Appendix 2

K J S Associates, Inc.

Memorandum

DATE: February 20, 1998

TO: Roosevelt Transportation Subcommittee and Steering Committee

FROM: Michael J. Read, P.E., KJS Associates
Jennifer G. Ting, KJS Associates

RE: Technical Memorandum 1 – Existing Conditions Report (Final Draft Report)

This memorandum documents all current transportation conditions in the Roosevelt neighborhood, including roadway volumes, existing levels of congestion, accident history, public transit services, parking conditions and bicycle/pedestrian facilities. In addition, a discussion of planned transportation improvements and existing transportation' issues are included in this memorandum.

Roadway Conditions

Figure 1 shows the project study area. The Roosevelt neighborhood is the area bounded by I-5 to the west, 15th Avenue NE to the east, NE 75th Street to the north and NE Ravenna Boulevard to the south. Access to and from I-5 is provided to the south via NE Ravenna Boulevard and to the north via NE 70th Street. Major north-south arterials traveling through the neighborhood include I-5, Roosevelt Way NE, 12th Avenue NE and 1 5th Avenue NE. Roosevelt Way NE and 12th Avenue NE form a one-way couplet system between the Ship Canal, in the University District, to NE 75th Street, the northern boundary of the Roosevelt neighborhood. Major east-west arterials include NE 75th Street, NE 65th Street and NE Ravenna Boulevard.

The following paragraphs describe major arterials serving the neighborhood. Roadway characteristics are described in terms of facility type, number of lanes, posted speed limits, average weekday daily volumes, and shoulder types and widths.

Interstate 5 is classified as limited access freeway. It has an S-lane cross-section in the vicinity of the Roosevelt neighborhood for general purpose traffic as well as a three-lane revisable center roadway to accommodate direction demand during peak commute periods. Travel lanes average 12 feet in width, with 4- to 12-foot paved shoulders and jersey barrier systems. The posted speed limit is 60 mph. Ramp access to I-5 is provided at NE Ravenna Boulevard (Milepost 170.02 – 170.50) and at NE 70th Street (Milepost 170.64) . Existing average daily traffic volumes near NE Ravenna Boulevard are about 234.000 daily vehicles. Ramp access to NE Ravenna Boulevard and NE 70th Street average 14,700 daily vehicles, and 1 1,200 daily vehicles, respectively.

