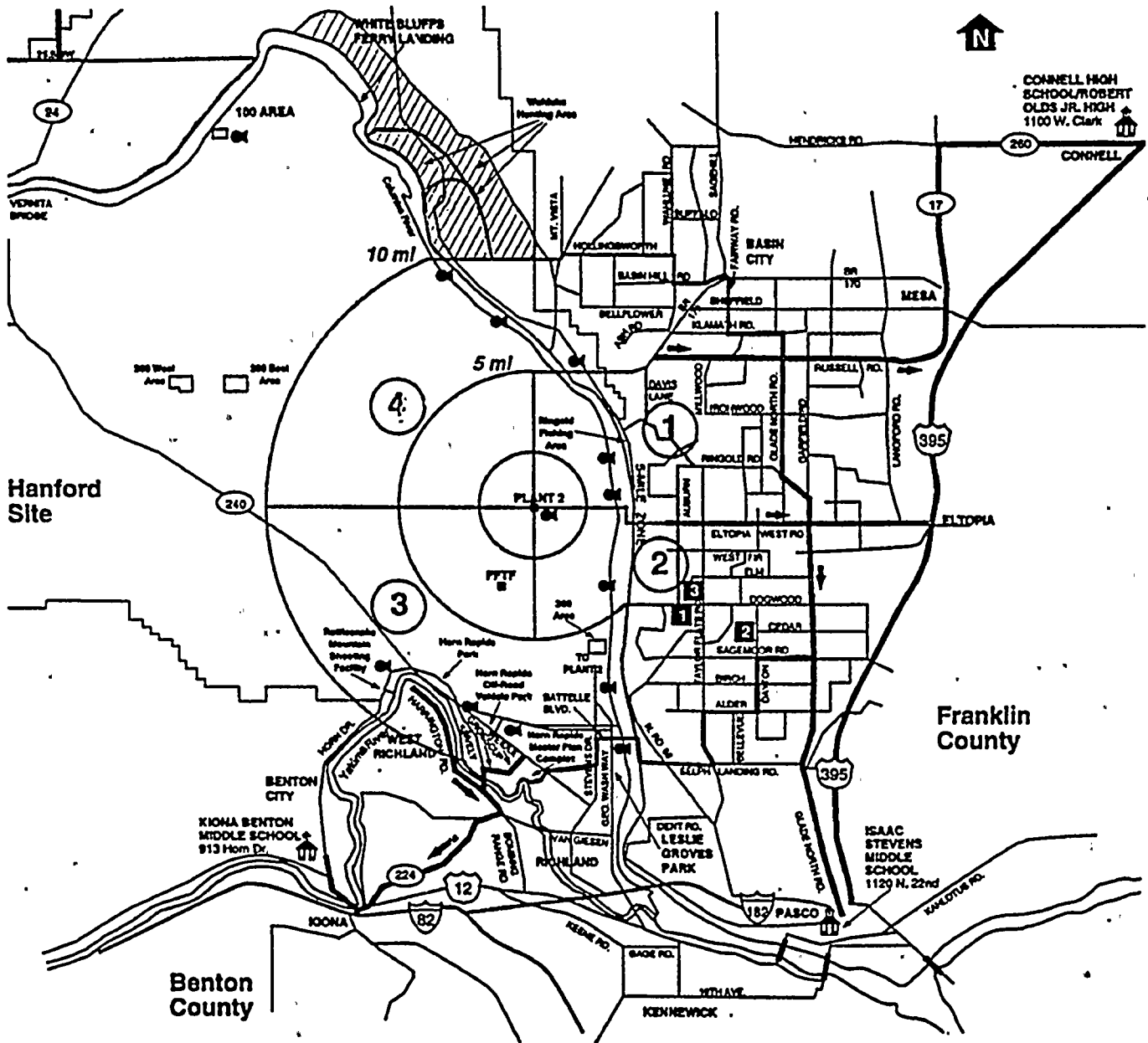


WNP-2 TEN MILE EPZ EVACUATION TIME ESTIMATE STUDY



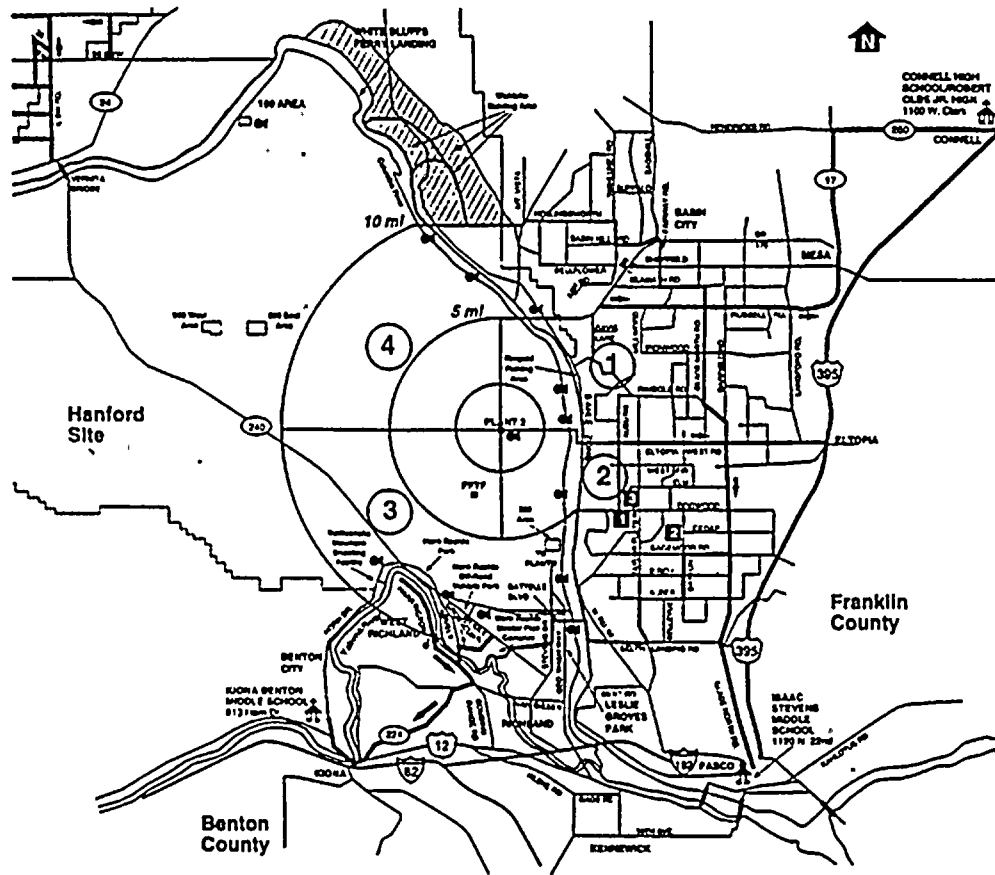
June 1996
Revision 3

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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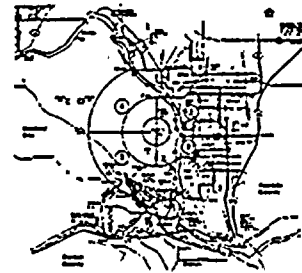


Prepared by Kevin Galimoto/Kevin P. Meehan
June 1996
Revision 3

Reviewed By: *W.F. Thomas* 7/6/96
Lead, Offsite Emergency Planner Date

Approved By: *George J. Reed* 7/12/96
Corporate Emergency Preparedness, Date
Safety and Health Officer





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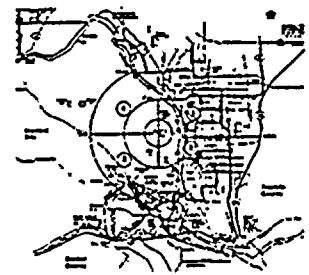


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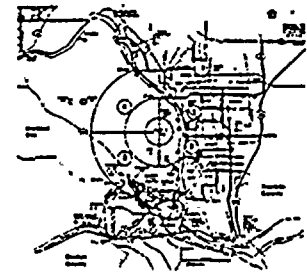
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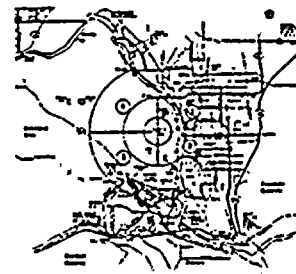


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EXECUTIVE SUMMARY

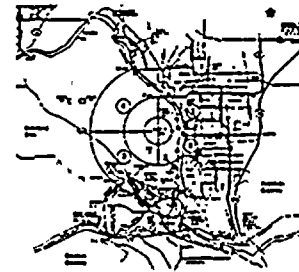
This document provides the evacuation time estimates and other pertinent demographic data utilized in WNP-2's Emergency Plan (FSAR, Chapter 13.3). As part of the annual review of the WNP-2 Emergency Plan, population and roadway changes within the Ten-Mile Plume Exposure Pathway Emergency Planning Zone (EPZ) are assessed to determine if the potential exists to require modification of the evacuation routes or times.

The need for this current revision was based on guidance in NUREG/CR-4831; "...As a general rule, a 10 percent increase in population indicates a need to check evacuation times. An initial assessment would involve determining whether growth had taken place in areas constrained by roadway capacity...". Recent surveys indicated that a 25% increase of population in the emergency planning zone had occurred. Hence, this evacuation time estimate study was performed. Data analysis in this revision was accomplished using the latest release of the Oak Ridge Evacuation Modeling System (OREMS), version 2.0a, which is recommended by the Federal Emergency Management Agency.

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 Ten-Mile EPZ will have been routinely surveyed and a decision will be made as to whether a reassessment will be necessary.

The location of WNP-2 on the Hanford Reservation assures a relatively low number of residents within the Ten-Mile EPZ. Also the regional climate affords protection from extreme weather conditions which would require a caveat to be added to the estimates for such severe natural phenomenon as a blizzard or hurricane. Thus because of the low population and the mild climate, the time it is calculated to take to evacuate the entire Ten-Mile EPZ in normal conditions is 2 hours and 15 minutes and for adverse conditions it is 2 hours and 30 minutes, which is much shorter than some plants that have a higher population density and who suffer from extremes in weather conditions. Figure 3, Evacuation Routes - Access Control Points, Traffic Control Points, and Assistance Centers, and Table 6, Summary of Results of Evacuation Times Analysis, presents the key findings and data useful in developing and implementing public protective actions for the WNP-2 site.





SECTION I. - INTRODUCTION

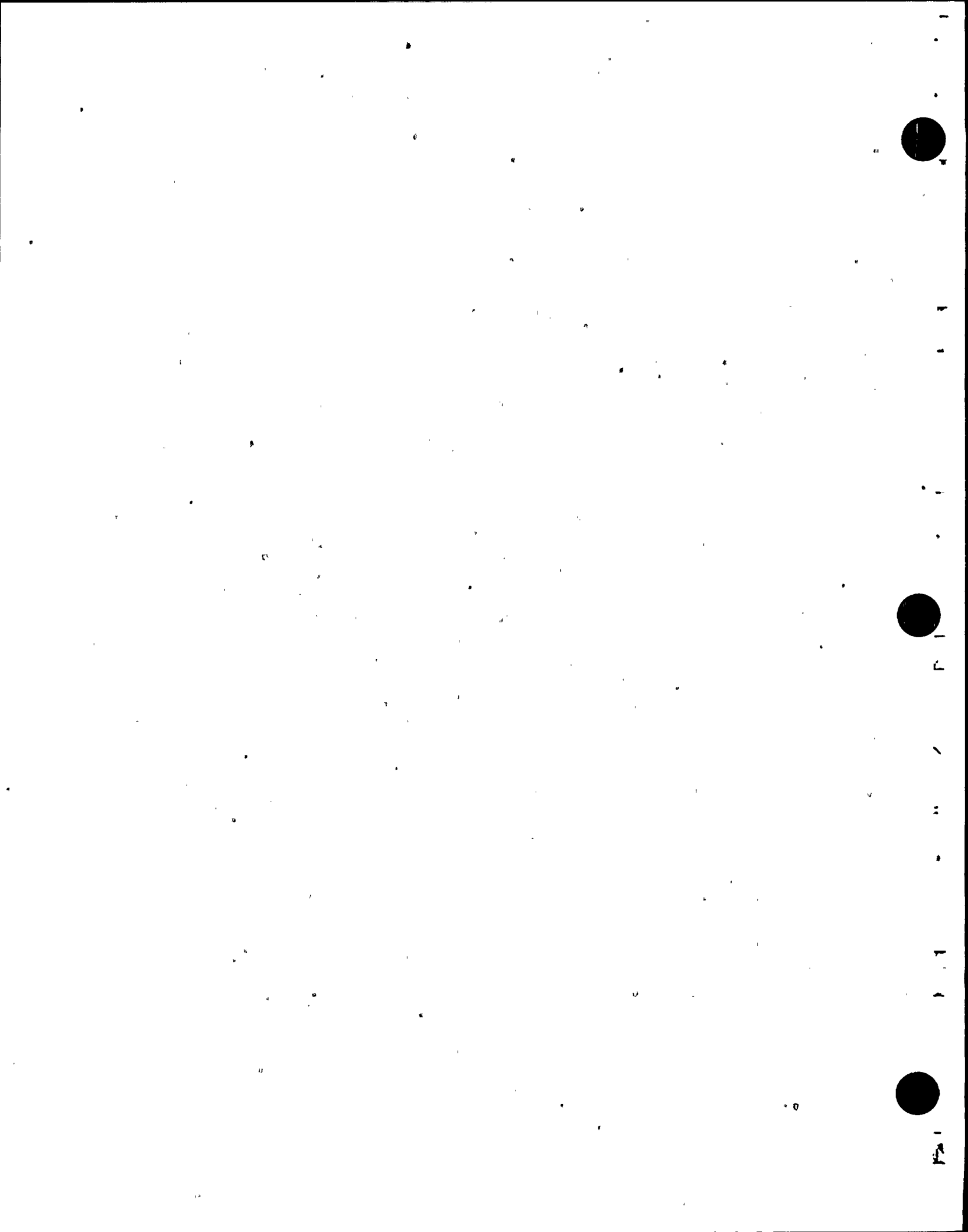
Even though the likelihood of an accident severe enough to warrant extensive off-site protective action is very small, should one occur, recommendations to shelter or evacuate large numbers of people could be significantly impeded by a lack of advance planning. Thus each nuclear power plant in the United States is required to ensure methods are in place to provide for the health and safety of the public in the event of an accident that impacts areas beyond their site boundaries. This study was performed to provide input into this process for the Washington Nuclear Project No. 2 (WNP-2).

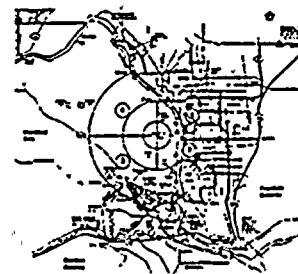
A. Site Location & Emergency Planning Zone (EPZ)

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, Richland (DOE-RL). The Supply System's portion is approximately 3 miles west of the Columbia River and 12 miles north of the populated area of Richland. Within the Supply System's exclusion area resides an operating nuclear power plant referred to as WNP-2 or Plant 2. Figure 1 shows the Ten-Mile Plume Exposure Pathway Emergency Planning Zone Map associated with WNP-2. This Emergency Planning Zone (EPZ) is the study area for which these evacuation time estimates have been made.

The DOE-RL 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 as well as recommending appropriate evacuation measures for the public in the event of an emergency at WNP-2. This evacuation plan has been discussed with DOE-RL and the Benton/Franklin County Emergency Management Agency emergency planning representatives.

Because of the relative location of WNP-2 to the other DOE facilities on the Hanford Reservation, it is postulated that there would be no impact to the evacuation times of the general public to a Plant 2 emergency should there also be an emergency at one of the DOE facilities at the same time.



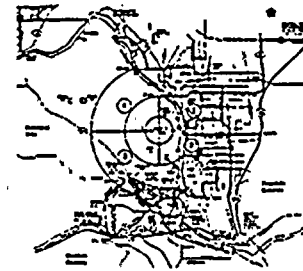


B. General Assumptions

The evacuation analysis is based on the following assumptions:

- 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 Section IV.A).
- No permanent population resides on the Hanford Reservation.
- 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 south of the plant will evacuate south towards Kennewick/Pasco.
- Inner sections would evacuate simultaneously with the outer sections.
- Initial road vehicle population is free of traffic and set at zero.
- One hour loading period for all populations, even for site industrial workers (which would normally be much quicker).
- Occupancy loading was assumed to be 3 persons per vehicle for categories other than transient industrial, schools and the ORV Park.
- Based on the size of the average household, households will evacuate as a unit, using only one vehicle per family.
- Schools are part of the general population for purposes of evacuation time estimates.
- Buses to be used for school evacuation will be dispatched within the one-hour loading time frame.
- Vehicle occupancy of 35 persons per school bus.

**WNP-2 Ten Mile EPZ
Evacuation Time Estimate Study
Revision 3 - June 1996**

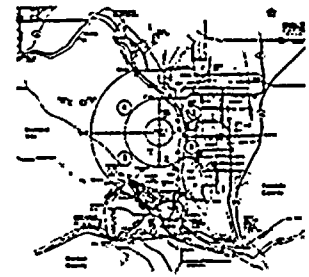


- Evacuation is occurring on a weekday with school in session, during months (April-June) when an additional 100 children of migratory agricultural workers are present.
- Evacuation is occurring during the workday for areas with the high transient worker populations.
- Evacuation is occurring during the day on a weekend for areas with high numbers of transient recreationists.
- Evacuation is occurring when WNP-2 and nearby facilities are staffed at fully operational levels.
- All persons have transportation available to them.
- Adverse weather conditions reduce both free-flow speeds and roadway capacities by 30% each. (Snow conditions; roads open; side streets passable).
- Evacuation is occurring at night.

Confirmation time estimates were not calculated in the model but are estimated as a maximum of one hour (see Section V). The calculated evacuation time estimates by the model start at the time of the announcement over the EBS¹ (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).

¹ EBS is currently being phased out and a new nationwide EAS (Emergency Alerting System) is being implemented. The Supply System has elected to maintain the EBS capability for WNP-2 until such time as the residents can be provided with radios that can utilize the new EAS digital signal.



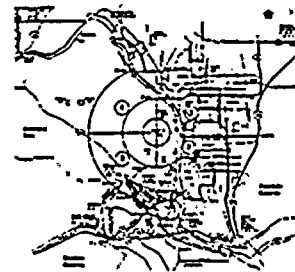


C. Methodology

This assessment was completed using the Oak Ridge Evacuation Modeling System (OREMS). Refer to the OREMS 2.0a users manual for a detailed description of the model.

The OREMS software required developing the Ten-Mile EPZ road network into link-node diagrams as shown in Figure 2. These link-nodes were utilized as evaluation schemes for data handling. The evacuation routes these schemes are depicting are shown on the map in Figure 3. The Ten-Mile EPZ center point is located midway between Washington Nuclear Projects #1, #2, and #4 (WNP-1, -2, -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.





SECTION II. - DEMAND ESTIMATION

The 10 mile EPZ population for 1996 is presented in Figure 4. This same information is also presented in Tables 1 through 4. Values within the EPZ were updated by data provided by the Benton County Department of Emergency Management and Franklin County Department of Emergency Management from their radio survey questionnaires. Additionally, updated data was provided by the DOE-RL or DOE-RL contractors for contractor facilities under DOE-RL jurisdiction on or near the Hanford Site.

A. Permanent Residents

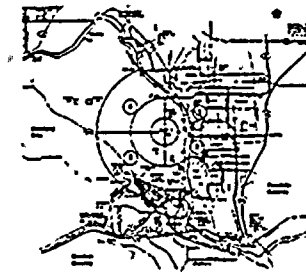
Permanent residents included all people residing in the area, but excluded occupants of institutions (schools). The ten-mile radius around the site is shown in Figure 1. In 1996 an estimated 3,044 people were living within the Ten-Mile EPZ. The nearest inhabitants occupy farms which are located east of the Columbia River and are thinly spread through the EPZ. There are no permanent residents located within three miles of the site. Only about 274 persons reside between the three-mile and the five-mile radii; these are all located east of the Columbia River.

Of the 3,044 people residing in the Ten-Mile EPZ, about 2,186 live in Franklin County and about 858 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. Over the next several years the Horn Rapids area in Benton County is predicted to steadily grow in population. Consequently, population assessments should include this area to ensure that proper steps are taken to assess their evacuation needs.

A partial survey (24 percent) of the permanent residents within the Ten-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. During the annual 25% survey of the EPZ population, residents are queried about needing assistance during evacuation. The small number that answer yes are listed in the Benton/Franklin Emergency Operations Center (EOC) so that assistance may be immediately provided. In addition, the public information brochure and EPZ calendars 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 Ten-Mile EPZ have transportation available to them.

B. Transient Population

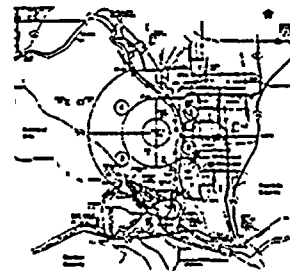
The transient population is divided into three main subgroups: 1) industrial employees, 2) migratory agricultural workers, and 3) recreationists. Figure 5 illustrates this population location graphically.

1. Industrial Employees

Industrial employees in the Ten-Mile EPZ total 7,926. Most are located in Benton County and form the main population to be evacuated in Benton County. About 11 percent of the industrial employees work at the WNP-2 site.

Industrial employment in the Ten-Mile EPZ includes:

WNP-2 Plant (5/96 Operational Day Shift)	728
WNP-1 (5/96 Supply System and Non Supply Personnel)	27
BPA Ashe Substation (5/96)	10
WNP-2 Plant Engineering Center (5/96)	246
WNP-2 Plant Support Facility (5/96)	122
DOE 400 Area, Fast Flux Test Facility (5/96)	454
Siemens Power Corporation (5/96)	800
DOE 300 Area (5/96)	1,671
DOE 3000 Area, contractors in Port of Benton area (5/96)	2,896
<u>Pacific Northwest National Laboratory (5/96)</u>	<u>972</u>
Total	7,926



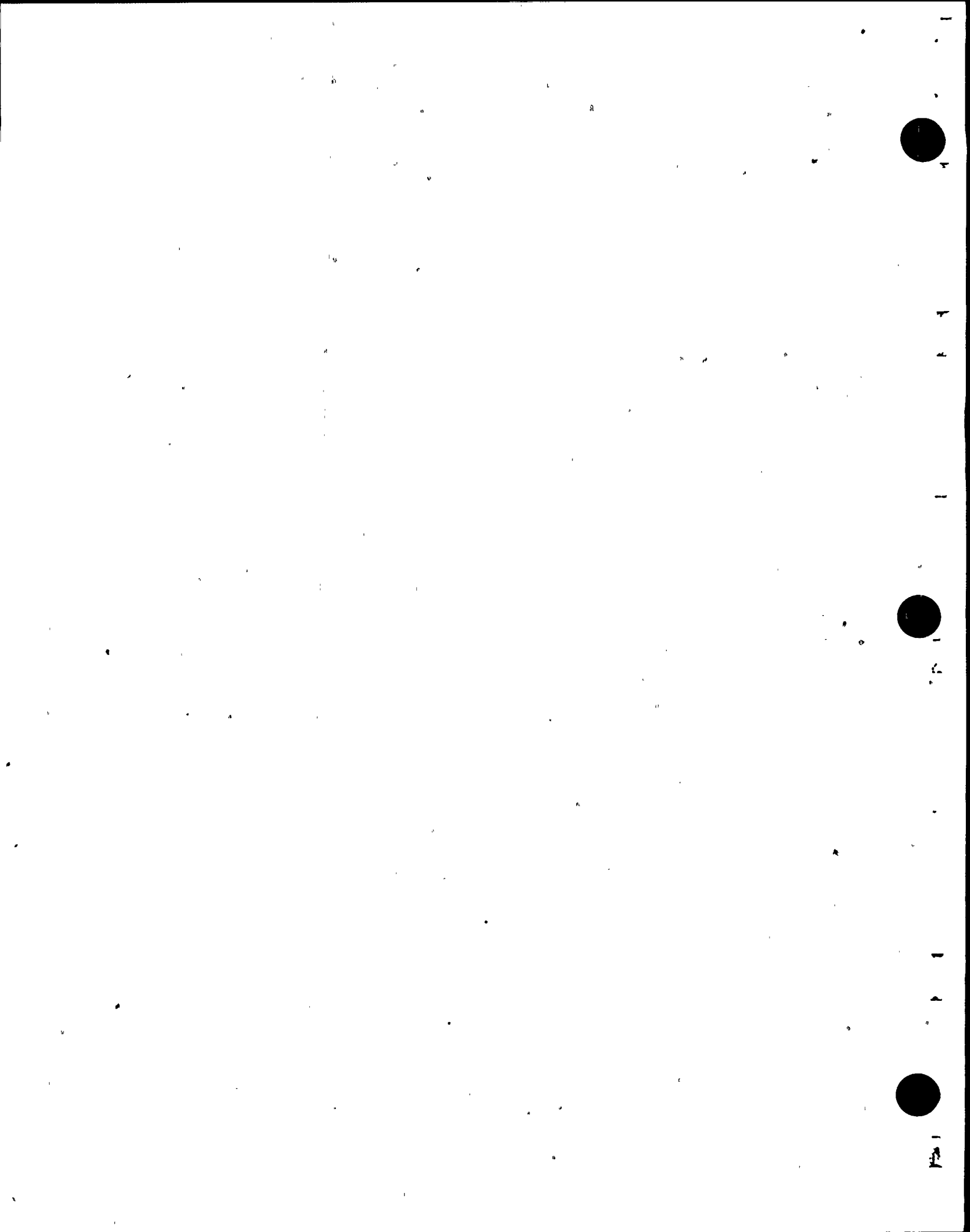
The majority of these employees work days but there may be some shift workers in the DOE-RL figures. Credit is not deducted from the population values due to emergency personnel remaining in place. Therefore, the planning figure of 7,926 to be evacuated is conservatively high.

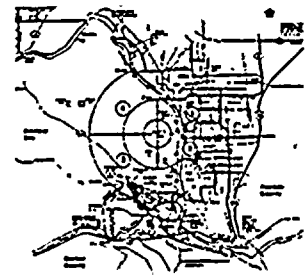
2. Migratory Agricultural Workers

There may be up to approximately 4,244 migratory farm workers in the Ten-Mile EPZ. This figure may be high due to the possibility of double counting during the different harvest periods. 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 2 reflect their work locations in Franklin County within the Ten-Mile EPZ, not their residences. 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, and boaters, enjoy activities mainly along the east bank of the Columbia river. 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 in the early morning hours. On the average, 52 fishermen and 80 hunters are present in Franklin County during the weekdays. This increases to about 155 fishermen and 200 hunters on weekends and holidays. Recreationists also use the Yakima River with an estimated maximum of 42 at any time in this area. During peak fishing or hunting times, up to 1,275 fishing and hunting recreationists may be located within the Ten-Mile Emergency Planning Zone. Of these, 1,233 are assigned to Franklin County and 42 to Benton County.





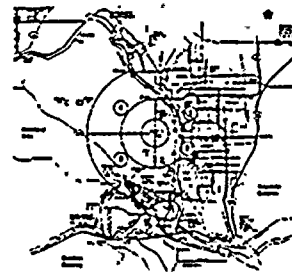
The main concentration of recreationists consists of fishermen located just south of the Ringold Fish Hatchery spillway on the Franklin County side of the Columbia River. Hunting consists of both water fowl, hunted at the Wahluke Hunting Area on the Franklin County side of the Columbia River, and upland game birds, hunted inland on the farm land of Franklin County. Up to 600 recreationists may be located around the Ringold Fish Hatchery and the Wahluke Hunting Area and the rest distributed inland.

An additional recreation attraction is in the south section of the Ten-Mile Emergency Planning Zone in Benton County as an Off-Road Vehicle Park (ORV). As many as 1,500 participants and spectators may be present during an event. Thus, a maximum total of 2,775 recreationists may be located within the Ten-Mile Emergency Planning Zone. Additional provisions have been made for the Horn Rapids housing development and golf course.

An automobile occupancy factor of 3, the same as used for the transient industrial population, 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 sector 2; the Edwin Markham Elementary School, the County Haven Academy, and the Country Christian Center, with a total population of approximately 565 (students and faculty). Although most of those live within the Ten-Mile EPZ, the total amount was added to the general population for this study. Buses which would be used for the evacuation are located at the district bus lot in north Pasco.



