	0.	A
81(	86, 87)	1027.2	319	0.99	389.1	29.8	0.	A	82(	87, 88)	646.3	325	0.99	179.8	39.8	0.	A
83(	76, 84)	108.5	143	1.00	182.4	30.0	0.	A	84(	89, 90)	87.0	105	1.00	199.2	30.0	0.	A
85(	90, 91)	338.5	126	1.00	214.9	44.9	0.	A	86(	92, 90)	19.2	18	1.00	250.8	30.0	0.	A
87(	93, 91)	55.0	24	1.00	541.2	30.0	0.	A	88(	94, 85)	85.9	177	1.00	116.4	30.0	0.	A
89(	95, 96)	17.2	48	1.00	56.8	45.0	0.	A	90(	96, 97)	1162.1	366	1.00	444.9	45.0	0.	A
91(	98, 99)	4.5	24	1.00	45.6	30.0	0.	A	92(	99, 100)	845.7	242	1.00	508.0	44.9	0.	A

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 15 0 0, ELAPSED SIMULATED TIME IS 2 HOURS, 0 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
93	(101, 102)	735.8	296	1.00	346.7	49.7	0.	A	94	(103, 104)	1.9	10	1.00	27.5	49.8	0.	A
95	(104, 101)	24.2	10	0.99	173.5	49.2	0.	A	96	(74, 106)	1012.5	617	0.98	109.1	54.1	0.	A
97	(105, 106)	82.5	749	0.02	1922.0	0.4	0.	A	98	(106, 75)	3097.8	1389	0.95	153.3	52.4	0.	A
99	(107, 108)	87.9	152	1.00	75.6	55.2	0.	A	100	(108, 109)	234.4	153	0.97	102.8	53.6	0.	A

DYNEV SUBNETWORK STATISTICS

VEHICLE-MILES = 36316.39 VEHICLE-MINUTES = 100668.51 VEHICLE-TRIPS(EST.) = 9214
 PCT OF VEHs THAT STOPPED = 7.263 MOVING/TOTAL TRIP TIME = 0.455 AVG. SPEED(MPH) = 21.65
 AVG. QUEUE CONTENT = 465.7 VEH. AVG DELAY/VEH = 56.52 SEC. TOTAL DELAY = 54871.7 MIN.
 DELAY/VEH-MILE = 1.51 MIN/V-MILE TRAVEL TIME/VEH-MILE = 2.77 MIN/V-MILE