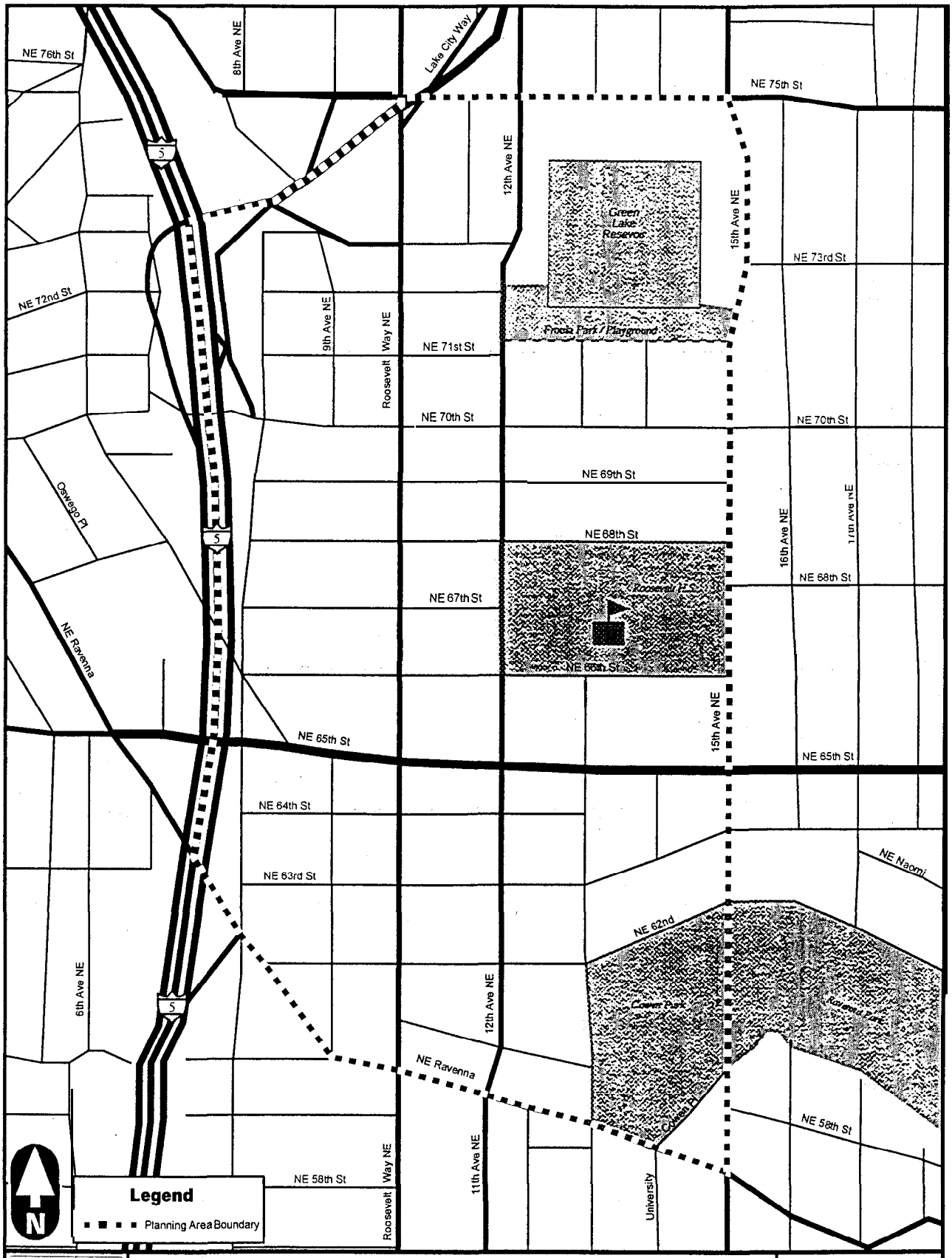

Figure 1 - Roosevelt Neighborhood Planning Area

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Roosevelt Way NE is a 40-foot wide, one-way southbound principal arterial and operates as an effective 2-lane arterial during most periods. Roosevelt Way NE becomes a two-way roadway north of NE 75th Street. Parking is provided on both sides of the street except during morning commute periods, when parking is prohibited on the west side of the street between 7:00 and 9:00 a.m. creating three travel lanes during the a.m. peak period. Curb, gutter and sidewalk are also provided on both sides of the street. Existing traffic volumes average 12,500 daily vehicles north of NE 65th Street.

12th Avenue NE is a 40-foot wide, one-way northbound principal arterial. Parking is provided on both sides of the street except on the east side of the street during afternoon commute periods. Curb, 'gutter and sidewalk are found on both sides of the street. An average of 6,500 vehicles traveled this roadway daily south of NE 70th Street.

15th Avenue NE is a four-lane north-south minor arterial. Parking is provided on both sides of the street. Parking is prohibited on the east side of the street between 4:00 and 6:00 p.m. and on the west side of the street between 7:00 a.m. and 9:00 a.m. The speed limit is posted at 30 mph. The roadway becomes a four-lane arterial between NE 59th Street and NE 62nd Street. The pavement width is 42 feet wide. Daily traffic volumes average 11,600 vehicles south of NE 65th Street.

NE 75th Street is a four-lane, east-west arterial which also serves as the northern border for the Roosevelt neighborhood. Curb, gutter and sidewalk are located on both sides of the street. Existing traffic volumes average 20,100 daily vehicles east of 12th Avenue NE.

NE 65th Street is a two-lane, east-west minor arterial in the Roosevelt neighborhood vicinity. Parking is provided on both sides of the street. Curb, gutter and sidewalk are also provided. Parking is prohibited between 7:00 and 9:00 p.m. on the north side of the street and between 4:00 and 6:00 p.m. on both sides of the street. Existing average daily traffic volumes are 15,800 vehicles east of Roosevelt Way NE.

NE Ravenna Boulevard is a two-lane minor arterial with a landscaped median that separates the eastbound and westbound travel lanes. The arterial consists of one travel lane, one parking lane and one bike lane in each direction. The 1 l-foot wide bike lane narrows at major intersections to provide a turning pocket for left-turning vehicles. The sidewalks located on both sides of the street are separated from the curb by a planting strip. An average of 8,300 vehicles use this roadway daily in 1998 east of 12th Avenue NE.

Traffic Volumes

Figure 2 shows estimated Existing Average Weekday Daily Traffic (AWDT) volumes in the immediate site vicinity. AWDT volumes represent the number of vehicles traveling a roadway segment over a 24-hour period on an average weekday. Afternoon peak hour traffic volumes usually occur during a typical 4:00 p.m. to 6:00 p.m. peak period. Since the p.m. peak period volumes usually represent the highest volumes of the average ,day, these volumes are typically used to evaluate the worst-case traffic scenario at an intersection.