D. Emergency Planning Zone, Sub-Areas and Sectors

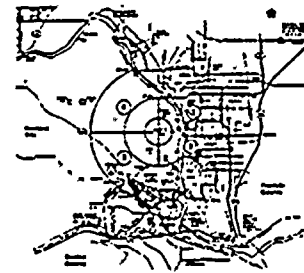
For assimilation of data and ease of determining protective action scenarios, the Ten-Mile EPZ was broken down into sub-areas and sectors. The sectors are the four divisions identified on Figure 1 that separate the area within the 2 to 10-mile radius for ease of protective action recommendation decision-making purposes. The sub-areas considered in this study were:

<u>Radius</u>	<u>Area</u>
0-2 miles	entire circumference
0-5 miles	four approximately 90° sectors
0-10 miles	four approximately 90° sectors
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 sector 3, on contiguous Supply System properties. Only three of the four sectors were examined because the fourth sector, entirely on the Hanford Reservation, contains no residential, transient nor special populations. These sectors are numbered 1 through 4 and are graphically shown on Figures 1 and 3. The Columbia River, as a natural border between Benton and Franklin Counties, was used to form the division between sector 2 and sector 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 sectors, it was modeled that the inner portions of the sector were being simultaneously evacuated.





SECTION III. - TRAFFIC CAPACITY

Figure 3 illustrates the evacuation routes, access control points, traffic control points, and assistance centers for the Hanford Site. These routes have been designated as primary, and secondary, based on discussion 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.

A. Evacuation Roadway Networks

Sector 1 - All Traffic

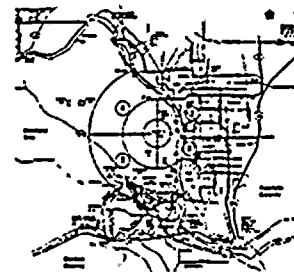
The primary evacuation route is Russell Road, east to old State Road 17, and north into Mesa. From Mesa, evacuees may continue by:

- Taking State Highway 17 north to Hendricks, then east on Hendricks Road to Connell.
- Taking U.S. Highway 395 northeast to Connell.
- 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
- Klamath Road
- Ironwood Road
- Ringold Road
- Taylor Flats Road





Sector 2 - All Traffic

The primary evacuation route is Eltopia West Road to Glade North Road then south towards Pasco or east to Eltopia and Highway 395. Additional Secondary Evacuation Routes are:

- Elm Road
- Sagemoor Road
- Road 68
- Taylor Flats Road

Sector 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 west and south to Benton City via SR 224, then to Kiona-Benton Middle School.

The primary route for the residents of the Horn Rapids community is south and east on highway 240 to Van Giesen, then west and south on SR 224 to Benton City.

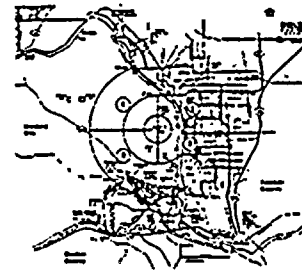
Some residents may travel to the assistance center at Isaac Stevens Middle School rather than traveling to Benton City.

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.

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





Sector 3 - Transient Traffic

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

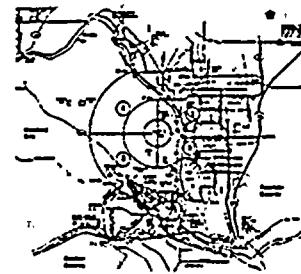
A portion of the normal daily traffic coming from the Hanford Reservation routinely uses Stevens Drive to the Richland Bypass Highway 240, and on to Highway 240/12 to Kennewick. The other often utilized route into Kennewick is George Washington Way south to the Richland Bypass Highway 240, and to Highway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

Secondary Evacuation Routes are:

- Highway 240 (toward Richland or Yakima).
- Horn Rapids west to Highway 240, then northwest on Highway 240 to SR 225 then south on SR 225 to Kiona-Benton middle school (Seimens Power Corporation recommended to evacuate this direction to optimize evacuation time.)
- Van Giesen (towards Benton City).
- 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).
- FFTF Access Route west to Route 10 south, south on SR 225 to Benton City, (FFTF recommended to evacuate this direction vs. east to Route 4 South to optimize evacuation time.)

B. Roadway Segment Characteristics

Table 5 is page 1 of a 7 page report which lists the link-node characteristics used by the OREMS software for all roadway segments plotted in the evacuation assessment. Only page 1 is shown due to the inability of most individuals to interpret the data, however, the full report will remain on file for future reference and documentation purposes.



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 per-lane capacities were used:

<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.

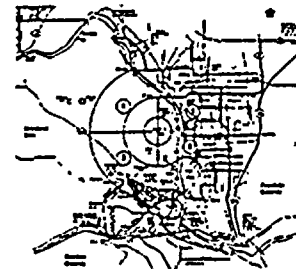
C. Assistance Centers

Emergency Worker/Assistance Centers (EWACs) have been selected by local emergency planning officials. Criteria for selection included that these locations be at least 15 miles from the plant, in the path of normal travel, having adequate facilities, and readily available. As indicated by the name, these facilities can be used by Emergency Workers as well as the evacuating members of the general public.

Residents evacuated from the Ten-Mile EPZ would be directed to the centers for registration and communicating with family or friends, first aid if needed, radiation monitoring and decontamination if needed, beverages, snacks and temporary lodging or assistance in obtaining meals and commercial lodging, social services and organized activities, and to receive updated information about the event.

The EWACs or Assistance Centers are arranged to accept evacuee flow from the evacuation "Sectors" indicated on Figure 1. There are four of them indicated in the figure by the large numbers 1 through 4 encased in circles.





The Assistance Centers are associated with the evacuation sectors as shown below.

Sector 1

- Connell High School, Connell

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

Sector 2

- 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.

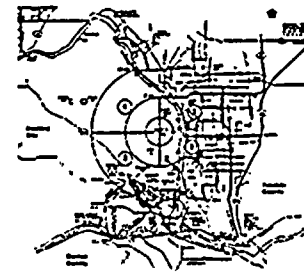
Sector 3

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

The school, located at 913 Horn Drive, can serve as an assistance center for evacuees. The school is situated in Benton City, approximately 16 miles from the Hanford site.

Sector 4 does not have an Assistance Center since the entire area of Sector 4 is government land known as the Hanford Reservation which is controlled by DOE-RL. No private home ownership or business exists in this 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. The early warning system includes EBS tone alert radios for all permanent residents within the Ten-Mile EPZ and a system of sirens located along the Yakima and Columbia Rivers, and near the Horn Rapids development tract and park, for notification of transient populations in those areas.

The early warning 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 likewise has established procedures to notify the county officials within 15 minutes of an incident which would require protective actions to be taken by the public. Thus a total of 30 minutes was assumed to elapse during the notification of the general public within the Ten-Mile EPZ.

After a review and update of current population statistics and the completion of the traffic/roadway assignments, the simulation studies were begun. Three scenarios were developed for presentation:

- Case 1: Daytime, one-hour loading period.
- Case 2: Nighttime, one-hour loading period.
- Case 3: Adverse weather, one-hour loading period.

Table 6 presents the evacuation time estimate results for these three case studies. As shown in this table, during normal weather conditions it is estimated that it will take approximately 2 hours and 15 minutes to evacuate the populous within the Ten-Mile EPZ.





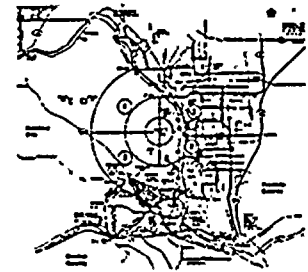
B. Adverse Weather

Severe weather conditions such as blizzards, heavy rain storms, flooding, fog, or high winds could hamper evacuation. However, historical records for the WNP-2 site indicate that severe conditions of this nature have rarely occurred in the past. Table 6 presents evacuation time estimates under three conditions; weekday daytime, nighttime and adverse weather. This table indicates that during adverse weather conditions it is estimated that it will take approximately 2 hours and 30 minutes to evacuate the populous within the Ten-Mile EPZ.

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.

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.





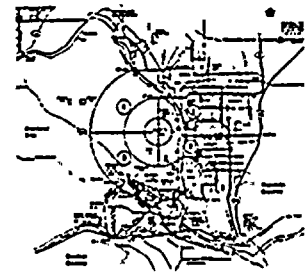
SECTION V. - OTHER REQUIREMENTS

A. 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-RL 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-RL has agreed not to send transient vehicles into the Ten-Mile EPZ during a Supply System evacuation situation. Vehicles could be re-directed at the Wye Barricade (or sooner).

- FFTF - For optimum time benefit, it is recommended that FFTF be directed to evacuate west to Route 10 South versus accessing Route 4 South. This decreases the loading through the 300 Area.
- DOE-RL 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-RL has been advised to balance outlet traffic volume going onto Stevens Drive (Route 4 South) with traffic south out of the 300 Area onto George Washington Way.
- Siemens Power Corporation - To further decrease loading on Stevens Drive, 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 versus accessing Stevens Drive.
- DOE-RL 3000 Area - Battelle and other DOE-RL contractors between George Washington Way and Stevens Drive should be directed to evacuate using Stevens Drive. All other contractors that lie east of George Washington Way are directed to evacuate using George Washington Way. The stationing of a traffic control officer is suggested at the Battelle Boulevard and Stevens Drive intersection.





During the evacuation process, non-emergency vehicles should be restricted from entering the Ten-Mile EPZ. This can be accomplished with the assistance of State and local law enforcement officials who will establish traffic control points along the effected areas perimeter. This function can be coordinated with the County Emergency Operations Center to ensure the appropriate areas are controlled. All of the assigned traffic control points will function to some extent as access control points to restrict unauthorized entry into the evacuated areas. Traffic control points along the evacuation routes will also serve to direct and aid the flow of outgoing evacuation traffic. Persons who staff the traffic control points will be considered emergency workers and should be trained and equipped to handle radiological emergency situations.

The evacuation routes and traffic/access control point concept as indicated in Figure 3 have not changed as a result of this study, hence the current plans, implementing procedures, and public education documents have the correct traffic flow guidance. The traffic/access control points shown in Figure 3 are layed out in a typical pattern for the Ten-Mile EPZ. The actual points utilized by local officials are identified in the Benton and Franklin County Radiological Emergency Preparedness Implementing Procedures.

B. Review of Study by State and Local Officials

The prior revision to this study was reviewed by the principal state and local officials involved in emergency response for the site. Their comments were solicited and incorporated into the final draft. The methodology and evacuate routes were not modified as a result of this latest study and thus a formal review was not performed on this revision. However, the Supply System would like to thank the Planners at both Benton and Franklin County for their extensive assistance, including acquisition and support of the OREMS software, in helping to complete this report.



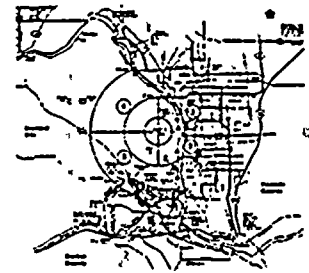
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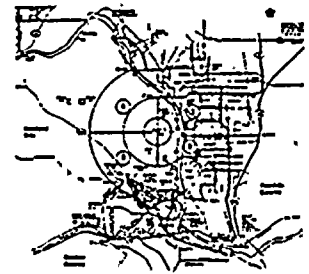
1
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SECTION VI. - REFERENCES

1. WNP-2 Emergency Plan, Revision 16, November 1995.
2. Benton and Franklin County Radiological Emergency Preparedness Implementing Procedures, 1995.
3. Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparation and Preparedness in Support of Nuclear Power Plants, NUREG-0654, FEMA-REP-1, Rev. 1, November 1980, Appendix 4.
4. Oak Ridge Evacuation Modeling System (OREMS) User's Manual.
5. WNP-2 Environmental Report--Operating License Stage Amendment #5, July 17, 1981.
6. State of the Art in Evacuation Time Estimate Studies for Nuclear Power Plants, NUREG/CR-4831, PNL-7776, March 1992.
7. Acceptance Criteria for Evacuation Plans, FEMA Guidance Memoranda GM-21.
8. Planning Concepts And Decision Criteria For Sheltering And Evacuation in a Nuclear Power Plant Emergency, AIF/NESP-031, June 1985.
9. Identification and Analysis of Factors Affecting Emergency Evacuations, NUMARC/NESP-004, February 1989.





APPENDICES

- Figure 1 Ten-Mile 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 in the Ten-Mile EPZ
- Figure 6 series Percent Evacuated vs. Time for Various Populations and Conditions
("S Curves" for Ten-Mile EPZ)
- 6A Permanent Population - Normal Conditions
- 6B Permanent Population - Adverse Conditions
- 6C General Population - Normal Conditions
- 6D General Population - Adverse Conditions
- Table 1 Permanent Population Distribution
- Table 2 Transient Population Distribution
- Table 3 Special Facility Population Distribution
- Table 4 Maximum Population Distribution
- Table 5 Roadway Characteristics
- Table 6 Summary of Results of Evacuation Time Analysis
- Resource 1 Example Computer Run

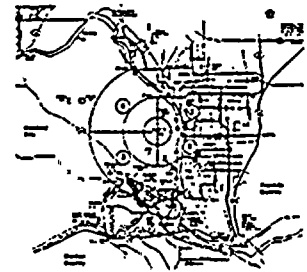
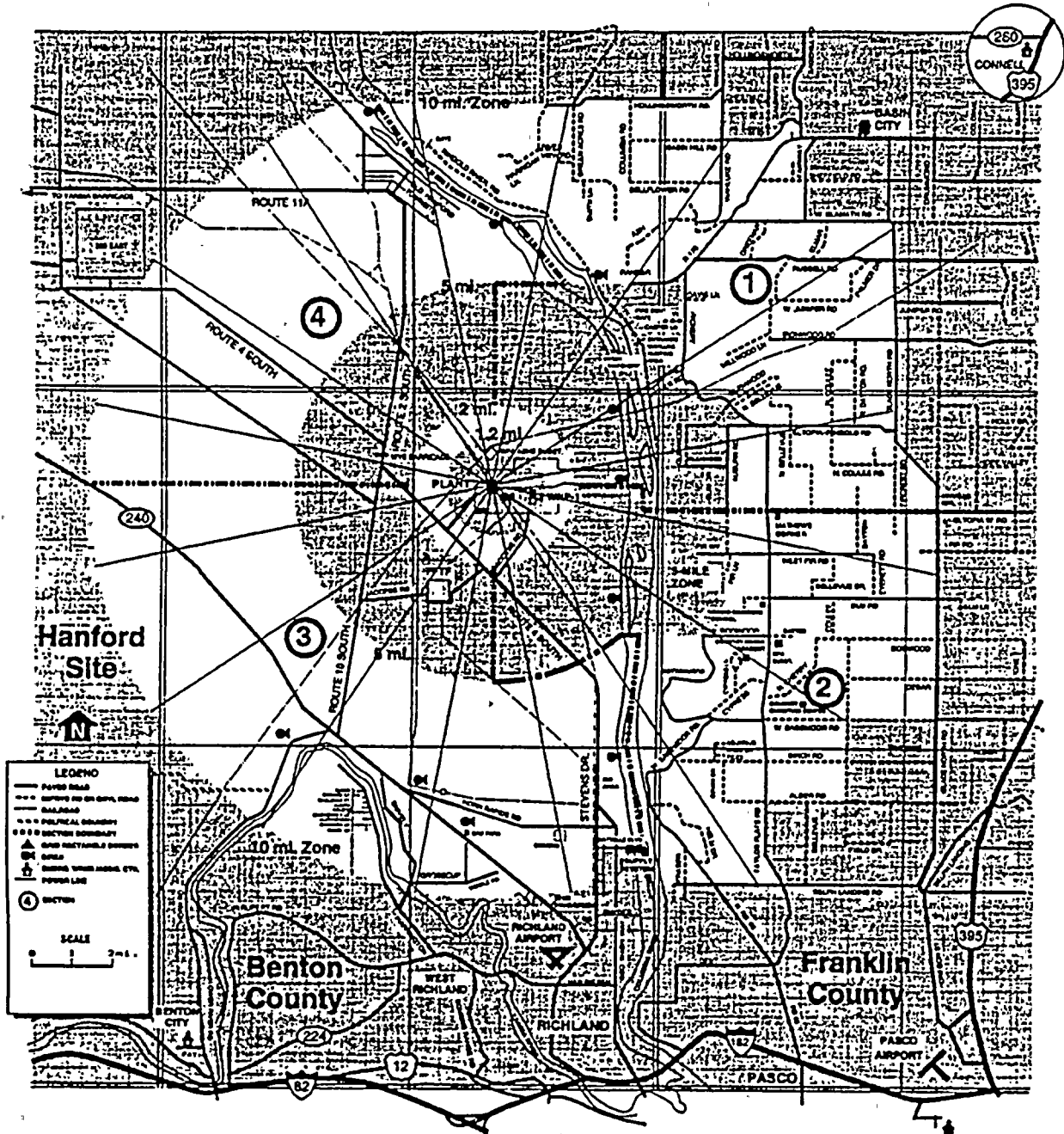


FIGURE 1

TEN-MILE EMERGENCY PLANNING ZONE



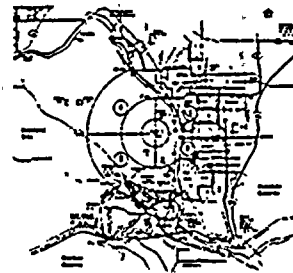
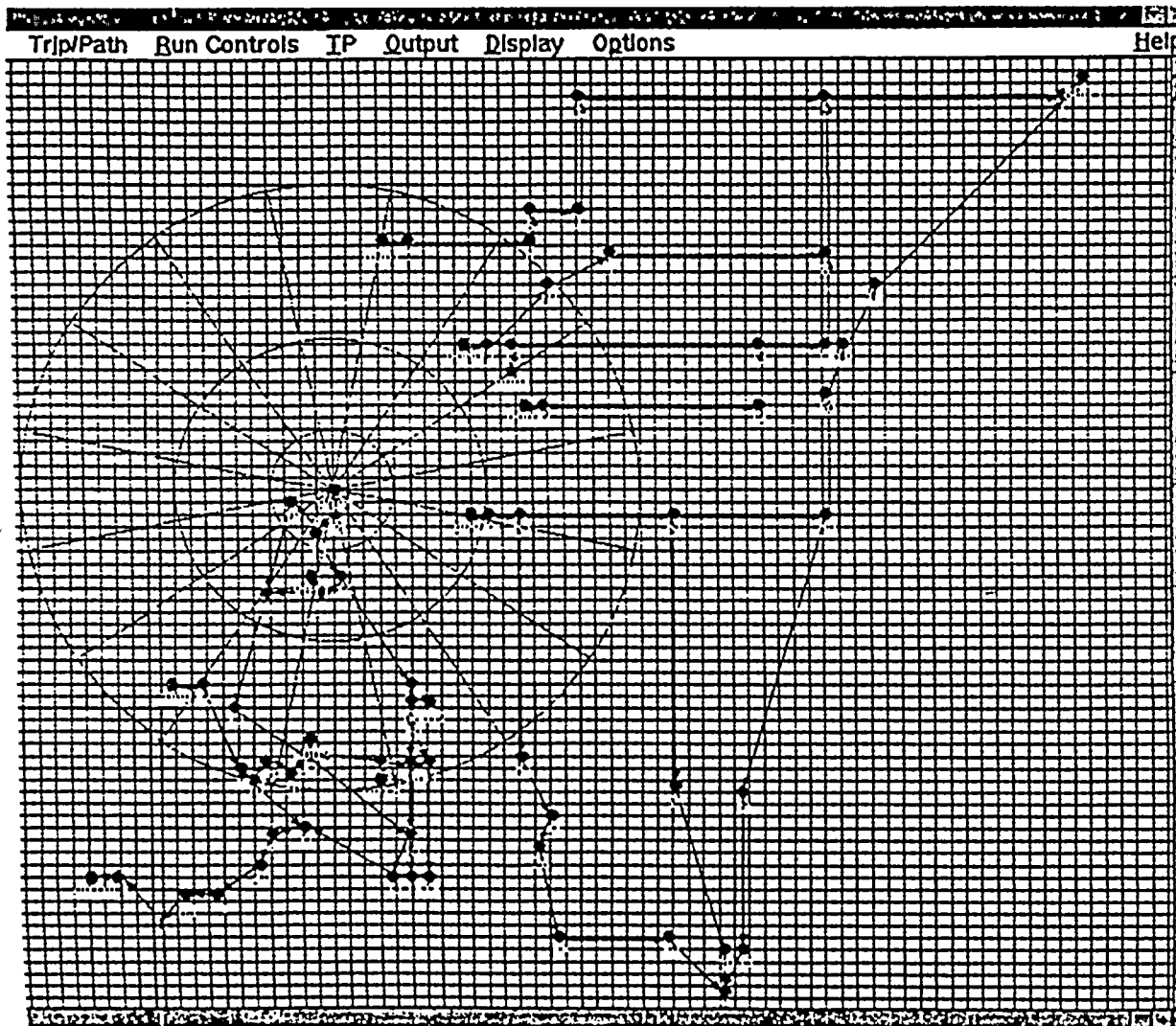


FIGURE 2

LINK NODE MAPS



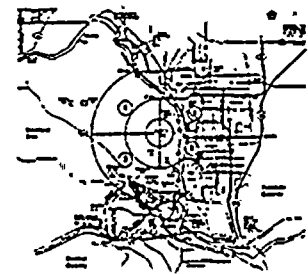
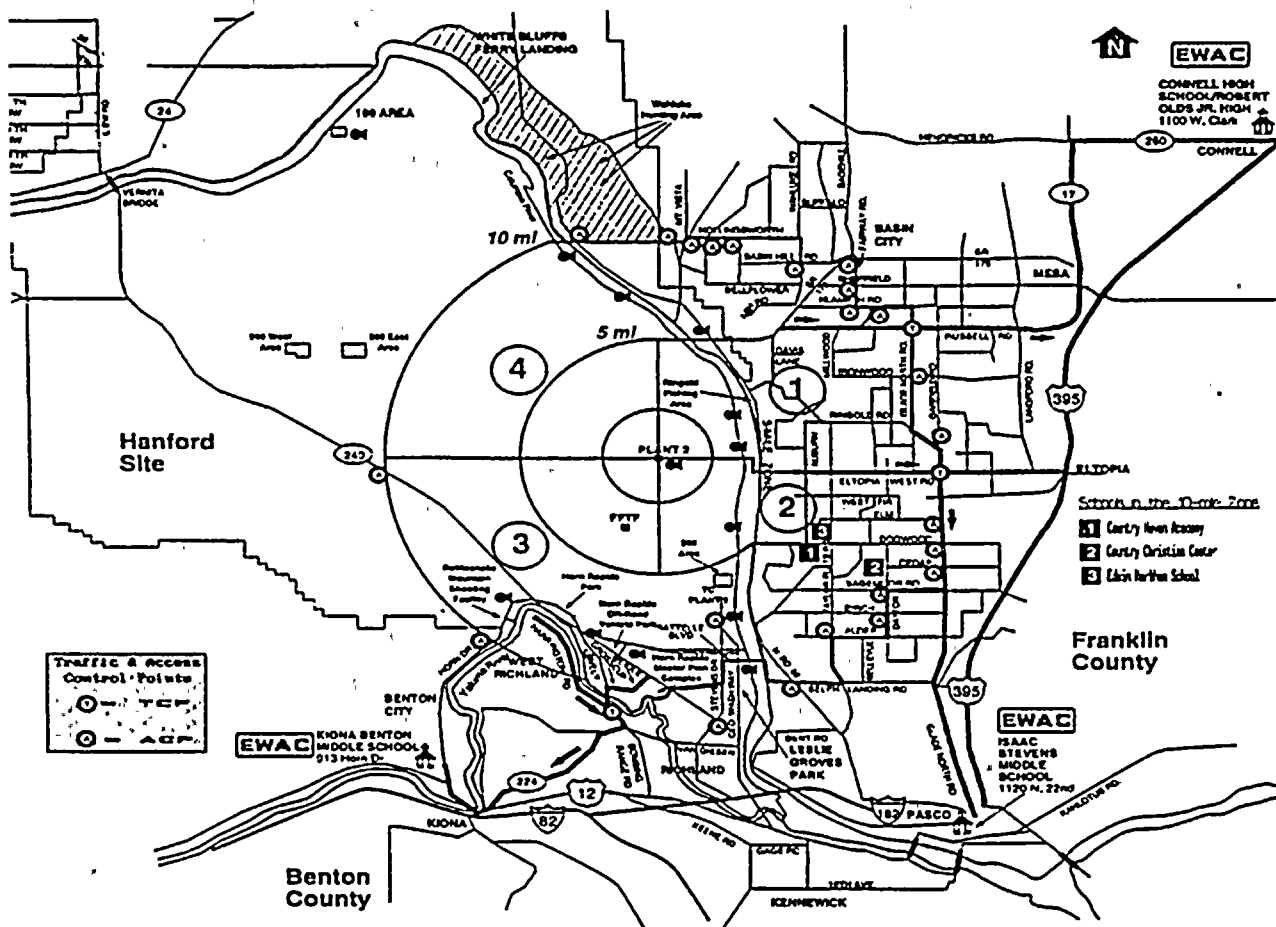


FIGURE 3

EVACUATION ROUTES

(Access Control Points, Traffic Control Points, and Assistance Centers)





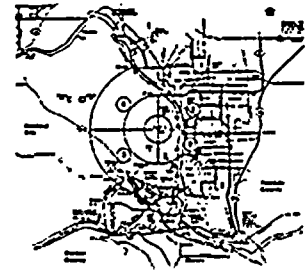
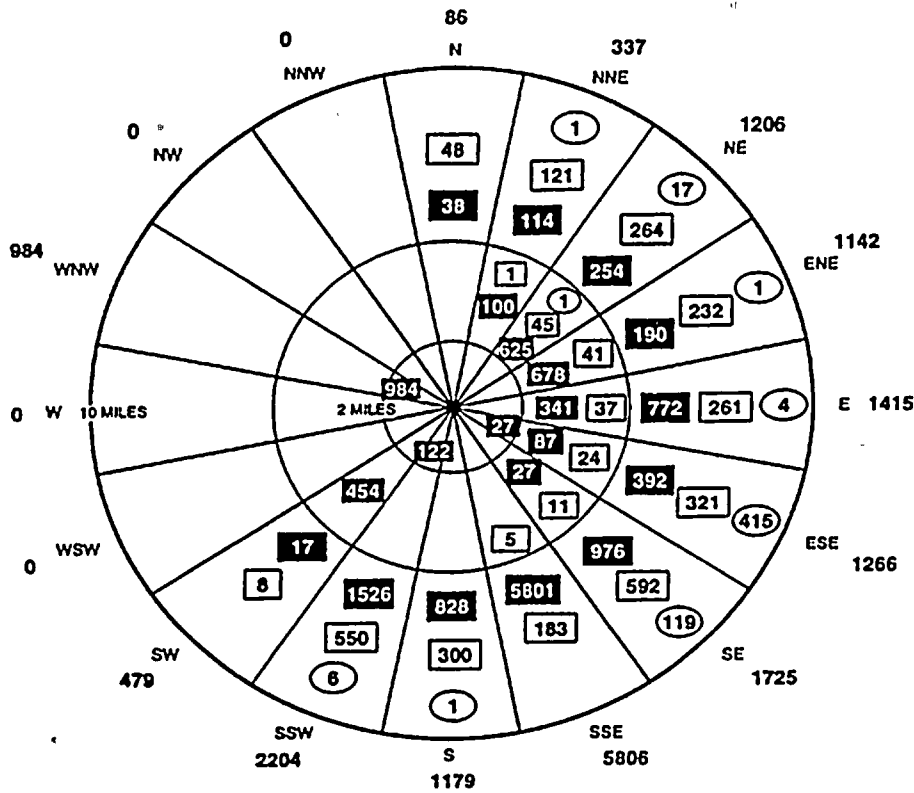


FIGURE 4

TOTAL POPULATION IN THE TEN-MILE EPZ
(Broken Down Into Classifications)



17,829 TOTAL SEGMENT POPULATION
 0 TO 10 MILES

POPULATION TOTALS - PERMANENT			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	0	0-2	0
2-5	184	0-5	184
5-10	2880	0-10	3044

POPULATION TOTALS - TRANSIENT			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	1133	0-2	1133
2-5	2312	0-5	3445
5-10	10,775	0-10	14,220

POPULATION TOTALS - SPECIAL			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	0	0-2	0
2-5	1	0-5	1
5-10	584	0-10	585

POPULATION TOTALS			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	1133	0-2	1133
2-5	2477	0-5	3610
5-10	14,219	0-10	17,829