DYNEV SUBNETWORK NO. 1 PERSON MEASURES OF EFFECTIVENESS

LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN
(18, 19)	119.4	189.5	247.0	(19, 20)	59.8	94.9	122.8	(20, 21)	96.2	96.2	195.8
(19, 22)	59.8	94.9	122.8	(22, 23)	102.1	96.3	207.7	(17, 18)	106.3	94.1	212.7
(26, 31)	64.2	641.5	70.6	(28, 29)	63.5	162.8	151.0	(30, 29)	38.0	146.1	115.3
(34, 26)	37.2	185.8	51.0	(33, 5)	131.1	655.7	1922.4	(24, 4)	67.7	161.2	161.1
(4, 52)	275.3	423.5	482.4	(1, 2)	175.0	486.1	15211.8	(7, 26)	363.7	454.6	498.9
(5, 8)	129.2	1292.1	142.4	(8, 9)	479.3	1295.2	526.7	(9, 10)	662.9	1299.7	727.7
(10, 13)	1969.9	1313.3	2180.0	(13, 14)	1989.2	1326.1	2199.8	(14, 16)	931.7	1331.1	1023.5
(35, 16)	16.3	162.8	38.7	(15, 38)	400.7	1602.9	662.8	(38, 39)	668.8	2229.4	971.5
(41, 38)	105.8	311.2	182.7	(39, 42)	642.0	2568.0	1086.9	(42, 43)	1184.7	2961.7	3015.4
(44, 40)	839.5	1952.6	1056.3	(40, 45)	890.7	2968.9	1139.0	(45, 46)	297.1	2970.8	588.7
(47, 46)	43.8	219.2	104.3	(49, 40)	100.9	504.3	3312.2	(53, 50)	843.1	533.6	936.9
(50, 51)	749.0	538.8	832.6	(51, 54)	243.2	540.5	266.9	(54, 55)	1414.0	550.2	1565.9
(55, 57)	1548.5	559.0	1710.5	(57, 56)	521.5	560.8	575.3	(58, 25)	35.6	355.9	189.6
(25, 59)	364.5	714.6	451.9	(60, 59)	14.0	28.1	24.2	(27, 7)	101.6	225.7	241.5
(61, 34)	9.3	92.8	22.1	(3, 63)	125.3	626.5	138.4	(63, 5)	969.0	633.4	1079.1
(29, 3)	500.6	625.7	1234.2	(6, 33)	984.7	660.9	2167.0	(31, 6)	141.4	642.6	155.3
(16, 32)	664.6	1661.5	726.6	(32, 62)	182.4	1823.9	198.9	(64, 32)	15.2	80.1	60.8
(62, 37)	365.2	1826.1	399.1	(37, 65)	780.5	2601.7	853.4	(65, 11)	521.0	2605.1	567.8
(11, 66)	509.1	1018.2	619.1	(66, 2)	132.4	1018.7	159.8	(2, 44)	195.1	1951.4	237.2
(12, 68)	158.6	1586.0	172.9	(68, 15)	397.2	1588.7	519.4	(11, 67)	732.7	1592.8	801.1
(67, 12)	79.7	1593.0	86.6	(52, 53)	823.6	527.9	1017.8	(46, 69)	426.8	2372.1	516.2
(69, 48)	865.6	2985.3	1049.9	(70, 69)	69.8	303.6	19948.1	(71, 39)	48.4	166.9	1323.7
(72, 42)	38.3	191.6	5251.9	(36, 1)	7.2	42.4	1457.2	(36, 37)	154.2	770.8	2653.8
(73, 36)	48.7	405.7	1555.4	(59, 74)	2809.2	793.5	3602.3	(46, 47)	375.9	1044.0	905.2
(77, 78)	155.2	105.6	231.5	(78, 79)	224.5	400.8	342.0	(79, 80)	1016.1	248.4	1383.4
(79, 81)	183.5	160.9	249.5	(81, 82)	297.0	98.7	402.5	(81, 83)	153.4	65.3	206.1
(84, 78)	192.8	187.2	264.0	(85, 86)	334.2	315.3	451.3	(86, 87)	1335.4	414.7	2689.4
(87, 88)	840.2	422.2	1265.4	(76, 84)	141.1	92.8	282.2	(89, 90)	113.1	68.1	226.2
(90, 91)	440.0	164.2	588.2	(92, 90)	25.0	12.0	50.0	(93, 91)	71.5	15.9	143.1
(94, 85)	111.7	115.2	223.5	(95, 96)	22.3	31.5	29.8	(96, 97)	1510.7	271.7	2014.5
(98, 99)	5.8	15.3	11.7	(99, 100)	1099.4	173.7	1470.4	(101, 102)	956.5	199.7	1153.7
(103, 104)	2.5	6.5	3.0	(104, 101)	31.4	13.3	38.3	(74, 106)	1316.3	802.6	1458.9
(105, 106)	107.2	487.1	15603.8	(106, 75)	4027.2	1806.0	4613.8	(107, 108)	114.3	98.5	124.2
(108, 109)	304.7	199.2	341.2								