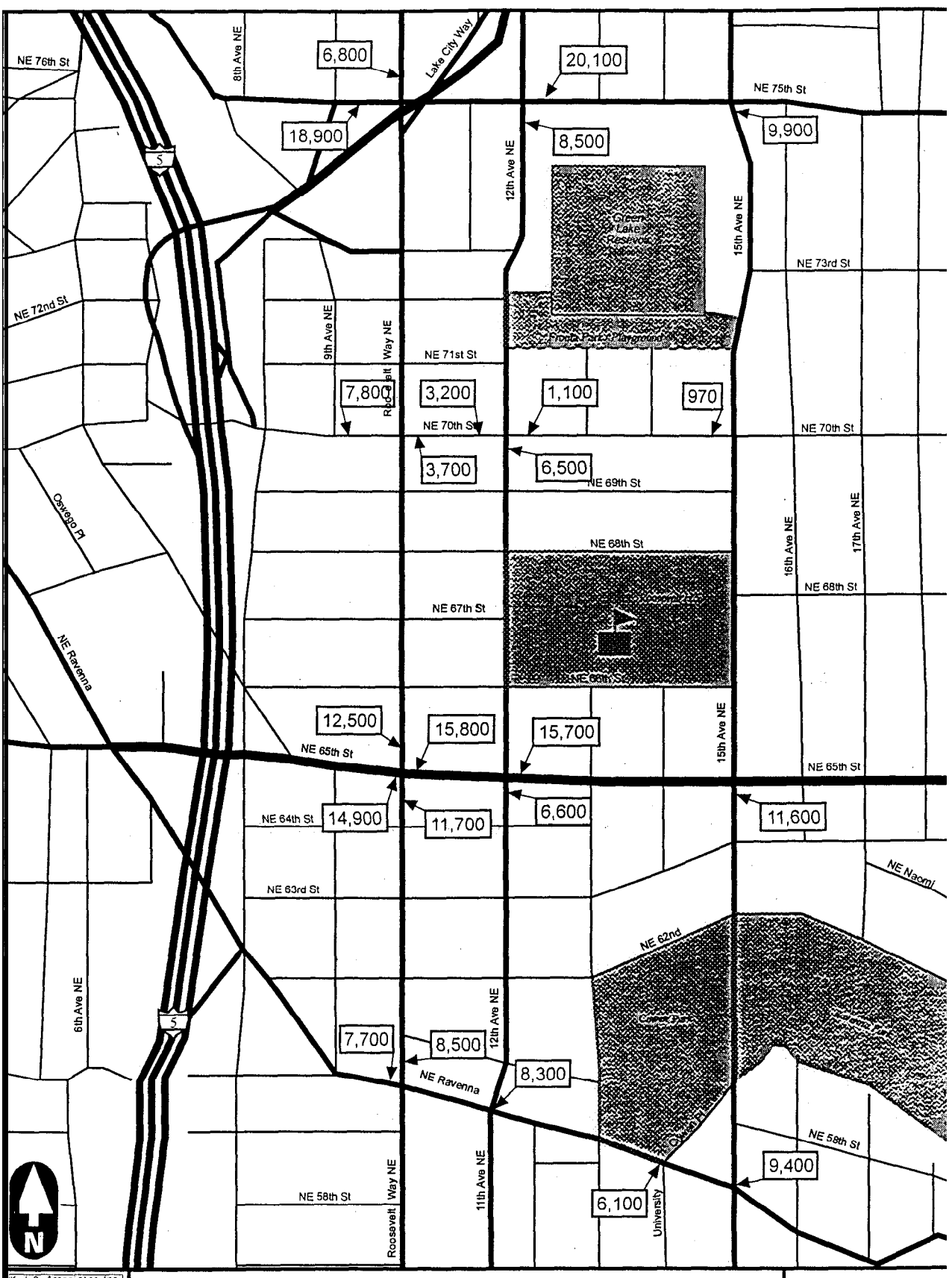

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Figure 2 - Existing Average Weekday Traffic Volumes

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Historical traffic volumes, AWDT volumes and p.m. peak turning movement volumes were collected from the City of Seattle Engineering Department – Transportation Division (SeaTran). KJS supplemented this data with other recent p.m. peak turning movement counts conducted as part of the traffic impact study prepared for Roosevelt Square, Transportation Solutions, Inc., January 1998. A review of historical traffic volumes back to 1994, found an average growth rate of 1 percent per year within the Roosevelt neighborhood. Thus, traffic counts were factored by 1 percent per year to arrive at existing conditions. Existing p.m. peak hour turning movement counts are provided in Appendix A.

Roadway Levels of Service

Level of service (LOS) serves as an indicator of the quality of traffic flow at an intersection or road segment. The LOS grading ranges from A to F, such that LOS A is assigned when no delays are present and low volumes are experienced. LOS E, on the other hand, represents "capacity" conditions where no more vehicles could be added to the intersection or road segment without a breakdown in traffic flow. LOS F represents an unacceptable level of service, and indicates long delays and/or forced flow traffic.

A volume to capacity (v/c) ratio was used to measure level of service. There are a variety of methods used to calculate arterial roadway level of service. Most recently, the published standards for the transportation engineering profession in the 1994 Highway Capacity *Manual* (Special Report 209, Transportation Research Board), base arterial level of service on functional classification (e.g., principal, minor, etc.) and average travel speed as a measure of congestion. Level of service ranges stratify average travel speeds from above 35 mph to below 7 mph by three different arterial classifications in urban and suburban areas. Spot speed surveys were conducted by Traffic Count Consultants, Inc. in April 1998 on 12th Avenue NE south of NE 68th Street and on 15th Avenue NE near NE 70th Street. The 85th percentile is used as the measure at which roadway speed limits are designed for. The 85th percentile indicates that 85 percent of the vehicles on the roadway travel at or above the surveyed speed. The 85th percentile on 12th Avenue NE was 35 mph, which means that 85 percent of the vehicles were traveling at or above 35 mph, while 15 percent were traveling below 35 mph. The 85th percentile on 15th Avenue NE was 38 mph.

Table 1 summarizes a different methodology in determining arterial level of service. This methodology is based upon the more traditional method of comparing the ratio of traffic counts with an estimated roadway capacity. Recommended arterial capacities are shown in Table 2 and are used by the City of Seattle in evaluation of arterial roadway capacity.