870747.8
 June 1996
 Rev 18

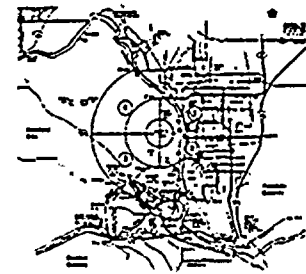
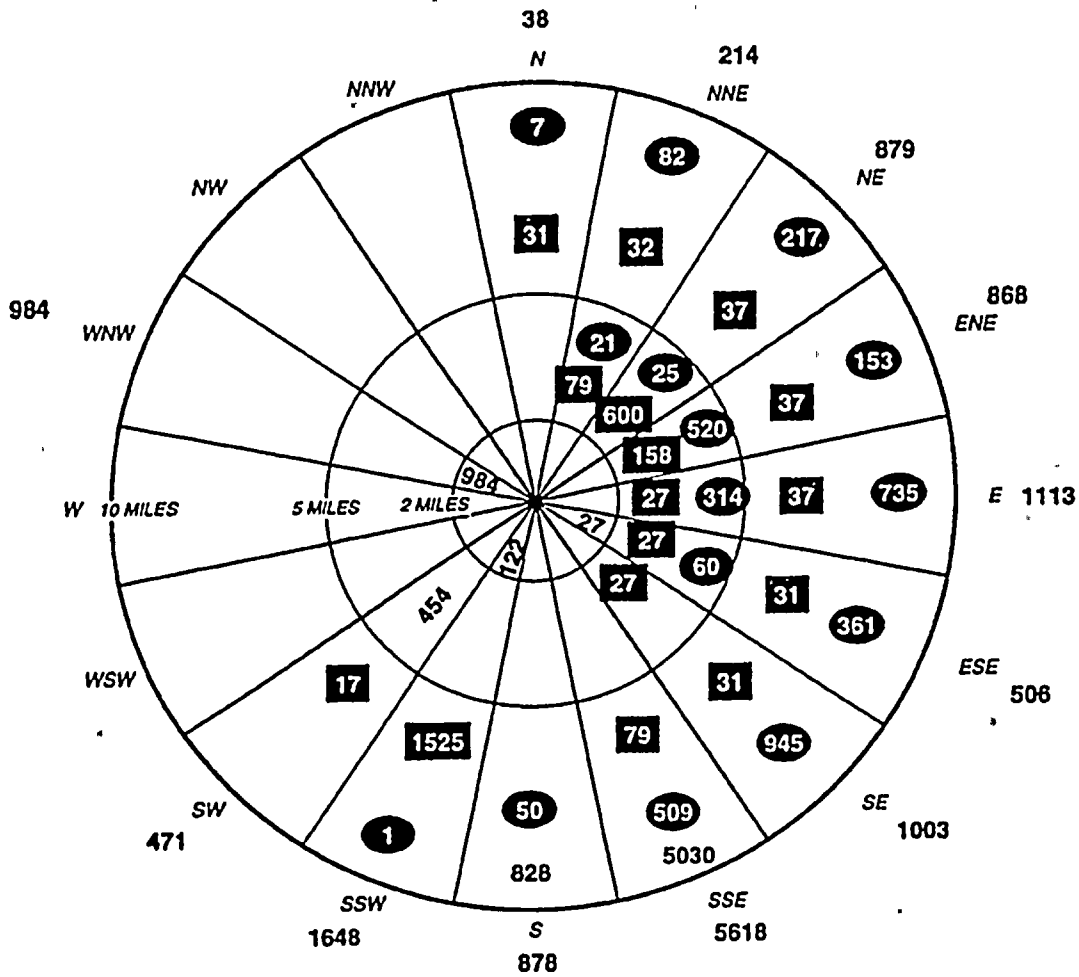


FIGURE 5

DISTRIBUTION OF TRANSIENT POPULATION IN THE TEN-MILE EPZ



KEY	
865	Industrial Employees
152	Migratory Agriculture Workers
25	Recreationists

870747.3
 May 1996
 Rev 16



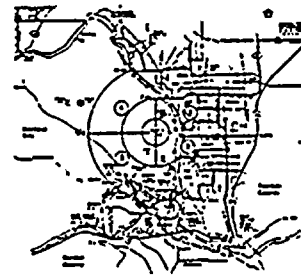
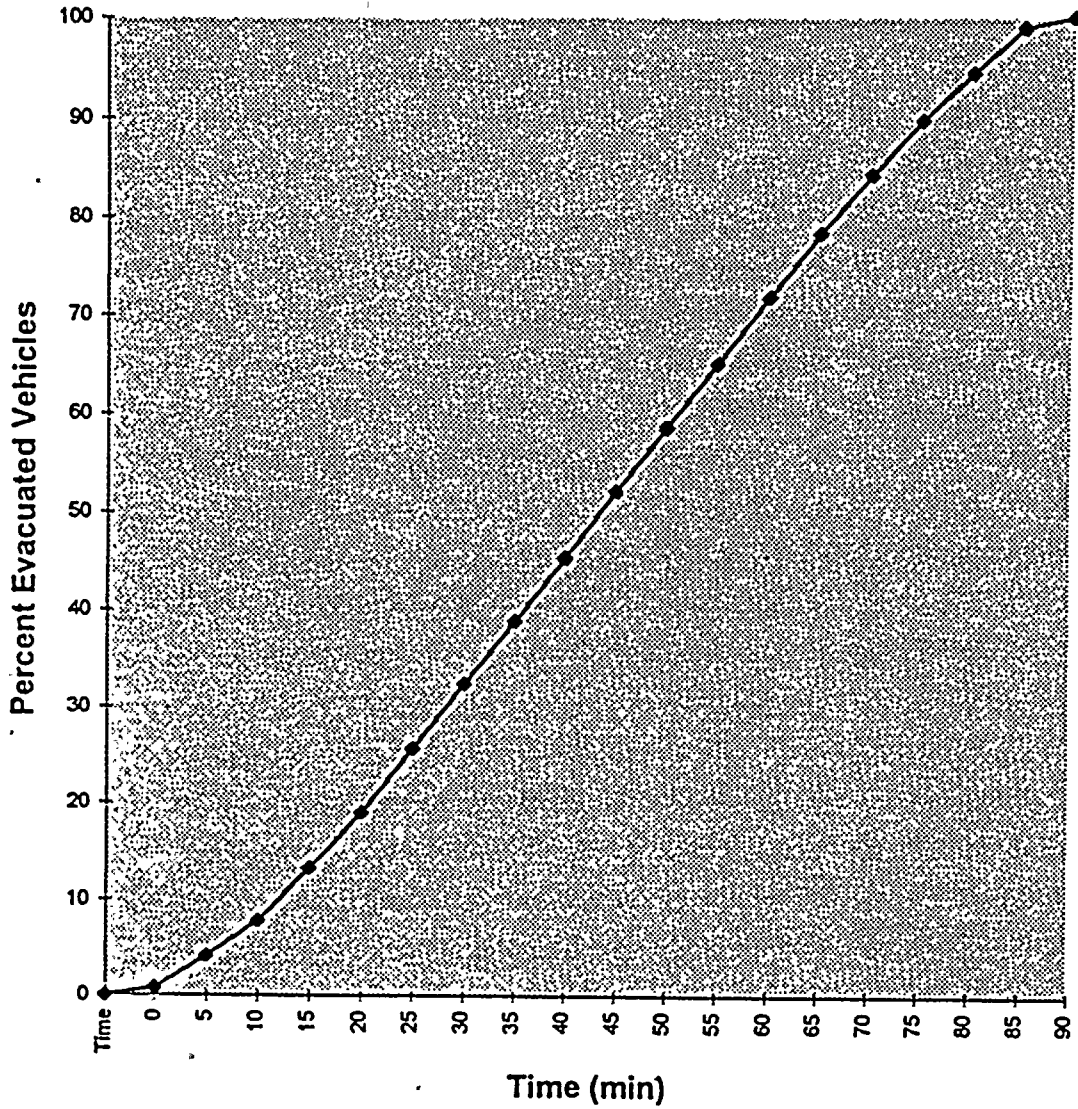


FIGURE 6A

PERMANENT POPULATION - NORMAL CONDITIONS





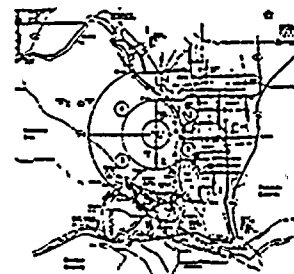
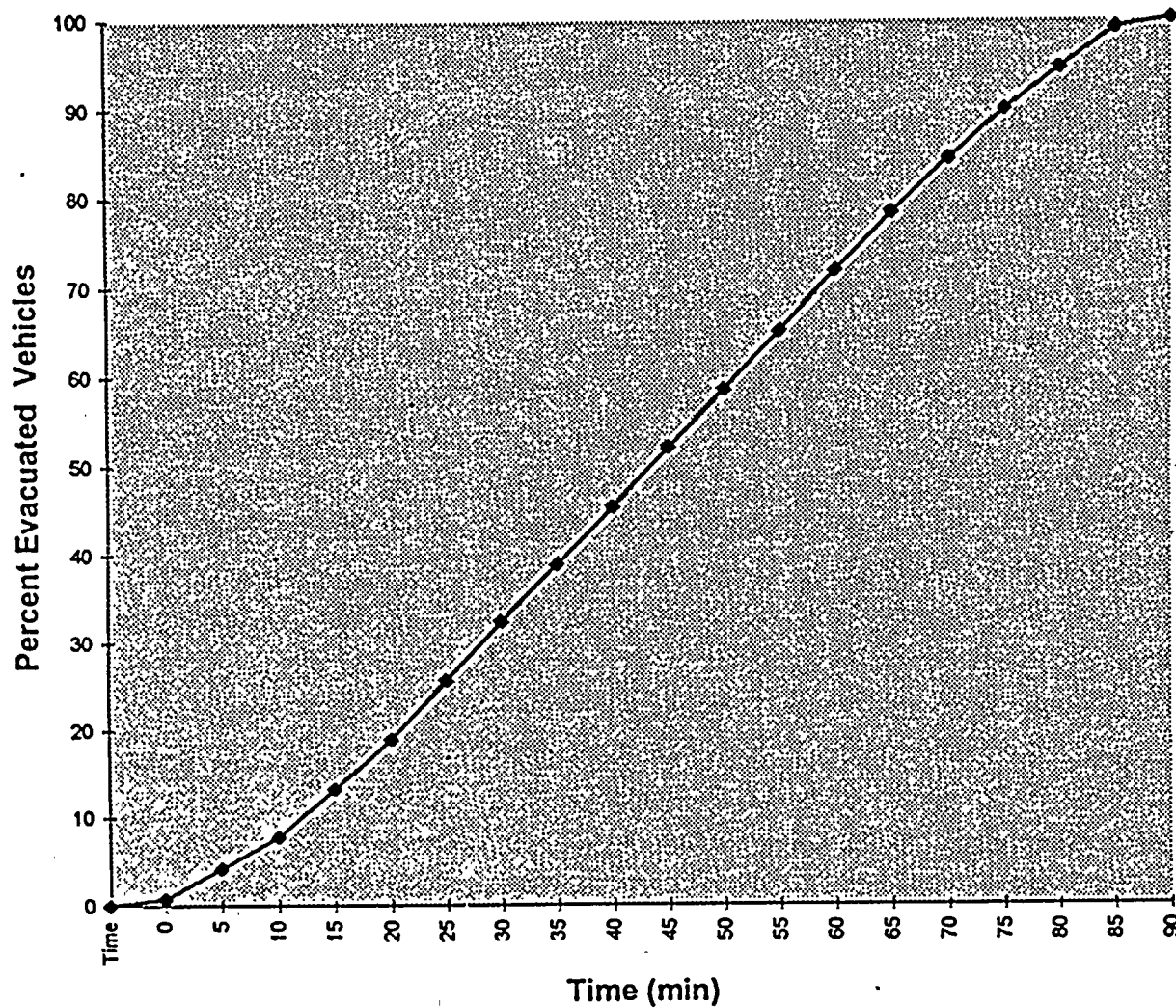


FIGURE 6B

PERMANENT POPULATION - ADVERSE CONDITIONS



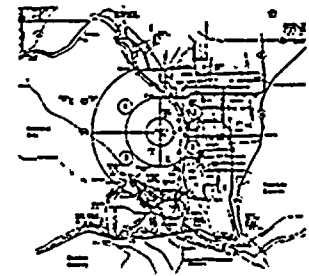
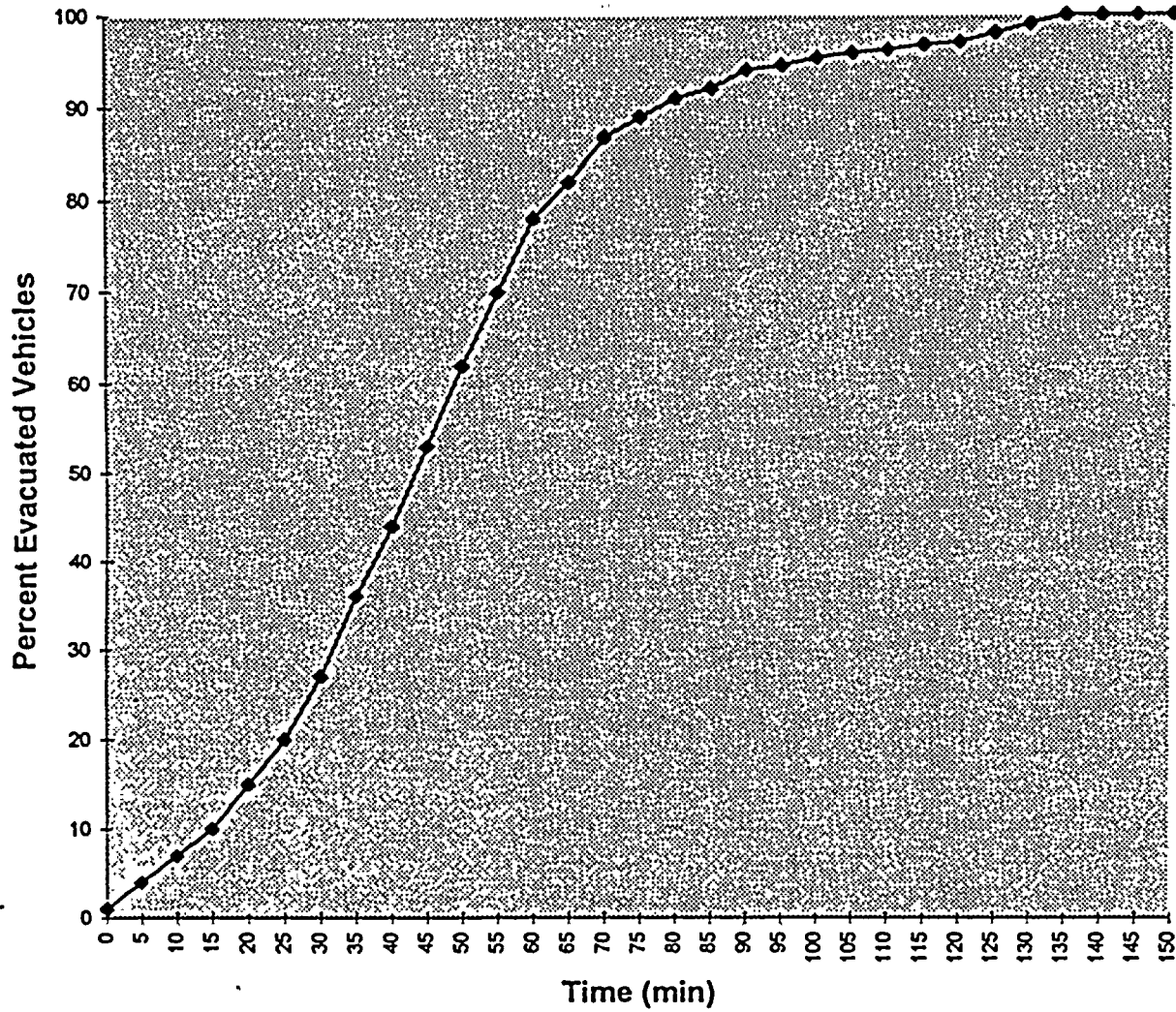


FIGURE 6C

GENERAL POPULATION - NORMAL CONDITIONS





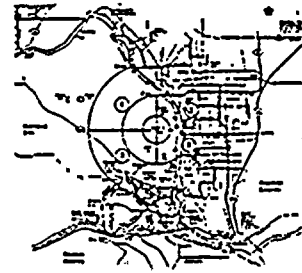
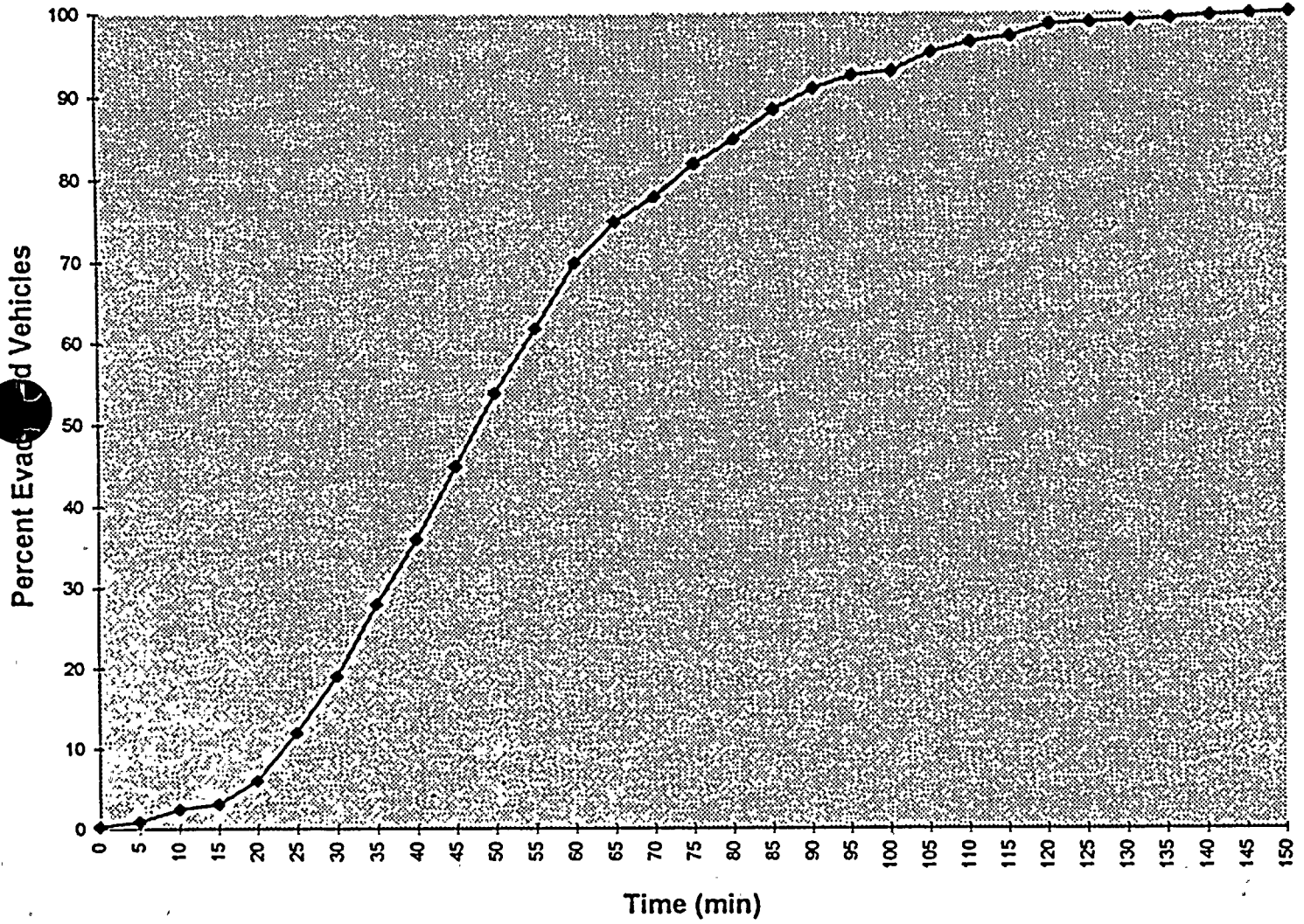
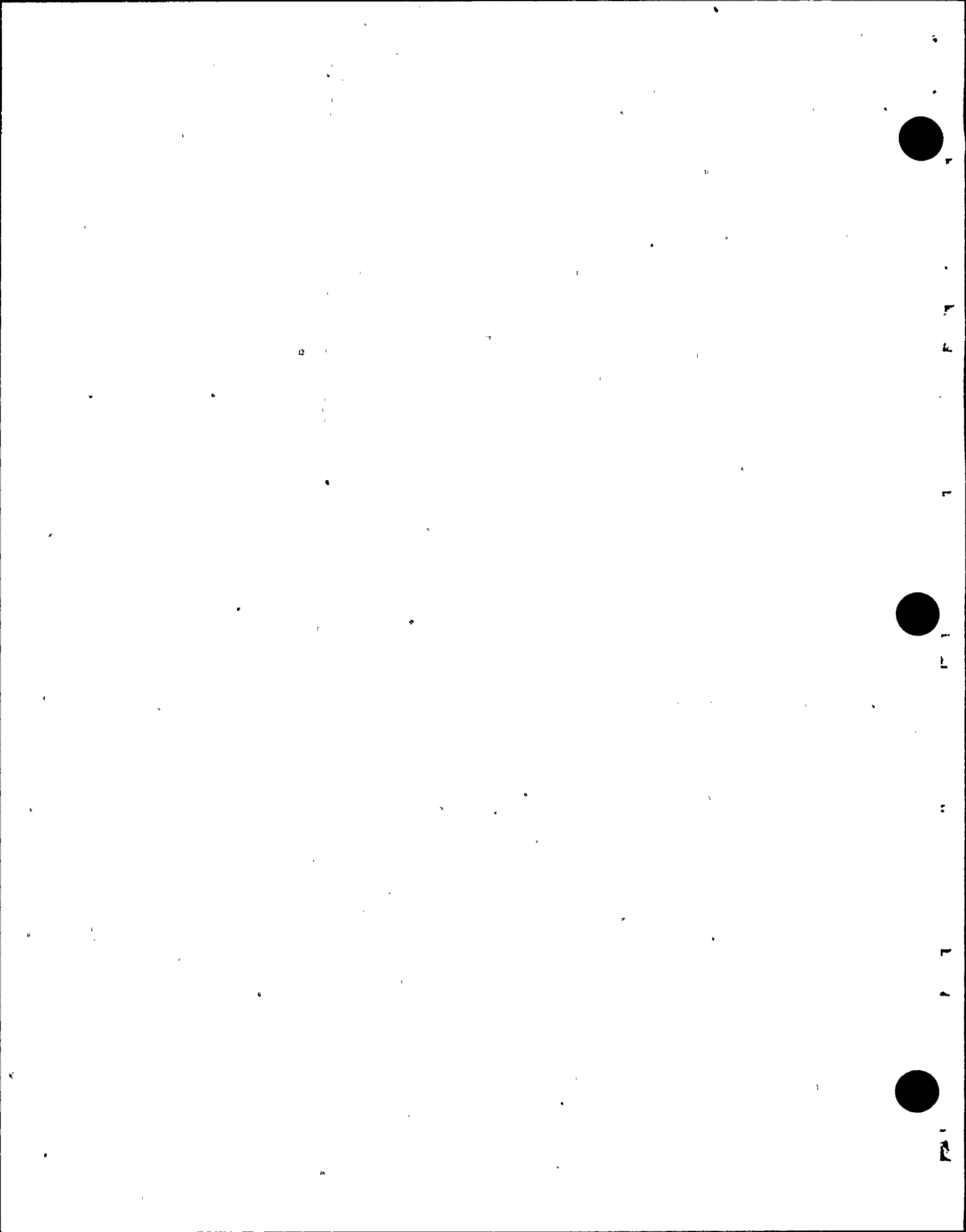


FIGURE 6D

GENERAL POPULATION - ADVERSE CONDITIONS





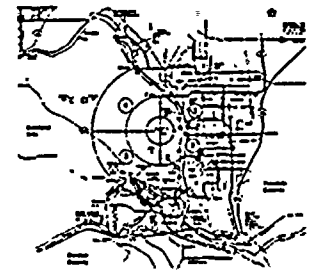


TABLE 1

PERMANENT POPULATION DISTRIBUTION

WNP-2 ETE STUDY DATA				
SECTORS - MILES	0-2 Miles	2-5 Miles	5-10 Miles	Sector Totals
N	0	0	48	48
NNE	0	1	121	122
NE	0	45	264	309
ENE	0	41	232	273
E	0	37	261	298
ESE	0	24	321	345
SE	0	11	592	603
SSE	0	5	183	188
S	0	0	300	300
SSW	0	0	550	550
SW	0	0	8	8
WSW	0	0	0	0
W	0	0	0	0
WNW	0	0	0	0
NW	0	0	0	0
NNW	0	0	0	0
RADIUS TOTALS	0	164	2880	
EPZ TOTAL				3044



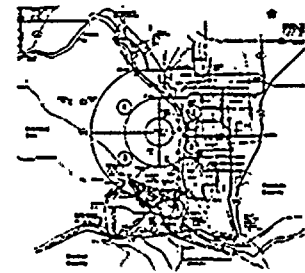
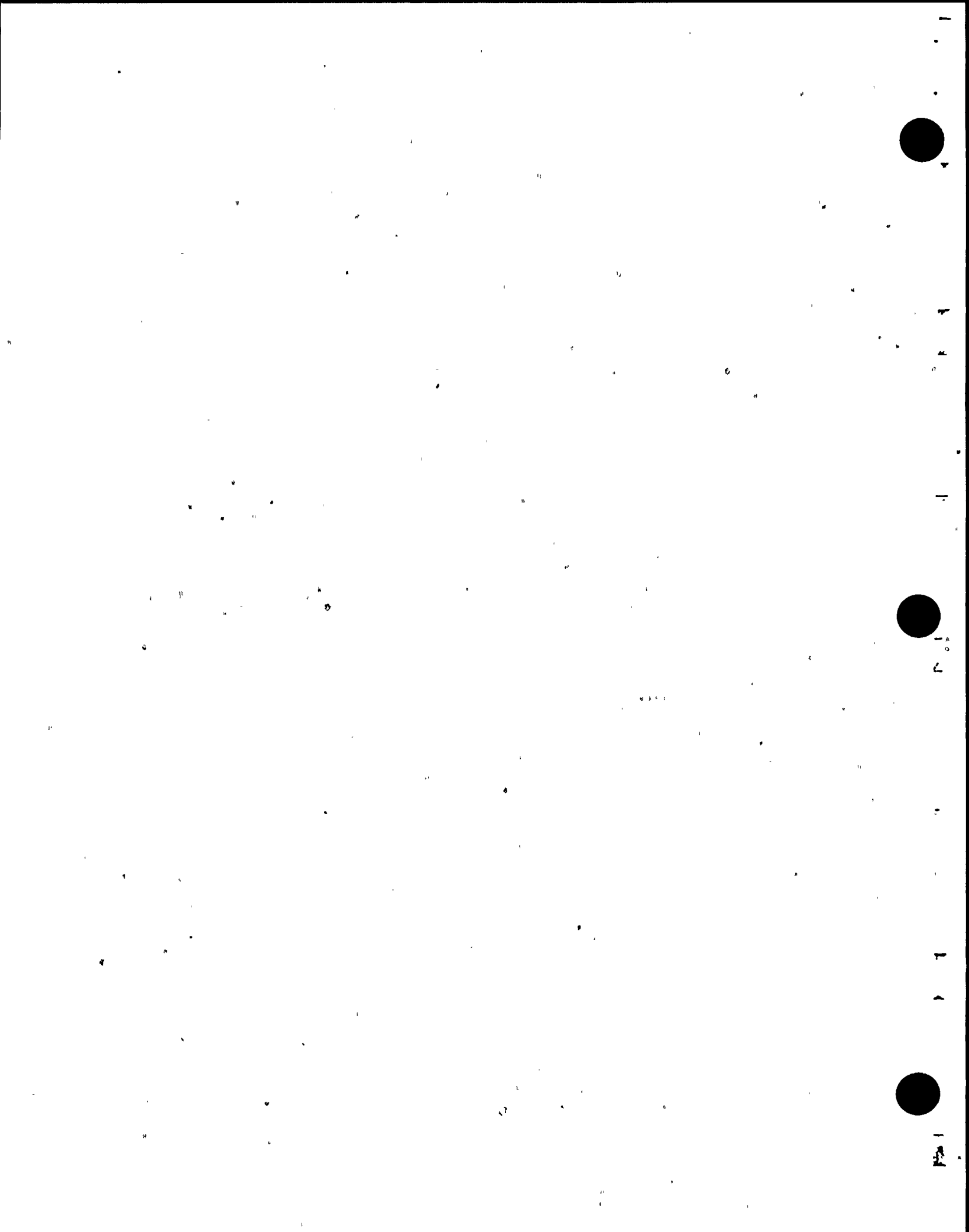


TABLE 2

TRANSIENT POPULATION DISTRIBUTION

WNP-2 ETE STUDY DATA				
SECTORS - MILES	0-2 Miles	2-5 Miles	5-10 Miles	Sector Totals
N	0	0	38	38
NNE	0	100	114	214
NE	0	625	254	879
ENE	0	678	190	868
E	0	341	772	1113
ESE	27	87	392	506
SE	0	27	976	1003
SSE	0	0	5618	5618
S	0	0	878	878
SSW	122	0	1526	1648
SW	0	454	17	471
WSW	0	0	0	0
W	0	0	0	0
WNW	984	0	0	984
NW	0	0	0	0
NNW	0	0	0	0
RADIUS TOTALS	1133	2312	10775	
		3445¹		
EPZ TOTAL				14220

