



City of Shoreline

Light Rail Station Subareas Parking Study 2021 Update

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Introduction

In March 2015 and September 2016, new zoning designations were established in the vicinity of the 185th Street station and the 145th Street station respectively. Anticipating the increased demand for on-street parking resulting from the opening of light rail stations and from increased density around the light rail stations, the Shoreline City Council allocated \$25,000 annually from 2018 through 2021 to obtain baseline parking utilization information, identify current and anticipated future on-street parking capacity challenges, and evaluate opportunities to manage parking now and into the future within the light rail subareas. Two studies have been completed prior to this 2021 update.

The first Light Rail Subareas Parking Study was discussed with the Council in October 2019 and is available at the following link: [October 28, 2019 staff report on Discussion of the Light Rail Station Subareas Parking Study](#). The first study provided thorough documentation of existing parking laws, codes, policies and practices, common parking management tools, on-street parking demand projections, and recommended near-term, mid-term, and long-term strategies to manage parking demand.

The second Light Rail Subareas Parking Study (2020) was discussed with Council in January 2021 and is available at the following link: [January 4th, 2021 staff report on Discussion of the Light Rail Station Subareas Parking Study 2020 Update](#). The 2020 study included updated enforcement statistics, 2020 subarea on-street parking capacity and utilization data, updated on-street parking demand projections, actions completed since last study report out, and updated recommendations.

These studies only address motor vehicle parking on City streets and do not include information about bicycle or other types of unlicensed vehicle parking. This 2021 update focuses on utilization data, provides updates to utilization projections, updates to action steps, and includes new walkshed mapping around the light rail stations to prepare for anticipated restricted parking zones.

On-Street Parking Utilization

Thorough on-street parking capacity and utilization, data collection and analysis were performed for the 145th and 185th Subareas, extending approximately ¼ mile surrounding the subareas to account for impacts to surrounding areas. [Appendix A](#) provides a map showing the full extent of both study areas.

For the purposes of this inventory, on-street parking utilization is defined as the percentage of vehicles parked on-street during a set time period. The City of Shoreline does not formally designate or delineate individual spaces but compiled a space inventory that would exist if spaces were marked. These spaces are based on standard parking dimensions and reflect parking restrictions near intersections, driveways, and fire hydrants. Occupancy can be over 100% as vehicles sometimes park close together, unlawfully at 90-degree angle, or in prohibited areas (i.e., too close to intersections or crossings).

The target occupancy, typically representing 1-2 open spaces per block, is 70% to 85%. This excess capacity helps address circling or “cruising” for parking, which has associated congestion and environmental impacts. Conversely, occupancy significantly lower than the target range represents a City asset that is being underutilized, representing an unbalanced cost in terms of maintenance and operations of the asset.

Recognizing that parking occupancy varies over the course of the day, parking occupancy is evaluated by time-of-day groupings. These groupings normally include early morning hours between 4-6 AM to obtain

residential demand and middle hours 10 AM-12 PM to obtain daytime demand. Parking data collection was performed in the Winter of 2021, avoiding any holidays, however travel patterns related to COVID-19 impacts would certainly be applicable to the data collected during this period.

Table 1 shows household growth by year within each subarea; the main factor influencing on street parking at this time. Between January 1st, 2020 and December 31st, 2020, permits for four (4) new households in the 145th Subarea and 31 new households in the 185th subarea were finalized.

Table 1. Subarea Household Growth

Study Area Household Growth	145 th Subarea	185 th Subarea
2019 Report (2018 YE)	3,467	3,317
2020 Report (2019 YE)	3,476	3,418
2021 Report (2020 YE)	3,480	3,449

Table 2 provides parking utilization data from 2019, 2020, and 2021 survey efforts. Given the relatively minor growth in both subareas for the 2020 calendar year, 2021 parking utilization (representing 2020 year-end) is not significantly different from prior report findings.

Table 2. Summary Parking Utilization - 145th & 185th Subareas

	4-6 AM % Utilized (residential demand)			10-12 PM % Utilized (commercial demand)		
	2019 Report (2018 YE)	2020 Report (2019 YE)	2021 Report (2020 YE)	2019 Report (2018 YE)	2020 Report (2019 YE)	2021 Report (2020 YE)
145th Local Streets	36%	37%	34%	26%	26%	29%
145th Arterials	17%	18%	22%	31%	30%	28%
145th Summary	35%	35%	33%	26%	26%	29%
185th Local Streets	35%	36%	38%	26%	29%	31%
185th Arterials	28%	25%	34%	28%	23%	30%
185th Summary	34%	35%	38%	26%	28%	31%

As would be expected, parking utilization is highest in the hours representing residential parking demand (4-6 AM) but is still quite low overall, at 33% in the 145th Subarea and 38% in the 185th Subarea. As residential streets make up the majority of the City street network, they also account for the majority of on-street parking. It is worth noting that the capacity of on-street parking was lower for this cycle in both subareas, which likely contributes to the overall increased utilization rate within the 185th Subarea, considering the relatively minor increase in households. The reduction in parking capacity (shown in [Appendix E](#)) is likely due primarily to construction activity. Conversely, the 145th Subarea saw a slight decrease in utilization despite reduced on-street parking capacity, from 35% to 33%. This may be in part due to COVID-19 related impacts, as much of the higher parking utilization historically occurred near 15th Avenue NE where there are more commercial land uses.

Comprehensive street segment-specific results are provided in tabular form in [Appendix B](#) and are also mapped as shown in [Appendix C](#). The 145th Subarea contained 12 segments exceeding 70% (a net decrease of 6 segments), with 9 segments exceeding 85% for at least one period. The 185th Subarea contained 28 segments with utilization over 70% (a net increase of 2 new segments in comparison to the last survey). Of these 28 segments, 17 had parking utilization over 85% for at least one period during the day. A list of

specific segments with utilization over 70% is shown in [Appendix D](#). In considering areas that could potentially meet restricted parking zone permit requirements, the following streets appeared to meet or come close to the criteria (75% utilization across a ¼ mile area):

- 11th Avenue NE (NE 170th Street to NE 175th Street)
- 12th Avenue NE (NE 170th Street to NE 181st Place)
- 15th Avenue NE (NE 175th Street to 15th Place NE)

A Restricted Parking Zone (RPZ) in this area would be applicable to local streets west of 15th Avenue NE, and west to and including 11th Avenue NE, if established.

Projected On-Street Parking Capacity and Utilization

With the existing capacity and utilization conditions documented, as well as the underlying future growth thresholds established by the 145th and 185th Subarea Final Environmental Impact Statements, it is possible to estimate, at a very high level, potential impacts to on-street parking within and surrounding the subarea.

According to the most recent US Census Data, in King County an average of two (2) vehicles per household are available. Using this information, in conjunction with existing household data, year 2035 household thresholds, code requirements for on-site parking for new construction (including reductions allowed when light rail stations are operating), and existing on-street parking capacity/utilization data, it is possible to estimate the parking demand trend. Figure 3 shows two scenarios for each subarea; one in which car ownership remains at 2 vehicles per household, and another where it drops to 1.4 vehicles per new household by 2029. The differential in parking demand by 2035 under the two scenarios is approximately 17% for both subareas. The data tables for this figure and additional context for assumptions is provided as [Appendix E](#).