Table 1: Roadway Levels of Service Measures

LOS	V/C	Description
A	< 0.59	Little or No Delays
B	0.60 to 0.69	Short Delays
C	0.70 to 0.79	Average Delays
D	0.80 to 0.89	Long Delays
E	0.90 to 0.99	Very Long Delays
F	>1.00	Failure - Extreme Congestion

Table 2: Recommended Capacity Values

Average Free Flow Speeds	Peak Hour – Peak Direction Capacity
Two-Lane Principal or Minor Arterial	
30-35 mph	1,000 vph
30 mph	900 vph
25-30 mph	800 vph
20 mph (CBD)	600 vph
Four-Lane Principal or Minor Arterial	
30-35 mph	1,800 vph
30 mph	1,600 vph
25-30 mph	1,400 vph
20 mph (CBD)	1,200 vph
Two Lane Collector Arterial	
35 mph	800 vph
30 mph	600 vph
20-25 mph	500 vph
Local Access Street	
25 mph	500 vph
<20 mph	350 vph

Source: City of Seattle Transportation Model Network, Default Values -- Lane Capacities and Speeds, KJS Associates, 1992.
* - All values for principal and minor arterial, except the CBD, should be reduced if narrow lanes, pedestrian conflicts, parking conflicts, misalignments or heavy transit usage are present.

Table 3 summarizes existing levels of service on key arterial roadways in the neighborhood. The table summarizes existing peak period volumes, its estimated capacity, ratio and level of service rating. The table shows that both Roosevelt Way NE and NE 65th Street operate at LOS F near its intersection with one another. Also, both NE 75th Street and NE Ravenna Boulevard operate at LOS F near 12th Avenue NE. NE 70th Street near 8th Avenue NE and NE Ravenna Boulevard near Roosevelt Way operate at LOS E.

Table 3: Existing Roadway Levels of Service

Roadway	Section	Direction	Peak Hour Volume	Directional Capacity	V/C
15th Avenue NE	South of NE 75th Street	NB	600	1,200	0.50
		SB	350	900	0.39
	South of NE 65th Street	NB	650	1,200	0.54
		SB	400	900	0.44
	North of NE Ravenna Blvd.	NB	500	1,200	0.42
		SB	380	900	0.42
12th Avenue NE	South of NE 70th Street	NB	1,150	2,150	0.53
	South of NE 65th Street	NB	950	1,900	0.50
Roosevelt Way NE	North of NE 65th Street	SB[1]	1,385	1,900	0.73
	South of NE 65th Street	SB[1]	1,045	1,900	0.55
	North of NE Ravenna Blvd.	SB[1]	1,015	2,150	0.47
NE 75th Street	East of 12th Avenue NE	EB	1,020	1,800	0.57
		WB	835	1,800	0.46
NE 70th Street	East of 8th Avenue NE	EB	270	600	0.45
		WB	440	600	0.73
NE 65th Street	East of 12th Avenue NE	EB	750	1,100	0.68
		WB	620	1,100	0.56
	West of Roosevelt Way NE	EB	600	1,100	0.55
		WB	670	1,100	0.61
NE Ravenna Blvd.	East of 12th Avenue NE	EB	450	900	0.50
		WB	370	900	0.41
	West of Roosevelt Way	EB	330	900	0.37
		WB	500	900	0.56

* - Volume to Capacity Ratio.
[1] - Peak period traffic volumes occur during the morning commute period compared against a.m. peak capacity.

Intersection Levels of Service

The methods used to calculate the levels of service are described in the 1994 Highway Capacity Manual (Special Report 209, Transportation Research Board). The measure of effectiveness for signalized intersections is average stopped delay, which is defined as the total time vehicles are stopped in an intersection approach during a specified time period divided by the number of vehicles departing from the approach in the same time period. Table 4 summarizes the delay range for each level of service at signalized intersections and describes the prevalent traffic characteristics of each.

For unsignalized intersections, level of service is based on an estimate of average stopped delay for each movement or approach group. The evaluation procedure is a sequential analysis based on prioritized use of gaps in the major traffic streams for stop controlled and yield controlled movements (i.e., left turns off of the major street); these two movement types at unsignalized intersections would be referred throughout the remainder of this report as "controlled movements". Relationships of average stopped delay are summarized in Table 5, level of service criteria of controlled movements at unsignalized intersections.

Table 4: Signalized Intersection Level of Service Measures

Level of Service	Vehicle Delay Range (seconds per vehicle)	Description of Traffic Conditions
A	0.0-4.9	Traffic is light; most vehicles arrive when the light is green and don't stop at all.
B	5.0-14.9	Conditions are similar to LOS A, but more vehicles are forced to slow or stop for the light.
C	15.0-24.9	The number of vehicles stopping is significant, and individual cycle failures may begin to appear.
D	25.0-39.9	Longer delay result from longer cycle lengths, poor progression, and/or more traffic. Many vehicles stop, and cycle failures become noticeable.
E	40.0-59.9	This is the limit of acceptable delay. Cycle failures become a frequent occurrence.
F	≥ 60.0	Delays are considered unacceptable to most drivers. This often occurs when arrival rates exceed the capacity of the intersection.

Source: *1994 Highway Capacity Manual*, Table 9-1, page 9-6.