¹ 0-5 Miles Accumulated Total



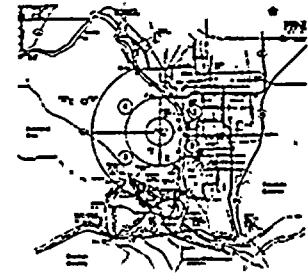
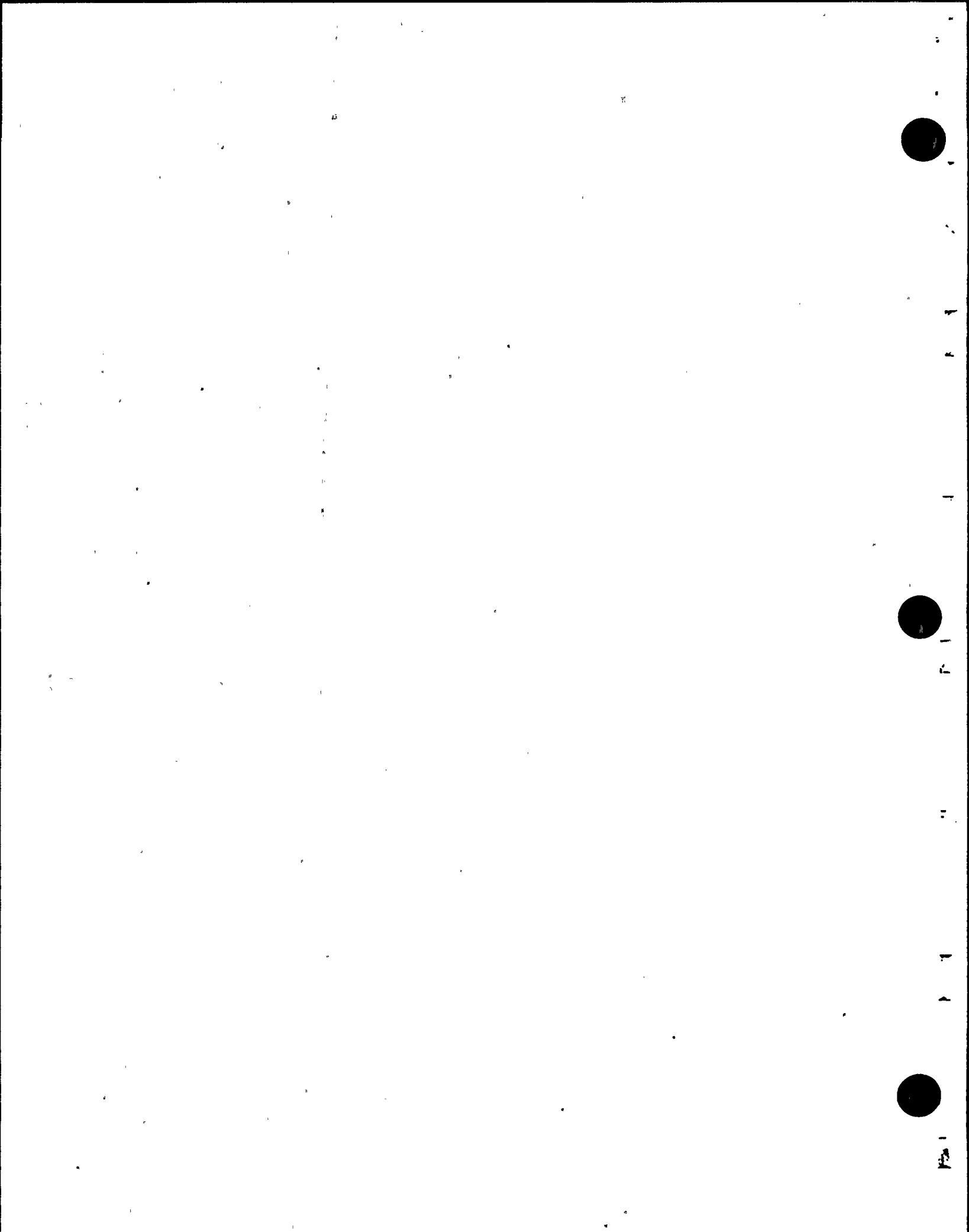


TABLE 3

SPECIAL FACILITY POPULATION DISTRIBUTION

WNP-2 ETE STUDY DATA				
SECTORS - MILES	0-2 Miles	2-5 Miles	5-10 Miles	Sector Totals
N	0	0	0	0
NNE	0	0	1	1
NE	0	1	17	18
ENE	0	0	1	1
E	0	0	4	4
ESE	0	0	415	415
SE	0	0	119	119
SSE	0	0	0	0
S	0	0	1	1
SSW	0	0	6	6
SW	0	0	0	0
WSW	0	0	0	0
W	0	0	0	0
WNW	0	0	0	0
NW	0	0	0	0
NNW	0	0	0	0
RADIUS TOTALS	0	1	564	
EPZ TOTAL				565



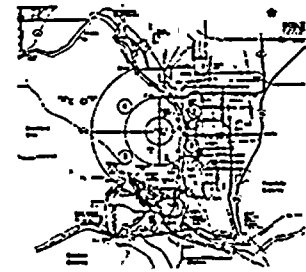


TABLE 4

MAXIMUM POPULATION DISTRIBUTION

WNP-2 ETE STUDY DATA				
SECTORS - MILES	0-2 Miles	2-5 Miles	5-10 Miles	Sector Totals
N	0	0	86	86
NNE	0	101	235	336
NE	0	671	535	1206
ENE	0	719	422	1141
E	0	378	1037	1415
ESE	27	111	1128	1266
SE	0	38	1687	1725
SSE	0	5	5801	5806
S	0	0	1179	1179
SSW	122	0	2082	2204
SW	0	454	25	479
WSW	0	0	0	0
W	0	0	0	0
WNW	984	0	0	984
NW	0	0	0	0
NNW	0	0	0	0
RADIUS TOTALS	1133	2477	14217	
		3610¹		
EPZ TOTAL				17827

¹ 0-5 Miles Accumulated Total



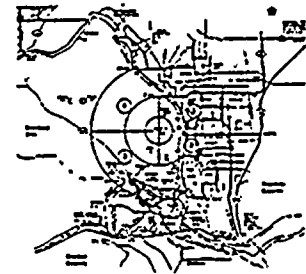


TABLE 5

ROADWAY CHARACTERISTICS

OREMS 2.0	Kevin Galloto	10	100	5	22	96	Washington Public Power	2	00
150	150	150				0	1200		02
			60						03
5									04
000000000	000000000								05
8001	7	0	2		6				06
7	6	400	2	5			25	24	30
6	5	100	2			4	25	24	30
5	4	160	2	3			25	24	30
4	3	360	2			2	25	24	30
3	2	799	2		1		25	24	30
2	1	761	2		8003		25	24	55
8000	11	0	2		10				11
11	10	282	2		9		25	24	55
10	9	222	2		8		25	24	55
9	8	701	2	2			25	24	55
8	2	500	2			1	25	24	55
8005	13	0	2			14			11
13	14	800	2		12		25	24	30
14	12	220	2	8			25	24	55
12	8	300	2		2		25	24	55
8002	16	0	2		15				11
16	15	700	2	14			25	24	30
15	14	200	2		12		25	24	30
32	35	84	2	36	38		25	24	30
35	38	128	4	55			25	24	55
38	55	310	2		54		25	24	55
35	36	161	4		37		25	24	55
52	36	84	2		37		25	24	30
52	55	179	2		54		25	24	30
36	37	422	2		66		25	24	55
39	41	151	4		42		25	24	35
39	40	139	4	41	45		25	24	55
53	40	99	2		41	45	25	24	30
40	41	60	2		42		25	24	30
53	51	221	2	45	50		25	24	30
51	50	82	2		49		25	24	30
50	49	82	2	48			25	24	30
54	51	287	2		50	45	25	24	55
51	45	413	2		43	44	25	24	55
40	45	241	4		43	44	25	24	35
41	42	381	4		43	43	25	24	35
42	43	60	2		44		25	24	30
43	44	60	2		46		25	24	30
45	43	140	2		44		25	24	30
45	44	152	2		46		25	24	30
49	48	102	2		46		25	24	30
47	48	84	2		46		25	24	35
44	46	260	2		57		25	24	55
48	46	197	2		57		25	24	35
8009	51	0	2	45	50				11
8013	53	0	2	51	40				11
37	66	60	2		39		25	24	55
66	39	60	4	41	40		25	24	55
8012	66	0	2	39					11



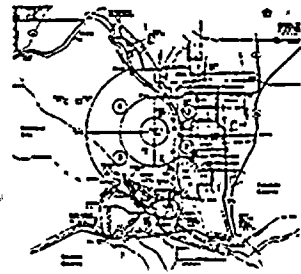
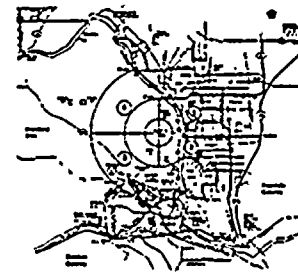


TABLE 6

SUMMARY OF RESULTS OF EVACUATION TIME ANALYSIS

DESCRIPTION	Total Within 2 Miles	Areas Within 5 Miles				Areas Within 10 Miles			
		1	2	3	Total	1	2	3	Total
Permanent Population	-	124	40	-	164	1050	1136	858	3044
Perm. Population Vehicles	-	41	13	-	54	347	380	286	1013
Transient Population	1133	1744	141	1560	3445	1571	7154	3931	12656
Trans: Population Vehicles	971	581	64	964	2580	5763	2636	2944	6102
General Population	1133	1868	181	1560	3609	2621	8290	4789	15700
Total Vehicles	971	622	77	964	2634	870	3016	3230	7115
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





RESOURCE 1

EXAMPLE COMPUTER RUN

The following is a copy of a computer run produced by the Oak Ridge Evacuation Modeling System (OREMS) software which was used to calculate the time estimates. This is provided for general review and informational purposes only.



ESIM SIMULATION MODEL
(ADAPTED FROM CORFLO OF TRAF)

DEVELOPED FOR:

FEDERAL EMERGENCY MANAGEMENT AGENCY

START OF CASE 1

MODIFIED CARD FILE LIST

OSEQ.#: →1→2→3→4→5→6→7→8

1: OREMS 2.0 Alpha Case Study: Trip Dist. + Traffic Assignment + Simulation 00
 2: 00
 3: Oscar FRANZESE 3 15 95ORNL 1 01
 4: 10 0 1600 02
 5: 150 150 150 03
 6: 60 04
 7: 5 1 05
 8: 8001 1 0 2 2 3 0 11
 9: 1 3 1000 2 1 4 40 35 40 1 0 11
 10: 3 1 1000 2 1 2 40 35 40 0 0 11
 11: 8003 3 0 2 1 4 0 11
 12: 3 4 1000 2 1 1 2 58004 30 25 40 0 0 11
 13: 4 3 1000 2 1 1 30 25 40 0 0 11
 14: 4 5 1000 2 8005 30 25 40 0 0 11
 15: 5 4 1000 2 1 1 8004 3 2 30 25 40 0 0 11
 16: 4 2 1000 2 8002 40 35 40 0 0 11
 17: 2 4 1000 2 1 1 58004 3 40 35 40 0 0 11
 18: 1 2 1000 2 8002 4 30 25 25 1 0 11
 19: 1 8001 3 0 0 0 35
 20: 3 50 18003 4 0 0 15 3 2 15 3 2 10 3 2 0 0 0 35
 21: 4 3 5 2 0 0 35
 22: 5 4 0 0 0 0 35
 23: 2 4 1 0 0 0 35
 24: 1 00 150 300 36
 25: 3 123 020 222 192 002 222 223 220 222 000 000 000 150 200 36
 26: 4 555 250 200 36
 27: 5 1 350 200 36
 28: 2 55 250 300 36
 29: 130 52
 30: 170
 31: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 175
 32: 2001 4 3 177
 33: 800430008005300080023000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 178
 34: 8001 14008004 8005 8002 179
 35: 8003 24008005 8004 8002 179
 36: 2001 1608004 8002 179
 37: 8001 150 350 195
 38: 1 150 300 195
 39: 3 150 200 195
 40: 8003 150 150 195
 41: 4 250 200 195
 42: 8004 250 150 195
 43: 5 350 200 195
 44: 8005 400 200 195
 45: 2 250 300 195
 46: 8002 250 350 195
 47: 0 8 1 210
 48: 130 52
 49: 170
 50: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 175

OSEQ.#: →1→2→3→4→5→6→7→8

MODIFIED CARD FILE LIST (CONT.)

```

0SEQ.#:--+1--+2--+3--+4--+5--+6--+7--+8
51:2001 4 3                               177
52:8001      10008004 8005 8002           179
53:8003      12008005 8004 8002           179
54:2001      808004 8002                   179
55: 0 8 1                210
56:130                52
57:                170
58: 0 0 0 0 0 0 0 0 0 0 0 0 0
59:2001 4 3                               177
60:8001      2008004 8005 8002           179
61:8003      10008005 8004 8002           179
62:2001      18004 8002                   179
63: 1 1                210
0SEQ.#:--+1--+2--+3--+4--+5--+6--+7--+8

```

1 EVACUATION SIMULATION MODEL

DEVELOPED FOR FEDERAL EMERGENCY
MANAGEMENT AGENCY

0 OREMS 2.0 Alpha Case Study: Trip Dist. + Traffic Assignment + Simulation

1 RUN CONTROL DATA

VALUE RUN PARAMETERS AND OPTIONS

0 0 RUN IDENTIFICATION NUMBER
0 3 RUN TYPE CODE = (1, 2, 3) TO RUN (SIMULATION, ASSIGNMENT, BOTH)
(-1,-2,-3) TO CHECK (SIMULATION, ASSIGNMENT, BOTH) ONLY
0 0 INPUT UNITS CODE = (0,1) IF INPUT IS IN (ENGLISH, METRIC) UNITS
0 OUTPUT UNITS CODE = (0,1,2,3) IF OUTPUT IS IN (SAME AS INPUT, ENGLISH, METRIC, BOTH)
UNITS
0 1600 CLOCK TIME AT START OF SIMULATION (HHMM)
900 DURATION (SEC) OF TIME PERIOD NO. 1
900 DURATION (SEC) OF TIME PERIOD NO. 2
900 DURATION (SEC) OF TIME PERIOD NO. 3
0 60 LENGTH OF A TIME INTERVAL, SECONDS
0 10 MAXIMUM INITIALIZATION TIME, NUMBER OF TIME INTERVALS
0 300 NUMBER OF TIME INTERVALS BETWEEN SUCCESSIVE STANDARD OUTPUTS
0 * VALUES ASSERTED BY THE MODEL FOR THE FOLLOWING REASONS -

TIME PERIOD 1 - ESIM DATA

1 ESIM LINKS

0 -LANES- -CHANNEL-

LINK CODE	F U FT/M	C U LLR	GRD PCT	R B23456	DESTINATION NODE		LOST Q DIS FREE		OPP. TIME		HDWY. SEC	SPEED MPH/KMPH	RTOR PED CODE
					LEFT	THRU	RIGHT	DIAG	NODE	SEC			

(8001, 1)	0/ 0	200	0	000000	2	3	0	0	0	2.5*	2.2*	0/ 0	0 0
(1, 3)	52800****	210	0	000000	4	0	0	0	0	4.0	3.5	40/64	1 0
(3, 1)	52800****	201	0	000000	0	0	2	0	0	4.0	3.5	40/64	0 0
(8003, 3)	0/ 0	200	0	000000	0	1	4	0	0	2.5*	2.2*	0/ 0	0 0
(3, 4)	52800****	211	0	000000	2	5	8004	0	0	3.0	2.5	40/64	0 0
(4, 3)	52800****	211	0	000000	0	0	1	0	0	3.0	2.5	40/64	0 0
(4, 5)	52800****	200	0	000000	0	8005	0	0	0	3.0	2.5	40/64	0 0
(5, 4)	52800****	211	0	000000	8004	3	2	0	0	3.0	2.5	40/64	0 0

(4, 2) 52800/**** 200 0 000000 0 8002 0 0 0 4.0 3.5 40/64 0 0
 (2, 4) 52800/**** 211 0 000000 5 8004 3 0 0 4.0 3.5 40/64 0 0
 (1, 2) 52800/**** 200 0 000000 8002 0 4 0 0 3.0 2.5 25/40 1 0

* INDICATES A DEFAULT VALUE, ASSIGNED INTERNALLY BY THE MODEL

LANE CHANNELIZATION CODES	RTOR CODES	PEDESTRIAN CODES
0 UNRESTRICTED	0 RTOR PERMITTED	0 NO PEDESTRIANS
1 LEFT TURNS ONLY	1 RTOR PROHIBITED	1 LIGHT
2 BUSES ONLY		2 MODERATE
3 CLOSED		3 HEAVY
4 RIGHT TURNS ONLY		
5 CAR - POOLS		
6 CAR - POOLS + BUSES		

ESIM TURNING MOVEMENT DATA

LINK	TURN MOVEMENT PERCENTAGES	TURN MOVEMENT POSSIBLE	BLOCKAGE	POCKET
LENGTH (FEET/METERS)	LEFT THROUGH RIGHT DIAGONAL	LEFT THROUGH RIGHT DIAGONAL	(PCT)	(SECS)
RIGHT				LEFT
(8001, 1)	0 0 0 0	YES YES NO NO	0 0	0/ 0 0/ 0
(1, 3)	0 0 0 0	YES NO NO NO	0 0	60/ 18 0/ 0
(3, 1)	0 0 0 0	NO NO YES NO	0 0	0/ 0 60/ 18
(8003, 3)	0 0 0 0	NO YES YES NO	0 0	0/ 0 0/ 0
(3, 4)	0 0 0 0	YES YES YES NO	0 0	60/ 18 60/ 18
(4, 3)	0 0 0 0	NO NO YES NO	0 0	60/ 18 60/ 18
(4, 5)	0 0 0 0	NO YES NO NO	0 0	0/ 0 0/ 0
(5, 4)	0 0 0 0	YES YES YES NO	0 0	60/ 18 60/ 18
(4, 2)	0 0 0 0	NO YES NO NO	0 0	0/ 0 0/ 0
(2, 4)	0 0 0 0	YES YES YES NO	0 0	60/ 18 60/ 18
(1, 2)	0 0 0 0	YES NO YES NO	0 0	0/ 0 0/ 0

FREEWAY SUBNETWORK PARAMETERS

RELAXATION TIME COEFFICIENT 75 SECONDS/MILE OR 46 SECONDS/KM

ANTICIPATION COEFFICIENT (EE-2) 50 MILES**2/HOUR OR 129 KM**2/HOUR

TIME SLICE DURATION 3 SECONDS

JAM DENSITY 180 (VEH/LANE-MILE) OR 112 (VEH/LANE-KM)

COEFFICIENTS FOR SPEED-DENSITY RELATIONSHIP

RELATIONSHIP 1

COEFFICIENT 1	107 (MILES/HOUR)	OR	172 (KM/HOUR)
COEFFICIENT 2	-231 (MILES/HOUR) (LANE-MILE/VEH)	OR	-598 (KM/HOUR) (LANE-KM/VEH)
COEFFICIENT 3	215 (MILES/HOUR) (LANE-MILE/VEH)**2	OR	896 (KM/HOUR) (LANE-KM/VEH)**2
COEFFICIENT 4	-74 (MILES/HOUR) (LANE-MILE/VEH)**3	OR	-496 (KM/HOUR) (LANE-KM/VEH)**3

RELATIONSHIP 2

COEFFICIENT 1	80 (HOURS/MILE)	OR	49 (HOURS/KM)
COEFFICIENT 2	474 (HOURS/MILE) (LANE-MILE/VEH)	OR	474 (HOURS/KM) (LANE-KM/VEH)

KM/VEH)**2 COEFFICIENT 3 -591 (HOURS/MILE) (LANE-MILE/VEH)**2 OR -951 (HOURS/KM) (LANE-
 KM/VEH)**3 COEFFICIENT 4 466 (HOURS/MILE) (LANE-MILE/VEH)**3 OR 1206 (HOURS/KM) (LANE-

RELATIONSHIP 3

COEFFICIENT 1 25. (VEH/LANE-MILE) OR 16 (VEH/LANE-KM)
 COEFFICIENT 2 50. (VEH/LANE-MILE) OR 31 (VEH/LANE-KM)
 COEFFICIENT 3 35. (MILES/HOUR) OR 56 (KM/HOUR)
 COEFFICIENT 4 40. (MILES/HOUR) OR 64 (KM/HOUR)
 COEFFICIENT 5 2. (DIMENSIONLESS) OR 2 (DIMENSIONLESS)

NO TYPE 34 CARD WAS INPUT, ALL VALUES ARE
 DEFAULTS, ASSIGNED INTERNALLY BY THE MODEL
 SPECIFIED FIXED-TIME SIGNAL CONTROL, AND SIGN CONTROL, CODES
 NODE 1 IS UNDER SIGN CONTROL

1
 0
 0 INTERVAL DURATION +-----APPROACHES-----+
 NUMBER (SEC) (PCT) (8001, 1) (3, 1)
 1 0 100 0 0

0 NODE 2 IS UNDER SIGN CONTROL
 0 INTERVAL DURATION +-----APPROACHES-----+
 NUMBER (SEC) (PCT) (4, 2) (1, 2)
 1 0 100 5 5

0 NODE 3
 OFFSET 50 SEC CYCLE LENGTH 55 SEC
 0 INTERVAL DURATION +-----APPROACHES-----+
 NUMBER (SEC) (PCT) (1, 3) (8003, 3) (4, 3)
 1 15 27 1 2 3
 2 3 5 0 2 0
 3 2 4 2 2 2
 4 15 27 1 9 2
 5 3 5 0 0 2
 6 2 4 2 2 2
 7 10 18 2 2 3
 8 3 5 2 2 0
 9 2 4 2 2 2

0 NODE 4 IS UNDER SIGN CONTROL
 0 INTERVAL DURATION +-----APPROACHES-----+
 NUMBER (SEC) (PCT) (3, 4) (5, 4) (2, 4)
 1 0 100 5 5 5

0 NODE 5 IS UNDER SIGN CONTROL
 0 INTERVAL DURATION +-----APPROACHES-----+
 NUMBER (SEC) (PCT) (4, 5)
 1 0 100 1

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
- 1 TRAFFIC CONTROL TABLE - SIGNS AND FIXED TIME SIGNALS

CONTROL CODES GO = PROTECTED
 NOGO = NOT PERMITTED
 PERM = PERMITTED NOT.PROTECTED
 PROT = PROTECTED
 STOP = STOP SIGN
 YLD = YIELD SIGN

NODE 1 SIGN CONTROL

PHASE DURATION _____ APPROACHES _____
 (8001, 1) (3, 1)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT
 THRU RITE DIAG
 1 0 YLD YLD YLD

NODE 2 SIGN CONTROL

PHASE DURATION _____ APPROACHES _____
 (4, 2) (1, 2)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT
 THRU RITE DIAG
 1 0 STOP STOP STOP

NODE 3 FIXED TIME CONTROL OFFSET = 50 SECONDS CYCLE LENGTH = 55 SECONDS

PHASE DURATION _____ APPROACHES _____
 (1, 3) (8003, 3) (4, 3)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT
 THRU RITE DIAG
 1 20 PROT NOGO NOGO GO
 2 20 PROT GO GO NOGO
 3 15 NOGO NOGO NOGO GO

NODE 4 SIGN CONTROL

PHASE DURATION _____ APPROACHES _____
 (3, 4) (5, 4) (2, 4)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT
 THRU RITE DIAG
 1 0 STOP STOP STOP STOP STOP STOP STOP STOP STOP
 1

NODE 5 SIGN CONTROL

PHASE DURATION _____ APPROACHES _____
 (4, 5)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT
 THRU RITE DIAG
 1 0 GO

0***** WARNING - MESSAGE NUMBER 622, ROUTINE CHKPH2, PARAMETER(S) - P1 = 0, P2 = 4, P3 =

3
 1
 AVERAGE VEHICLE OCCUPANCIES
 (HUNDREDTHS-OF-A-PERSON / VEHICLE)

AUTOS CAR-POOLS TRUCKS BUSES
 130 350 120 250
 TRAFFIC ASSIGNMENT PARAMETERS

EPSILON (OBJ.FUNC.THRESHOLD VALUE) = 1.0 % +
 LINE SEARCH ACCURACY OF OBJ.FUNCION = 1.0 % +
 MAX.NUMBER OF ASSIGNMENT ITERATIONS = 15
 MAX.NUMBER OF CAPACITY CALIBRATIONS = 1 +
 TYPE OF OBJECTIVE FUNCTION
 (0:USER OPTIMAL, 1:SYSTEM OPTIMAL)= 0 +
 IMPEDANCE FUNCTION PARAMETERS:
 ALPHA = 60/100 +
 BETA = 40/ 10 +
 TYPE (0:FHWA, 1:MODIFIED DAVIDSON)= 0 +

(+) :INDICATES DEFAULT VALUE

REQUESTED INTERMEDIATE OUTPUT CODE = 4
 0: NO INTERMEDIATE OUTPUT
 1: PATH ASSIGNMENTS
 2: TREE CONSTRUCTS
 3: DETAILED O-D TREES
 4: ALL OUTPUTS 1,2 AND 3

TRIP TABLE

FOR EACH ORIGIN NODE, TABLE PROVIDES LISTING OF CANDIDATE DESTINATION NODES

ORIGIN NODE (8001) 8004 8005 8002
 ORIGIN NODE (8003) 8005 8004 8002
 ORIGIN NODE (2001) 8004 8002
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8001
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8004
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8005
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8002
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8003
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 2001

INTERNAL CENTROIDS

CENTROID LINK

2001 (4, 3)

TRAFFIC ASSIGNMENT :SOURCE VOLUMES

ORIGIN NODE VOLUME (VPH)

8001 9000
 8003 9000
 2001 6000

TRAFFIC ASSIGNMENT :SINK VOLUMES

DESTINATION NODE VOLUME (VPH)

8002 9000
 8004 9000
 8005 6000

DESTINATION TRIP TABLE

FOR EACH DESTINATION NODE, TABLE PROVIDES LISTING OF DATA PAIRS: ORIGIN NODE/VOLUME

DESTINATION (8002) 8001/3000 8003/3000 2001/3000

DESTINATION (8004) 8001/3000 8003/3000 2001/3000

DESTINATION (8005) 8001/3000 8003/3000

TIME PERIOD 2 - ESIM DATA

1

ESIM TURNING MOVEMENT DATA

LINK (SECS)	TURN MOVEMENT PERCENTAGES				TURN MOVEMENT POSSIBLE				BLOCKAGE (PCT)	
	LEFT	THROUGH	RIGHT	DIAGONAL	LEFT	THROUGH	RIGHT	DIAGONAL		
(8001, 1)	0	0	0	0	YES	YES	NO	NO	0	0
(1, 3)	0	0	0	0	YES	NO	NO	NO	0	0
(3, 1)	0	0	0	0	NO	NO	YES	NO	0	0
(8003, 3)	0	0	0	0	NO	YES	YES	NO	0	0
(3, 4)	0	0	0	0	YES	YES	YES	NO	0	0
(4, 3)	0	0	0	0	NO	NO	YES	NO	0	0
(4, 5)	0	0	0	0	NO	YES	NO	NO	0	0
(5, 4)	0	0	0	0	YES	YES	YES	NO	0	0
(4, 2)	0	0	0	0	NO	YES	NO	NO	0	0
(2, 4)	0	0	0	0	YES	YES	YES	NO	0	0
(1, 2)	0	0	0	0	YES	NO	YES	NO	0	0

0***** WARNING - MESSAGE NUMBER 622, ROUTINE CHKPH2, PARAMETER(S) - P1 = 0, P2 = 4, P3 =

3

1

AVERAGE VEHICLE OCCUPANCIES
(HUNDREDTHS-OF-A-PERSON / VEHICLE)

AUTOS CAR-POOLS TRUCKS BUSES
130 350 120 250

1

TRAFFIC ASSIGNMENT PARAMETERS

EPSILON (OBJ.FUNC.THRESHOLD VALUE) = 1.0% +
 LINE SEARCH ACCURACY OF OBJ.FUNCTION = 1.0% +
 MAX.NUMBER OF ASSIGNMENT ITERATIONS = 15
 MAX.NUMBER OF CAPACITY CALIBRATIONS = 1 +
 TYPE OF OBJECTIVE FUNCTION
 (0:USER OPTIMAL, 1:SYSTEM OPTIMAL)= 0 +
 IMPEDANCE FUNCTION PARAMETERS:
 ALPHA = 60/100 +
 BETA = 40/10 +
 TYPE (0:FHWA, 1:MODIFIED DAVIDSON)= 0 +

(+):INDICATES DEFAULT VALUE

REQUESTED INTERMEDIATE OUTPUT CODE = 4
 0: NO INTERMEDIATE OUTPUT
 1: PATH ASSIGNMENTS
 2: TREE CONSTRUCTS
 3: DETAILED O-D TREES
 4: ALL OUTPUTS 1,2 AND 3

