



INFORMATIONAL MEMORANDUM

TO: Transportation and Infrastructure Committee
FROM: Henry Hash, Public Works Director *HH*
BY: Cyndy Knighton, Senior Program Manager
CC: Mayor Ekberg
DATE: October 19, 2018
SUBJECT: Traffic Calming/Safety Improvements Priorities

ISSUE

Update the Committee on the prioritization process on traffic calming requests and safety improvement needs.

BACKGROUND

During the September 10, 2018 Transportation and Infrastructure Committee meeting, staff presented a list of locations where traffic calming treatments have been requested on residential streets as well as 8 locations on commercial streets where safety improvements have been identified. The Committee directed staff to bring back the list with some prioritization of the projects for further discussion.

DISCUSSION

Staff scored the residential locations applying the existing criteria and point schedule in the Neighborhood Traffic Calming Program (NTCP) on the 9 locations where full data was available. The remaining 13 locations have not yet been scored as the necessary data collection has not been completed. While working through the scoring criteria, staff sees the need to revise the criteria in some locations to accommodate locations near all major pedestrian generators and not just K-12 schools. The highest scoring location for the residential locations is currently the S 144th Street at 46th Avenue S intersection where a Rectangular Rapid Flashing Beacon (RRFB) has been installed at the marked crosswalk. This location is a portion of a larger project to improve safety for school children that Tukwila applied for a Safe Routes to School Grant earlier this year. Project awards have not yet been announced.

On the commercial locations, the NTCP scoring criteria cannot be applied as it is designed for residential and collector streets with Average Daily Traffic (ADT) volumes of 7,000 or less. Some of the commercial locations have begun design using Traffic Impact Fee funds and one location has already received funding for design and construction through a recently awarded grant. Staff has assigned some preliminary rankings after considering the known urgency of need, status on design, funding availability, and engineering judgement.

ADA Accessibility Scores have been included for both the residential and commercial locations. This information could be considered as a factor when assigning a priority ranking as it addresses safety and accessibility needs.

RECOMMENDATION

Staff recommends continuing refining the scoring and ranking system in the NTCP to meet the needs and priorities of the City.

ATTACHMENTS

- Priority List for Traffic Calming and Safety Improvements
- Map of Locations
- Scoring worksheet from the Neighborhood Traffic Calming Program

Priority List for Traffic Calming and Safety Improvements

Identifier	Rank	ADA Accessibility Score	NTCP Score	Residential Locations	Safety issue(s)	Average Volume	Average Speed	85th %ile Speed	2013-2017 Accidents				Potential Revisions/Improvements		Comments
									PDO	Peda-cyclist	Injury	Fatality	Option 1	\$	
R-18.A	1	35	18	S.144th at 46th Ave S	School Crossing safety	7,400 (13 hrs)	23	28	2	0	0	0	RRFB with remarked crossing	13k	RRFB is ordered, to be install before school year. Safe Routes to School Grant
R-18.B	2	n/a	9	S.148th St at 4400 blk	Speeding/school bus stop safety	1,300	21	26	1	0	0	0	Speed Cushions/pair	17k	
R-18.C	3	n/a	8	Macadam rd s at 13700 blk	Speeding	2,500	26	29	0	0	0	0	Permanent Radar sign	6k	
R-18.D		n/a	7	S.164th at 4700 blk	Speeding	1,800	25	30	0	0	0	0	Permanent Radar sign	6k	
R-18.E	4	25	7	42nd Ave S at 11900 blk	Speeding	3,800	23	29	1	2	0	0	Speed Cushions/pair	17k	85%tile is low but regular dangerous violators
R-18.F	-	n/a	7	44th Ave S at 11800 blk	Speeding	700	17	21	1	0	0	0	No Action		No evidence of a speeding issue. PD and radar sign studies.
R-18.G		25	6	51st Ave S 16200 Block	Speeding	3,300	25	30	3	0	0	0	Permanent Radar sign	6k	
R-18.H		15	4	S.140th at 3500 blk	Speeding	3,700	20	25	0	0	0	0	Permanent Radar sign	6k	
R-18.I		15	3	53rd Ave S at S.140th	Speeding	3,000	23	28	0	0	0	0	Speed Cushions/pair	17k	
R-18.J		25	n/a	42nd Ave S at 13700 blk	Speeding/curve safety				4	1	3	0	Led light warning signs (4)	8k	Homeowner association claims 3 road departures in past year
R-18.K		36	n/a	62nd Ave at 149th	School Crossing safety/speeding	1,600			1	1	0	0	RRFB with remarked crossing	80k	Design work complete for ADA improvements.
R-18.L		16	n/a	S.130th St at 37th Ave S	Speeding				0	0	0	0	Speed Cushions/pair	17k	No current traffic data, on schedule soon
R-18.M		36	n/a	S.150th St at Thorndyke Elementary	School Crossing safety/marked xing				1	0	0	0	RRFB with marked crossing	80k	This was to be addressed with School remodeling
R-18.N		36	n/a	S.147th St at 59th Ave S	School Crossing safety/marked xing								RRFB with marked crossing	80k	ADA ramp improvements required
R-18.O		36	n/a	S.144th St at Macadam Rd	School Crossing safety/marked xing								RRFB with marked crossing	80k	ADA ramp improvements required
R-18.P		25	n/a	S.144th St at 44th Pl	School Crossing safety/marked xing	7,400 (13 hrs)							Marked crossing w/signs and ADA ramps	13k	ADA ramp improvements required
R-18.Q		15	n/a	S.144th St at 37th Ave S	Crossing safety/marked xing								RRFB with marked crossing	32k	At Cascade view park
R-18.R		36	n/a	TIB at S.141st St	Crossing safety/marked xing								RRFB with marked crossing	190k	Refuge islands and ADA ramps required
R-18.S		36	n/a	58th Ave S at S.144th St	Speeding								No Action		No evidence of a speeding issue. PD and radar sign studies.
R-18.T		n/a	n/a	50th Ave S at S.125th Pl	Speeding								Radar sign Temp/Permanent	6k	No current traffic data, on schedule soon
R-18.U		n/a	n/a	S.132nd St at 33rd Ave S	Speeding								Radar sign Temp/Permanent	6k	No current traffic data, on schedule soon
R-18.V		n/a	n/a	Macadam rd s at 13600 blk	Speeding/truck traffic								Speed Cushions/pair	\$680k	This is signed for no trucks, speed cushions requested