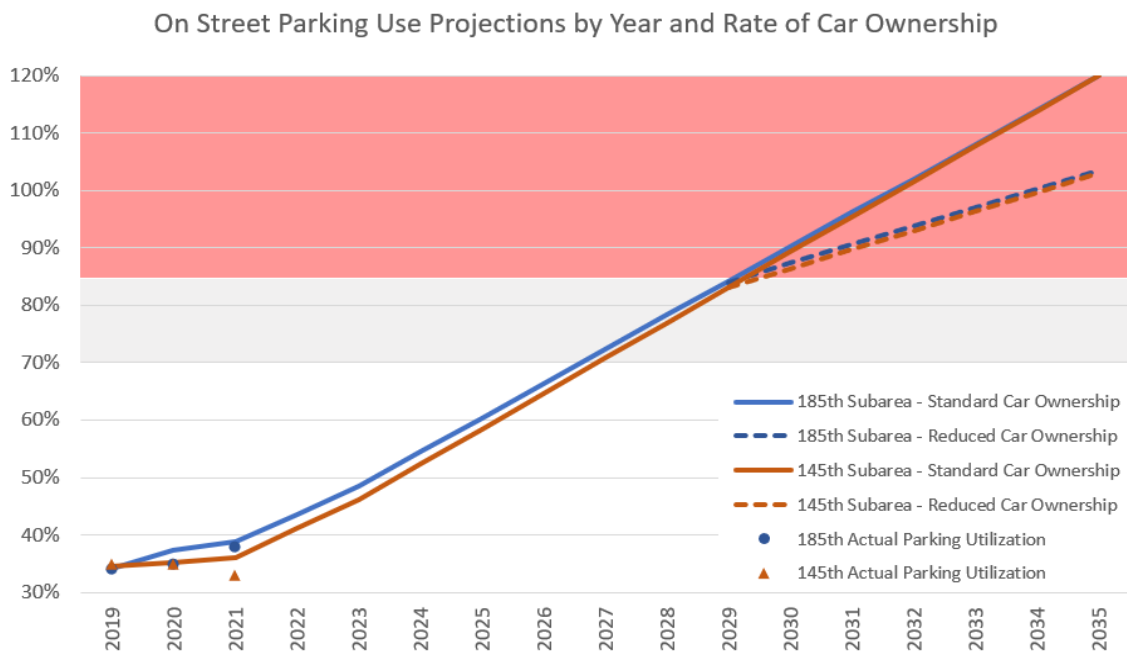


Figure 3. On-street parking demand projections

This projection provides useful information about when the subareas as a whole may begin to approach target and at-capacity on-street parking demand so the City can take the appropriate steps for proactive parking management, and guide provision of on-street parking associated with developer right-of-way improvements. This model can also be adjusted over time to more accurately reflect fluctuations in housing growth year by year which will allow for more accurate projections. It should be noted that the assumption for on-street parking capacity remains fixed in this projection. On-street parking capacity will change over time; in some cases, parking may be added with developer frontage improvements, or with consolidation of driveways, and in others it may be removed to accommodate bicycle facilities for example.

It should also be noted that increased parking demand generated by Sound Transit Light Rail stations is not accounted for. This is because hide-and-ride mitigation is planned to detour trips to the station once the parking garage is full. For this year's report, to help the City prepare for potential hide-and-ride mitigation, walkshed mapping was completed. [Appendix F](#) illustrates a 15-minute walkshed around station areas; these areas will require consideration for tools such as restricted parking zone permitting.

Conclusions & Recommendations

Household growth for the 2020 calendar year was relatively low for both subareas which resulted in little change from the prior year parking utilization report. As such, the conclusions and recommendations are consistent with the 2020 report. Progress on near term actions is reported in blue italic text.

Near-Term (0-5 years)

1. Continue to utilize basic time of day and load zone parking restrictions as needed

As redevelopment occurs, continue to assess need for load zone restrictions, or other time of day/day of week restrictions as needed. Assessment and implementation typically occur with review of Right-of-Way permits associated with frontage improvements.

Status: In progress/ongoing.

2. Analyze and adopt a monetary penalty schedule for parking violations specific to City of Shoreline

More thorough budget analysis would be performed as part of this process, which could help to inform enforcement staffing decisions. Any changes would come before Council for discussion and adoption. If adopted, the penalty schedule should be reviewed and adjusted as needed periodically.

Status: Complete. The first discussion of the proposed monetary penalty updates occurred May 18, 2020, and the adoption occurred June 1st. [Ordinance No. 889](#) documents these changes which reflect a \$40 minimum monetary penalty and \$25 delinquency penalty starting January 1, 2021. The ordinance also documents an increase to a \$50 minimum monetary penalty starting January 1, 2023.

3. Fund a position dedicated to parking management and enforcement

Based on existing and anticipated need to enforce anticipated RPZ's around Sound Transit Light Rail Stations, staff recommends funding a part time position by 2024, dependent on the financial analysis

and outcomes of revising the parking violation monetary penalty. The position should be periodically reviewed with biennium budget process to determine if/when additional staff resource is needed.

Status: On hold. Revisions to the parking violation monetary penalty will help to offset the cost of a new dedicated parking enforcement position. Through financial analysis conducted for the monetary penalty changes, and discussions with Council, the goal is now to fund a position by the time light rail opens. The request for the position, including supporting analysis, will be addressed in the 2023-2024 budget process.

4. Update RPZ policies, procedures and fees to prepare for anticipated new RPZ's surrounding light rail stations

The City currently manages a small RPZ near Shoreline Community College, however the program framework is cumbersome for both staff and residents. Updating the policies, procedures and fees will allow for a more predictable and scalable RPZ program in order to be responsive to the new demands of the light rail stations and surrounding redevelopment. Public Works Staff will also work with Planning and Community Development staff to migrate RPZ permit intake from Public Works to Planning and Community Development as this represents the only permit that Public Works currently takes in directly. In accordance with these RPZ updates, implement new zones as part of Sound Transit Hide-and-Ride mitigation commitment, following Sound Transit's study efforts.

Status: In progress. RPZ guidelines have been updated and are online at: www.shorelinewa.gov/government/departments/public-works/traffic-services/parking.

The new fee collection system used by the City's Recreation Division, ActiveNet, will likely be utilized for RPZ tracking and fees. Once the migration to ActiveNet is operationally complete and vacant positions in the City's IT Division are filled, Traffic staff will work to add RPZ permits to ActiveNet.

5. Use existing study data to inform the Engineering Development Manual Street Matrix update process

This will be an ongoing effort, using parking data to inform where on-street parking is needed and should be included as part of frontage improvements. Parking utilization data will continue to be collected through 2021 which will provide additional context for this process. Nexus and proportionality must be considered in terms of associated dedication requirements.

Status: In progress/ongoing.

6. Consider updating Transportation Master Plan parking policies specific to land use context

The City may wish to expand upon or reframe policy T36 in order to allow for a more nuanced approach to parking prioritization as it relates to adjacent land use.

Status: In progress. TMP process has begun: <https://www.shorelinewa.gov/government/departments/public-works/transportation-services/transportation-master-plan/tmp-update>.