1

TRIP TABLE

FOR EACH ORIGIN NODE, TABLE PROVIDES LISTING OF CANDIDATE DESTINATION NODES

ORIGIN NODE (8001) 8004 8005 8002

ORIGIN NODE (8003) 8005 8004 8002

ORIGIN NODE (2001) 8004 8002

0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8001
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8004
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8005
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8002
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8003
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 2001

1 INTERNAL CENTROIDS

CENTROID LINK

2001 (4, 3)

1 TRAFFIC ASSIGNMENT :SOURCE VOLUMES

ORIGIN NODE VOLUME (VPH)

8001 9000
 8003 9000
 2001 6000

1 TRAFFIC ASSIGNMENT :SINK VOLUMES

DESTINATION NODE VOLUME (VPH)

8002 9000
 8004 9000
 8005 6000

1 DESTINATION TRIP TABLE

FOR EACH DESTINATION NODE, TABLE PROVIDES LISTING OF DATA PAIRS: ORIGIN NODE/VOLUME

DESTINATION (8002) 8001/3000 8003/3000 2001/3000

DESTINATION (8004) 8001/3000 8003/3000 2001/3000

DESTINATION (8005) 8001/3000 8003/3000

1

TIME PERIOD 3 - ESIM DATA

1

ESIM TURNING MOVEMENT DATA

LINK (SECS)	TURN MOVEMENT PERCENTAGES				TURN MOVEMENT POSSIBLE				BLOCKAGE (PCT)	
	LEFT	THROUGH	RIGHT	DIAGONAL	LEFT	THROUGH	RIGHT	DIAGONAL		
(8001, 1)	0	0	0	0	YES	YES	NO	NO	0	0
(1, 3)	0	0	0	0	YES	NO	NO	NO	0	0
(3, 1)	0	0	0	0	NO	NO	YES	NO	0	0
(8003, 3)	0	0	0	0	NO	YES	YES	NO	0	0
(3, 4)	0	0	0	0	YES	YES	YES	NO	0	0
(4, 3)	0	0	0	0	NO	NO	YES	NO	0	0
(4, 5)	0	0	0	0	NO	YES	NO	NO	0	0
(5, 4)	0	0	0	0	YES	YES	YES	NO	0	0
(4, 2)	0	0	0	0	NO	YES	NO	NO	0	0
(2, 4)	0	0	0	0	YES	YES	YES	NO	0	0
(1, 2)	0	0	0	0	YES	NO	YES	NO	0	0

0***** WARNING - MESSAGE NUMBER 622, ROUTINE CHKPH2, PARAMETER(S) - P1 = 0, P2 = 4, P3 =

3
1

AVERAGE VEHICLE OCCUPANCIES
 (HUNDREDTHS-OF-A-PERSON / VEHICLE)

1
 AUTOS CAR-POOLS TRUCKS BUSES
 130 350 120 250
 TRAFFIC ASSIGNMENT PARAMETERS

EPSILON (OBJ.FUNC.THRESHOLD VALUE) = 1.0 % +
 LINE SEARCH ACCURACY OF OBJ.FUNCION = 1.0 % +
 MAX.NUMBER OF ASSIGNMENT ITERATIONS = 15
 MAX.NUMBER OF CAPACITY CALIBRATIONS = 1 +
 TYPE OF OBJECTIVE FUNCTION
 (0:USER OPTIMAL, 1:SYSTEM OPTIMAL)= 0 +
 IMPEDANCE FUNCTION PARAMETERS:
 ALPHA = 60/100 +
 BETA = 40/ 10 +
 TYPE (0:FHWA, 1:MODIFIED DAVIDSON)= 0 +

(+):INDICATES DEFAULT VALUE

REQUESTED INTERMEDIATE OUTPUT CODE = 4
 0: NO INTERMEDIATE OUTPUT
 1: PATH ASSIGNMENTS
 2: TREE CONSTRUCTS
 3: DETAILED O-D TREES
 4: ALL OUTPUTS 1,2 AND 3

1 TRIP TABLE

FOR EACH ORIGIN NODE, TABLE PROVIDES LISTING OF CANDIDATE DESTINATION NODES

ORIGIN NODE (8001) 8004 8005 8002

ORIGIN NODE (8003) 8005 8004 8002

ORIGIN NODE (2001) 8004 8002

0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8001
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8004
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8005
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8002
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8003
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 2001

1 INTERNAL CENTROIDS

CENTROID LINK

2001 (4, 3)

1 TRAFFIC ASSIGNMENT :SOURCE VOLUMES

ORIGIN NODE VOLUME (VPH)

8001 9000
 8003 9000
 2001 6000

1 TRAFFIC ASSIGNMENT :SINK VOLUMES

DESTINATION NODE VOLUME (VPH)

8002 9000
 8004 9000
 8005 6000

1 DESTINATION TRIP TABLE

FOR EACH DESTINATION NODE, TABLE PROVIDES LISTING OF DATA PAIRS: ORIGIN NODE/VOLUME

DESTINATION (8002) 8001/3000 8003/3000 2001/3000

DESTINATION (8004) 8001/3000 8003/3000 2001/3000

DESTINATION (8005) 8001/3000 8003/3000
1 EVACUATION SIMULATION MODEL

MANAGEMENT AGENCY DEVELOPED FOR FEDERAL EMERGENCY

0 OREMS 2.0 Alpha Case Study: Trip Dist. + Traffic Assignment + Simulation

1 RUN CONTROL DATA

VALUE RUN PARAMETERS AND OPTIONS

0 0 RUN IDENTIFICATION NUMBER
0 3 RUN TYPE CODE = (1, 2, 3) TO RUN (SIMULATION, ASSIGNMENT, BOTH)
(-1,-2,-3) TO CHECK (SIMULATION, ASSIGNMENT, BOTH) ONLY
0 0 INPUT UNITS CODE = (0,1) IF INPUT IS IN (ENGLISH, METRIC) UNITS
0 0 OUTPUT UNITS CODE = (0,1,2,3) IF OUTPUT IS IN (SAME AS INPUT, ENGLISH, METRIC, BOTH)
UNITS
0 1600 CLOCK TIME AT START OF SIMULATION (HHMM)
900* DURATION (SEC) OF TIME PERIOD NO. 1
900* DURATION (SEC) OF TIME PERIOD NO. 2
900* DURATION (SEC) OF TIME PERIOD NO. 3
0 60* LENGTH OF A TIME INTERVAL, SECONDS
0 10* MAXIMUM INITIALIZATION TIME, NUMBER OF TIME INTERVALS
0 300 NUMBER OF TIME INTERVALS BETWEEN SUCCESSIVE STANDARD OUTPUTS
0 * VALUES ASSERTED BY THE MODEL FOR THE FOLLOWING REASONS -

TIME PERIOD 1 - ESIM DATA

1 ESIM LINKS

0 -LANES- -CHANNEL-

LINK CODE	LENGTH FT/M	LPKT LLR	GRD PCT	R B23456	DESTINATION NODE LEFT THRU	LOST Q RTHT	DIS DIAG	FREE NODE	OPP. SEC	TIME SEC	HDWY. SEC	SPEED MPH/KMPH	RTOR CODE	PED

(8001, 1)	0/ 0	200	0	000000	2 3 0 0	0	2.5*	2.2*	0/ 0	0	0	0	0	0
(1, 3)	52800/****	210	0	000000	4 0 0 0	0	4.0	3.5	40/ 64	1	0	0	0	0
(3, 1)	52800/****	201	0	000000	0 0 2 0	0	4.0	3.5	40/ 64	0	0	0	0	0
(8003, 3)	0/ 0	200	0	000000	0 1 4 0	0	2.5*	2.2*	0/ 0	0	0	0	0	0
(3, 4)	52800/****	211	0	000000	2 5 8004	0	0	3.0	2.5	40/ 64	0	0	0	0
(4, 3)	52800/****	211	0	000000	0 0 1 0	0	3.0	2.5	40/ 64	0	0	0	0	0
(4, 5)	52800/****	200	0	000000	0 8005	0 0	0	3.0	2.5	40/ 64	0	0	0	0
(5, 4)	52800/****	211	0	000000	8004 3 2	0	0	3.0	2.5	40/ 64	0	0	0	0
(4, 2)	52800/****	200	0	000000	0 8002	0 0	0	4.0	3.5	40/ 64	0	0	0	0
(2, 4)	52800/****	211	0	000000	5 8004	3 0	0	4.0	3.5	40/ 64	0	0	0	0
(1, 2)	52800/****	200	0	000000	8002 0 4	0	0	3.0	2.5	25/ 40	1	0	0	0

* INDICATES A DEFAULT VALUE, ASSIGNED INTERNALLY BY THE MODEL

LANE CHANNELIZATION CODES	RTOR CODES	PEDESTRIAN CODES
0 UNRESTRICTED	0 RTOR PERMITTED	0 NO PEDESTRIANS
1 LEFT TURNS ONLY	1 RTOR PROHIBITED	1 LIGHT
2 BUSES ONLY		2 MODERATE
3 CLOSED		3 HEAVY
4 RIGHT TURNS ONLY		
5 CAR - POOLS		
6 CAR - POOLS + BUSES		

1

ESIM TURNING MOVEMENT DATA

LINK RIGHT	TURN MOVEMENT PERCENTAGES				TURN MOVEMENT POSSIBLE				BLOCKAGE (PCT)	POCKET (SECS)		
	LEFT	THROUGH	RIGHT	DIAGONAL	LEFT	THROUGH	RIGHT	DIAGONAL				
(8001, 1)	0	0	0	0	YES	YES	NO	NO	0	0	0/ 0	0/ 0
(1, 3)	0	0	0	0	YES	NO	NO	NO	0	0	60/ 18	0/ 0
(3, 1)	0	0	0	0	NO	NO	YES	NO	0	0	0/ 0	60/ 18
(8003, 3)	0	0	0	0	NO	YES	YES	NO	0	0	0/ 0	0/ 0
(3, 4)	0	0	0	0	YES	YES	YES	NO	0	0	60/ 18	60/ 18
(4, 3)	0	0	0	0	NO	NO	YES	NO	0	0	60/ 18	60/ 18
(4, 5)	0	0	0	0	NO	YES	NO	NO	0	0	0/ 0	0/ 0
(5, 4)	0	0	0	0	YES	YES	YES	NO	0	0	60/ 18	60/ 18
(4, 2)	0	0	0	0	NO	YES	NO	NO	0	0	0/ 0	0/ 0
(2, 4)	0	0	0	0	YES	YES	YES	NO	0	0	60/ 18	60/ 18
(1, 2)	0	0	0	0	YES	NO	YES	NO	0	0	0/ 0	0/ 0

1

FREEWAY SUBNETWORK PARAMETERS

RELAXATION TIME COEFFICIENT 75 SECONDS/MILE OR 46 SECONDS/KM

ANTICIPATION COEFFICIENT (EE-2) 50 MILES**2/HOUR OR 129 KM**2/HOUR

TIME SLICE DURATION 3 SECONDS

JAM DENSITY 180 (VEH/LANE-MILE) OR 112 (VEH/LANE-KM)

COEFFICIENTS FOR SPEED-DENSITY RELATIONSHIP

RELATIONSHIP 1

	COEFFICIENT 1	107 (MILES/HOUR)	OR	172 (KM/HOUR)
	COEFFICIENT 2	-231 (MILES/HOUR) (LANE-MILE/VEH)	OR	-598 (KM/HOUR) (LANE-KM/VEH)
	COEFFICIENT 3	215 (MILES/HOUR) (LANE-MILE/VEH)**2	OR	896 (KM/HOUR) (LANE-
KM/VEH)**2				
	COEFFICIENT 4	-74 (MILES/HOUR) (LANE-MILE/VEH)**3	OR	-496 (KM/HOUR) (LANE-
KM/VEH)**3				

RELATIONSHIP 2

	COEFFICIENT 1	80 (HOURS/MILE)	OR	49 (HOURS/KM)
	COEFFICIENT 2	474 (HOURS/MILE) (LANE-MILE/VEH)	OR	474 (HOURS/KM) (LANE-
KM/VEH)				
	COEFFICIENT 3	-591 (HOURS/MILE) (LANE-MILE/VEH)**2	OR	-951 (HOURS/KM) (LANE-
KM/VEH)**2				
	COEFFICIENT 4	466 (HOURS/MILE) (LANE-MILE/VEH)**3	OR	1206 (HOURS/KM) (LANE-
KM/VEH)**3				

RELATIONSHIP 3

	COEFFICIENT 1	25. (VEH/LANE-MILE)	OR	16 (VEH/LANE-KM)
	COEFFICIENT 2	50. (VEH/LANE-MILE)	OR	31 (VEH/LANE-KM)

COEFFICIENT 3 35. (MILES/HOUR) OR 56 (KM/HOUR)
 COEFFICIENT 4 40. (MILES/HOUR) OR 64 (KM/HOUR)
 COEFFICIENT 5 2. (DIMENSIONLESS) OR 2 (DIMENSIONLESS)

1 SPECIFIED FIXED-TIME SIGNAL CONTROL, AND SIGN CONTROL, CODES
 0 NODE 1 IS UNDER SIGN CONTROL
 0 INTERVAL DURATION +-----APPROACHES-----+
 0 NUMBER (SEC) (PCT) (8001, 1) (3, 1)
 1 0 100 0 0
 0 NODE 2 IS UNDER SIGN CONTROL
 0 INTERVAL DURATION +-----APPROACHES-----+
 0 NUMBER (SEC) (PCT) (4, 2) (1, 2)
 1 0 100 5 5
 0 NODE 3
 0 OFFSET 50 SEC CYCLE LENGTH 55 SEC
 0 INTERVAL DURATION +-----APPROACHES-----+
 0 NUMBER (SEC) (PCT) (1, 3) (8003, 3) (4, 3)
 1 15 27 1 2 3
 2 3 5 0 2 0
 3 2 4 2 2 2
 4 15 27 1 9 2
 5 3 5 0 0 2
 6 2 4 2 2 2
 7 10 18 2 2 3
 8 3 5 2 2 0
 9 2 4 2 2 2
 0 NODE 4 IS UNDER SIGN CONTROL
 0 INTERVAL DURATION +-----APPROACHES-----+
 0 NUMBER (SEC) (PCT) (3, 4) (5, 4) (2, 4)
 1 0 100 5 5 5
 0 NODE 5 IS UNDER SIGN CONTROL
 0 INTERVAL DURATION +-----APPROACHES-----+
 0 NUMBER (SEC) (PCT) (4, 5)
 1 0 100 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

1 TRAFFIC CONTROL TABLE - SIGNS AND FIXED TIME SIGNALS

CONTROL CODES GO = PROTECTED
 NOGO = NOT PERMITTED
 PERM = PERMITTED NOT PROTECTED
 PROT = PROTECTED
 STOP = STOP SIGN
 YLD = YIELD SIGN

NODE 1 SIGN CONTROL

PHASE DURATION _____ APPROACHES _____
 (8001, 1) (3, 1)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT
 THRU RITE DIAG
 1 0 YLD YLD YLD

NODE 2 SIGN CONTROL

PHASE DURATION _____ APPROACHES _____
 (4, 2) (1, 2)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT
 THRU RITE DIAG
 1 0 STOP STOP STOP

NODE 3 FIXED TIME CONTROL OFFSET = 50 SECONDS CYCLE LENGTH = 55 SECONDS

PHASE DURATION _____ APPROACHES _____
 (1, 3) (8003, 3) (4, 3)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT
 THRU RITE DIAG
 1 20 PROT NOGO NOGO GO
 2 20 PROT GO GO NOGO
 3 15 NOGO NOGO NOGO GO

NODE 4 SIGN CONTROL

PHASE DURATION _____ APPROACHES _____
 (3, 4) (5, 4) (2, 4)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT
 THRU RITE DIAG
 1 0 STOP STOP STOP STOP STOP STOP STOP STOP STOP
 1

NODE 5 SIGN CONTROL

PHASE DURATION _____ APPROACHES _____
 (4, 5)
 LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT THRU RITE DIAG LEFT
 THRU RITE DIAG
 1 0 GO

0***** WARNING - MESSAGE NUMBER 622, ROUTINE CHKPH2, PARAMETER(S) - P1 = 0, P2 = 4, P3 = 3
 1

AVERAGE VEHICLE OCCUPANCIES
 (HUNDREDTHS-OF-A-PERSON / VEHICLE)

AUTOS CAR-POOLS TRUCKS BUSES
 130 350 120 250
 1 TRAFFIC ASSIGNMENT PARAMETERS

EPSILON (OBJ.FUNC.THRESHOLD VALUE) = 1.0 % +

LINE SEARCH ACCURACY OF OBJ.FUNCION = 1.0 % +

MAX.NUMBER OF ASSIGNMENT ITERATIONS = 15

MAX.NUMBER OF CAPACITY CALIBRATIONS = 1 +

TYPE OF OBJECTIVE FUNCTION
 (0:USER OPTIMAL, 1:SYSTEM OPTIMAL)= 0 +

IMPEDANCE FUNCTION PARAMETERS:

ALPHA = 60/100 +
BETA = 40/ 10 +

TYPE (0:FHWA, 1:MODIFIED DAVIDSON)= 0 +

(+):INDICATES DEFAULT VALUE

REQUESTED INTERMEDIATE OUTPUT CODE = 4

- 0: NO INTERMEDIATE OUTPUT
- 1: PATH ASSIGNMENTS
- 2: TREE CONSTRUCTS
- 3: DETAILED O-D TREES
- 4: ALL OUTPUTS 1,2 AND 3

1

TRIP TABLE

FOR EACH ORIGIN NODE, TABLE PROVIDES LISTING OF CANDIDATE DESTINATION NODES

ORIGIN NODE (8001) 8004 8005 8002

ORIGIN NODE (8003) 8005 8004 8002

ORIGIN NODE (2001) 8004 8002

- 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8001
- 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8004
- 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8005
- 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8002
- 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8003
- 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 2001

1

INTERNAL CENTROIDS

CENTROID LINK

2001 (4, 3)

1

TRAFFIC ASSIGNMENT :SOURCE VOLUMES

ORIGIN NODE VOLUME (VPH)

8001	9000
8003	9000
2001	6000

1

TRAFFIC ASSIGNMENT :SINK VOLUMES

DESTINATION NODE VOLUME (VPH)

8002	9000
8004	9000
8005	6000

1

DESTINATION TRIP TABLE

FOR EACH DESTINATION NODE, TABLE PROVIDES LISTING OF DATA PAIRS: ORIGIN NODE/VOLUME

DESTINATION (8002) 8001/3000 8003/3000 2001/3000

DESTINATION (8004) 8001/3000 8003/3000 2001/3000

DESTINATION (8005) 8001/3000 8003/3000

1

MINIMUM PATH CONSTRUCTS FOR ITERATION: 1

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)

OORIGIN:8003 (3, 4)

OORIGIN:2001 (3, 1) (1, 2) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 1 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.0 1085 0 0.0 T INT
 (1, 2) 8.0 813.3 389 1400 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 927.6 417 2400 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 0 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.1 1598 160 40.0 R INT
 (1, 3) (3, 4) 52800 895 897.0 897.0 1337 0 40.1 L INT
 (3, 4) (4,8004) 52800 895 903.0139603.8 570 2400 0.3 R EXIT V>C
 (4, 5) 905.0 905.0 1000 0 39.8 T INT
 (4, 2) 906.0 906.0 460 0 39.7 L INT
 (1, 2) (2, 4) 52800 1427 1435.0 1435.0 661 0 25.1 R INT
 (2,8002) 1438.0 64752.0 533 1560 0.6 L EXIT V>C
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 905.0 1000 0 39.8 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 895.0 2880 0 40.2 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 905.0 1000 0 39.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 42800.00 VEHICLE-HOURS= 122142.91 AVERAGE
 SPEED(MPH)= 0.35

MINIMUM PATH CONSTRUCTS FOR ITERATION: 2

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 3) (3, 4) (4, 5)

OORIGIN:8003 (3, 4) (4, 5)

OORIGIN:2001 (3, 1) (1, 2) (2, 4) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 2 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.7 1085 702 0.0 T INT
 (1, 2) 8.0 57.7 389 698 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 927.6 417 2400 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 0 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.1 1598 160 40.0 R INT
 (1, 3) (3, 4) 52800 895 897.0 937.9 1337 702 38.4 L INT
 (3, 4) (4,8004) 52800 895 903.011414.5 570 1196 3.2 R EXIT V>C
 (4, 5) 905.0 8069.7 1000 1906 4.5 T INT V>C
 (4, 2) 906.0 906.0 460 0 39.7 L INT
 (1, 2) (2, 4) 52800 1427 1435.0 1435.2 661 80 25.1 R INT
 (2,8002) 1438.0 5346.2 533 778 6.7 L EXIT V>C
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 905.0 1000 80 39.8 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 998.0 2880 1906 36.1 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 905.0 1000 0 39.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 69683.17 VEHICLE-HOURS= 10694.38 AVERAGE
 SPEED(MPH)= 6.52

1

MINIMUM PATH CONSTRUCTS FOR ITERATION: 3

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE.

OORIGIN:8001 (1, 2)(2, 4)

OORIGIN:8003 (3, 4)(4, 2)

OORIGIN:2001 (3, 1)(1, 2)(2, 4)(4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 3 CAPACITY ITERATION: 1

LINK	RECEIVER	FEET	TIME(SEC)	TIME(SEC)	VPH	VPH	(MPH)	TYPE	TYPE
ON-LINK TOTAL									
(8001, 1)	(1, 3)	0	0	7.0	7.2	1085	507	0.0	T INT
	(1, 2)	8.0	141.6	389	893	0.0	L	INT V>C	
(8003, 3)	(3, 4)	0	0	6.0	927.6	417	2400	0.0	R INT V>C
	(3, 1)	9.0	9.0	894	0	0.0	T	INT	
(3, 1)	(1, 2)	52800	895	901.0	901.1	1598	160	40.0	R INT
(1, 3)	(3, 4)	52800	895	897.0	908.1	1337	507	39.6	L INT
(3, 4)	(4,8004)	52800	895	903.0	3749.2	570	863	9.6	R EXIT V>C
	(4, 5)	905.0	2845.0	1000	1375	12.7	T	INT V>C	
	(4, 2)	906.0	3334.1	460	669	10.8	L	INT V>C	
(1, 2)	(2, 4)	52800	1427	1435.0	1700.5	661	493	21.2	R INT
	(2,8002)	1438.0	2496.2	533	561	14.4	L	EXIT V>C	
(2, 4)	(4, 3)	52800	895	903.0	903.0	570	0	39.9	R INT
	(4,8004)	905.0	937.0	1000	493	38.4	T	EXIT	
	(4, 5)	906.0	906.0	460	0	39.7	L	INT	
(4, 5)	(5,8005)	52800	895	895.0	922.9	2880	1375	39.0	T EXIT
(5, 4)	(4, 2)	52800	895	903.0	903.0	570	0	39.9	R INT
	(4, 3)	905.0	905.0	1000	0	39.8	T	INT	
	(4,8004)	906.0	906.0	460	0	39.7	L	EXIT	
(4, 3)	(3, 1)	52800	895	895.0	895.0	3110	160	40.2	R INT
	(3,2001)	0.0	0.0	1800	0	40.2	SINK		
(4, 2)	(2,8002)	52800	895	905.0	1013.6	1000	669	35.5	T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 73226.59 VEHICLE-HOURS= 4757.27 AVERAGE SPEED(MPH)= 15.39

1

MINIMUM PATH CONSTRUCTS FOR ITERATION: 4

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)

OORIGIN:8003 (3, 1)(1, 2)

OORIGIN:2001 (3, 1)(1, 2)(4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 4 CAPACITY ITERATION: 1

LINK	RECEIVER	FEET	TIME(SEC)	TIME(SEC)	VPH	VPH	(MPH)	TYPE	TYPE
ON-LINK TOTAL									
(8001, 1)	(1, 3)	0	0	7.0	7.2	1085	496	0.0	T INT
	(1, 2)	8.0	148.2	389	904	0.0	L	INT V>C	
(8003, 3)	(3, 4)	0	0	6.0	927.6	417	2349	0.0	R INT V>C
	(3, 1)	9.0	9.0	894	51	0.0	T	INT	
(3, 1)	(1, 2)	52800	895	901.0	901.2	1598	211	39.9	R INT
(1, 3)	(3, 4)	52800	895	897.0	907.2	1337	496	39.7	L INT
(3, 4)	(4,8004)	52800	895	903.0	3514.5	570	845	10.2	R EXIT V>C
	(4, 5)	905.0	2685.0	1000	1346	13.4	T	INT V>C	
	(4, 2)	906.0	3133.9	460	655	11.5	L	INT V>C	
(1, 2)	(2, 4)	52800	1427	1435.0	1678.6	661	482	21.4	R INT
	(2,8002)	1438.0	3157.3	533	633	11.4	L	EXIT V>C	
(2, 4)	(4, 3)	52800	895	903.0	903.0	570	0	39.9	R INT
	(4,8004)	905.0	934.3	1000	482	38.5	T	EXIT	
	(4, 5)	906.0	906.0	460	0	39.7	L	INT	
(4, 5)	(5,8005)	52800	895	895.0	920.6	2880	1346	39.1	T EXIT
(5, 4)	(4, 2)	52800	895	903.0	903.0	570	0	39.9	R INT
	(4, 3)	905.0	905.0	1000	0	39.8	T	INT	
	(4,8004)	906.0	906.0	460	0	39.7	L	EXIT	

(4, 3) (3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 1004.6 1000 655. 35.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 73089.80 VEHICLE-HOURS= 4691.01 AVERAGE
 SPEED(MPH)= 15.58

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 5

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2) (2, 4)
 OORIGIN:8003 (3, 1) (1, 2) (2, 4)
 OORIGIN:2001 (3, 1) (1, 2) (2, 4) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 5 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.2 1085 480 0.0 T INT
 (1, 2) 8.0 158.4 389 920 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 927.6 417 2273 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 127 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.6 1598 287 39.9 R INT
 (1, 3) (3, 4) 52800 895 897.0 905.9 1337 480 39.7 L INT
 (3, 4) (4,8004) 52800 895 903.0 3191.0 570 817 11.3 R EXIT V>C
 (4, 5) 905.0 2464.5 1000 1302 14.6 T INT V>C
 (4, 2) 906.0 2857.9 460 633 12.6 L INT V>C
 (1, 2) (2, 4) 52800 1427 1435.0 2001.0 661 595 18.0 R INT
 (2,8002) 1438.0 2944.3 533 613 12.2 L EXIT V>C
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 973.1 1000 595 37.0 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 917.4 2880 1302 39.2 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 992.3 1000 633 36.3 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 74173.14 VEHICLE-HOURS= 4477.05 AVERAGE
 SPEED(MPH)= 16.57

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 6

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)
 OORIGIN:8003 (3, 1) (1, 2)
 OORIGIN:2001 (3, 1) (1, 2) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 6 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.2 1085 478 0.0 T INT
 (1, 2) 8.0 159.4 389 922 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 927.6 417 2265 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 135 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.6 1598 295 39.9 R INT
 (1, 3) (3, 4) 52800 895 897.0 905.8 1337 478 39.7 L INT
 (3, 4) (4,8004) 52800 895 903.0 3162.7 570 815 11.4 R EXIT V>C
 (4, 5) 905.0 2445.2 1000 1298 14.7 T INT V>C
 (4, 2) 906.0 2833.8 460 631 12.7 L INT V>C

```

( 1, 2) ( 2, 4) 52800 1427 1435.0 1994.0 661 593 18.1 R INT
( 2,8002) 1438.0 3049.2 533 623 11.8 L EXIT V>C
( 2, 4) ( 4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
( 4,8004) 905.0 972.3 1000 593 37.0 T EXIT
( 4, 5) 906.0 906.0 460 0 39.7 L INT
( 4, 5) ( 5,8005) 52800 895 895.0 917.1 2880 1298 39.3 T EXIT
( 5, 4) ( 4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
( 4, 3) 905.0 905.0 1000 0 39.8 T INT
( 4,8004) 906.0 906.0 460 0 39.7 L EXIT
( 4, 3) ( 3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
( 3,2001) 0.0 0.0 1800 0 40.2 SINK
( 4, 2) ( 2,8002) 52800 895 905.0 991.2 1000 631 36.3 T EXIT

```

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 74150.24 VEHICLE-HOURS= 4474.76 AVERAGE SPEED(MPH)= 16.57