Accessibility scores of 36 or higher are considered high priority locations

Priority List for Traffic Calming and Safety Improvements

COMMERCIAL LOCATIONS

2013-2017 Accidents

Potential Revisions/Improvements

Identifier	ADA Accessibility Score	Notes	Commercial Locations	Safety issue(s)	Average Volume	Average Speed	85th %ile Speed	PDO	Peda-cyclist	Injury	Fatality	Potential Revisions/Improvements		Comments
												Option 1	\$	
C-18.A	28		Southcenter Blvd at 65th	Speeding, left turn delays, high ped crossings	9,300	35	40	10	2	1	0	RRFB/radar sign/rechannel	\$190k	Signal warranted, radar sign and RRFB as interim
C-18.B	26		Southcenter Blvd at 62nd	Speeding, left turn delays, high ped crossings	9,300	35	40	10	4	4	0	Traffic Signal	\$750k-1M	Existing RRFB
C-18.C	25		TIB at S.140th st	Pedestrian safety and left turn delays	16,000			19	1	10	0	RRFB Traffic Signal	\$200k \$750k-1M	High pedestrian traffic area
C18-D	20	*	Andover Park East at Minkler	Left turn delays	12,000			1	0	3	0	Signal revision & rechan	\$2M	60% design completed
C18-E	20	*	Andover Park East at Industry Dr	Pedestrian safety and left turn delays	12,000			1	1	2	0	Traffic Signal	\$850k	60% design completed
C18-F	15	+	S.133rd at SR 599 on/off ramp	Left turn delays	10,000			7	0	2	0	Traffic Signal Roundabout	\$1.9- 2.4M	Feasibility report but no design
C18-G	35	#	West Valley Hwy at Ped bridge	pedestrian access/safety	28,800			25	0	16	0	Full Pedestrian signal	\$750k-1M	Currently under design for West Valley improvements
C18-H	n/a		Flashing Yellow arrow revisions to signalized left turns throughout the City	Pedestrian safety and left turn delays	Varies							List to be compiled on case by case studies. Many locations possible.	\$5k each	FYA operation is safer for pedestrians and increases intersection capacity when used in lieu of protect only phasing.
													\$6.6 - \$8.5M	

* 60% design is complete, project is shelved pending additional funding

+ Feasibility report is complete

Grant funds for design and construction in hand, negotiating scope and fee for design