Table 5: Level of Service Criteria of Controlled Movements at Unsignalized Intersections

Level of Service	Average Stopped Delay, (seconds per vehicle)
A	≤5
B	>5 and ≤10
C	>10 and ≤ 20
D	> 20 and ≤30
E	> 30 and ≤45
F	> 45

Source: *1994 Highway Capacity Manual*, Table 10-3, page 10-12.

Table 6 summarizes the existing levels of service at key intersections in the Roosevelt neighborhood. The table shows the level of service rating for the intersection as a whole (letter grade) and the average delay per vehicle in seconds for the worst approach at the intersection. All intersections operate at LOS C or better except for the intersection of Roosevelt Way NE and NE 73rd Street which operates at LOS E. This intersection has an average stopped delay of 44 seconds and is less than 2 seconds away from operating at LOS F.

Table 6: 1998 Existing Intersection Levels of Service (PM Peak)

Intersection	PM Peak Level of Service
15th Avenue NE at NE 75th Street	LOS B (SIG - 15 secs)
15th Avenue NE at NE 65th Street	LOS C (SIG - 17 secs)
15th Avenue NE at NE Ravenna Boulevard	LOS B (UNSIG - 11 secs)
12th Avenue NE at NE 75th Street	LOS B (SIG - 8 secs)
12th Avenue NE at NE 65th Street	LOS B (SIG - 9 secs)
12th Avenue NE at NE 64th Street	LOS B (UNSIG – 25 secs)
Roosevelt Way NE at NE 75th Street*	LOS B (SIG - 8 secs)
Roosevelt Way NE at NE 73rd Street*	LOS E (UNSIG - 44 secs)
Roosevelt Way NE at NE 65th Street	LOS B (SIG - 8 secs)

LOS A–F average intersection LOS.
(XX) - Average delay per vehicle of the critical intersection movement (in seconds) and level of service for critical movement.
SIG - Signalized.
UNSIG – Unsignalized.

Collision History

The frequency and severity of collisions are commonly weighed against the speed, volume, and functional classification of a roadway segment or intersection. All five variables are considered in determining if a certain location has an unusually high collision rate.

A summary of high accident locations (HAL's) in the past 5 years was collected from SeaTran. Non-signalized intersections with 5 or more accidents per year and signalized intersections with 10 or more accidents per year are identified by SeaTran as HAL's. Table 7 summarizes the high accident locations in 1996, the total number of accidents within the past 5 years and the average number of collisions in the past 5 years for intersections affecting the Roosevelt neighborhood.

Accident history information was also taken at the intersections of 12th Avenue NE at NE 70th Street and 15th Avenue NE at NE 58th Street, which were. 15th Avenue NE at NE 75th Street experienced the most accidents with 42 in the last 5 years.

Table 7: High Accident Locations

Intersection	Total Accidents in 1996	Total Accidents (1992-1996)	Average Annual Collision Rates	Collision Rate per Million Entering Vehicles
15th Avenue NE at NE Ravenna Boulevard	6	33	6.6	1.22
Roosevelt Way NE at NE 66th Street	5	11	2.2	0.65
Roosevelt Way NE at NE 73rd Street	5	22	4.4	1.30
15th Avenue NE at NE 75th Street*	10	42	8.4	0.85
12th Avenue NE at NE 70th Street	2	21	4.2	0.72

Source: City of Seattle
* - Signalized.

Nonmotorized Facilities

The Roosevelt neighborhood has curb, gutter and sidewalks located on all of its arterial roadways and on most local streets. Crossing treatments of arterial roadways for bicycles and pedestrians are typically accommodated at signalized intersections. Crossing treatments at mid-block locations or unsignalized intersections include:

- Pedestrian crosswalk on 15th Avenue NE at the south side of its intersection with NE 68th Street (southern street).
- Bicycle crossing on the south of 1 5th Avenue's intersection with Cowen Place.
- Bicycle crossing (signed but not painted) on the north side of 15th Avenue at its intersection with NE Ravenna Boulevard.
- Pedestrian crosswalk on the west side of the NE Ravenna Boulevard and Brooklyn Avenue NE intersection.
- Two pedestrian crosswalks on 12th Avenue NE at the south side of its intersections with NE 67th Street (signed but not painted) and NE 68th Street.

Crosswalks at most mid-block crossings and intersections are not painted well. Existing striped and designated bicycle lanes within the neighborhood are found along NE Ravenna Boulevard. This particular nonmotorized corridor serves as a green belt, providing a link between Green Lake, Roosevelt, and the University District neighborhoods.

Public Transportation Services and Facilities

King County Department of Metropolitan Services (Metro Transit) offers an extensive public transportation program within King County. The system offers fixed-route, demand-response, vanpool, ride-matching and parking services either directly through contracts with neighboring transit systems and private and nonprofit transportation providers. Metro Transit also provides custom bus services - a direct, premium-fare service, faster, point-to-point bus trips or routing for larger employers.

Table 8 summarizes existing Metro Transit services within the Roosevelt area. A majority of fixed route service is destined for the Seattle CBD. Only three of the 12 fixed routes do not serve the Seattle CBD, but are destined for the University of Washington, a major destination for transit trips. Other neighborhoods or areas served by transit services that operate within the Roosevelt neighborhood are summarized in the table below.