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 15 30 0, ELAPSED SIMULATED TIME IS 2 HOURS, 30 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
1(	18, 19)	91.8	146	0.97	78.2	29.0	0.	A	2(	19, 20)	46.0	73	0.97	77.7	29.2	0.	A
3(	20, 21)	74.0	74	0.98	122.2	29.5	0.	A	4(	19, 22)	46.0	73	0.97	77.7	29.2	0.	A
5(	22, 23)	78.5	74	0.98	129.4	29.5	0.	A	6(	17, 18)	81.8	145	1.00	135.6	30.0	0.	A
7(	26, 31)	49.3	494	0.99	6.6	54.5	0.	A	8(	28, 29)	48.8	250	1.00	55.6	25.2	0.	A
9(	30, 29)	29.2	225	1.00	47.3	19.8	0.	A	10(	34, 26)	28.6	143	0.97	16.5	43.7	0.	A
11(	33, 5)	100.9	504	0.10	175.9	4.1	0.	A	12(	24, 4)	52.1	248	1.00	59.9	25.2	0.	A
13(	4, 52)	211.8	401	0.98	68.3	34.2	0.	A	14(	1, 2)	134.6	715	0.02	1877.7	0.7	0.	A
15(	7, 26)	279.8	350	0.97	65.8	43.7	0.	A	16(	5, 8)	99.4	994	0.99	6.6	54.4	0.	A
17(	8, 9)	368.7	996	0.99	24.4	54.6	0.	A	18(	9, 10)	509.9	1000	0.99	33.6	54.7	0.	A
19(	10, 13)	1515.3	1010	0.98	99.6	54.2	0.	A	20(	13, 14)	1530.2	1020	0.98	99.5	54.3	0.	A
21(	14, 16)	716.7	1024	0.99	46.1	54.6	0.	A	22(	35, 16)	12.5	250	1.00	14.3	25.2	0.	A
23(	15, 38)	308.3	1233	0.66	24.8	36.3	0.	A	24(	38, 39)	514.5	1715	0.75	26.1	41.3	0.	A
25(	41, 38)	81.4	479	1.00	35.2	34.7	0.	A	26(	39, 42)	493.9	1975	0.71	25.4	35.4	0.	A
27(	42, 43)	911.3	2278	0.47	61.1	23.6	0.	A	28(	44, 40)	645.7	1502	0.96	32.5	47.7	0.	A
29(	40, 45)	685.1	2284	0.94	23.0	46.9	0.	A	30(	45, 46)	228.5	2285	0.61	11.9	30.3	0.	A
31(	47, 46)	33.7	337	1.00	28.5	25.2	0.	A	32(	49, 40)	77.6	776	0.07	394.1	1.8	0.	A
33(	53, 50)	648.6	411	0.98	105.3	54.0	0.	A	34(	50, 51)	576.1	415	0.98	92.7	54.0	0.	A
35(	51, 54)	187.1	416	0.99	29.6	54.7	0.	A	36(	54, 55)	1087.7	423	0.98	170.8	54.2	0.	A
37(	55, 57)	1191.1	430	0.98	183.6	54.3	0.	A	38(	57, 56)	401.2	431	0.98	61.6	54.4	0.	A
39(	58, 25)	27.4	548	0.75	32.0	11.3	0.	A	40(	25, 59)	280.4	550	0.97	37.9	48.4	0.	A
41(	60, 59)	10.8	43	1.00	51.8	34.8	0.	A	42(	27, 7)	78.1	347	1.00	64.2	25.2	0.	A
43(	61, 34)	7.1	143	1.00	14.3	25.2	0.	A	44(	3, 63)	96.4	482	0.98	13.3	54.3	0.	A
45(	63, 5)	745.4	487	0.98	102.2	53.9	0.	A	46(	29, 3)	385.0	481	0.96	118.4	24.3	0.	A
47(	6, 33)	757.5	508	0.49	196.7	27.3	0.	A	48(	31, 6)	108.8	494	0.99	14.5	54.6	0.	A
49(	16, 32)	511.2	1278	0.99	26.2	54.9	0.	A	50(	32, 62)	140.3	1403	1.00	6.5	55.0	0.	A
51(	64, 32)	11.7	123	1.00	45.6	15.0	0.	A	52(	62, 37)	280.9	1405	0.99	13.1	54.9	0.	A
53(	37, 65)	600.4	2001	0.99	19.7	54.9	0.	A	54(	65, 11)	400.8	2004	1.00	13.1	55.1	0.	A
55(	11, 66)	391.6	783	0.99	36.5	49.3	0.	A	56(	66, 2)	101.8	784	1.00	9.4	49.7	0.	A
57(	2, 44)	150.1	1501	0.99	7.3	49.4	0.	A	58(	12, 68)	122.0	1220	1.00	6.5	55.0	0.	A
59(	68, 15)	305.5	1222	0.83	19.6	45.9	0.	A	60(	11, 67)	563.6	1225	0.99	30.2	54.9	0.	A
61(	67, 12)	61.3	1225	1.00	3.3	55.2	0.	A	62(	52, 53)	633.5	406	0.98	115.7	48.6	0.	A
63(	46, 69)	328.3	1825	1.00	13.1	49.6	0.	A	64(	69, 48)	681.1	2349	0.99	21.2	49.3	0.	A
65(	70, 69)	59.5	518	0.01	3616.9	0.2	0.	A	66(	71, 39)	37.2	257	0.09	475.8	2.2	0.	A
67(	72, 42)	29.5	295	0.02	1645.0	0.4	0.	A	68(	36, 1)	5.5	33	0.01	2063.0	0.3	0.	A
69(	36, 37)	118.6	593	0.14	206.6	3.5	0.	A	70(	73, 36)	37.5	624	0.07	230.1	1.9	0.	A
71(	59, 74)	2160.9	610	0.94	272.4	46.8	0.	A	72(	46, 47)	289.1	803	0.99	52.0	24.9	0.	A
73(	77, 78)	119.4	162	1.00	131.6	40.2	0.	A	74(	78, 79)	172.7	308	0.98	51.2	39.4	0.	A
75(	79, 80)	781.6	191	0.98	334.1	44.1	0.	A	76(	79, 81)	141.1	124	0.98	93.0	44.1	0.	A
77(	81, 82)	228.5	76	0.98	244.8	44.3	0.	A	78(	81, 83)	118.0	50	0.99	189.5	44.6	0.	A
79(	84, 78)	148.3	144	0.97	84.6	43.8	0.	A	80(	85, 86)	257.1	306	0.99	85.9	44.4	0.	A
81(	86, 87)	1027.2	319	0.99	389.1	29.8	0.	A	82(	87, 88)	646.3	325	0.99	179.8	39.8	0.	A
83(	76, 84)	108.5	143	1.00	182.4	30.0	0.	A	84(	89, 90)	87.0	105	1.00	199.2	30.0	0.	A
85(	90, 91)	338.5	126	1.00	214.9	44.9	0.	A	86(	92, 90)	19.2	18	1.00	250.8	30.0	0.	A
87(	93, 91)	55.0	24	1.00	541.2	30.0	0.	A	88(	94, 85)	85.9	177	1.00	116.4	30.0	0.	A
89(	95, 96)	17.2	48	1.00	56.8	45.0	0.	A	90(	96, 97)	1162.1	366	1.00	444.9	45.0	0.	A
91(	98, 99)	4.5	24	1.00	45.6	30.0	0.	A	92(	99, 100)	845.7	242	1.00	508.0	44.9	0.	A