7. Explore potential development code revisions to encourage reduced car ownership

Existing code should be examined for unintended consequences that effectively increase traffic volumes and car ownership. This could include but is not limited to, options to incentivize lower car ownership, removing the current code provision restricting unbundling parking for the interior portion of the subareas to reduce car ownership, and/or expanding on criteria for reduced or revised on-site parking requirements. Fee-in-lieu or other programs could provide a mechanism for shifting private investments from the traditional individual owned car structure to more sustainable modes like walking, biking, transit, car-share, or other alternatives.

Status: In progress. The Planning and Community Development Department has begun reviewing policy to unbundle parking from rental prices. Additional refinements to development code with regard to on-site parking will be considered in future code updates.

8. Group subarea parking utilization reporting into smaller analysis zones

For the final report out, and in preparation for upcoming Sound Transit parking studies, create smaller geographic groupings within each subarea for utilization analysis. This will better reflect the impacts around pockets of development and will allow for better planning and quicker response to areas with emerging parking capacity issues.

Status: In progress. This report evaluated some smaller grouped areas in consideration of RPZ criteria (as described on page 5) but did not set specific boundaries for utilization summaries. Instead, to better prepare for light rail station hide-and-ride mitigation, walkshed analysis was completed to better understand where RPZ actions may be needed. Staff will use walkshed data and detailed utilization data provided by the 2019, 2020, and 2021 reports to further refine study zones as part of the ST2 Special Use Permit conditions for RPZ study as needed.

Mid-Term (5-10 years)

Dependent on growth and light rail station impacts, the following represent potential actions for the mid-term timeframe of 5-10 years.

1. Potential implementation of special use zones

Around light rail stations or other major trip generators, identify key locations for designating curb space for car-share and ride-hail services to maintain safe, consistent, user-friendly transportation options.

2. Establish basic real time parking information technology

If not already implemented or planned within the 5-10 year timeframe, work with Sound Transit to establish real time information for their parking garages in Shoreline to reduce unnecessary trips on City Streets and provide useful information to drivers/riders.

3. Depending on growth, perform a feasibility analysis of metered parking in key locations

If growth is generally on-track with or exceeding projections, collect new parking utilization and demand data in 2028 to determine if metered parking is viable. If utilization shows metered parking

may be viable based on demand, prepare more detailed implementation strategy and financial analysis for follow up Council action.

Long-Term (10+ years)

Dependent on growth and status of mid-term recommendations, the following represent potential actions to take in the mid-term timeframe of greater than 10 years.

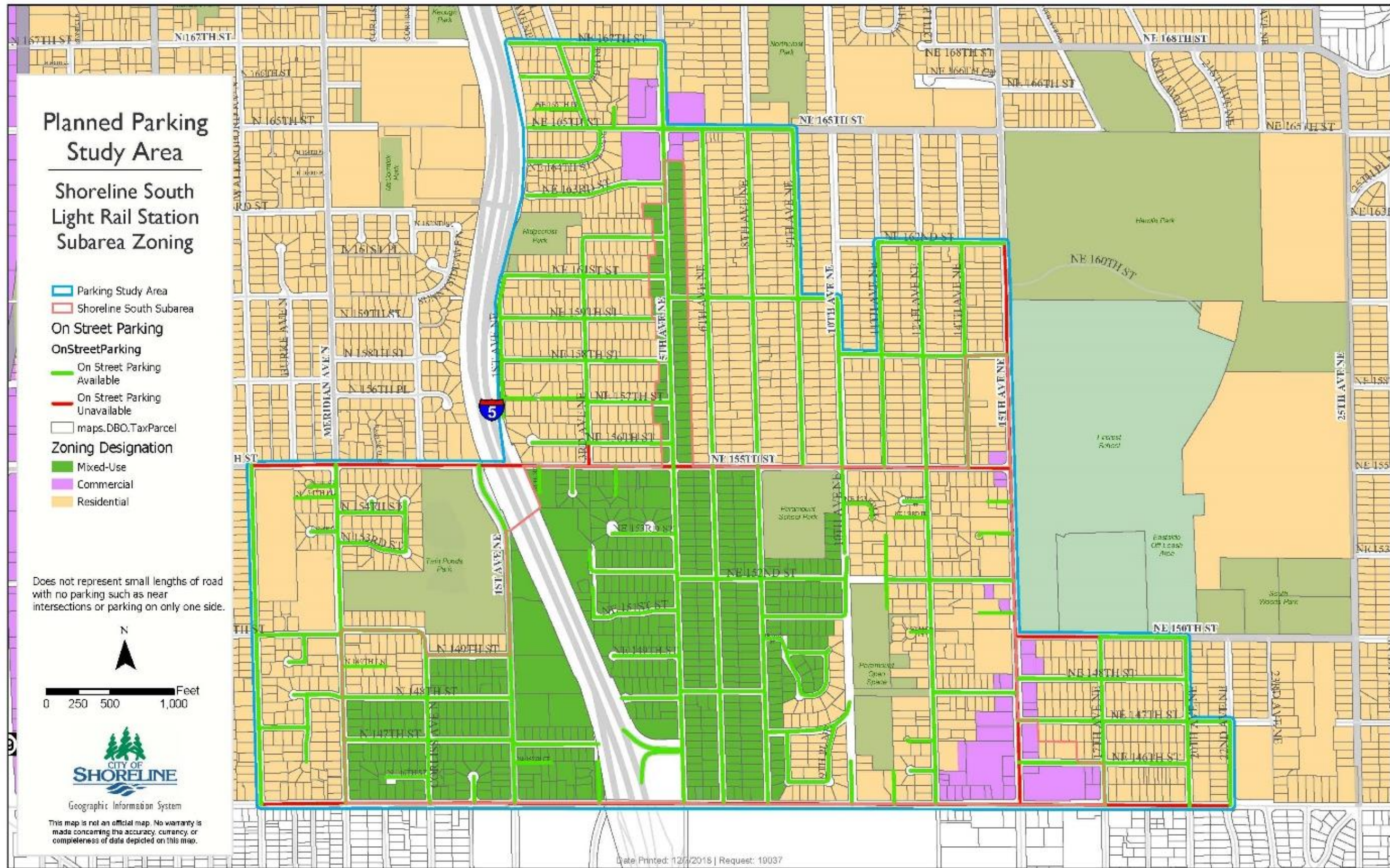
1. Implement metered parking in key locations