Table 8: Existing Metro Transit Routes in Roosevelt Neighborhood

Route Number	Transit Stop(s) in Roosevelt	Service Areas Outside of Roosevelt Boundaries	Number of Daily Trips	Peak Headways (Minutes)
25	NE 65th Street at 15th Avenue NE	Lake City, Wedgwood, Montlake, Downtown Seattle	54	10-30
25E	NE 65th Street at 15th Avenue NE	Lake City, Wedgwood, Montlake, Downtown Seattle	12	10-40
40	NE 65th Street at 15th Avenue NE, NE 65th Street at 8th Avenue NE	Wedgwood, Ravenna, University District, Boeing Industrial	5	30
48	NE 65th Street between 12th Avenue NE and Roosevelt Way, NE 65th Street at 15th Avenue NE	Loyal Heights, Greenwood, Ravenna Park, University District, Montlake, Capitol Hill, Madrona, Downtown Seattle, Columbia City, Rainier Beach	138	10-30
48E	NE 65th Street at 15th Avenue NE	Loyal Heights, Greenwood, Ravenna Park, University District, Montlake	6	30-40
68	NE 75th Street at 15th Avenue NE	Northgate, Maple Leaf, Ravenna University District	25	30-60
71	NE 65th Street at 15th Avenue NE	View Ridge, Wedgwood, Ravenna, University District, Downtown Seattle	89	30
72	NE 65th Street at 15th Avenue NE	Lake City, University District, Downtown Seattle	71	30-60
73	NE 65th Street at 15th Avenue NE	Jackson Park, Maple Leaf, University District, Downtown Seattle	70	30-60
76	NE 65th Street at 15th Avenue NE	Wedgwood, Ravenna, Downtown Seattle	19	15-20
78	NE 65th Street at 15th Avenue NE	Jackson Park, Lake City, UW	10	60
79E	NE 65th Street at 15th Avenue NE	Lake City, Maple Leaf, University District, Downtown Seattle	10	30

E – Express Route.

Park and Ride Utilization

There are two existing park-and-rides facilities in the Roosevelt neighborhood planning area. The I-S/NE 65th Street/Green Lake is a State owned park-and-ride with a capacity of 475 parking spaces. Table 9 summarizes this lot's historical monthly utilization between June 1996 to February 1998. This park-and-ride lot utilizes an average of 386 parking spaces out of a total of 475 parking spaces for a percent utilization of 81 percent. Thus, there are about 89 parking spaces open on an average annual daily basis. Typically, at an 85 percent average utilization rate a park-and-ride facility is considered "at capacity". This facility is nearing "at capacity" conditions, utilization during certain periods throughout the year indicate 100 percent or more utilization.

The second existing park-and-ride facility within Roosevelt is a leased lot at the Calvary Temple Church. It has a capacity of 50 stalls, with an average 50 percent utilization rate. A third park-and-ride lot that was leased by King County-Metro within Roosevelt was closed last summer at

the Safeway store located in the southeast comer of the NE 75th Street/Roosevelt Way NE intersection. This lot had a total capacity of 16 stalls for commuting purposes.

Table 9: I-5/NE 65th Street/Green Lake Park and Ride Utilization

Date	Utilization	Capacity	Percent Utilization
Jun-96	388	475	82%
Jul-96	371	475	78%
Aug-96	338	475	71%
Sep-96	378	475	80%
Oct-96	395	475	83%
Nov-96	452	475	95%
Dec-96	342	475	72%
Jan-97	351	475	74%
Feb-97	339	475	71%
Mar-97	n/a	n/a	n/a
Apr-97	n/a	n/a	n/a
May-97	354	475	75%
Jun-97	408	475	86%
Jul-97	378	475	80%
Aug-97	300	475	63%
Sep-97	431	475	91%
Oct-97	471	475	99%
Nov-97	465	475	98%
Dec-97	387	475	94%
Jan-98	423	475	89%
Feb-98	425	475	89%
AVERAGE TOTALS	386	**475**	**81%**

Existing Parking Conditions

Based on a site reconnaissance conducted by KJS in March 1998, it was determined that parking in the Roosevelt neighborhood is provided on both sides of the street on Roosevelt Way NE, 12th Avenue NE, 15th Avenue NE and NE 65th Street. Parking is prohibited on the west side of Roosevelt Way NE between 7:00 and 9:00 a.m., on the east side of the street on 12th Avenue NE between 4:00 and 6:00 p.m. and on the east side of the street on 15th Avenue NE between 4:00 and 6:00 p.m.. Parking on NE 65th Street is prohibited between 7:00 and 9:00 p.m. on the north side of the street and between 4:00 and 6:00 p.m. on both sides of the street and on the west side of the street between 7:00 a.m. and 9:00 a.m.

According to the City of Seattle's *Data Viewer A Neighborhood Information System* 1997, the parking meter district in the Roosevelt neighborhood is bounded by NE 66th Street to the north, NE 62nd Street to the south, 9th Avenue NE to the west and Brooklyn Avenue NE to the east. A residential parking zone (RPZ) is also located in the area bounded by Cowen Place, NE 15th Street and NE Ravenna Boulevard. Figure 3 summarizes existing designated parking areas in the Roosevelt neighborhood.