CUMULATIVE DYNEV SUBNETWORK NO. 1 STATISTICS SINCE BEGINNING OF SIMULATION

PRESENT TIME IS 15 30 0, ELAPSED SIMULATED TIME IS 2 HOURS, 30 MINUTES, 0 SECONDS

LINK STATISTICS

NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS	NO.	LINK	VEH- MILES	VEH- DISCH	M/T	AVG T-TIME SEC/V	AVG SPEED MPH	CNTNT VEH	LOS
93	(101, 102)	735.8	296	1.00	346.7	49.7	0.	A	94	(103, 104)	1.9	10	1.00	27.5	49.8	0.	A
95	(104, 101)	24.2	10	0.99	173.5	49.2	0.	A	96	(74, 106)	1012.5	617	0.98	109.1	54.1	0.	A
97	(105, 106)	82.5	749	0.02	1922.0	0.4	0.	A	98	(106, 75)	3097.8	1389	0.95	153.3	52.4	0.	A
99	(107, 108)	87.9	152	1.00	75.6	55.2	0.	A	100	(108, 109)	234.4	153	0.97	102.8	53.6	0.	A

DYNEV SUBNETWORK STATISTICS

VEHICLE-MILES = 36337.46 VEHICLE-MINUTES = 100954.47 VEHICLE-TRIPS(EST.) = 9267
 PCT OF VEHs THAT STOPPED = 7.253 MOVING/TOTAL TRIP TIME = 0.454 AVG. SPEED(MPH) = 21.60
 AVG. QUEUE CONTENT = 375.4 VEH. AVG DELAY/VEH = 56.71 SEC. TOTAL DELAY = 55125.4 MIN.
 DELAY/VEH-MILE = 1.52 MIN/V-MILE TRAVEL TIME/VEH-MILE = 2.78 MIN/V-MILE