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 7

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2) (2, 4)
 OORIGIN:8003 (3, 1) (1, 2) (2, 4)
 OORIGIN:2001 (3, 1) (1, 2) (2, 4) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 7 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE
 ON-LINK TOTAL

```

(8001, 1) ( 1, 3) 0 0 7.0 7.2 1085 477 0.0 T INT
( 1, 2) 8.0 160.4 389 923 0.0 L INT V>C
(8003, 3) ( 3, 4) 0 0 6.0 927.6 417 2258 0.0 R INT V>C
( 3, 1) 9.0 9.0 894 142 0.0 T INT
( 3, 1) ( 1, 2) 52800 895 901.0 901.7 1598 302 39.9 R INT
( 1, 3) ( 3, 4) 52800 895 897.0 905.7 1337 477 39.7 L INT
( 3, 4) ( 4,8004) 52800 895 903.0 3134.8 570 812 11.5 R EXIT V>C
( 4, 5) 905.0 2426.2 1000 1294 14.8 T INT V>C
( 4, 2) 906.0 2809.9 460 629 12.8 L INT V>C
( 1, 2) ( 2, 4) 52800 1427 1435.0 2034.5 661 604 17.7 R INT
( 2,8002) 1438.0 3029.3 533 621 11.9 L EXIT V>C
( 2, 4) ( 4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
( 4,8004) 905.0 977.2 1000 604 36.8 T EXIT
( 4, 5) 906.0 906.0 460 0 39.7 L INT
( 4, 5) ( 5,8005) 52800 895 895.0 916.9 2880 1294 39.3 T EXIT
( 5, 4) ( 4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
( 4, 3) 905.0 905.0 1000 0 39.8 T INT
( 4,8004) 906.0 906.0 460 0 39.7 L EXIT
( 4, 3) ( 3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
( 3,2001) 0.0 0.0 1800 0 40.2 SINK
( 4, 2) ( 2,8002) 52800 895 905.0 990.2 1000 629 36.4 T EXIT

```

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 74250.41 VEHICLE-HOURS= 4460.13 AVERAGE SPEED(MPH)= 16.65

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 8

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2) (2, 4)
 OORIGIN:8003 (3, 1) (1, 2) (2, 4)
 OORIGIN:2001 (3, 1) (1, 2) (2, 4) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 8 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE
 ON-LINK TOTAL

```

(8001, 1) ( 1, 3) 0 0 7.0 7.2 1085 475 0.0 T INT
( 1, 2) 8.0 161.4 389 925 0.0 L INT V>C
(8003, 3) ( 3, 4) 0 0 6.0 927.6 417 2251 0.0 R INT V>C
( 3, 1) 9.0 9.0 894 149 0.0 T INT
( 3, 1) ( 1, 2) 52800 895 901.0 901.8 1598 309 39.9 R INT
( 1, 3) ( 3, 4) 52800 895 897.0 905.6 1337 475 39.8 L INT
( 3, 4) ( 4,8004) 52800 895 903.0 3107.2 570 810 11.6 R EXIT V>C
( 4, 5) 905.0 2407.4 1000 1290 15.0 T INT V>C
( 4, 2) 906.0 2786.4 460 627 12.9 L INT V>C
( 1, 2) ( 2, 4) 52800 1427 1435.0 2077.0 661 614 17.3 R INT
( 2,8002) 1438.0 3009.6 533 619 12.0 L EXIT V>C
( 2, 4) ( 4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
( 4,8004) 905.0 982.3 1000 614 36.6 T EXIT
( 4, 5) 906.0 906.0 460 0 39.7 L INT
( 4, 5) ( 5,8005) 52800 895 895.0 916.6 2880 1290 39.3 T EXIT
( 5, 4) ( 4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
( 4, 3) 905.0 905.0 1000 0 39.8 T INT
( 4,8004) 906.0 906.0 460 0 39.7 L EXIT
( 4, 3) ( 3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
( 3,2001) 0.0 0.0 1800 0 40.2 SINK
( 4, 2) ( 2,8002) 52800 895 905.0 989.1 1000 627 36.4 T EXIT

```

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 74350.26 VEHICLE-HOURS= 4446.54 AVERAGE SPEED(MPH)= 16.72

1

MINIMUM PATH CONSTRUCTS FOR ITERATION: 9

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)
 OORIGIN:8003 (3, 1) (1, 2)
 OORIGIN:2001 (3, 1) (1, 2) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 9 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE
 ON-LINK TOTAL

```

(8001, 1) ( 1, 3) 0 0 7.0 7.2 1085 474 0.0 T INT
( 1, 2) 8.0 162.3 389 926 0.0 L INT V>C
(8003, 3) ( 3, 4) 0 0 6.0 927.6 417 2244 0.0 R INT V>C
( 3, 1) 9.0 9.0 894 156 0.0 T INT
( 3, 1) ( 1, 2) 52800 895 901.0 901.8 1598 316 39.9 R INT
( 1, 3) ( 3, 4) 52800 895 897.0 905.5 1337 474 39.8 L INT
( 3, 4) ( 4,8004) 52800 895 903.0 3079.9 570 807 11.7 R EXIT V>C
( 4, 5) 905.0 2388.8 1000 1286 15.1 T INT V>C
( 4, 2) 906.0 2763.1 460 625 13.0 L INT V>C
( 1, 2) ( 2, 4) 52800 1427 1435.0 2069.0 661 612 17.4 R INT
( 2,8002) 1438.0 3117.6 533 630 11.5 L EXIT V>C
( 2, 4) ( 4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
( 4,8004) 905.0 981.3 1000 612 36.7 T EXIT
( 4, 5) 906.0 906.0 460 0 39.7 L INT
( 4, 5) ( 5,8005) 52800 895 895.0 916.3 2880 1286 39.3 T EXIT
( 5, 4) ( 4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
( 4, 3) 905.0 905.0 1000 0 39.8 T INT
( 4,8004) 906.0 906.0 460 0 39.7 L EXIT
( 4, 3) ( 3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
( 3,2001) 0.0 0.0 1800 0 40.2 SINK
( 4, 2) ( 2,8002) 52800 895 905.0 988.1 1000 625 36.4 T EXIT

```

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 74326.81 VEHICLE-HOURS= 4445.90 AVERAGE SPEED(MPH)= 16.72

1

MINIMUM PATH CONSTRUCTS FOR ITERATION: 10

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)(2, 4)
 OORIGIN:8003 (3, 1)(1, 2)(2, 4)
 OORIGIN:2001 (3, 1)(1, 2)(2, 4)(4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 10 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL
 (8001, 1) (1, 3) 0 0 7.0 7.2 1085 472 0.0 T INT
 (1, 2) 8.0 163.3 389 928 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 927.6 417 2237 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 163 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.9 1598 323 39.9 R INT
 (1, 3) (3, 4) 52800 895 897.0 905.4 1337 472 39.8 L INT
 (3, 4) (4,8004) 52800 895 903.0 3053.0 570 804 11.8 R EXIT V>C
 (4, 5) 905.0 2370.4 1000 1282 15.2 T INT V>C
 (4, 2) 906.0 2740.2 460 623 13.1 L INT V>C
 (1, 2) (2, 4) 52800 1427 1435.0 2113.2 661 623 17.0 R INT
 (2,8002) 1438.0 3096.8 533 628 11.6 L EXIT V>C
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 986.7 1000 623 36.5 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 916.1 2880 1282 39.3 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 987.0 1000 623 36.5 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 74426.43 VEHICLE-HOURS= 4433.24 AVERAGE
 SPEED(MPH)= 16.79

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 11

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)
 OORIGIN:8003 (3, 4)
 OORIGIN:2001 (3, 1)(1, 2)(4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 11 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL
 (8001, 1) (1, 3) 0 0 7.0 7.1 1085 461 0.0 T INT
 (1, 2) 8.0 170.8 389 939 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 927.6 417 2241 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 159 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.9 1598 319 39.9 R INT
 (1, 3) (3, 4) 52800 895 897.0 904.6 1337 461 39.8 L INT
 (3, 4) (4,8004) 52800 895 903.0 3477.0 570 842 10.4 R EXIT V>C
 (4, 5) 905.0 2239.1 1000 1252 16.1 T INT V>C
 (4, 2) 906.0 2575.7 460 609 14.0 L INT V>C
 (1, 2) (2, 4) 52800 1427 1435.0 2052.4 661 608 17.5 R INT
 (2,8002) 1438.0 3337.7 533 649 10.8 L EXIT V>C
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 979.3 1000 608 36.8 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 914.2 2880 1252 39.4 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 979.7 1000 609 36.7 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 73692.54 VEHICLE-HOURS= 4483.89 AVERAGE SPEED(MPH)= 16.43

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 12

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2) (2, 4)

OORIGIN:8003 (3, 1) (1, 2) (2, 4)

OORIGIN:2001 (3, 1) (1, 2) (2, 4) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 12 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.1 1085 460 0.0 T INT
(1, 2) 8.0 171.8 389 940 0.0 L INT V>C
(8003, 3) (3, 4) 0 0 6.0 927.6 417 2234 0.0 R INT V>C
(3, 1) 9.0 9.0 894 166 0.0 T INT
(3, 1) (1, 2) 52800 895 901.0 901.9 1598 326 39.9 R INT
(1, 3) (3, 4) 52800 895 897.0 904.5 1337 460 39.8 L INT
(3, 4) (4,8004) 52800 895 903.0 3445.1 570 839 10.4 R EXIT V>C
(4, 5) 905.0 2222.6 1000 1248 16.2 T INT V>C
(4, 2) 906.0 2555.1 460 607 14.1 L INT V>C
(1, 2) (2, 4) 52800 1427 1435.0 2095.8 661 619 17.2 R INT
(2,8002) 1438.0 3314.2 533 647 10.9 L EXIT V>C
(2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
(4,8004) 905.0 984.6 1000 619 36.6 T EXIT
(4, 5) 906.0 906.0 460 0 39.7 L INT
(4, 5) (5,8005) 52800 895 895.0 913.9 2880 1248 39.4 T EXIT
(5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
(4, 3) 905.0 905.0 1000 0 39.8 T INT
(4,8004) 906.0 906.0 460 0 39.7 L EXIT
(4, 3) (3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
(3,2001) 0.0 0.0 1800 0 40.2 SINK
(4, 2) (2,8002) 52800 895 905.0 978.8 1000 607 36.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 73794.11 VEHICLE-HOURS= 4470.18 AVERAGE SPEED(MPH)= 16.51

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 13

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2) (2, 4)

OORIGIN:8003 (3, 1) (1, 2) (2, 4)

OORIGIN:2001 (3, 1) (1, 2) (2, 4) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 13 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.1 1085 458 0.0 T INT
(1, 2) 8.0 172.8 389 942 0.0 L INT V>C
(8003, 3) (3, 4) 0 0 6.0 927.6 417 2227 0.0 R INT V>C
(3, 1) 9.0 9.0 894 173 0.0 T INT
(3, 1) (1, 2) 52800 895 901.0 902.0 1598 333 39.9 R INT
(1, 3) (3, 4) 52800 895 897.0 904.4 1337 458 39.8 L INT
(3, 4) (4,8004) 52800 895 903.0 3413.7 570 836 10.5 R EXIT V>C
(4, 5) 905.0 2206.3 1000 1244 16.3 T INT V>C
(4, 2) 906.0 2534.7 460 605 14.2 L INT V>C
(1, 2) (2, 4) 52800 1427 1435.0 2141.2 661 629 16.8 R INT
(2,8002) 1438.0 3291.0 533 645 10.9 L EXIT V>C
(2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT

```

( 4,8004) 905.0 990.0 1000 629 36.4 T EXIT
( 4, 5) 906.0 906.0 460 0 39.7 L INT
( 4, 5) ( 5,8005) 52800 895 895.0 913.7 2880 1244 39.4 T EXIT
( 5, 4) ( 4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
( 4, 3) 905.0 905.0 1000 0 39.8 T INT
( 4,8004) 906.0 906.0 460 0 39.7 L EXIT
( 4, 3) ( 3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
( 3,2001) 0.0 0.0 1800 0 40.2 SINK
( 4, 2) ( 2,8002) 52800 895 905.0 977.8 1000 605 36.8 T EXIT

```

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 73895.39 VEHICLE-HOURS= 4457.57 AVERAGE SPEED(MPH)= 16.58

1

MINIMUM PATH CONSTRUCTS FOR ITERATION: 14

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2) (2, 4)
OORIGIN:8003 (3, 1) (1, 2) (2, 4)
OORIGIN:2001 (3, 1) (1, 2) (2, 4) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 14 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL
(8001, 1) (1, 3) 0 0 7.0 7.1 1085 457 0.0 T INT
(1, 2) 8.0 173.8 389 943 0.0 L INT V>C
(8003, 3) (3, 4) 0 0 6.0 927.6 417 2220 0.0 R INT V>C
(3, 1) 9.0 9.0 894 180 0.0 T INT
(3, 1) (1, 2) 52800 895 901.0 902.1 1598 340 39.9 R INT
(1, 3) (3, 4) 52800 895 897.0 904.3 1337 457 39.8 L INT
(3, 4) (4,8004) 52800 895 903.0 3382.6 570 834 10.6 R EXIT V>C
(4, 5) 905.0 2190.2 1000 1240 16.4 T INT V>C
(4, 2) 906.0 2514.6 460 603 14.3 L INT V>C
(1, 2) (2, 4) 52800 1427 1435.0 2188.9 661 639 16.4 R INT
(2,8002) 1438.0 3268.1 533 643 11.0 L EXIT V>C
(2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
(4,8004) 905.0 995.8 1000 639 36.2 T EXIT
(4, 5) 906.0 906.0 460 0 39.7 L INT
(4, 5) (5,8005) 52800 895 895.0 913.5 2880 1240 39.4 T EXIT
(5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
(4, 3) 905.0 905.0 1000 0 39.8 T INT
(4,8004) 906.0 906.0 460 0 39.7 L EXIT
(4, 3) (3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
(3,2001) 0.0 0.0 1800 0 40.2 SINK
(4, 2) (2,8002) 52800 895 905.0 976.9 1000 603 36.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 73996.34 VEHICLE-HOURS= 4446.06 AVERAGE SPEED(MPH)= 16.64

1

MINIMUM PATH CONSTRUCTS FOR ITERATION: 15

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2) (2, 4)
OORIGIN:8003 (3, 4) (4, 5)
OORIGIN:2001 (3, 1) (1, 2) (2, 4) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 15 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL
(8001, 1) (1, 3) 0 0 7.0 7.1 1085 441 0.0 T INT
(1, 2) 8.0 185.1 389 959 0.0 L INT V>C
(8003, 3) (3, 4) 0 0 6.0 927.6 417 2227 0.0 R INT V>C


```

( 3, 1) 9.0 9.0 894 173 0.0 T INT
( 3, 1) ( 1, 2) 52800 895 901.0 902.0 1598 333 39.9 R INT
( 1, 3) ( 3, 4) 52800 895 897.0 903.4 1337 441 -39.9 L INT
( 3, 4) ( 4,8004) 52800 895 903.0 3058.3 570 805 11.8 R EXIT V>C
( 4, 5) 905.0 2363.9 1000 1280 15.2 T INT V>C
( 4, 2) 906.0 2304.1 460 583 15.6 L INT V>C
( 1, 2) ( 2, 4) 52800 1427 1435.0 2349.9 661 671 15.3 R INT V>C
( 2,8002) 1438.0 3028.7 533 621 11.9 L EXIT V>C
( 2, 4) ( 4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
( 4,8004) 905.0 1015.1 1000 671 35.5 T EXIT
( 4, 5) 906.0 906.0 460 0 39.7 L INT
( 4, 5) ( 5,8005) 52800 895 895.0 916.0 2880 1280 39.3 T EXIT
( 5, 4) ( 4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
( 4, 3) 905.0 905.0 1000 0 39.8 T INT
( 4,8004) 906.0 906.0 460 0 39.7 L EXIT
( 4, 3) ( 3, 1) 52800 895 895.0 895.0 3110 160 40.2 R INT
( 3,2001) 0.0 0.0 1800 0 40.2 SINK
( 4, 2) ( 2,8002) 52800 895 905.0 967.5 1000 583 37.2 T EXIT

```

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 74285.78 VEHICLE-HOURS= 4387.89 AVERAGE SPEED(MPH)= 16.93

TRAFFIC DISTRIBUTION ASSIGNMENT EVALUATION

ITERATION OBJECTIVE FUNCTION BOUND GAP(%) LAMBDA CONTRIBUTION(%)
VALUE (VEH-SEC)

1	0.9213080800E+08	100.000000	1.000000	31.321474
2	0.1350734500E+08	100.000000	0.501552	31.516478
3	0.9575877000E+07	100.000000	0.278641	24.272505
4	0.9544929000E+07	47.593208	0.021286	1.894586
5	0.9508969000E+07	40.226360	0.032523	2.992013
6	0.9509339000E+07	18.568750	0.003106	0.286625
7	0.9509713000E+07	17.501295	0.003106	0.287518
8	0.9510807000E+07	15.047194	0.003106	0.288413
9	0.9512299000E+07	14.654764	0.003106	0.289312
10	0.9514013000E+07	12.865901	0.003106	0.290213
11	0.9500724000E+07	10.996099	0.023205	2.219784
12	0.9501816000E+07	11.006328	0.003106	0.298034
13	0.9503658000E+07	11.023577	0.003106	0.298962
14	0.9506268000E+07	9.784460	0.003106	0.299894
15	0.9489179000E+07	8.585958	0.034442	3.444183

1

DETAILED LIST OF O-D MINIMUM PATHS

THE FOLLOWING LISTING PROVIDES THE ASSIGNED VOLUME AND THE SEQUENCE OF INTERNAL NODE NUMBERS FOR EACH O-D MINIMUM PATH.

TOTAL DEMAND IS PRINTED FOLLOWING ALL PATHS FOR EACH O-D PAIR.

NOTE THAT CUMULATIVE TRAVEL TIME (SEC) FOR THE O-D PATH IS PRINTED FOLLOWING THE NODE LIST.

O-D VOLUME PATH ROUTE

8001-8004 454.0 1, 2, 4
(SEC): 185.1,2535.0,3550.2
454 VPH

8001-8005 441.0 1, 3, 4, 5
(SEC): 7.1, 910.5,3274.4,4190.4
441 VPH

8001-8002 504.0 1, 2
(SEC): 185.1,3213.8

504 VPH

8003-8005 839.0 3, 4, 5
 (SEC): 927.6,3291.5,4207.5
 859 VPH

8003-8004 804.9 3, 4
 (SEC): 927.6,3985.9

8003-8004 114.1 3, 1, 2, 4
 (SEC): 9.0,911.0,3260.9,4276.1
 919 VPH

8003-8002 581.8 3, 4, 2
 (SEC): 927.6,3231.7,4199.3

8003-8002 59.2 3, 1, 2
 (SEC): 9.0,911.0,3939.7
 641 VPH

2001-8004 102.0 4, 3, 1, 2, 4
 (SEC): 0.0,895.0,1797.0,4146.9,5162.1
 102 VPH

2001-8002 57.0 4, 3, 1, 2
 (SEC): 0.0,895.0,1797.0,4825.7
 57 VPH

1

TRAFFIC ASSIGNMENT RESULTS

ESIM SUBNETWORK

SPEED LINK ESTIMATE	INTERNAL		RIGHT TURN		THRU		LEFT TURN		DIAGONAL		SOURCE	SINK	DISCHARGE
	VPH	VPH	VPH	VPH	VPH	VPH	VPH	VPH	VPH	VPH	MPH	VOLUME	VOLUME
(8001, 1)	0	0	0	441	32	959	68	0	0	0	0	1400	
(1, 3)	0	0	0	0	0	441	100	0	0	0	0	441	39.8
(3, 1)	0	333	100	0	0	0	0	0	0	0	0	333	39.9
(8003, 3)	0	2227	93	173	7	0	0	0	0	0	0	2400	
(3, 4)	0	805	30	1280	48	583	22	0	0	0	0	2668	14.0
(4, 3)	2001	160	100	0	0	0	0	0	0	160	0	160	40.2
(4, 5)	0	0	0	1280	100	0	0	0	0	0	0	1280	39.3
(5, 4)	0	0	0	0	0	0	0	0	0	0	0	0	0.0
(4, 2)	0	0	0	583	100	0	0	0	0	0	0	583	37.2
(2, 4)	0	0	0	671	100	0	0	0	0	0	0	671	35.4
(1, 2)	0	671	52	0	0	621	48	0	0	0	0	1292	13.4

1

TRAFFIC ASSIGNMENT

ESIM ENTRY LINK VOLUMES

LINK	FLOW RATE (VEH/HOUR)	TRUCKS (PERCENT)
(8001, 1)	1400	0
(8003, 3)	2400	0

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TIME PERIOD 2 - ESIM DATA

.....

1

ESIM TURNING MOVEMENT DATA

TURN MOVEMENT PERCENTAGES	TURN MOVEMENT POSSIBLE	BLOCKAGE
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LINK (SECS)	LEFT THROUGH	RIGHT DIAGONAL	LEFT THROUGH	RIGHT DIAGONAL	(PCT)
(8001, 1)	0	0	0	0	NO NO NO NO 0 0
(1, 3)	0	0	0	0	NO NO NO NO 0 0
(3, 1)	0	0	0	0	NO NO NO NO 0 0
(8003, 3)	0	0	0	0	NO NO NO NO 0 0
(3, 4)	0	0	0	0	NO NO NO NO 0 0
(4, 3)	0	0	0	0	NO NO NO NO 0 0
(4, 5)	0	0	0	0	NO NO NO NO 0 0
(5, 4)	0	0	0	0	YES NO YES NO 0 0
(4, 2)	0	0	0	0	NO NO NO NO 0 0
(2, 4)	0	0	0	0	YES NO YES NO 0 0
(1, 2)	0	0	0	0	NO NO NO NO 0 0

0***** WARNING - MESSAGE NUMBER 622, ROUTINE CHKPH2, PARAMETER(S) - P1 = 0, P2 = 4, P3 =

3
1

AVERAGE VEHICLE OCCUPANCIES
(HUNDREDTHS-OF-A-PERSON / VEHICLE)

AUTOS CAR-POOLS TRUCKS BUSES
130 350 120 250

1

TRAFFIC ASSIGNMENT PARAMETERS

EPSILON (OBJ.FUNC.THRESHOLD VALUE) = 1.0 % +

LINE SEARCH ACCURACY OF OBJ.FUNCION = 1.0 % +

MAX.NUMBER OF ASSIGNMENT ITERATIONS = 15

MAX.NUMBER OF CAPACITY CALIBRATIONS = 1 +

TYPE OF OBJECTIVE FUNCTION
(0:USER OPTIMAL, 1:SYSTEM OPTIMAL)= 0 +

IMPEDANCE FUNCTION PARAMETERS:

ALPHA = 60/100 +
BETA = 40/10 +

TYPE (0:FHWA, 1:MODIFIED DAVIDSON)= 0 +

(+):INDICATES DEFAULT VALUE

REQUESTED INTERMEDIATE OUTPUT CODE = 4

0: NO INTERMEDIATE OUTPUT
1: PATH ASSIGNMENTS
2: TREE CONSTRUCTS
3: DETAILED O-D TREES
4: ALL OUTPUTS 1,2 AND 3

1

TRIP TABLE

FOR EACH ORIGIN NODE, TABLE PROVIDES LISTING OF CANDIDATE DESTINATION NODES

ORIGIN NODE (8001) 8004 8005 8002

ORIGIN NODE (8003) 8005 8004 8002

ORIGIN NODE (2001) 8004 8002

0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8001
0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8004
0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8005
0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8002
0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8003
0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 2001

1

INTERNAL CENTROIDS

CENTROID LINK

1 2001 (4, 3)
 TRAFFIC ASSIGNMENT :SOURCE VOLUMES

ORIGIN NODE VOLUME (VPH)

8001 9000
 8003 9000
 2001 6000

1 TRAFFIC ASSIGNMENT :SINK VOLUMES

DESTINATION NODE VOLUME (VPH)

8002 9000
 8004 9000
 8005 6000

1 DESTINATION TRIP TABLE

FOR EACH DESTINATION NODE, TABLE PROVIDES LISTING OF DATA PAIRS: ORIGIN NODE/VOLUME

DESTINATION (8002) 8001/3000 8003/3000 2001/3000

DESTINATION (8004) 8001/3000 8003/3000 2001/3000

DESTINATION (8005) 8001/3000 8003/3000

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 1

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)

OORIGIN:8003 (3, 4)

OORIGIN:2001 (3, 1) (1, 2) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 1 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE
 ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.0 1085 0 0.0 T INT
 (1, 2) 8.0 217.6 389 1000 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 252.9 417 1200 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 0 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.0 1598 80 40.0 R INT
 (1, 3) (3, 4) 52800 895 897.0 897.0 1337 0 40.1 L INT
 (3, 4) (4,8004) 52800 895 903.0 11546.0 570 1200 3.1 R EXIT V>C
 (4, 5) 905.0 905.0 1000 0 39.8 T INT
 (4, 2) 906.0 906.0 460 0 39.7 L INT
 (1, 2) (2, 4) 52800 1427 1435.0 1435.0 661 0 25.1 R INT
 (2,8002) 1438.0 15982.4 533 1080 2.3 L EXIT V>C
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 905.0 1000 0 39.8 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 895.0 2880 0 40.2 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 80 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 905.0 1000 0 39.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 24400.00 VEHICLE-HOURS= 8828.05 AVERAGE
 SPEED(MPH)= 2.76

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 2

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2) (2, 4)

OORIGIN:8003 (3, 4)(4, 5)
 OORIGIN:2001 (3, 1)(1, 2)(2, 4)(4, 3)
 1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 2 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1)	(1, 3)	0	0	7.0	7.0	1085	0	0.0	T	INT
	(1, 2)			8.0	217.6	389	1000	0.0	L	INT V>C
(8003, 3)	(3, 4)	0	0	6.0	252.9	417	1200	0.0	R	INT V>C
	(3, 1)			9.0	9.0	894	0	0.0	T	INT
(3, 1)	(1, 2)	52800	895	901.0	901.0	1598	80	40.0	R	INT
(1, 3)	(3, 4)	52800	895	897.0	897.0	1337	0	40.1	L	INT
(3, 4)	(4,8004)	52800	895	903.0	1814.8	570	649	19.8	R	EXIT V>C
	(4, 5)			905.0	955.0	1000	551	37.7	T	INT
	(4, 2)			906.0	906.0	460	0	39.7	L	INT
(1, 2)	(2, 4)	52800	1427	1435.0	1707.3	661	496	21.1	R	INT
	(2,8002)			1438.0	2684.1	533	584	13.4	L	EXIT V>C
(2, 4)	(4, 3)	52800	895	903.0	903.0	570	0	39.9	R	INT
	(4,8004)			905.0	937.8	1000	496	38.4	T	EXIT
	(4, 5)			906.0	906.0	460	0	39.7	L	INT
(4, 5)	(5,8005)	52800	895	895.0	895.7	2880	551	40.2	T	EXIT
(5, 4)	(4, 2)	52800	895	903.0	903.0	570	0	39.9	R	INT
	(4, 3)			905.0	905.0	1000	0	39.8	T	INT
	(4,8004)			906.0	906.0	460	0	39.7	L	EXIT
(4, 3)	(3, 1)	52800	895	895.0	895.0	3110	80	40.2	R	INT
	(3,2001)			0.0	0.0	1800	0	40.2	S	SINK
(4, 2)	(2,8002)	52800	895	905.0	905.0	1000	0	39.8	T	EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 34864.75 VEHICLE-HOURS= 1594.94 AVERAGE
 SPEED(MPH)= 21.86

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 3

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 3)(3, 4)(4, 2)
 OORIGIN:8003 (3, 4)(4, 2)
 OORIGIN:2001 (3, 1)(1, 2)(2, 4)(4, 3)
 1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 3 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1)	(1, 3)	0	0	7.0	7.0	1085	31	0.0	T	INT
	(1, 2)			8.0	192.6	389	969	0.0	L	INT V>C
(8003, 3)	(3, 4)	0	0	6.0	252.9	417	1200	0.0	R	INT V>C
	(3, 1)			9.0	9.0	894	0	0.0	T	INT
(3, 1)	(1, 2)	52800	895	901.0	901.0	1598	80	40.0	R	INT
(1, 3)	(3, 4)	52800	895	897.0	897.0	1337	31	40.1	L	INT
(3, 4)	(4,8004)	52800	895	903.0	1705.8	570	629	21.1	R	EXIT V>C
	(4, 5)			905.0	949.0	1000	534	37.9	T	INT
	(4, 2)			906.0	906.3	460	69	39.7	L	INT
(1, 2)	(2, 4)	52800	1427	1435.0	1679.8	661	483	21.4	R	INT
	(2,8002)			1438.0	2535.1	533	566	14.2	L	EXIT V>C
(2, 4)	(4, 3)	52800	895	903.0	903.0	570	0	39.9	R	INT
	(4,8004)			905.0	934.5	1000	483	38.5	T	EXIT
	(4, 5)			906.0	906.0	460	0	39.7	L	INT
(4, 5)	(5,8005)	52800	895	895.0	895.6	2880	534	40.2	T	EXIT
(5, 4)	(4, 2)	52800	895	903.0	903.0	570	0	39.9	R	INT
	(4, 3)			905.0	905.0	1000	0	39.8	T	INT
	(4,8004)			906.0	906.0	460	0	39.7	L	EXIT
(4, 3)	(3, 1)	52800	895	895.0	895.0	3110	80	40.2	R	INT
	(3,2001)			0.0	0.0	1800	0	40.2	S	SINK
(4, 2)	(2,8002)	52800	895	905.0	905.0	1000	69	39.8	T	EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 35564.65 VEHICLE-HOURS= 1539.00 AVERAGE
 SPEED(MPH)= 23.11