Planned Transportation Improvements

The City of Seattle's *Capital Improvement Program* (1998 to 2003) did not identify any transportation-related improvements in the Roosevelt neighborhood.

[add in discussion of RTA, scheduling, timing, etc., describe alternatives]

The following short-range improvements in public transportation service are proposed for implementation by King County-Metro:

- Routes 71 and 73 would be revised to operate only between the northeast Seattle neighborhoods and the University District.
- Routes 68, 72 would be replaced by new Route **63**, which would operate only between the northeast Seattle neighborhoods and the University District.
- Combine Routes 73 and 78 into a single, more frequent revised Route 73. This new route would run seven days a week and connect to downtown service on University Way NE. It would serve the University of Washington's south campus area next to 15th Avenue NE and NE Pacific Street.
- Modify Routes 72 Local and 72 Express to serve NE 65th Street in Ravenna instead of NE 80th Street, which would improve service to the NE 65th Street commercial area.
- Delete Route 40; riders could take one of several routes to downtown Seattle and transfer to Route 174.
- Delete Route 68; replace with more frequent service on Route 73 in Maple Leaf and new Route 63 on 25th Avenue NE; alternate service would also be available on Routes 66 and 67.
- Delete Route 72; replace with more frequent service on revised Route 73.
- Delete Route 79, which duplicates other service; Ravenna Avenue NE riders could take revised Route 63 and transfer at 15th Avenue NE and NE 65th Street to downtown Seattle service on Route 76.

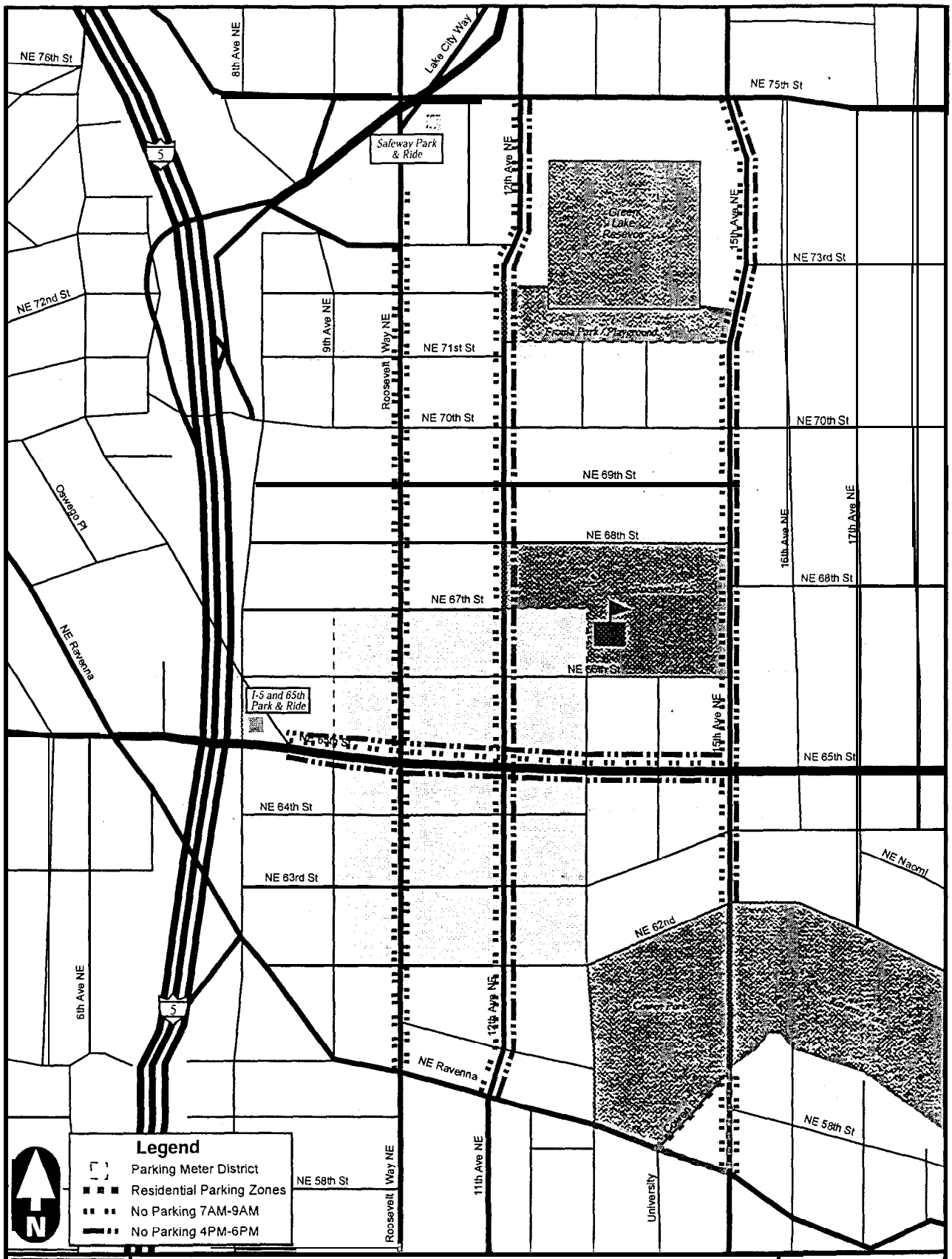

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Figure 3 - Existing Designated Parking Areas