DYNEV SUBNETWORK NO. 1 PERSON MEASURES OF EFFECTIVENESS

LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN	LINK	PERSON MILES	PERSON TRIPS	TRVL-TIME PRSON-MIN
(18, 19)	119.4	189.5	247.0	(19, 20)	59.8	94.9	122.8	(20, 21)	96.2	96.2	195.8
(19, 22)	59.8	94.9	122.8	(22, 23)	102.1	96.3	207.7	(17, 18)	106.3	94.1	212.7
(26, 31)	64.2	641.5	70.6	(28, 29)	63.5	162.8	151.0	(30, 29)	38.0	146.1	115.3
(34, 26)	37.2	185.8	51.0	(33, 5)	131.1	655.7	1922.4	(24, 4)	67.7	161.2	161.1
(4, 52)	275.3	423.3	482.4	(1, 2)	175.0	486.1	15211.8	(7, 26)	363.7	454.6	498.9
(5, 8)	129.2	1292.1	142.4	(8, 9)	479.3	1295.2	526.7	(9, 10)	662.9	1299.7	727.7
(10, 13)	1969.9	1313.3	2180.0	(13, 14)	1989.2	1326.1	2199.8	(14, 16)	931.7	1331.1	1023.5
(35, 16)	16.3	162.8	38.7	(15, 38)	400.7	1602.9	662.8	(38, 39)	668.8	2229.4	971.5
(41, 38)	105.8	311.2	182.7	(39, 42)	642.0	2568.0	1086.9	(42, 43)	1184.7	2961.7	3015.4
(44, 40)	839.5	1952.6	1056.3	(40, 45)	890.7	2968.9	1139.0	(45, 46)	297.1	2970.8	588.7
(47, 46)	43.8	219.2	104.3	(49, 40)	100.9	504.3	3312.2	(53, 50)	843.1	533.6	936.9
(50, 51)	749.0	538.8	832.6	(51, 54)	243.2	540.5	266.9	(54, 55)	1414.0	550.2	1565.9
(55, 57)	1548.5	559.0	1710.5	(57, 56)	521.5	560.8	575.3	(58, 25)	35.6	355.9	189.6
(25, 59)	364.5	714.6	451.9	(60, 59)	14.0	28.1	24.2	(27, 7)	101.6	225.7	241.5
(61, 34)	9.3	92.8	22.1	(3, 63)	125.3	626.5	138.4	(63, 5)	969.0	633.4	1079.1
(29, 3)	500.6	625.7	1234.2	(6, 33)	984.7	660.9	2167.0	(31, 6)	141.4	642.6	155.3
(16, 32)	664.6	1661.5	726.6	(32, 62)	182.4	1823.9	198.9	(64, 32)	15.2	80.1	60.8
(62, 37)	365.2	1826.1	399.1	(37, 65)	780.5	2601.7	853.4	(65, 11)	521.0	2605.1	567.8
(11, 66)	509.1	1018.2	619.1	(66, 2)	132.4	1018.7	159.8	(2, 44)	195.1	1951.4	237.2
(12, 68)	158.6	1586.0	172.9	(68, 15)	397.2	1588.7	519.4	(11, 67)	732.7	1592.8	801.1
(67, 12)	79.7	1593.0	86.6	(52, 53)	823.6	527.9	1017.8	(46, 69)	426.8	2372.1	516.2
(69, 48)	885.4	3053.6	1076.6	(70, 69)	77.4	336.6	20293.1	(71, 39)	48.4	166.9	1323.7
(72, 42)	38.3	191.6	5251.9	(36, 1)	7.2	42.4	1457.2	(36, 37)	154.2	770.8	2653.8
(73, 36)	48.7	405.7	1555.4	(59, 74)	2809.2	793.5	3602.3	(46, 47)	375.9	1044.0	905.2
(77, 78)	155.2	105.6	231.5	(78, 79)	224.5	400.8	342.0	(79, 80)	1016.1	248.4	1383.4
(79, 81)	183.5	160.9	249.5	(81, 82)	297.0	98.7	402.5	(81, 83)	153.4	65.3	206.1
(84, 78)	192.8	187.2	264.0	(85, 86)	334.2	315.3	451.3	(86, 87)	1335.4	414.7	2689.4
(87, 88)	840.2	422.2	1265.4	(76, 84)	141.1	92.8	282.2	(89, 90)	113.1	68.1	226.2
(90, 91)	440.0	164.2	588.2	(92, 90)	25.0	12.0	50.0	(93, 91)	71.5	15.9	143.1
(94, 85)	111.7	115.2	223.5	(95, 96)	22.3	31.5	29.8	(96, 97)	1510.7	271.7	2014.5
(98, 99)	5.8	15.3	11.7	(99, 100)	1099.4	173.7	1470.4	(101, 102)	956.5	199.7	1153.7
(103, 104)	2.5	6.5	3.0	(104, 101)	31.4	13.3	38.3	(74, 106)	1316.3	802.6	1458.9
(105, 106)	107.2	487.1	15603.8	(106, 75)	4027.2	1806.0	4613.8	(107, 108)	114.3	98.5	124.2
(108, 109)	304.7	199.2	341.2								