RESIDENTIAL LOCATIONS



City of Tukwila



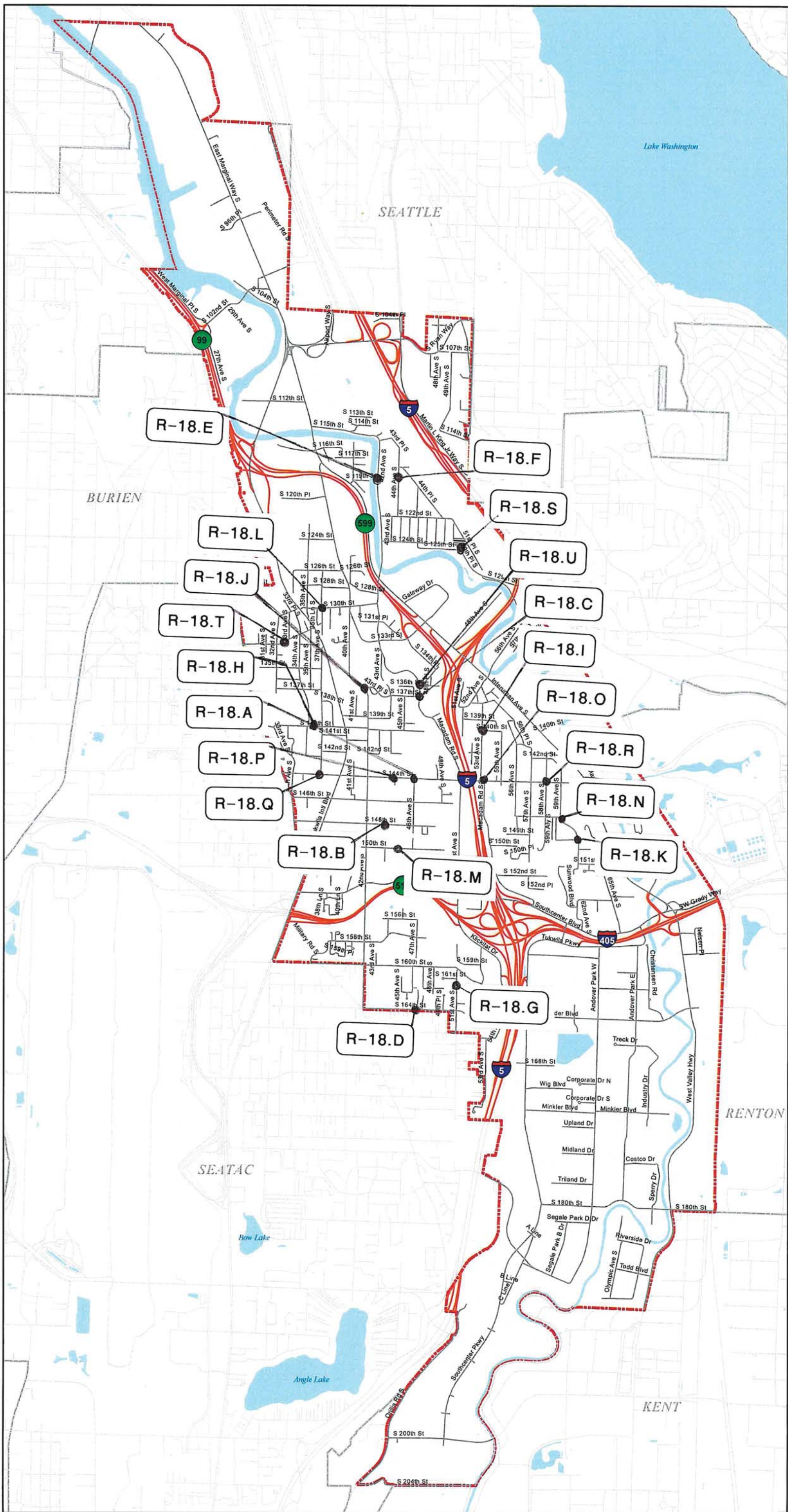
Not to Scale

Vicinity Map



Disclaimer:
The location of features and boundaries are approximate and are intended for reference only. Data is based on best information available.