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Transportation Issues

A survey conducted in May 1997 of Roosevelt residents showed Roosevelt residents seek to maintain and improve a strong neighborhood identity by living in a safe and pedestrian-friendly environment, maintaining and expanding neighborhood parks, improving traffic corridors and decreasing vehicle speeds. Discussions groups with Roosevelt's businesses and property owners were also conducted in May 1997 and participants expressed an interest in creating a community event for businesses, residents and local community and attracting more businesses to serve the area. The following transportation issues are identified below:

- Pass-through traffic from I-5 onto Roosevelt Way and NE 65th Street.
- Speeding on 15th Avenue NE, 12th Avenue NE and to a lesser degree on Roosevelt Way NE. (Few speed limits signs and little or no police enforcement).
- Unsafe crossing treatments along major transportation corridors, near neighborhood parks and around Roosevelt High School.
- Parking and no police enforcement of parking restrictions.
- Transit layovers below I-5 and on NE Ravenna Boulevard.
- The change in Metro's service plan is also a concern to many residents.

Figure 4 summarizes existing transportation issues in the Roosevelt neighborhood.

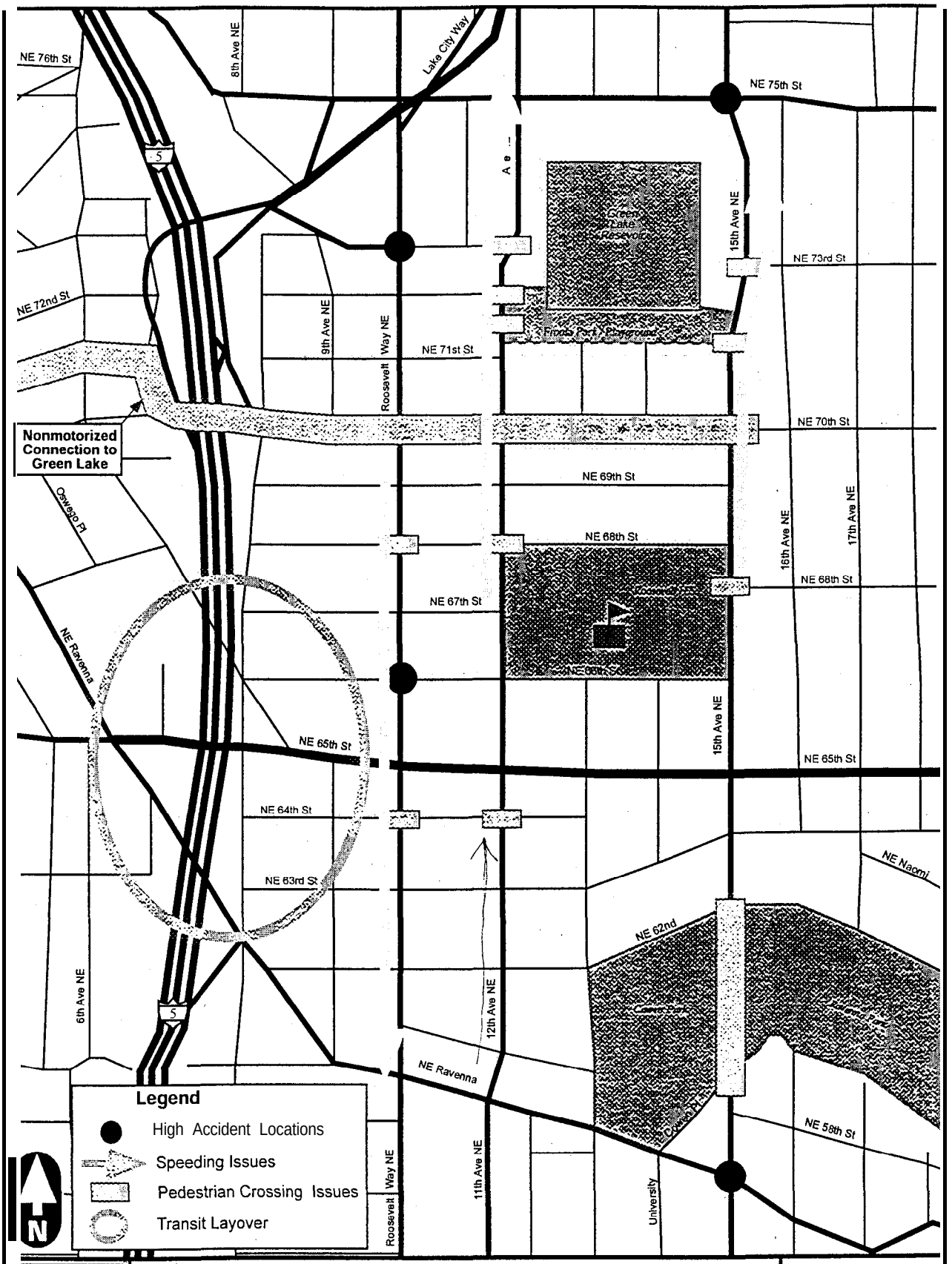

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Figure 4 - Transportation Issues in Roosevelt

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