*** CUMULATIVE VEHICLE TRIPS HAVE NOT CHANGED FOR MORE THAN ONE TIME INTERVAL - RUN TERMINATED

NODE 54 SIGN CONTROL

PHASE DURATION	APPROACHES
(51, 54)	
1 0	LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG STOP

NODE 55 SIGN CONTROL

PHASE DURATION	APPROACHES
(54, 55)	
1 0	LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG GO

NODE 56 SIGN CONTROL

PHASE DURATION	APPROACHES
(57, 56)	
1 0	LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG GO

NODE 57 SIGN CONTROL

PHASE DURATION	APPROACHES
(55, 57)	
1 0	LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG GO

NODE 58 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 59 SIGN CONTROL

PHASE DURATION	APPROACHES
(60, 59) (25, 59)	
1 0	LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG STOP GO

NODE 60 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 61 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 62 SIGN CONTROL

PHASE DURATION	APPROACHES

NODE 63 SIGN CONTROL

PHASE DURATION ----- APPROACHES -----
 (3, 63)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 1 0 GO

NODE 64 SIGN CONTROL
 NO APPROACHES TO THIS NODE

NODE 65 SIGN CONTROL

PHASE DURATION ----- APPROACHES -----
 (37, 65)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 1 0 GO

NODE 66 SIGN CONTROL

PHASE DURATION ----- APPROACHES -----
 (11, 66)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 1 0 YLD

NODE 67 SIGN CONTROL

PHASE DURATION ----- APPROACHES -----
 (11, 67)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 1 0 GO

NODE 68 SIGN CONTROL

PHASE DURATION ----- APPROACHES -----
 (12, 68)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 1 0 GO

NODE 69 SIGN CONTROL

PHASE DURATION ----- APPROACHES -----
 (46, 69) (70, 69)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 1 0 GO YLD

NODE 70 SIGN CONTROL
 NO APPROACHES TO THIS NODE

NODE 71 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 72 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 73 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 74 SIGN CONTROL

PHASE	DURATION	-----	APPROACHES	-----
		(59, 74)		
1	0	LEFT THRU RITE DIAG STOP	LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 75 SIGN CONTROL

PHASE	DURATION	-----	APPROACHES	-----
		(106, 75)		
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 76 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 77 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 78 SIGN CONTROL

PHASE	DURATION	-----	APPROACHES	-----
		(77, 78) (84, 78)		
1	0	LEFT THRU RITE DIAG PROT	LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 79 SIGN CONTROL

PHASE	DURATION	-----	APPROACHES	-----
		(78, 79)		
1	0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 80 SIGN CONTROL

(79, 80)
 1 0 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 60

NODE 81 SIGN CONTROL
 PHASE DURATION ----- APPROACHES -----
 (79, 81)
 1 0 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 60 60

NODE 82 SIGN CONTROL
 PHASE DURATION ----- APPROACHES -----
 (81, 82)
 1 0 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 60

NODE 83 SIGN CONTROL
 PHASE DURATION ----- APPROACHES -----
 (81, 83)
 1 0 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 60

NODE 84 SIGN CONTROL
 PHASE DURATION ----- APPROACHES -----
 (76, 84)
 1 0 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 PROT

NODE 85 SIGN CONTROL
 PHASE DURATION ----- APPROACHES -----
 (94, 85)
 1 0 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 YLD

NODE 86 SIGN CONTROL
 PHASE DURATION ----- APPROACHES -----
 (85, 86)
 1 0 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
 60

NODE 87 SIGN CONTROL
 PHASE DURATION ----- APPROACHES -----
 (86, 87)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG

NODE 88 SIGN CONTROL

PHASE DURATION ----- APPROACHES -----
(87, 88)
LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
1 0 GO