MINIMUM PATH CONSTRUCTS FOR ITERATION: 4

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 3)(3, 4)

OORIGIN:8003 (3, 4)

OORIGIN:2001 (3, 1)(1, 2)(4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 4 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH)TYPE TYPE

ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.0 1085 44 0.0 T INT
 (1, 2) 8.0 183.0 389 956 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 252.9 417 1200 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 0 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.0 1598 80 40.0 R INT
 (1, 3) (3, 4) 52800 895 897.0 897.0 1337 44 40.1 L INT
 (3, 4) (4,8004) 52800 895 903.0 1816.7 570 650 19.8 R EXIT V>C
 (4, 5) 905.0 946.7 1000 526 38.0 T INT
 (4, 2) 906.0 906.3 460 68 39.7 L INT
 (1, 2) (2, 4) 52800 1427 1435.0 1667.2 661 476 21.6 R INT
 (2,8002) 1438.0 2486.3 533 560 14.5 L EXIT V>C
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 933.0 1000 476 38.6 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 895.6 2880 526 40.2 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 80 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 905.0 1000 68 39.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 35549.33 VEHICLE-HOURS= 1545.84 AVERAGE
 SPEED(MPH)= 23.00

MINIMUM PATH CONSTRUCTS FOR ITERATION: 5

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)

OORIGIN:8003 (3, 4)(4, 2)

OORIGIN:2001 (3, 1)(1, 2)(4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION : 5 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH)TYPE TYPE

ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.0 1085 43 0.0 T INT
 (1, 2) 8.0 183.6 389 957 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 252.9 417 1200 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 0 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.0 1598 80 40.0 R INT
 (1, 3) (3, 4) 52800 895 897.0 897.0 1337 43 40.1 L INT
 (3, 4) (4,8004) 52800 895 903.0 1758.7 570 639 20.5 R EXIT V>C
 (4, 5) 905.0 944.1 1000 518 38.1 T INT
 (4, 2) 906.0 906.7 460 86 39.7 L INT
 (1, 2) (2, 4) 52800 1427 1435.0 1652.4 661 469 21.8 R INT
 (2,8002) 1438.0 2551.2 533 568 14.1 L EXIT V>C
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 931.2 1000 469 38.7 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT

(4, 5) (5,8005) 52800 895 895.0 895.6 2880 518 40.2 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 80 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 905.0 1000 86 39.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 35563.16 VEHICLE-HOURS= 1543.05 AVERAGE
 SPEED(MPH)= 23.05

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 6

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 3) (3, 4)

OORIGIN:8003 (3, 4)

OORIGIN:2001 (3, 1) (1, 2) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 6 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.0 1085 51 0.0 T INT
 (1, 2) 8.0 177.9 389 949 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 252.9 417 1200 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 0 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.0 1598 80 40.0 R INT
 (1, 3) (3, 4) 52800 895 897.0 897.0 1337 51 40.1 L INT
 (3, 4) (4,8004) 52800 895 903.0 1828.7 570 652 19.7 R EXIT V>C
 (4, 5) 905.0 942.8 1000 514 38.2 T INT
 (4, 2) 906.0 906.7 460 86 39.7 L INT
 (1, 2) (2, 4) 52800 1427 1435.0 1645.4 661 465 21.9 R INT
 (2,8002) 1438.0 2520.4 533 564 14.3 L EXIT V>C
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 930.3 1000 465 38.7 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 895.5 2880 514 40.2 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 80 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 905.0 1000 86 39.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 35553.71 VEHICLE-HOURS= 1547.93 AVERAGE
 SPEED(MPH)= 22.97

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 7

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)

OORIGIN:8003 (3, 4) (4, 2)

OORIGIN:2001 (3, 1) (1, 2) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 7 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.0 1085 51 0.0 T INT
 (1, 2) 8.0 178.3 389 949 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 252.9 417 1200 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 0 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.0 1598 80 40.0 R INT

(1, 3) (3, 4) 52800 895 897.0 897.0 1337 51 40.1 L INT
 (3, 4) (4,8004) 52800 895 903.0 1792.0 570 645 20.1 R EXIT V>C
 (4, 5) 905.0 941.3 1000 509 38.2 T INT
 (4, 2) 906.0 907.1 460 97 39.7 L INT
 (1, 2) (2, 4) 52800 1427 1435.0 1637.1 661 460 22.0 R INT
 (2,8002) 1438.0 2560.8 533 569 14.1 L EXIT V>C
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 929.3 1000 460 38.7 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 895.5 2880 509 40.2 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 80 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 905.0 1000 97 39.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 35562.21 VEHICLE-HOURS= 1546.30 AVERAGE SPEED(MPH)= 23.00

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 8

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 3) (3, 4)

OORIGIN:8003 (3, 4)

OORIGIN:2001 (3, 1) (1, 2) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 8 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE
 ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.0 1085 54 0.0 T INT
 (1, 2) 8.0 176.2 389 946 0.0 L INT V>C
 (8003, 3) (3, 4) 0 0 6.0 252.9 417 1200 0.0 R. INT V>C
 (3, 1) 9.0 9.0 894 0 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.0 1598 80 40.0 R INT
 (1, 3) (3, 4) 52800 895 897.0 897.0 1337 54 40.1 L INT
 (3, 4) (4,8004) 52800 895 903.0 1819.0 570 650 19.8 R EXIT V>C
 (4, 5) 905.0 940.9 1000 507 38.3 T INT
 (4, 2) 906.0 907.1 460 97 39.7 L INT
 (1, 2) (2, 4) 52800 1427 1435.0 1634.6 661 459 22.0 R INT
 (2,8002) 1438.0 2548.8 533 568 14.1 L EXIT V>C
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 929.0 1000 459 38.8 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 895.5 2880 507 40.2 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 80 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 905.0 1000 97 39.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 35558.60 VEHICLE-HOURS= 1548.24 AVERAGE SPEED(MPH)= 22.97

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 9

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 3) (3, 4) (4, 2)

OORIGIN:8003 (3, 4) (4, 2)

OORIGIN:2001 (3, 1) (1, 2) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 9 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1)	(1, 3)	0	0	7.0	1085	58	0.0	T	INT
	(1, 2)			8.0	172.8	389	942	0.0	L INT V>C
(8003, 3)	(3, 4)	0	0	6.0	252.9	417	1200	0.0	R INT V>C
	(3, 1)			9.0	9.0	894	0	0.0	T INT
(3, 1)	(1, 2)	52800	895	901.0	901.0	1598	80	40.0	R INT
(1, 3)	(3, 4)	52800	895	897.0	897.0	1337	58	40.1	L INT
(3, 4)	(4,8004)	52800	895	903.0	1800.7	570	647	20.0	R EXIT V>C
	(4, 5)			905.0	940.2	1000	504	38.3	T INT
	(4, 2)			906.0	907.6	460	107	39.7	L INT
(1, 2)	(2, 4)	52800	1427	1435.0	1630.6	661	456	22.1	R INT
	(2,8002)			1438.0	2529.8	533	565	14.2	L EXIT V>C
(2, 4)	(4, 3)	52800	895	903.0	903.0	570	0	39.9	R INT
	(4,8004)			905.0	928.6	1000	456	38.8	T EXIT
	(4, 5)			906.0	906.0	460	0	39.7	L INT
(4, 5)	(5,8005)	52800	895	895.0	895.5	2880	504	40.2	T EXIT
(5, 4)	(4, 2)	52800	895	903.0	903.0	570	0	39.9	R INT
	(4, 3)			905.0	905.0	1000	0	39.8	T INT
	(4,8004)			906.0	906.0	460	0	39.7	L EXIT
(4, 3)	(3, 1)	52800	895	895.0	895.0	3110	80	40.2	R INT
	(3,2001)			0.0	0.0	1800	0	40.2	SINK
(4, 2)	(2,8002)	52800	895	905.0	905.1	1000	107	39.8	T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 35663.32 VEHICLE-HOURS= 1540.40 AVERAGE
 SPEED(MPH)= 23.15

TRAFFIC DISTRIBUTION ASSIGNMENT EVALUATION

ITERATION OBJECTIVE FUNCTION BOUND GAP(%) LAMBDA CONTRIBUTION(%)
 VALUE (VEH-SEC)

1	0.8821199000E+07	100.000000	1.000000	49.549995
2	0.4366017500E+07	100.000000	0.458981	42.036346
3	0.4363048000E+07	4.426641	0.031336	2.962784
4	0.4361387000E+07	4.390243	0.013156	1.260427
5	0.4360793000E+07	1.757719	0.016261	1.583757
6	0.4360280500E+07	1.746172	0.008131	0.798370
7	0.4360006500E+07	1.197865	0.010050	0.996809
8	0.4359877500E+07	1.194942	0.003106	0.309030
9	0.4359782000E+07	0.755542	0.005025	0.502482

1 DETAILED LIST OF O-D MINIMUM PATHS

THE FOLLOWING LISTING PROVIDES THE ASSIGNED VOLUME AND THE SEQUENCE OF INTERNAL NODE
 NUMBERS FOR EACH O-D MINIMUM PATH.

TOTAL DEMAND IS PRINTED FOLLOWING ALL PATHS FOR EACH O-D PAIR.

NOTE THAT CUMULATIVE TRAVEL TIME (SEC) FOR THE O-D PATH IS PRINTED FOLLOWING THE NODE LIST.

O-D VOLUME PATH ROUTE

8001-8004 420.3 1, 2, 4
 (SEC): 172.8,1803.5,2732.0

8001-8004 23.7 1, 3, 4
 (SEC): 7.0, 904.0, 2704.7
 444 VPH
 0 VPH

8001-8002 520.4 1, 2

(SEC): 172.8,2702.6

8001-8002 34.6 1, 3, 4, 2
(SEC): 7.0, 904.0, 1811.6, 2716.7
555 VPH

8003-8005 504.0 3, 4, 5
(SEC): 252.9, 1193.0, 2088.5
504 VPH

8003-8004 623.0 3, 4
(SEC): 252.9, 2053.6
623 VPH

8003-8002 72.0 3, 4, 2
(SEC): 252.9, 1160.5, 2065.6
72 VPH

2001-8004 35.0 4, 3, 1, 2, 4
(SEC): 0.0, 895.0, 1796.0, 3426.6, 4355.2
35 VPH

2001-8002 44.0 4, 3, 1, 2
(SEC): 0.0, 895.0, 1796.0, 4325.8
44 VPH

1 TRAFFIC ASSIGNMENT RESULTS

ESIM SUBNETWORK

SPEED ESTIMATE	LINK	INTERNAL RIGHT TURN		THRU		LEFT TURN		DIAGONAL		SOURCE	SINK	DISCHARGE	FLOW VOLUME	FLOW VOLUME
		VOL. PCT.	VOL. PCT.	VOL. PCT.	VOL. PCT.	VOL. PCT.	VOL. PCT.	VOL. PCT.	VOL. PCT.					
	(8001, 1)	0	0	0	58	6	942	94	0	0	0	0	1000	
	(1, 3)	0	0	0	0	0	58	100	0	0	0	0	58	40.1
	(3, 1)	0	80	100	0	0	0	0	0	0	0	0	80	39.9
	(8003, 3)	0	1200	100	0	0	0	0	0	0	0	0	1200	
	(3, 4)	0	647	51	504	40	107	9	0	0	0	0	1258	26.0
	(4, 3)	2001	80	100	0	0	0	0	0	0	80	0	80	40.2
	(4, 5)	0	0	0	504	100	0	0	0	0	0	0	504	40.2
	(5, 4)	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	(4, 2)	0	0	0	107	100	0	0	0	0	0	0	107	39.7
	(2, 4)	0	0	0	456	100	0	0	0	0	0	0	456	38.7
	(1, 2)	0	456	45	0	0	565	55	0	0	0	0	1021	16.9

1 TRAFFIC ASSIGNMENT

ESIM ENTRY LINK VOLUMES

LINK	FLOW RATE (VEH/HOUR)	TRUCKS (PERCENT)
(8001, 1)	1000	0
(8003, 3)	1200	0

TIME PERIOD 3 - ESIM DATA

1 ESIM TURNING MOVEMENT DATA

(SECS)	LINK	TURN MOVEMENT PERCENTAGES			TURN MOVEMENT POSSIBLE			BLOCKAGE (PCT)
		LEFT	THROUGH	RIGHT	DIAGONAL	LEFT	THROUGH	

(8001, 1)	0	0	0	0	NO	NO	NO	NO	0	0
(1, 3)	0	0	0	0	NO	NO	NO	NO	0	0
(3, 1)	0	0	0	0	NO	NO	NO	NO	0	0
(8003, 3)	0	0	0	0	NO	YES	NO	NO	0	0
(3, 4)	0	0	0	0	NO	NO	NO	NO	0	0
(4, 3)	0	0	0	0	NO	NO	NO	NO	0	0
(4, 5)	0	0	0	0	NO	NO	NO	NO	0	0
(5, 4)	0	0	0	0	YES	NO	YES	NO	0	0
(4, 2)	0	0	0	0	NO	NO	NO	NO	0	0
(2, 4)	0	0	0	0	YES	NO	YES	NO	0	0
(1, 2)	0	0	0	0	NO	NO	NO	NO	0	0

0***** WARNING - MESSAGE NUMBER 622, ROUTINE CHKP2, PARAMETER(S) - P1 = 0, P2 = 4, P3 =

3
1

AVERAGE VEHICLE OCCUPANCIES
(HUNDREDTHS-OF-A-PERSON / VEHICLE)

AUTOS	CAR-POOLS	TRUCKS	BUSES
130	350	120	250

1

TRAFFIC ASSIGNMENT PARAMETERS

EPSILON (OBJ.FUNC.THRESHOLD VALUE) = 1.0 % +

LINE SEARCH ACCURACY OF OBJ.FUNCION = 1.0 % +

MAX.NUMBER OF ASSIGNMENT ITERATIONS = 15

MAX.NUMBER OF CAPACITY CALIBRATIONS = 1 +

TYPE OF OBJECTIVE FUNCTION
(0:USER OPTIMAL, 1:SYSTEM OPTIMAL)= 0 +

IMPEDANCE FUNCTION PARAMETERS:

ALPHA = 60/100 +
BETA = 40/ 10 +

TYPE (0:FHWA, 1:MODIFIED DAVIDSON)= 0 +

(+):INDICATES DEFAULT VALUE

REQUESTED INTERMEDIATE OUTPUT CODE = 4

- 0: NO INTERMEDIATE OUTPUT
- 1: PATH ASSIGNMENTS
- 2: TREE CONSTRUCTS
- 3: DETAILED O-D TREES
- 4: ALL OUTPUTS 1,2 AND 3

1

TRIP TABLE

FOR EACH ORIGIN NODE, TABLE PROVIDES LISTING OF CANDIDATE DESTINATION NODES

ORIGIN NODE (8001) 8004 8005 8002

ORIGIN NODE (8003) 8005 8004 8002

ORIGIN NODE (2001) 8004 8002

0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8001
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8004
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8005
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8002
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 8003
 0***** WARNING - MESSAGE NUMBER 920, ROUTINE RDF179, PARAMETER(S) - P1 = 2001

1

INTERNAL CENTROIDS

CENTROID LINK

2001 (4, 3)

1

TRAFFIC ASSIGNMENT :SOURCE VOLUMES

ORIGIN NODE VOLUME (VPH)

8001 9000
8003 9000
2001 6000

1 TRAFFIC ASSIGNMENT :SINK VOLUMES

DESTINATION NODE VOLUME (VPH)

8002 9000
8004 9000
8005 6000

1 DESTINATION TRIP TABLE

FOR EACH DESTINATION NODE, TABLE PROVIDES LISTING OF DATA PAIRS: ORIGIN NODE/VOLUME

DESTINATION (8002) 8001/3000 8003/3000 2001/3000

DESTINATION (8004) 8001/3000 8003/3000 2001/3000

DESTINATION (8005) 8001/3000 8003/3000

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 1

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)

OORIGIN:8003 (3, 4)

OORIGIN:2001 (3, 1) (1, 2) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 1 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL

(8001, 1) (1, 3) 0 0 7.0 7.0 1085 0 0.0 T INT
(1, 2) 8.0 8.3 389 200 0.0 L INT
(8003, 3) (3, 4) 0 0 6.0 125.1 417 1000 0.0 R INT V>C
(3, 1) 9.0 9.0 894 0 0.0 T INT
(3, 1) (1, 2) 52800 895 901.0 901.0 1598 1 40.0 R INT
(1, 3) (3, 4) 52800 895 897.0 897.0 1337 0 40.1 L INT
(3, 4) (4,8004) 52800 895 903.0 6035.6 570 1000 6.0 R EXIT V>C
(4, 5) 905.0 905.0 1000 0 39.8 T INT
(4, 2) 906.0 906.0 460 0 39.7 L INT
(1, 2) (2, 4) 52800 1427 1435.0 1435.0 661 0 25.1 R INT
(2,8002) 1438.0 1455.4 533 201 24.7 L EXIT
(2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
(4,8004) 905.0 905.0 1000 0 39.8 T EXIT
(4, 5) 906.0 906.0 460 0 39.7 L INT
(4, 5) (5,8005) 52800 895 895.0 895.0 2880 0 40.2 T EXIT
(5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
(4, 3) 905.0 905.0 1000 0 39.8 T INT
(4,8004) 906.0 906.0 460 0 39.7 L EXIT
(4, 3) (3, 1) 52800 895 895.0 895.0 3110 1 40.2 R INT
(3,2001) 0.0 0.0 1800 0 40.2 SINK
(4, 2) (2,8002) 52800 895 905.0 905.0 1000 0 39.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 12030.00 VEHICLE-HOURS= 1793.53 AVERAGE
SPEED(MPH)= 6.71

1 MINIMUM PATH CONSTRUCTS FOR ITERATION: 2

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)

OORIGIN:8003 (3, 4) (4, 5)

OORIGIN:2001 (3, 1) (1, 2) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 2 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL
 (8001, 1) (1, 3) 0 0 7.0 7.0 1085 0 0.0 T INT
 (1, 2) 8.0 8.3 389 200 0.0 L INT
 (8003, 3) (3, 4) 0 0 6.0 125.1 417 1000 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 0 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.0 1598 1 40.0 R INT
 (1, 3) (3, 4) 52800 895 897.0 897.0 1337 0 40.1 L INT
 (3, 4) (4,8004) 52800 895 903.0 1804.9 570 647 19.9 R EXIT V>C
 (4, 5) 905.0 913.4 1000 353 39.4 T INT
 (4, 2) 906.0 906.0 460 0 39.7 L INT
 (1, 2) (2, 4) 52800 1427 1435.0 1435.0 661 0 25.1 R INT
 (2,8002) 1438.0 1455.4 533 201 24.7 L EXIT
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 905.0 1000 0 39.8 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 895.1 2880 353 40.2 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 1 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 905.0 1000 0 39.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 15555.49 VEHICLE-HOURS= 618.68 AVERAGE
 SPEED(MPH)= 25.14

MINIMUM PATH CONSTRUCTS FOR ITERATION: 3

LIST OF LABELLED INTERNAL LINKS FOR EACH ORIGIN NODE

OORIGIN:8001 (1, 2)
 OORIGIN:8003 (3, 4)
 OORIGIN:2001 (3, 1) (1, 2) (4, 3)

1 TRAFFIC DISTRIBUTION ASSIGNMENT RESULTS AT ITERATION: 3 CAPACITY ITERATION: 1

GEOMETRIC PATH-LINK LENGTH FREE-FLOW TRAVEL CAPACITY VOLUME SPEED TURN RECEIVER
 LINK RECEIVER FEET TIME(SEC) TIME(SEC) VPH VPH (MPH) TYPE TYPE

ON-LINK TOTAL
 (8001, 1) (1, 3) 0 0 7.0 7.0 1085 0 0.0 T INT
 (1, 2) 8.0 8.3 389 200 0.0 L INT
 (8003, 3) (3, 4) 0 0 6.0 125.1 417 1000 0.0 R INT V>C
 (3, 1) 9.0 9.0 894 0 0.0 T INT
 (3, 1) (1, 2) 52800 895 901.0 901.0 1598 1 40.0 R INT
 (1, 3) (3, 4) 52800 895 897.0 897.0 1337 0 40.1 L INT
 (3, 4) (4,8004) 52800 895 903.0 1811.0 570 649 19.9 R EXIT V>C
 (4, 5) 905.0 913.3 1000 351 39.4 T INT
 (4, 2) 906.0 906.0 460 0 39.7 L INT
 (1, 2) (2, 4) 52800 1427 1435.0 1435.0 661 0 25.1 R INT
 (2,8002) 1438.0 1455.4 533 201 24.7 L EXIT
 (2, 4) (4, 3) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4,8004) 905.0 905.0 1000 0 39.8 T EXIT
 (4, 5) 906.0 906.0 460 0 39.7 L INT
 (4, 5) (5,8005) 52800 895 895.0 895.1 2880 351 40.2 T EXIT
 (5, 4) (4, 2) 52800 895 903.0 903.0 570 0 39.9 R INT
 (4, 3) 905.0 905.0 1000 0 39.8 T INT
 (4,8004) 906.0 906.0 460 0 39.7 L EXIT
 (4, 3) (3, 1) 52800 895 895.0 895.0 3110 1 40.2 R INT
 (3,2001) 0.0 0.0 1800 0 40.2 SINK
 (4, 2) (2,8002) 52800 895 905.0 905.0 1000 0 39.8 T EXIT

OTURN TYPE: R=RIGHT, T=THROUGH, D=DIAGONAL, L=LEFT; RECEIVER: INT = INTERNAL LINK

NETWORK HOURLY ESTIMATES: VEHICLE-MILES= 15544.54 VEHICLE-HOURS= 619.77 AVERAGE
 SPEED(MPH)= 25.08

TRAFFIC DISTRIBUTION ASSIGNMENT EVALUATION

ITERATION OBJECTIVE FUNCTION BOUND GAP(%) LAMBDA CONTRIBUTION(%)
 VALUE (VEH-SEC)

1 0.2372733750E+07 100.000000 1.000000 64.544006
 2 0.1779704250E+07 100.000000 0.352549 35.145401
 3 0.1779703750E+07 0.068747 0.003106 0.310591

1 DETAILED LIST OF O-D MINIMUM PATHS

THE FOLLOWING LISTING PROVIDES THE ASSIGNED VOLUME AND THE SEQUENCE OF INTERNAL NODE
 NUMBERS FOR EACH O-D MINIMUM PATH.
 TOTAL DEMAND IS PRINTED FOLLOWING ALL PATHS FOR EACH O-D PAIR.
 NOTE THAT CUMULATIVE TRAVEL TIME (SEC) FOR THE O-D PATH IS PRINTED FOLLOWING THE NODE LIST.

O-D VOLUME PATH ROUTE

0 VPH
 0 VPH
 8001-8002 200.0 1, 2
 (SEC): 8.3,1463.8
 200 VPH
 8003-8005 351.0 3, 4, 5
 (SEC): 125.1,1038.3,1933.5
 351 VPH
 8003-8004 648.0 3, 4
 (SEC): 125.1,1936.1
 648 VPH
 0 VPH
 0 VPH
 2001-8002 1.0 4, 3, 1, 2
 (SEC): 0.0, 895.0,1796.0,3251.4
 1 VPH

1 TRAFFIC ASSIGNMENT RESULTS

ESIM SUBNETWORK

SPEED ESTIMATE	LINK	CENTROID	INTERNAL RIGHT TURN				THRU	LEFT TURN				DIAGONAL	SOURCE	SINK	DISCHARGE
			VOL. PCT.	VOL. PCT.	VOL. PCT.	VOL. PCT.		VOL. PCT.	VOL. PCT.	VOL. PCT.	VOL. PCT.				
		VPH	VPH	VPH	VPH	VPH	VPH	VPH	VPH	VPH	VPH	VPH	VPH	MPH	
	(8001, 1)	0	0	0	0	200	100	0	0	0	0	0	200		
	(1, 3)	0	0	0	0	0	0	0	0	0	0	0	0	0.0	
	(3, 1)	0	1	100	0	0	0	0	0	0	0	0	1	39.9	
	(8003, 3)	0	1000	100	0	0	0	0	0	0	0	0	1000		
	(3, 4)	0	649	65	351	35	0	0	0	0	0	0	1000	24.0	
	(4, 3)	2001	1	100	0	0	0	0	0	0	1	0	1	40.2	
	(4, 5)	0	0	0	351	100	0	0	0	0	0	0	351	40.2	
	(5, 4)	0	0	0	0	0	0	0	0	0	0	0	0	0.0	
	(4, 2)	0	0	0	0	0	0	0	0	0	0	0	0	0.0	
	(2, 4)	0	0	0	0	0	0	0	0	0	0	0	0	0.0	
	(1, 2)	0	0	0	0	0	201	100	0	0	0	0	201	24.7	

1 TRAFFIC ASSIGNMENT

ESIM ENTRY LINK VOLUMES

LINK FLOW RATE TRUCKS
(VEH/HOUR) (PERCENT)

(8001, 1) 200 0
(8003, 3) 1000 0

CUMULATIVE ESIM STATISTICS AT TIME 16:5:0

ELAPSED TIME IS 0:5:0 (300 SECONDS), TIME PERIOD 1 ELAPSED TIME IS 300 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES		VPH	MPH
	VEHICLE	MOVE	DELAY	TOTAL	MOVE/	TOTAL	DELAY	TOTAL	DELAY	CNTNT		
	MILES	TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME		
(8001, 1)		117								1400		
(8003, 3)		94								1126		
(3, 1)	134.30	13	3.36	0.02	3.38	0.99	1.51	0.01	905.1	5.1	69	161 39.8
(1, 3)	177.77	18	4.44	0.03	4.47	0.99	1.51	0.01	905.1	5.1	92	213 39.8
(3, 4)	380.38	38	9.51	0.05	9.56	0.99	1.51	0.01	905.1	5.1	219	456 39.8
(1, 2)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(2, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(4, 5)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(4, 3)	133.33	13	3.33	0.02	3.35	0.99	1.51	0.01	905.1	5.1	0	160 39.8
(4, 2)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
0 NETWORK=	825.78	1	20.64	0.12	20.76	0.99	1.51	0.01	905.55	5.09	381.5	39.8

CUMULATIVE ESIM STATISTICS AT TIME 16:10:0

ELAPSED TIME IS 0:10:0 (600 SECONDS), TIME PERIOD 1 ELAPSED TIME IS 600 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES		VPH	MPH
	VEHICLE	MOVE	DELAY	TOTAL	MOVE/	TOTAL	DELAY	TOTAL	DELAY	CNTNT		
	MILES	TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME		
(8001, 1)		233								1399		
(8003, 3)		189								1135		
(3, 1)	412.13	41	10.30	0.06	10.36	0.99	1.51	0.01	905.1	5.1	69	247 39.8
(1, 3)	545.53	55	13.64	0.08	13.72	0.99	1.51	0.01	905.1	5.1	92	327 39.8
(3, 4)	1193.11	119	29.83	0.17	30.00	0.99	1.51	0.01	905.1	5.1	255	715 39.8
(1, 2)	58.03	6	1.16	0.00	1.16	1.00	1.20	0.00	720.0	0.0	354	34 25.2
(2, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(4, 5)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(4, 3)	266.67	27	6.67	0.04	6.70	0.99	1.51	0.01	905.1	5.1	0	159 39.8
(4, 2)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
0 NETWORK=	2475.47	5	61.60	0.34	61.94	0.99	1.50	0.01	804.38	4.43	773.0	40.0

CUMULATIVE ESIM STATISTICS AT TIME 16:15:0

ELAPSED TIME IS 0:15:0 (900 SECONDS), TIME PERIOD 1 ELAPSED TIME IS 900 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES		VPH	MPH
	VEHICLE	MOVE	DELAY	TOTAL	MOVE/	TOTAL	DELAY	TOTAL	DELAY	CNTNT		
	MILES	TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME		
(8001, 1)		350								1400		
(8003, 3)		282								1127		
(3, 1)	689.96	69	17.25	0.10	17.35	0.99	1.51	0.01	905.1	5.1	69	275 39.8
(1, 3)	913.30	91	22.83	0.13	22.96	0.99	1.51	0.01	905.1	5.1	92	365 39.8
(3, 4)	2004.11	200	50.10	0.28	50.39	0.99	1.51	0.01	905.1	5.1	289	801 39.8
(1, 2)	824.01	82	32.96	0.30	33.26	0.99	2.42	0.02	1453.0	13.0	386	329 24.8

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( 2, 4) 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.0 0.0 0 0 0.0
( 4, 5) 17.08 2 0.14 0.00 0.14 1.00 0.50 0.00 300.0 0.0 75 6 40.2
( 5, 4) 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.0 0.0 0 0 0.0
( 4, 3) 400.00 40 10.00 0.06 10.06 0.99 1.51 0.01 905.1 5.1 0 160 39.8
( 4, 2) 11.84 1 0.10 0.00 0.10 1.00 0.50 0.00 300.0 0.0 50 4 40.2
0 NETWORK= 4860.28 12 133.39 0.86 134.25 0.99 1.66 0.01 682.83 4.39 963.8 36.2
1 CUMULATIVE ESIM STATISTICS AT TIME 16:20:0