RESIDENTIAL LOCATIONS





City of Tukwila



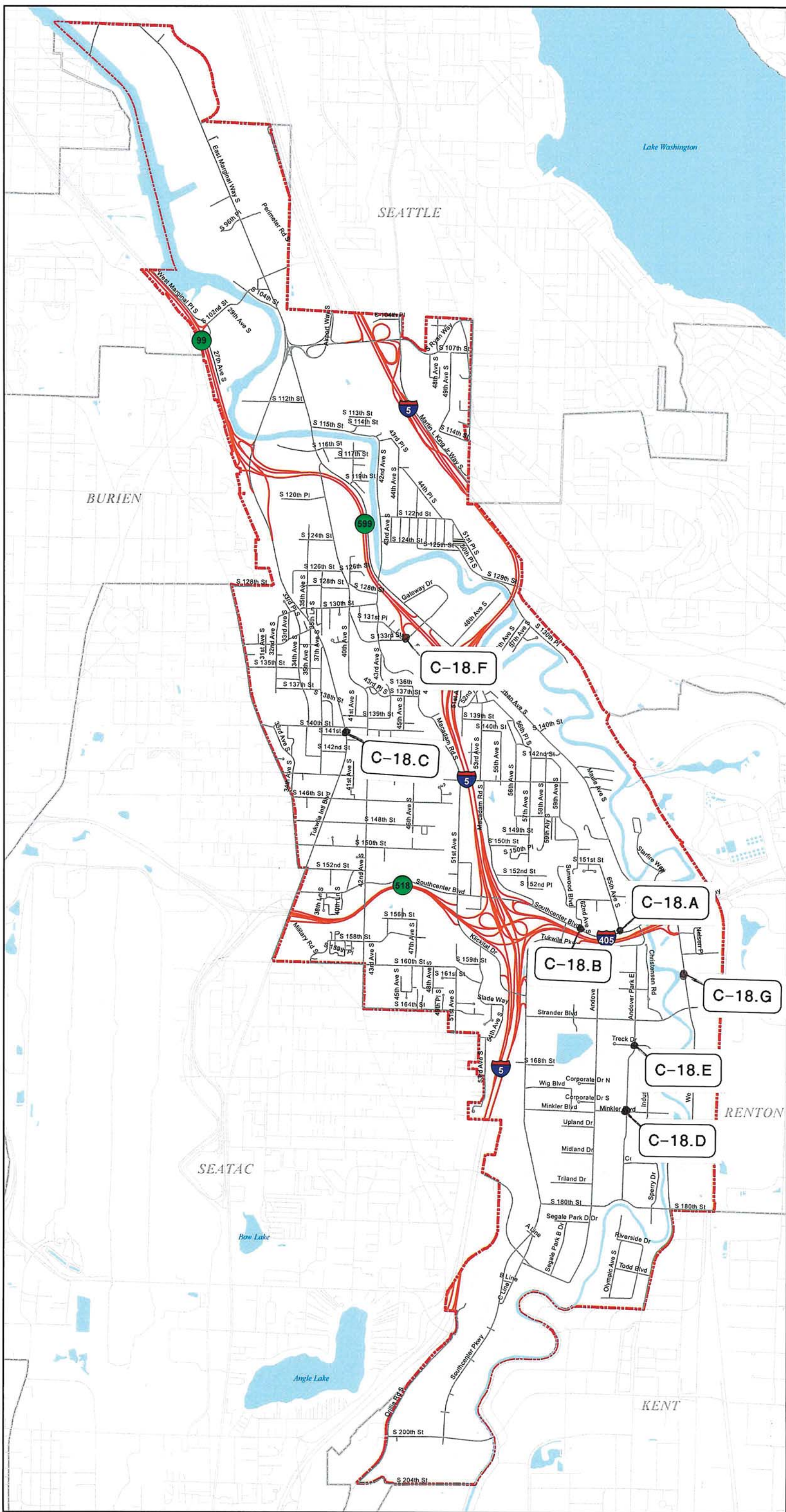
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Vicinity Map



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COMMERCIAL LOCATIONS



Appendix C: Priority Point Worksheet.

Location: _____

Date: _____

Staff Name: _____

Category	Points
1. Accidents: 1pts for each recorded accident of the roadway for the past 3years	_____
2. Volume: Average daily traffic volumes (weekday) divided by 100	_____
3. Speed: 5pts for every mph more than 5-10mph above the posted speed limit	_____
4. Sidewalks: If sidewalks exist 0pts; if not 5pts	_____
5. School: 10pts for each school within the impacted area	_____
Total Points:	_____

Speed, Accident and Volume Data

Volume = _____

85% Speed = _____

% 10mph above = _____

Basis for Point Assignment Chart

Criteria	Basis for Point Assignment
Accidents	10 points for each recorded accident of roadway for the past three years total (5 points will be added if there an injury reported)
Speed	5 points for every mph greater than 10mph above the posted speed or [(85th percentile speed limit – 10 mph – posted speed limit) x 5 points]
Volume (Residential)	1 point for every 200 vehicles Average daily traffic volumes (weekday)
Volume (Collector)	1 point for every 500 vehicles Average daily traffic volumes (weekday)
Sidewalks	5 points if there is not a continuous sidewalk on one side of residential streets or both sides of collectors
Schools	5 points for every school within the impact area and 2 points for school property within 500 ft of the impact area