NODE 89 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 90 SIGN CONTROL

PHASE DURATION ----- APPROACHES -----
(89, 90) (92, 90)
LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
1 0 GO YLD

NODE 91 SIGN CONTROL

PHASE DURATION ----- APPROACHES -----
(90, 91) (93, 91)
LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
1 0 GO YLD

NODE 92 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 93 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 94 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 95 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 96 SIGN CONTROL

PHASE DURATION ----- APPROACHES -----
(95, 96)
LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
1 0 GO

NODE 97 SIGN CONTROL

PHASE DURATION (96, 97) APPROACHES
1 0 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
GO

NODE 98 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 99 SIGN CONTROL
PHASE DURATION ----- APPROACHES -----
1 0 (98, 99)
LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
GO

NODE 100 SIGN CONTROL
PHASE DURATION ----- APPROACHES -----
1 0 (99, 100)
LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
GO

NODE 101 SIGN CONTROL
PHASE DURATION ----- APPROACHES -----
1 0 (104, 101)
LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
YLD

NODE 102 SIGN CONTROL
PHASE DURATION ----- APPROACHES -----
1 0 (101, 102)
LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
YLD

NODE 103 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 104 SIGN CONTROL
PHASE DURATION ----- APPROACHES -----
1 0 (103, 104)
LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG
GO

NODE 105 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 106	SIGN CONTROL				
PHASE DURATION	-----		APPROACHES	-----	
	(74, 106)	(105, 106)			
1 0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG STOP	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 107 SIGN CONTROL
NO APPROACHES TO THIS NODE

NODE 108	SIGN CONTROL				
PHASE DURATION	-----		APPROACHES	-----	
	(107, 108)				
1 0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

NODE 109	SIGN CONTROL				
PHASE DURATION	-----		APPROACHES	-----	
	(108, 109)				
1 0	LEFT THRU RITE DIAG GO	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG	LEFT THRU RITE DIAG

SOURCE/SINK FLOW RATES

CENTROID NUMBER	LINK	SOURCE/SINK RATE (VEH/HR)
2000	(58, 25)	220
2001	(61, 34)	57
2002	(24, 4)	99
2003	(27, 7)	139
2004	(70, 69)	172
2005	(35, 16)	100
2006	(41, 38)	192
2007	(17, 18)	58
2008	(28, 29)	100
2009	(30, 29)	90
2010	(4, 52)	60
2011	(1, 2)	273
2012	(64, 32)	50
2013	(71, 39)	103
2014	(47, 46)	135
2015	(49, 40)	311
2016	(60, 59)	18
2017	(72, 42)	118
2018	(73, 36)	250
2019	(94, 85)	71
2020	(77, 78)	65
2021	(89, 90)	42
2022	(92, 90)	8
2023	(76, 84)	57
2024	(93, 91)	10
2025	(85, 86)	52
2026	(95, 96)	20
2027	(96, 97)	126
2028	(98, 99)	10
2029	(99, 100)	87
2030	(101, 102)	114
2031	(103, 104)	4
2032	(105, 106)	300
2033	(107, 108)	61

SOURCE/SINK FLOW RATES

CENTROID NUMBER	LINK	SOURCE/SINK RATE (VEH/HR)
2000	(58, 25)	494
2001	(61, 34)	128
2002	(24, 4)	223
2003	(27, 7)	312
2004	(70, 69)	388
2005	(35, 16)	225
2006	(41, 38)	431
2007	(17, 18)	131
2008	(28, 29)	225
2009	(30, 29)	203
2010	(4, 52)	135
2011	(1, 2)	614
2012	(64, 32)	112
2013	(71, 39)	232
2014	(47, 46)	303
2015	(49, 40)	699
2016	(60, 59)	40
2017	(72, 42)	266
2018	(73, 36)	563
2019	(94, 85)	160
2020	(77, 78)	146
2021	(89, 90)	95
2022	(92, 90)	17
2023	(76, 84)	129
2024	(93, 91)	23
2025	(85, 86)	116
2026	(95, 96)	44
2027	(96, 97)	284
2028	(98, 99)	22
2029	(99, 100)	195
2030	(101, 102)	257
2031	(103, 104)	9
2032	(105, 106)	675
2033	(107, 108)	137