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ELAPSED TIME IS 0:20:0 (1200 SECONDS), TIME PERIOD 2 ELAPSED TIME IS 300 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE		VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
	MILES	TRIPS	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	VPH	MPH	
(8001, 1)	433									1300		
(8003, 3)	364									1090		
(3, 1)	967.78	97	24.19	0.14	24.33	0.99	1.51	0.01	905.1	5.1	48	290 39.8
(1, 3)	1281.06	128	32.03	0.18	32.21	0.99	1.51	0.01	905.1	5.1	60	384 39.8
(3, 4)	3146.30	315	78.66	0.44	79.10	0.99	1.51	0.01	905.1	5.1	293	943 39.8
(1, 2)	1622.91	162	64.92	0.58	65.50	0.99	2.42	0.02	1453.0	13.0	412	486 24.8
(2, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0	0.0
(4, 5)	291.49	29	7.29	0.04	7.33	0.99	1.51	0.01	905.1	5.1	111	87 39.8
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0	0.0
(4, 3)	466.67	47	11.67	0.07	11.73	0.99	1.51	0.01	905.1	5.1	0	139 39.8
(4, 2)	202.13	20	5.05	0.03	5.08	0.99	1.51	0.01	905.1	5.1	52	60 39.8
0 NETWORK=	7978.34	24	223.80	1.48	225.28	0.99	1.69	0.01	573.57	3.77	979.9	35.4
1	CUMULATIVE ESIM STATISTICS AT TIME 16:25:0											

ELAPSED TIME IS 0:25:0 (1500 SECONDS), TIME PERIOD 2 ELAPSED TIME IS 600 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE		VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
	MILES	TRIPS	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	VPH	MPH	
(8001, 1)	517									1240		
(8003, 3)	443									1062		
(3, 1)	1245.61	125	31.14	0.18	31.32	0.99	1.51	0.01	905.1	5.1	27	298 39.8
(1, 3)	1648.82	165	41.22	0.23	41.45	0.99	1.51	0.01	905.1	5.1	28	395 39.8
(3, 4)	4305.59	431	107.64	0.61	108.25	0.99	1.51	0.01	905.1	5.1	293	1033 39.8
(1, 2)	2564.84	256	102.59	0.92	103.52	0.99	2.42	0.02	1453.0	13.0	424	615 24.8
(2, 4)	194.91	19	0.97	0.00	0.97	1.00	0.30	0.00	180.0	0.0	104	46 40.2
(4, 5)	593.46	59	14.84	0.08	14.92	0.99	1.51	0.01	905.1	5.1	148	142 39.8
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0	0.0
(4, 3)	533.33	53	13.33	0.08	13.41	0.99	1.51	0.01	905.1	5.1	0	127 39.8
(4, 2)	411.52	41	10.29	0.06	10.35	0.99	1.51	0.01	905.1	5.1	52	98 39.8
0 NETWORK=	11498.09	38	322.03	2.16	324.19	0.99	1.69	0.01	509.26	3.39	1079.5	35.5
1	CUMULATIVE ESIM STATISTICS AT TIME 16:30:0											

ELAPSED TIME IS 0:30:0 (1800 SECONDS), TIME PERIOD 2 ELAPSED TIME IS 900 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE		VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
	MILES	TRIPS	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	VPH	MPH	
(8001, 1)	600									1200		
(8003, 3)	524									1047		
(3, 1)	1421.37	142	35.53	0.20	35.74	0.99	1.51	0.01	905.1	5.1	16	284 39.8
(1, 3)	1862.31	186	46.56	0.26	46.82	0.99	1.51	0.01	905.1	5.1	12	372 39.8
(3, 4)	5476.76	548	136.92	0.77	137.69	0.99	1.51	0.01	905.1	5.1	278	1095 39.8
(1, 2)	3641.58	364	145.66	1.31	146.98	0.99	2.42	0.02	1453.0	13.0	412	728 24.8

(2, 4) 573.51 57 14.34 0.08 14.42 0.99 1.51 0.01 905.1 5.1 122 114 39.8
 (4, 5) 1058.97 106 26.47 0.15 26.62 0.99 1.51 0.01 905.1 5.1 168 211 39.8
 (5, 4) 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.0 0.0 0 0 0.0
 (4, 3) 600.00 60 15.00 0.08 15.08 0.99 1.51 0.01 905.1 5.1 0 119 39.8
 (4, 2) 618.70 62 15.47 0.09 15.55 0.99 1.51 0.01 905.1 5.1 52 123 39.8
 0 NETWORK= 15253.19 57 435.95 2.95 438.91 0.99 1.73 0.01 463.73 3.12 1064.5 34.8
 1 CUMULATIVE ESIM STATISTICS AT TIME 16:35:0

ELAPSED TIME IS 0:35:0 (2100 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 300 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
	VEHICLE	MOVE DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME			
MILES TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME	TIME	VPH MPH
(8001, 1)	617						1057			
(8003, 3)	603						1032			
(3, 1)	1488.04	149 37.20	0.21 37.41	0.99 1.51	0.01 905.1	5.1	10 255	39.8		
(1, 3)	1910.92	191 47.77	0.27 48.04	0.99 1.51	0.01 905.1	5.1	7 327	39.8		
(3, 4)	6640.67	664 166.02	0.94 166.95	0.99 1.51	0.01 905.1	5.1	246 1138	39.8		
(1, 2)	4717.28	472 188.69	1.70 190.39	0.99 2.42	0.02 1453.0	13.0	328 808	24.8		
(2, 4)	968.93	97 24.22	0.14 24.36	0.99 1.51	0.01 905.1	5.1	138 166	39.8		
(4, 5)	1730.24	173 43.26	0.24 43.50	0.99 1.51	0.01 905.1	5.1	168 296	39.8		
(5, 4)	0.00	0 0.00	0.00 0.00	0.00 0.00	0.00 0.0	0.0	0 0	0.0		
(4, 3)	600.83	60 15.02	0.08 15.11	0.99 1.51	0.01 905.1	5.1	0 102	39.8		
(4, 2)	829.98	83 20.75	0.12 20.87	0.99 1.51	0.01 905.1	5.1	52 142	39.8		
0 NETWORK=	18886.89	78 542.93	3.70 546.63	0.99 1.74	0.01 422.48	2.86	951.8	34.6		
1	CUMULATIVE ESIM STATISTICS AT TIME 16:40:0									

ELAPSED TIME IS 0:40:0 (2400 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 600 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
	VEHICLE	MOVE DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME			
MILES TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME	TIME	VPH MPH
(8001, 1)	633						949			
(8003, 3)	683						1024			
(3, 1)	1554.70	155 38.87	0.22 39.09	0.99 1.51	0.01 905.1	5.1	3 233	39.8		
(1, 3)	1959.52	196 48.99	0.28 49.26	0.99 1.51	0.01 905.1	5.1	2 293	39.8		
(3, 4)	7786.54	779 194.66	1.10 195.76	0.99 1.51	0.01 905.1	5.1	217 1167	39.8		
(1, 2)	5780.42	578 231.22	2.08 233.30	0.99 2.42	0.02 1453.0	13.0	245 867	24.8		
(2, 4)	1511.05	151 37.78	0.21 37.99	0.99 1.51	0.01 905.1	5.1	137 226	39.8		
(4, 5)	2395.15	240 59.88	0.34 60.22	0.99 1.51	0.01 905.1	5.1	166 359	39.8		
(5, 4)	0.00	0 0.00	0.00 0.00	0.00 0.00	0.00 0.0	0.0	0 0	0.0		
(4, 3)	601.67	60 15.04	0.08 15.13	0.99 1.51	0.01 905.1	5.1	0 90	39.8		
(4, 2)	1036.03	104 25.90	0.15 26.05	0.99 1.51	0.01 905.1	5.1	52 155	39.8		
0 NETWORK=	22625.08	100 652.33	4.46 656.80	0.99 1.74	0.01 394.23	2.68	826.0	34.4		
1	CUMULATIVE ESIM STATISTICS AT TIME 16:45:0									

ELAPSED TIME IS 0:45:0 (2700 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 900 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
	VEHICLE	MOVE DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME			
MILES TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME	TIME	VPH MPH
(8001, 1)	650						866			
(8003, 3)	762						1016			
(3, 1)	1589.81	159 39.75	0.22 39.97	0.99 1.51	0.01 905.1	5.1	0 211	39.8		
(1, 3)	1984.63	198 49.62	0.28 49.90	0.99 1.51	0.01 905.1	5.1	0 264	39.8		
(3, 4)	8668.50	867 216.71	1.22 217.94	0.99 1.51	0.01 905.1	5.1	210 1155	39.8		
(1, 2)	6842.97	684 273.72	2.47 276.18	0.99 2.42	0.02 1453.0	13.0	159 912	24.8		

(2, 4) 2070.32 207 51.76 0.29 52.05 0.99 1.51 0.01 905.1 5.1 135 276 39.8
 (4, 5) 3068.95 307 76.72 0.43 77.16 0.99 1.51 0.01 905.1 5.1 132 409 39.8
 (5, 4) 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.0 0.0 0 0 0.0
 (4, 3) 602.50 60 15.06 0.09 15.15 0.99 1.51 0.01 905.1 5.1 0 80 39.8
 (4, 2) 1248.25 125 31.21 0.18 31.38 0.99 1.51 0.01 905.1 5.1 55 166 39.8
 0 NETWORK= 26075.94 123 754.54 5.18 759.73 0.99 1.75 0.01 371.15 2.53 693.3 34.3
 1 CUMULATIVE ESIM STATISTICS AT TIME 16:50: 0

ELAPSED TIME IS 0:50: 0 (3000 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 1200 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE		VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
	MILES	TRIPS	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	VPH	MPH	
(8001, 1)	650									779		
(8003, 3)	843									1011		
(3, 1)	1590.64	159	39.77	0.22	39.99	0.99	1.51	0.01	905.1	5.1	0	190 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	238 39.8
(3, 4)	9506.39	951	237.66	1.34	239.00	0.99	1.51	0.01	905.1	5.1	206	1140 39.8
(1, 2)	7751.93	775	310.08	2.79	312.87	0.99	2.42	0.02	1453.0	13.0	68	930 24.8
(2, 4)	2615.18	262	65.38	0.37	65.75	0.99	1.51	0.01	905.1	5.1	123	313 39.8
(4, 5)	3733.84	373	93.35	0.53	93.87	0.99	1.51	0.01	905.1	5.1	95	448 39.8
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(4, 3)	605.50	61	15.14	0.09	15.22	0.99	1.51	0.01	905.1	5.1	0	72 39.8
(4, 2)	1454.29	145	36.36	0.21	36.56	0.99	1.51	0.01	905.1	5.1	58	174 39.8
0 NETWORK=	29242.40	145	847.34	5.83	853.17	0.99	1.75	0.01	353.44	2.41	553.5	34.3
1	CUMULATIVE ESIM STATISTICS AT TIME 16:55: 0											

ELAPSED TIME IS 0:55: 0 (3300 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 1500 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE		VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
	MILES	TRIPS	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	VPH	MPH	
(8001, 1)	650									709		
(8003, 3)	922									1006		
(3, 1)	1591.48	159	39.79	0.22	40.01	0.99	1.51	0.01	905.1	5.1	0	173 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	216 39.8
(3, 4)	10364.50	1036	259.11	1.46	260.58	0.99	1.51	0.01	905.1	5.1	200	1130 39.8
(1, 2)	8010.74	801	320.43	2.89	323.32	0.99	2.42	0.02	1453.0	13.0	42	873 24.8
(2, 4)	3146.47	315	78.66	0.44	79.11	0.99	1.51	0.01	905.1	5.1	74	343 39.8
(4, 5)	4240.13	424	106.00	0.60	106.60	0.99	1.51	0.01	905.1	5.1	75	462 39.8
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(4, 3)	608.50	61	15.21	0.09	15.30	0.99	1.51	0.01	905.1	5.1	0	66 39.8
(4, 2)	1679.04	168	41.98	0.24	42.21	0.99	1.51	0.01	905.1	5.1	59	183 39.8
0 NETWORK=	31625.49	163	910.80	6.22	917.02	0.99	1.74	0.01	338.11	2.29	454.7	34.5
1	CUMULATIVE ESIM STATISTICS AT TIME 17: 0: 0											

ELAPSED TIME IS 1: 0: 0 (3600 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 1800 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE		VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
	MILES	TRIPS	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	VPH	MPH	
(8001, 1)	650									649		
(8003, 3)	1002									1001		
(3, 1)	1594.04	159	39.85	0.23	40.08	0.99	1.51	0.01	905.1	5.1	0	159 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	198 39.8
(3, 4)	11155.01	1116	278.88	1.58	280.45	0.99	1.51	0.01	905.1	5.1	201	1115 39.8
(1, 2)	8244.07	824	329.76	2.97	332.73	0.99	2.42	0.02	1453.0	13.0	19	824 24.8

(2, 4) 3663.68 366 91.59 0.52 92.11 0.99 1.51 0.01 905.1 5.1 25 366 39.8
 (4, 5) 4539.60 454 113.49 0.64 114.13 0.99 1.51 0.01 905.1 5.1 75 453 39.8
 (5, 4) 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.0 0 0 0.0
 (4, 3) 611.50 61 15.29 0.09 15.37 0.99 1.51 0.01 905.1 5.1 0 61 39.8
 (4, 2) 1914.64 191 47.87 0.27 48.14 0.99 1.51 0.01 905.1 5.1 56 191 39.8
 0 NETWORK= 33707.18 178 966.34 6.57 972.91 0.99 1.73 0.01 327.66 2.21 380.2 34.6
 1 CUMULATIVE ESIM STATISTICS AT TIME 17: 5: 0

ELAPSED TIME IS 1: 5: 0 (3900 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 2100 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS RATIO MINUTES/MILE SECONDS/VEHICLE AVERAGE VALUES										VPH	MPH
	VEHICLE	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	TIME	TIME		
LINK	MILES	TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME	TIME	TIME
(8001, 1)	650											599
(8003, 3)	1083											999
(3, 1)	1597.04	160	39.93	0.23	40.15	0.99	1.51	0.01	905.1	5.1	0	147 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	183 39.8
(3, 4)	11967.74	1197	299.19	1.69	300.88	0.99	1.51	0.01	905.1	5.1	200	1104 39.8
(1, 2)	8431.78	843	337.27	3.04	340.31	0.99	2.42	0.02	1453.0	13.0	1	778 24.8
(2, 4)	3877.94	388	96.95	0.55	97.50	0.99	1.51	0.01	905.1	5.1	5	357 39.8
(4, 5)	4842.98	484	121.07	0.68	121.76	0.99	1.51	0.01	905.1	5.1	78	447 39.8
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(4, 3)	614.50	61	15.36	0.09	15.45	0.99	1.51	0.01	905.1	5.1	0	56 39.8
(4, 2)	2153.87	215	53.85	0.30	54.15	0.99	1.51	0.01	905.1	5.1	40	198 39.8
0 NETWORK=	35470.48	192	1013.24	6.86	1020.10	0.99	1.73	0.01	319.60	2.15	327.9	34.8
1	CUMULATIVE ESIM STATISTICS AT TIME 17:10: 0											

ELAPSED TIME IS 1:10: 0 (4200 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 2400 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS RATIO MINUTES/MILE SECONDS/VEHICLE AVERAGE VALUES										VPH	MPH
	VEHICLE	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	TIME	TIME		
LINK	MILES	TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME	TIME	TIME
(8001, 1)	650											557
(8003, 3)	1161											995
(3, 1)	1600.04	160	40.00	0.23	40.23	0.99	1.51	0.01	905.1	5.1	0	137 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	170 39.8
(3, 4)	12757.85	1276	318.95	1.80	320.75	0.99	1.51	0.01	905.1	5.1	200	1093 39.8
(1, 2)	8439.51	844	337.58	3.04	340.62	0.99	2.42	0.02	1453.0	13.0	0	723 24.8
(2, 4)	3907.47	391	97.69	0.55	98.24	0.99	1.51	0.01	905.1	5.1	2	334 39.8
(4, 5)	5142.54	514	128.56	0.73	129.29	0.99	1.51	0.01	905.1	5.1	82	440 39.8
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(4, 3)	617.50	62	15.44	0.09	15.52	0.99	1.51	0.01	905.1	5.1	0	52 39.8
(4, 2)	2377.37	238	59.43	0.34	59.77	0.99	1.51	0.01	905.1	5.1	22	203 39.8
0 NETWORK=	36826.93	201	1047.27	7.05	1054.32	0.99	1.72	0.01	314.38	2.10	309.4	34.9
1	CUMULATIVE ESIM STATISTICS AT TIME 17:15: 0											

ELAPSED TIME IS 1:15: 0 (4500 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 2700 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS RATIO MINUTES/MILE SECONDS/VEHICLE AVERAGE VALUES										VPH	MPH
	VEHICLE	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	TIME	TIME		
LINK	MILES	TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME	TIME	TIME
(8001, 1)	650											519
(8003, 3)	1243											994
(3, 1)	1603.04	160	40.08	0.23	40.30	0.99	1.51	0.01	905.1	5.1	0	128 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	158 39.8
(3, 4)	13565.39	1357	339.13	1.92	341.05	0.99	1.51	0.01	905.1	5.1	201	1085 39.8
(1, 2)	8440.35	844	337.61	3.04	340.66	0.99	2.42	0.02	1453.0	13.0	1	675 24.8

(2, 4) 3936.67 394 98.42 0.56 98.97 0.99 1.51 0.01 905.1 5.1 0 314 39.8
 (4, 5) 5456.37 546 136.41 0.77 137.18 0.99 1.51 0.01 905.1 5.1 84 436 39.8
 (5, 4) 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.0 0 0 0.0
 (4, 3) 620.50 62 15.51 0.09 15.60 0.99 1.51 0.01 905.1 5.1 0 49 39.8
 (4, 2) 2528.13 253 63.20 0.36 63.56 0.99 1.51 0.01 905.1 5.1 12 202 39.8
 0 NETWORK= 38135.08 210 1079.98 7.24 1087.22 0.99 1.71 0.01 310.10 2.06 299.9 35.1
 1 CUMULATIVE ESIM STATISTICS AT TIME 17:20: 0

ELAPSED TIME IS 1:20: 0 (4800 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 3000 SECONDS

LINK STATISTICS

SPEED LINK	MILES	TRIPS	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
			VEHICLE	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	VPH	MPH
(8001, 1)	650											487
(8003, 3)	1322											991
(3, 1)	1606.04	161	40.15	0.23	40.38	0.99	1.51	0.01	905.1	5.1	0	120 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	148 39.8
(3, 4)	14356.92	1436	358.92	2.03	360.95	0.99	1.51	0.01	905.1	5.1	200	1076 39.8
(1, 2)	8443.35	844	337.73	3.04	340.78	0.99	2.42	0.02	1453.0	13.0	1	633 24.8
(2, 4)	3936.80	394	98.42	0.56	98.98	0.99	1.51	0.01	905.1	5.1	0	295 39.8
(4, 5)	5792.93	579	144.82	0.82	145.64	0.99	1.51	0.01	905.1	5.1	83	434 39.8
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0	0.0
(4, 3)	623.50	62	15.59	0.09	15.68	0.99	1.51	0.01	905.1	5.1	0	46 39.8
(4, 2)	2576.94	258	64.42	0.36	64.79	0.99	1.51	0.01	905.1	5.1	11	193 39.8
0 NETWORK=	39321.12	218	1109.68	7.40	1117.08	0.99	1.70	0.01	306.75	2.03	297.8	35.2
1	CUMULATIVE ESIM STATISTICS AT TIME 17:25: 0											

ELAPSED TIME IS 1:25: 0 (5100 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 3300 SECONDS

LINK STATISTICS

SPEED LINK	MILES	TRIPS	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
			VEHICLE	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	VPH	MPH
(8001, 1)	650											458
(8003, 3)	1361											960
(3, 1)	1609.04	161	40.23	0.23	40.45	0.99	1.51	0.01	905.1	5.1	0	113 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	140 39.8
(3, 4)	15160.32	1516	379.01	2.14	381.15	0.99	1.51	0.01	905.1	5.1	160	1070 39.8
(1, 2)	8446.35	845	337.85	3.04	340.90	0.99	2.42	0.02	1453.0	13.0	1	596 24.8
(2, 4)	3936.80	394	98.42	0.56	98.98	0.99	1.51	0.01	905.1	5.1	0	277 39.8
(4, 5)	6126.10	613	153.15	0.87	154.02	0.99	1.51	0.01	905.1	5.1	78	432 39.8
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0	0.0
(4, 3)	626.50	63	15.66	0.09	15.75	0.99	1.51	0.01	905.1	5.1	0	44 39.8
(4, 2)	2624.54	262	65.61	0.37	65.98	0.99	1.51	0.01	905.1	5.1	6	185 39.8
0 NETWORK=	40514.29	228	1139.55	7.57	1147.13	0.99	1.70	0.01	302.50	2.00	247.4	35.3
1	CUMULATIVE ESIM STATISTICS AT TIME 17:30: 0											

ELAPSED TIME IS 1:30: 0 (5400 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 3600 SECONDS

LINK STATISTICS

SPEED LINK	MILES	TRIPS	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES	
			VEHICLE	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNTNT	VOLUME	VPH	MPH
(8001, 1)	650											433
(8003, 3)	1361											907
(3, 1)	1612.04	161	40.30	0.23	40.53	0.99	1.51	0.01	905.1	5.1	0	107 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	132 39.8
(3, 4)	15956.47	1596	398.91	2.25	401.17	0.99	1.51	0.01	905.1	5.1	80	1063 39.8
(1, 2)	8449.35	845	337.97	3.04	341.02	0.99	2.42	0.02	1453.0	13.0	1	563 24.8

(2, 4) 3936.80 394 98.42 0.56 98.98 0.99 1.51 0.01 905.1 5.1 0 262 39.8
 (4, 5) 6465.85 647 161.65 0.91 162.56 0.99 1.51 0.01 905.1 5.1 72 431 39.8
 (5, 4) 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.0 0.0 0 0 0.0
 (4, 3) 629.50 63 15.74 0.09 15.83 0.99 1.51 0.01 905.1 5.1 0 41 39.8
 (4, 2) 2673.06 267 66.83 0.38 67.20 0.99 1.51 0.01 905.1 5.1 1 178 39.8
 0 NETWORK= 41707.70 237 1169.43 7.74 1177.18 0.99 1.69 0.01 298.52 1.96 156.9 35.4
 1 CUMULATIVE ESIM STATISTICS AT TIME 17:35: 0

ELAPSED TIME IS 1:35: 0 (5700 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 3900 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES		VPH	MPH
	VEHICLE	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNT	TNT	VOLUME			
	MILES	TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME		
(8001, 1)	650						410					
(8003, 3)	1361						859					
(3, 1)	1615.04	162	40.38	0.23	40.60	0.99	1.51	0.01	905.1	5.1	0	102 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	125 39.8
(3, 4)	16706.10	1671	417.65	2.36	420.01	0.99	1.51	0.01	905.1	5.1	5	1055 39.8
(1, 2)	8452.35	845	338.09	3.05	341.14	0.99	2.42	0.02	1453.0	13.0	1	533 24.8
(2, 4)	3936.80	394	98.42	0.56	98.98	0.99	1.51	0.01	905.1	5.1	0	248 39.8
(4, 5)	6764.37	676	169.11	0.96	170.06	0.99	1.51	0.01	905.1	5.1	69	427 39.8
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(4, 3)	632.50	63	15.81	0.09	15.90	0.99	1.51	0.01	905.1	5.1	0	39 39.8
(4, 2)	2691.83	269	67.30	0.38	67.68	0.99	1.51	0.01	905.1	5.1	0	170 39.8
0 NETWORK=	42783.63	245	1196.38	7.89	1204.27	0.99	1.69	0.01	295.32	1.94	76.6	35.5
1	CUMULATIVE ESIM STATISTICS AT TIME 17:40: 0											

ELAPSED TIME IS 1:40: 0 (6000 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 4200 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES		VPH	MPH
	VEHICLE	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNT	TNT	VOLUME			
	MILES	TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME		
(8001, 1)	650						389					
(8003, 3)	1361						816					
(3, 1)	1618.04	162	40.45	0.23	40.68	0.99	1.51	0.01	905.1	5.1	0	97 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	119 39.8
(3, 4)	16762.15	1676	419.05	2.37	421.42	0.99	1.51	0.01	905.1	5.1	0	1005 39.8
(1, 2)	8455.35	846	338.21	3.05	341.26	0.99	2.42	0.02	1453.0	13.0	1	507 24.8
(2, 4)	3936.80	394	98.42	0.56	98.98	0.99	1.51	0.01	905.1	5.1	0	236 39.8
(4, 5)	7049.62	705	176.24	1.00	177.24	0.99	1.51	0.01	905.1	5.1	42	422 39.8
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0 0.0
(4, 3)	635.50	64	15.89	0.09	15.98	0.99	1.51	0.01	905.1	5.1	0	38 39.8
(4, 2)	2691.83	269	67.30	0.38	67.68	0.99	1.51	0.01	905.1	5.1	0	161 39.8
0 NETWORK=	43133.92	248	1205.18	7.95	1213.12	0.99	1.69	0.01	293.60	1.92	44.4	35.6
1	CUMULATIVE ESIM STATISTICS AT TIME 17:45: 0											

ELAPSED TIME IS 1:45: 0 (6300 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 4500 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES		VPH	MPH
	VEHICLE	MOVE	DELAY	TOTAL MOVE/	TOTAL DELAY	TOTAL DELAY	CNT	TNT	VOLUME			
	MILES	TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME		
(8001, 1)	650						371					
(8003, 3)	1361						777					
(3, 1)	1621.04	162	40.53	0.23	40.76	0.99	1.51	0.01	905.1	5.1	0	92 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	113 39.8
(3, 4)	16762.15	1676	419.05	2.37	421.42	0.99	1.51	0.01	905.1	5.1	0	957 39.8
(1, 2)	8458.35	846	338.33	3.05	341.38	0.99	2.42	0.02	1453.0	13.0	1	483 24.8

(2, 4) 3936.80 394 98.42 0.56 98.98 0.99 1.51 0.01 905.1 5.1 0 224 39.8
 (4, 5) 7326.56 733 183.16 1.03 184.20 0.99 1.51 0.01 905.1 5.1 14 418 39.8
 (5, 4) 0.00 0 0.00 0.00 0.00 0.00 0.00 0.0 0 0 0 0.0
 (4, 3) 638.50 64 15.96 0.09 16.05 0.99 1.51 0.01 905.1 5.1 0 36 39.8
 (4, 2) 2691.83 269 67.30 0.38 67.68 0.99 1.51 0.01 905.1 5.1 0 153 39.8
 0 NETWORK= 43419.86 251 1212.37 7.99 1220.36 0.99 1.69 0.01 292.05 1.91 16.7 35.6
 1 CUMULATIVE ESIM STATISTICS AT TIME 17:48:0

ELAPSED TIME IS 1:48:0 (6480 SECONDS), TIME PERIOD 3 ELAPSED TIME IS-4680 SECONDS

LINK STATISTICS

SPEED LINK	VEHICLE HOURS		RATIO		MINUTES/MILE		SECONDS/VEHICLE		AVERAGE VALUES		VPH	MPH
	VEHICLE	MOVE	DELAY	TOTAL	MOVE/	TOTAL	DELAY	TOTAL	DELAY	CNTNT		
	MILES	TRIPS	TIME	TIME	TIME	TOTAL	TIME	TIME	TIME	TIME		
(8001, 1)	650										361	
(8003, 3)	1361										756	
(3, 1)	1622.84	162	40.57	0.23	40.80	0.99	1.51	0.01	905.1	5.1	0	90 39.8
(1, 3)	1984.63	198	49.62	0.28	49.90	0.99	1.51	0.01	905.1	5.1	0	110 39.8
(3, 4)	16762.15	1676	419.05	2.37	421.42	0.99	1.51	0.01	905.1	5.1	0	931 39.8
(1, 2)	8460.15	846	338.41	3.05	341.45	0.99	2.42	0.02	1453.0	13.0	1	470 24.8
(2, 4)	3936.80	394	98.42	0.56	98.98	0.99	1.51	0.01	905.1	5.1	0	218 39.8
(4, 5)	7462.94	746	186.57	1.05	187.63	0.99	1.51	0.01	905.1	5.1	1	414 39.8
(5, 4)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0	0	0 0.0
(4, 3)	640.30	64	16.01	0.09	16.10	0.99	1.51	0.01	905.1	5.1	0	35 39.8
(4, 2)	2691.83	269	67.30	0.38	67.68	0.99	1.51	0.01	905.1	5.1	0	149 39.8
0 NETWORK=	43561.64	252	1215.94	8.01	1223.95	0.99	1.69	0.01	291.30	1.91	3.1	35.6
MAX. CONTENT DURING EVACUATION 1												
EVACUATION TIME 1:48												