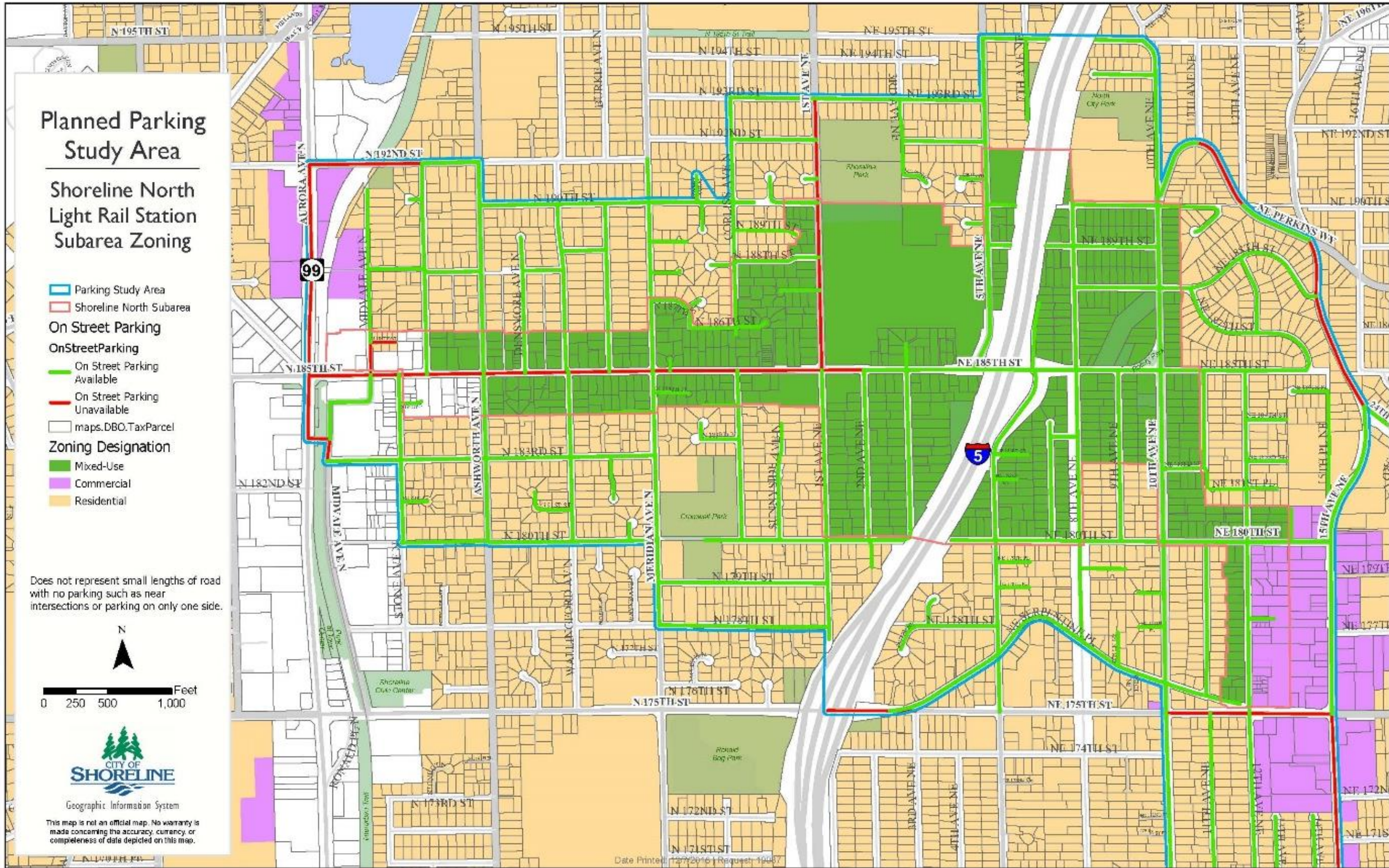
If warranted, begin implementation of metered parking program in high-demand locations within the subareas. *Note: Establishing ADA parking on-street is required when metered parking is implemented.*

2. Expand real time parking information

Depending on the private infrastructure and market demand, potentially form public-private partnerships to expand real time parking information program. Explore big data technology to provide opportunities for real time information with regard to on-street parking.

Appendices A-E





Appendix B – Tabular Parking Survey Results by Street Segment

145th Area

STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
10TH AVE NE FROM NE 151ST ST TO NE 152ND ST	12	0	0%	5	42%
10TH AVE NE FROM NE 152ND ST TO STREET END	6	4	67%	3	50%
10TH AVE NE FROM STREET END TO NE 153RD CT	17	6	35%	2	12%
10TH AVE NE FROM NE 153RD CT TO NE 155TH ST	5	2	40%	2	40%
10TH AVE NE FROM NE 155TH ST TO NE 158TH ST	37	18	49%	13	35%
10TH AVE NE FROM NE 158TH ST TO NE 160TH ST	29	14	48%	8	28%
11TH AVE NE FROM NE 155TH ST TO NE 158TH ST	37	16	43%	23	62%
11TH AVE NE FROM NE 158TH ST TO NE 162ND ST	42	12	29%	14	33%
12TH AVE NE FROM NE 145TH ST TO NE 146TH ST	4	4	100%	4	100%
12TH AVE NE FROM NE 146TH ST TO NE 147TH ST	15	4	27%	7	47%
12TH AVE NE FROM NE 147TH ST TO NE 148TH ST	15	1	7%	2	13%
12TH AVE NE FROM NE 148TH ST TO NE 150TH CT	23	5	22%	4	17%
12TH AVE NE FROM NE 150TH CT TO NE 152ND ST	13	1	8%	1	8%
12TH AVE NE FROM NE 152ND ST TO NE 153RD PL	28	0	0%	1	4%
12TH AVE NE FROM NE 153RD PL TO NE 154TH ST	6	1	17%	3	50%
12TH AVE NE FROM NE 154TH ST TO NE 155TH ST	8	2	25%	0	0%
12TH AVE NE FROM NE 155TH ST TO NE 158TH ST	41	4	10%	4	10%
12TH AVE NE FROM NE 158TH ST TO NE 162ND ST	27	10	37%	7	26%
14TH AVE NE FROM NE 155TH ST TO NE 158TH ST	40	10	25%	8	20%
14TH AVE NE FROM NE 158TH ST TO NE 162ND ST	39	12	31%	9	23%
17TH AVE NE FROM NE 145TH ST TO NE 146TH ST	8	3	38%	3	38%
17TH AVE NE FROM NE 146TH ST TO NE 147TH ST	2	0	0%	0	0%
17TH AVE NE FROM NE 147TH ST TO NE 148TH ST	7	1	14%	1	14%
17TH AVE NE FROM NE 148TH ST TO NE 150TH ST	7	7	100%	5	71%
2ND AVE NE FROM STREET END TO NE 155TH ST	12	3	25%	3	25%
20TH AVE NE FROM NE 145TH ST TO NE 146TH ST	6	4	67%	3	50%
20TH AVE NE FROM NE 146TH ST TO NE 147TH ST	15	6	40%	1	7%
20TH AVE NE FROM NE 147TH ST TO NE 148TH ST	20	5	25%	5	25%
20TH AVE NE FROM NE 148TH ST TO NE 150TH ST	19	2	11%	2	11%
22ND AVE NE FROM NE 145TH ST TO NE 147TH ST	46	14	30%	7	15%
3RD AVE NE FROM NE 151ST ST TO STREET END	Closed	0	Closed	1	Closed
3RD AVE NE FROM NE 155TH ST TO NE 156TH ST	4	0	0%	0	0%
3RD AVE NE FROM NE 156TH ST TO NE 157TH ST	12	3	25%	1	8%

STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
3RD AVE NE FROM NE 157TH ST TO NE 158TH ST	17	5	29%	3	18%
3RD AVE NE FROM NE 158TH ST TO NE 159TH ST	19	5	26%	4	21%
3RD AVE NE FROM NE 159TH ST TO NE 161ST ST	17	7	41%	4	24%
3RD AVE NE FROM NE 161ST ST TO NE 162ND ST	13	5	38%	4	31%
3RD AVE NE FROM NE 165TH ST TO NE 165TH PL	9	0	0%	0	0%
3RD AVE NE FROM NE 165TH PL TO NE 166TH ST	13	3	23%	3	23%
3RD PL NE FROM NE 166TH ST TO NE 167TH ST	10	5	50%	3	30%
4TH AVE NE FROM NE 164TH ST TO NE 165TH ST	12	1	8%	1	8%
4TH AVE NE FROM NE 165TH ST TO STREET END	7	6	86%	6	86%
6TH AVE NE FROM NE 145TH ST TO NE 148TH ST	36	17	47%	13	36%
6TH AVE NE FROM NE 148TH ST TO NE 152ND ST	42	19	45%	20	48%
6TH AVE NE FROM NE 152ND ST TO NE 155TH ST	38	28	74%	22	58%
6TH AVE NE FROM NE 155TH ST TO NE 160TH ST	82	22	27%	23	28%
6TH AVE NE FROM NE 160TH ST TO NE 165TH ST	76	23	30%	19	25%
8TH AVE NE FROM NE 145TH ST TO NE 147TH ST	29	2	7%	3	10%
8TH AVE NE FROM NE 147TH ST TO NE 148TH ST	14	4	29%	1	7%
8TH AVE NE FROM NE 148TH ST TO NE 150TH ST	13	3	23%	2	15%
8TH AVE NE FROM NE 150TH ST TO NE 151ST ST	7	6	86%	6	86%
8TH AVE NE FROM NE 151ST ST TO NE 152ND ST	13	3	23%	4	31%
8TH AVE NE FROM NE 152ND ST TO NE 155TH ST	43	11	26%	9	21%
8TH AVE NE FROM NE 155TH ST TO NE 160TH ST	70	13	19%	11	16%
8TH AVE NE FROM NE 160TH ST TO NE 165TH ST	79	17	22%	10	13%
9TH AVE NE FROM NE 146TH ST TO NE 147TH ST	18	3	17%	3	17%
9TH AVE NE FROM NE 148TH ST TO NE 150TH ST	16	5	31%	5	31%
9TH AVE NE FROM NE 150TH ST TO NE 150TH ST	3	0	0%	0	0%
9TH AVE NE FROM NE 155TH ST TO NE 160TH ST	86	35	41%	25	29%
9TH AVE NE FROM NE 160TH ST TO NE 165TH ST	75	35	47%	26	35%
9TH PL NE FROM NE 146TH ST TO NE 147TH ST	18	6	33%	6	33%
9TH PL NE FROM NE 148TH ST TO NE 150TH ST	14	5	36%	3	21%
9TH PL NE FROM NE 150TH ST TO STREET END	1	1	100%	0	0%
BAGLEY PL N FROM N 154TH ST TO STREET END	4	6	150%	4	100%
BURKE AVE N FROM STREET END TO N 147TH ST	12	3	25%	5	42%
BURKE AVE N FROM N 147TH ST TO N 148TH ST	12	1	8%	0	0%
BURKE AVE N FROM N 149TH ST TO N 150TH ST	5	4	80%	3	60%
CORLISS AVE N FROM N 145TH ST TO N 146TH ST	8	1	13%	1	13%
CORLISS AVE N FROM N 146TH ST TO N 147TH ST	13	1	8%	5	38%

STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
CORLISS AVE N FROM N 147TH ST TO N 148TH ST	24	4	17%	4	17%
CORLISS AVE N FROM N 148TH ST TO N 149TH ST	12	9	75%	7	58%
CORLISS AVE N FROM N 149TH ST TO N 150TH ST	10	0	0%	1	10%
CORLISS PL N FROM N 153RD ST TO N 154TH ST	12	8	67%	8	67%
CORLISS PL N FROM N 154TH ST TO STREET END	2	3	150%	1	50%
N 146TH ST FROM STREET END TO CORLISS AVE N	13	4	31%	4	31%
N 147TH ST FROM CORLISS AVE N TO 1ST AVE NE	30	4	13%	4	13%
N 147TH ST FROM MERIDIAN AVE N TO CORLISS AVE N	27	10	37%	10	37%
N 147TH ST FROM WALLINGFORD AV N TO BURKE AVE N	19	2	11%	0	0%
N 148TH ST FROM STREET END TO BURKE AVE N	5	4	80%	3	60%
N 148TH ST FROM BURKE AVE N TO MERIDIAN AVE N	5	3	60%	2	40%
N 148TH ST FROM MERIDIAN AVE N TO CORLISS AVE N	29	15	52%	7	24%
N 148TH ST FROM CORLISS AVE N TO 1ST AVE NE	19	9	47%	6	32%
N 149TH ST FROM STREET END TO BURKE AVE N	3	0	0%	1	33%
N 149TH ST FROM CORLISS AVE N TO 1ST AVE NE	19	13	68%	8	42%
N 150TH ST FROM WALLINGFORD AV N TO BURKE AVE N	8	4	50%	3	38%
N 150TH ST FROM BURKE AVE N TO MERIDIAN AVE N	12	0	0%	0	0%
N 150TH ST FROM MERIDIAN AVE N TO CORLISS AVE N	24	12	50%	11	46%
N 153RD PL FROM STREET END TO MERIDIAN AVE N	3	3	100%	3	100%
N 153RD ST FROM MERIDIAN AVE N TO CORLISS PL N	22	6	27%	9	41%
N 154TH ST FROM MERIDIAN AVE N TO BAGLEY PL N	11	4	36%	3	27%
N 154TH ST FROM BAGLEY PL N TO CORLISS PL N	15	3	20%	5	33%
NE 146TH ST FROM 9TH AVE NE TO 9TH PL NE	7	5	71%	6	86%
NE 146TH ST FROM STREET END TO 12TH AVE NE	8	4	50%	0	0%
NE 146TH ST FROM 15TH AVE NE TO 17TH AVE NE	26	12	46%	11	42%
NE 146TH ST FROM 17TH AVE NE TO 20TH AVE NE	25	12	48%	7	28%
NE 147TH ST FROM 1ST AVE NE TO STREET END	34	9	26%	8	24%
NE 147TH ST FROM 8TH AVE NE TO 9TH AVE NE	7	1	14%	1	14%
NE 147TH ST FROM 9TH AVE NE TO 9TH PL NE	14	3	21%	3	21%
NE 147TH ST FROM 9TH PL NE TO STREET END	14	3	21%	4	29%
NE 147TH ST FROM 15TH AVE NE TO 17TH AVE NE	24	13	54%	11	46%
NE 147TH ST FROM 17TH AVE NE TO 20TH AVE NE	20	19	95%	12	60%
NE 147TH ST FROM 20TH AVE NE TO 22ND AVE NE	20	3	15%	3	15%
NE 148TH ST FROM STREET END TO 5TH AVE NE	Closed	0	Closed	0	Closed
NE 148TH ST FROM 5TH AVE NE TO 6TH AVE NE	11	1	9%	1	9%
NE 148TH ST FROM 6TH AVE NE TO 8TH AVE NE	15	6	40%	5	33%

STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
NE 148TH ST FROM 9TH AVE NE TO 9TH PL NE	15	8	53%	3	20%
NE 148TH ST FROM 12TH AVE NE TO 15TH AVE NE	24	21	88%	23	96%
NE 148TH ST FROM 15TH AVE NE TO 17TH AVE NE	34	24	71%	23	68%
NE 148TH ST FROM 17TH AVE NE TO 20TH AVE NE	27	18	67%	15	56%
NE 149TH ST FROM STREET END TO 5TH AVE NE	25	17	68%	13	52%
NE 150TH ST FROM 8TH AVE NE TO 9TH AVE NE	3	0	0%	0	0%
NE 150TH ST FROM 9TH AVE NE TO 9TH PL NE	10	0	0%	1	10%
NE 151ST ST FROM 3RD AVE NE TO 5TH AVE NE	24	5	21%	5	21%
NE 151ST ST FROM 8TH AVE NE TO 10TH AVE NE	34	11	32%	14	41%
NE 152ND ST FROM 3RD AVE NE TO 5TH AVE NE	30	3	10%	4	13%
NE 152ND ST FROM 5TH AVE NE TO 6TH AVE NE	8	5	63%	3	38%
NE 152ND ST FROM 6TH AVE NE TO 8TH AVE NE	17	4	24%	1	6%
NE 152ND ST FROM 8TH AVE NE TO 10TH AVE NE	31	4	13%	5	16%
NE 152ND ST FROM 11TH AVE NE TO 12TH AVE NE	11	1	9%	0	0%
NE 152ND ST FROM 12TH AVE NE TO 15TH AVE NE	18	16	89%	17	94%
NE 153RD ST FROM STREET END TO 5TH AVE NE	21	5	24%	4	19%
NE 154TH ST FROM STREET END TO 12TH AVE NE	5	2	40%	1	20%
NE 156TH ST FROM STREET END TO 3RD AVE NE	16	7	44%	5	31%
NE 156TH ST FROM 3RD AVE NE TO 5TH AVE NE	32	15	47%	12	38%
NE 157TH ST FROM 3RD AVE NE TO 5TH AVE NE	28	16	57%	14	50%
NE 158TH ST FROM 1ST AVE NE TO 3RD AVE NE	33	13	39%	8	24%
NE 158TH ST FROM 3RD AVE NE TO 5TH AVE NE	36	15	42%	12	33%
NE 158TH ST FROM 10TH AVE NE TO 11TH AVE NE	7	0	0%	0	0%
NE 158TH ST FROM 11TH AVE NE TO 12TH AVE NE	15	7	47%	7	47%
NE 158TH ST FROM 12TH AVE NE TO 14TH AVE NE	20	3	15%	2	10%
NE 158TH ST FROM 14TH AVE NE TO 15TH AVE NE	11	2	18%	4	36%
NE 159TH ST FROM 1ST AVE NE TO 3RD AVE NE	33	13	39%	11	33%
NE 159TH ST FROM 3RD AVE NE TO 5TH AVE NE	28	15	54%	6	21%
NE 160TH ST FROM 5TH AVE NE TO 6TH AVE NE	15	3	20%	3	20%
NE 160TH ST FROM 6TH AVE NE TO 8TH AVE NE	22	3	14%	3	14%
NE 160TH ST FROM 8TH AVE NE TO 9TH AVE NE	18	4	22%	7	39%
NE 160TH ST FROM 9TH AVE NE TO 10TH AVE NE	14	0	0%	0	0%
NE 161ST ST FROM 1ST AVE NE TO 3RD AVE NE	27	10	37%	5	19%
NE 161ST ST FROM 3RD AVE NE TO 5TH AVE NE	28	13	46%	12	43%
NE 162ND ST FROM 3RD AVE NE TO 5TH AVE NE	31	21	68%	17	55%
NE 162ND ST FROM 11TH AVE NE TO 12TH AVE NE	17	0	0%	0	0%

STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
NE 162ND ST FROM 12TH AVE NE TO 14TH AVE NE	18	1	6%	1	6%
NE 162ND ST FROM 14TH AVE NE TO 15TH AVE NE	17	1	6%	1	6%
NE 163RD ST FROM STREET END TO 5TH AVE NE	47	12	26%	12	26%
NE 164TH ST FROM STREET END TO 4TH AVE NE	14	4	29%	6	43%
NE 165TH ST FROM STREET END TO 3RD AVE NE	10	4	40%	3	30%
NE 165TH ST FROM 3RD AVE NE TO 4TH AVE NE	1	0	0%	0	0%
NE 165TH ST FROM 4TH AVE NE TO 4TH AVE NE	1	0	0%	1	100%
NE 165TH ST FROM 4TH AVE NE TO 5TH AVE NE	15	4	27%	12	80%
NE 165TH PL FROM STREET END TO 3RD AVE NE	6	2	33%	2	33%
NE 166TH ST FROM 3RD AVE NE TO 3RD PL NE	9	1	11%	2	22%
NE 167TH ST FROM 3RD PL NE TO 5TH AVE NE	19	3	16%	3	16%
SUNNYSIDE AVE N FROM N 145TH ST TO STREET END	13	8	62%	1	8%
WALLINGFORD AV N FROM N 145TH ST TO N 147TH ST	25	1	4%	2	8%
WALLINGFORD AV N FROM N 147TH ST TO N 150TH ST	28	4	14%	4	14%
WALLINGFORD AV N FROM N 150TH ST TO N 155TH ST	50	13	26%	12	24%

STREET SEGMENT NAME	CAPACITY				3-6AM COUNTS				3-6AM DEMAND				10-11AM COUNTS				10-11AM Demand			
	N	S	W	E	N	S	W	E	N	S	W	E	N	S	W	E	N	S	W	E
1ST AVE NE: N 145TH ST TO NE 146TH CT			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
1ST AVE NE: NE 146TH CT TO N 147TH ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
1ST AVE NE: N 147TH ST TO N 148TH ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
1ST AVE NE: N 148TH ST TO N 149TH ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
1ST AVE NE: N 149TH ST TO N 155TH ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
5TH AVE NE: NE 145TH ST TO 145TH ST I-5 RP			NP	5			NP	0			NP	0%			NP	0			NP	0%
5TH AVE NE: 145TH ST I-5 RP TO NE 148TH ST			2	4			0	0			0%	0%			0	0			0%	0%
5TH AVE NE: NE 148TH ST TO NE 148TH ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
5TH AVE NE: NE 148TH ST TO NE 149TH ST			6	4			1	1			17%	25%			5	1			83%	25%
5TH AVE NE: NE 149TH ST TO NE 151ST ST			5	5			2	0			40%	0%			1	0			20%	0%
5TH AVE NE: NE 151ST ST TO NE 152ND ST			2	4			0	3			0%	75%			0	2			0%	50%
5TH AVE NE: NE 152ND ST TO NE 152ND ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
5TH AVE NE: NE 152ND ST TO NE 153RD ST			7	6			0	3			0%	50%			1	1			14%	17%
5TH AVE NE: NE 153RD ST TO NE 155TH ST			NP	4			NP	0			NP	0%			NP	1			NP	25%
5TH AVE NE: NE 155TH ST TO NE 156TH ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
5TH AVE NE: NE 156TH ST TO NE 157TH ST			NP	1			NP	0			NP	0%			NP	0			NP	0%
5TH AVE NE: NE 157TH ST TO NE 158TH ST			NP	7			NP	0			NP	0%			NP	3			NP	43%
5TH AVE NE: NE 158TH ST TO NE 159TH ST			NP	4			NP	2			NP	50%			NP	1			NP	25%
5TH AVE NE: NE 159TH ST TO NE 160TH ST			NP	2			NP	1			NP	50%			NP	1			NP	50%
5TH AVE NE: NE 160TH ST TO NE 161ST ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
5TH AVE NE: NE 161ST ST TO NE 162ND ST			7	NP			4	NP			57%	NP			3	NP			43%	NP
5TH AVE NE: NE 162ND ST TO NE 163RD ST			8	NP			5	NP			63%	NP			3	NP			38%	NP
5TH AVE NE: NE 163RD ST TO NE 165TH ST			NP	4			NP	0			NP	0%			NP	0			NP	0%
5TH AVE NE: NE 165TH ST TO NE 167TH ST			7	8			2	7			29%	88%			5	8			71%	100%
MERIDIAN AVE N: N 145TH ST TO N 147TH ST			7	11			0	1			0%	9%			1	2			14%	18%
MERIDIAN AVE N: N 147TH ST TO N 148TH ST			2	9			1	1			50%	11%			0	2			0%	22%
MERIDIAN AVE N: N 148TH ST TO N 149TH LN			6	2			1	1			17%	50%			0	0			0%	0%
MERIDIAN AVE N: N 149TH LN TO N 150TH ST			1	3			0	3			0%	100%			0	3			0%	100%
MERIDIAN AVE N: N 150TH ST TO N 153RD ST			13	8			0	1			0%	13%			0	0			0%	0%
MERIDIAN AVE N: N 153RD PL TO N 154TH ST			2	2			0	0			0%	0%			2	2			100%	100%
MERIDIAN AVE N: N 153RD ST TO N 153RD PL			NP	1			NP	0			NP	0%			NP	0			NP	0%
MERIDIAN AVE N: N 154TH ST TO N 154TH PL			2	4			0	0			0%	0%			1	2			50%	50%
MERIDIAN AVE N: N 154TH CT TO N 155TH ST			NP	3			NP	0			NP	0%			NP	0			NP	0%
NE 165TH ST: 5TH AVE NE TO 6TH AVE NE	7	TL			0	TL								1	TL				14%	

STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
10TH AVE NE FROM NE 170TH ST TO NE 171ST PL	8	0	0%	4	50%
10TH AVE NE FROM NE 171ST PL TO NE 172ND PL	6	1	17%	0	0%
10TH AVE NE FROM NE 172ND PL TO NE 174TH ST	24	3	13%	2	8%
10TH AVE NE FROM NE 174TH ST TO NE 175TH ST	10	1	10%	2	20%
10TH AVE NE FROM NE 190TH ST TO NE PERKINS WY	2	2	100%	3	150%
10TH AVE NE FROM NE PERKINS WY TO NE 194TH ST	62	11	18%	8	13%
10TH AVE NE FROM NE 194TH ST TO NE 195TH ST	10	0	0%	0	0%
11TH AVE NE FROM NE 170TH ST TO NE 175TH ST	35	28	80%	18	51%
11TH AVE NE FROM NE SERPENTINE PL TO NE 180TH ST	58	27	47%	21	36%
11TH AVE NE FROM NE 182ND ST TO NE 185TH ST	33	32	97%	25	76%
11TH AVE NE FROM STREET END TO NE 190TH ST	13	6	46%	5	38%
12TH AVE NE FROM NE 170TH ST TO NE 175TH ST	44	56	127%	35	80%
12TH AVE NE FROM NE 175TH ST TO NE 177TH ST	24	31	129%	26	108%
12TH AVE NE FROM NE 177TH ST TO NE 180TH ST	22	24	109%	14	64%
12TH AVE NE FROM NE 180TH ST TO NE 181ST PL	14	14	100%	9	64%
12TH AVE NE FROM NE 181ST PL TO NE 183RD ST	8	2	25%	2	25%
12TH AVE NE FROM NE 183RD ST TO NE 184TH ST	11	0	0%	0	0%
12TH AVE NE FROM NE 184TH ST TO NE 185TH ST	8	0	0%	0	0%
12TH AVE NE FROM NE 187TH ST TO NE 188TH ST	17	6	35%	8	47%
13TH AVE NE FROM 12TH PL NE TO STREET END	28	28	100%	21	75%
14TH AVE NE FROM NE 170TH ST TO STREET END	27	20	74%	18	67%
14TH AVE NE FROM NE 185TH ST TO NE 187TH ST	5	1	20%	0	0%
15TH PL NE FROM 15TH AVE NE TO NE 184TH PL	8	0	0%	1	13%
1ST AVE NE FROM N 178TH ST TO N 179TH ST	12	3	25%	2	17%
1ST AVE NE FROM N 179TH ST TO N 180TH ST	10	1	10%	2	20%
1ST AVE NE FROM N 180TH ST TO N 185TH ST	34	19	56%	11	32%
2ND AVE NE FROM NE 180TH ST TO NE 185TH ST	49	10	20%	10	20%
2ND PL NE FROM STREET END TO NE 178TH ST	16	3	19%	4	25%
3RD AVE NE FROM NE 178TH ST TO STREET END	11	2	18%	1	9%
3RD AVE NE FROM NE 180TH ST TO NE 185TH ST	41	25	61%	22	54%
3RD AVE NE FROM NE 192ND ST TO NE 193RD ST	10	0	0%	0	0%
7TH AVE NE FROM NE 180TH ST TO NE 183RD ST	33	20	61%	14	42%
7TH AVE NE FROM NE 183RD ST TO STREET END	1	5	500%	2	200%
7TH AVE NE FROM STREET END TO NE 195TH ST	22	3	14%	3	14%

STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
8TH AVE NE FROM NE SERPENTINE PL TO NE 179TH ST	17	4	24%	3	18%
8TH AVE NE FROM NE 179TH ST TO NE 180TH ST	10	0	0%	0	0%
8TH AVE NE FROM NE 180TH ST TO NE 183RD ST	47	5	11%	7	15%
8TH AVE NE FROM NE 183RD ST TO NE 185TH ST	18	3	17%	3	17%
8TH AVE NE FROM NE 185TH ST TO NE 188TH ST	18	4	22%	3	17%
8TH AVE NE FROM NE 188TH ST TO NE 189TH ST	16	8	50%	5	31%
8TH AVE NE FROM NE 189TH ST TO NE 190TH ST	16	8	50%	7	44%
9TH AVE NE FROM NE 180TH ST TO NE 185TH ST	68	40	59%	30	44%
BAGLEY PL N FROM N 183RD PL TO STREET END	5	2	40%	1	20%
BAGLEY PL N FROM N 187TH ST TO N 186TH ST	2	1	50%	1	50%
BAGLEY PL N FROM STREET END TO BAGLEY AVE N	9	4	44%	1	11%
BAGLEY AVE N FROM BAGLEY PL N TO STREET END	10	2	20%	3	30%
BURKE AVE N FROM STREET END TO N 183RD ST	7	3	43%	2	29%
BURKE AVE N FROM N 185TH ST TO N 189TH ST	35	10	29%	6	17%
BURKE AVE N FROM N 189TH ST TO N 190TH ST	11	0	0%	2	18%
CORLISS AVE N FROM N 180TH ST TO N 183RD PL	48	11	23%	13	27%
CORLISS AVE N FROM N 183RD PL TO N 184TH ST	11	4	36%	3	27%
CORLISS AVE N FROM N 184TH ST TO N 185TH ST	10	6	60%	5	50%
CORLISS AVE N FROM N 186TH ST TO N 188TH ST	25	11	44%	6	24%
CORLISS AVE N FROM N 188TH ST TO N 189TH ST	13	0	0%	0	0%
CORLISS AVE N FROM N 189TH ST TO N 190TH ST	8	0	0%	0	0%
CORLISS AVE N FROM N 190TH ST TO N 192ND ST	27	7	26%	7	26%
CORLISS AVE N FROM N 192ND ST TO N 193RD ST	20	2	10%	2	10%
DENSMORE AVE N FROM N 185TH ST TO N 188TH ST	31	11	35%	15	48%
DENSMORE AVE N FROM N 188TH ST TO STREET END	10	10	100%	5	50%
MIDVALE AVE N FROM N 185TH ST TO N 185TH CT	NP	NP	NP	NP	NP
MIDVALE AVE N FROM N 185TH CT TO N 188TH ST	16	6	38%	16	100%
MIDVALE AVE N FROM N 188TH ST TO STREET END	14	5	36%	9	64%
N 178TH ST FROM MERIDIAN AVE N TO CORLISS AVE N	24	7	29%	4	17%
N 178TH ST FROM CORLISS AVE N TO SUNNYSIDE CT N	5	1	20%	2	40%
N 178TH ST FROM SUNNYSIDE CT N TO 1ST AVE NE	8	2	25%	0	0%
N 179TH ST FROM MERIDIAN AVE N TO 1ST AVE NE	54	13	24%	12	22%
N 180TH ST FROM STONE AVE N TO ASHWORTH AVE N	16	7	44%	4	25%
N 180TH ST FROM ASHWORTH AVE N TO WALLINGFORD AV N	28	6	21%	4	14%
N 180TH ST FROM WALLINGFORD AV N TO BURKE AVE N	8	1	13%	1	13%
N 180TH ST FROM BURKE AVE N TO WAYNE AVE N	12	0	0%	0	0%

STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
N 180TH ST FROM WAYNE AVE N TO MERIDIAN AVE N	7	0	0%	0	0%
N 180TH ST FROM STREET END TO CORLISS AVE N	7	3	43%	2	29%
N 180TH ST FROM CORLISS AVE N TO SUNNYSIDE AVE N	14	5	36%	4	29%
N 180TH ST FROM SUNNYSIDE AVE N TO 1ST AVE NE	18	4	22%	2	11%
N 183RD ST FROM MIDVALE AVE N TO STONE AVE N	21	18	86%	11	52%
N 183RD ST FROM STONE AVE N TO ASHWORTH AVE N	18	3	17%	3	17%
N 183RD ST FROM ASHWORTH AVE N TO WALLINGFORD AV N	27	8	30%	6	22%
N 183RD ST FROM WALLINGFORD AV N TO BURKE AVE N	10	3	30%	5	50%
N 183RD ST FROM BURKE AVE N TO MERIDIAN AVE N	15	7	47%	8	53%
N 183RD PL FROM BAGLEY PL N TO CORLISS AVE N	11	3	27%	5	45%
N 186TH ST FROM BAGLEY PL N TO CORLISS AVE N	11	7	64%	7	64%
N 187TH ST FROM MERIDIAN AVE N TO BAGLEY PL N	10	4	40%	3	30%
N 187TH ST FROM BAGLEY PL N TO STREET END	10	2	20%	2	20%
N 188TH ST FROM MIDVALE AVE N TO STONE AVE N	6	3	50%	2	33%
N 188TH ST FROM STONE AVE N TO ASHWORTH AVE N	13	3	23%	2	15%
N 188TH ST FROM DENSMORE AVE N TO WALLINGFORD AV N	12	4	33%	3	25%
N 188TH ST FROM STREET END TO CORLISS AVE N	5	4	80%	3	60%
N 188TH ST FROM CORLISS AVE N TO 1ST AVE NE	28	3	11%	4	14%
N 189TH ST FROM WALLINGFORD AV N TO BURKE AVE N	22	1	5%	7	32%
N 190TH ST FROM ASHWORTH AVE N TO WALLINGFORD AV N	17	4	24%	2	12%
N 190TH ST FROM WALLINGFORD AV N TO BURKE AVE N	19	3	16%	2	11%
N 190TH ST FROM BURKE AVE N TO MERIDIAN AVE N	12	3	25%	3	25%
N 190TH ST FROM MERIDIAN AVE N TO BAGLEY AVE N	6	0	0%	1	17%
N 190TH ST FROM BAGLEY AVE N TO CORLISS AVE N	14	0	0%	1	7%
N 190TH ST FROM CORLISS AVE N TO STREET END	5	2	40%	1	20%
N 190TH ST FROM SUNNYSIDE AVE N TO 1ST AVE NE	11	4	36%	3	27%
N 191ST ST FROM STREET END TO STONE AVE N	2	3	150%	2	100%
N 192ND ST FROM STONE AVE N TO ASHWORTH AVE N	23	5	22%	5	22%
N 192ND ST FROM CORLISS AVE N TO 1ST AVE NE	28	5	18%	4	14%
N 193RD ST FROM CORLISS AVE N TO 1ST AVE NE	26	7	27%	7	27%
NE 178TH ST FROM STREET END TO 2ND PL NE	NP	NP	NP	NP	NP
NE 178TH ST FROM 2ND PL NE TO 3RD AVE NE	2	0	0%	1	50%
NE 178TH ST FROM 3RD AVE NE TO 5TH AVE NE	10	5	50%	3	30%
NE 180TH ST FROM 1ST AVE NE TO 2ND AVE NE	12	1	8%	2	17%
NE 180TH ST FROM 2ND AVE NE TO 3RD AVE NE	13	6	46%	5	38%
NE 180TH ST FROM STREET END TO 5TH AVE NE	18	7	39%	6	33%

STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
NE 180TH ST FROM 5TH AVE NE TO 7TH AVE NE	18	9	50%	7	39%
NE 180TH ST FROM 7TH AVE NE TO 8TH AVE NE	11	0	0%	0	0%
NE 180TH ST FROM 8TH AVE NE TO 9TH AVE NE	11	2	18%	1	9%
NE 180TH ST FROM 9TH AVE NE TO 10TH AVE NE	16	4	25%	4	25%
NE 181ST PL FROM 12TH AVE NE TO STREET END	5	3	60%	3	60%
NE 182ND ST FROM 10TH AVE NE TO 11TH AVE NE	12	4	33%	3	25%
NE 183RD ST FROM 7TH AVE NE TO 8TH AVE NE	6	1	17%	1	17%
NE 183RD ST FROM 12TH AVE NE TO STREET END	12	5	42%	4	33%
NE 184TH ST FROM 12TH AVE NE TO STREET END	12	4	33%	5	42%
NE 184TH PL FROM STREET END TO 15TH PL NE	11	3	27%	4	36%
NE 185TH ST FROM 10TH AVE NE TO 11TH AVE NE	6	4	67%	1	17%
NE 185TH ST FROM 11TH AVE NE TO 12TH AVE NE	10	1	10%	2	20%
NE 185TH ST FROM 12TH AVE NE TO 14TH AVE NE	17	7	41%	7	41%
NE 187TH ST FROM NE 188TH ST TO 12TH AVE NE	23	7	30%	12	52%
NE 187TH ST FROM 12TH AVE NE TO 14TH AVE NE	11	8	73%	7	64%
NE 188TH ST FROM 8TH AVE NE TO 10TH AVE NE	41	9	22%	5	12%
NE 188TH ST FROM 10TH AVE NE TO NE 187TH ST	2	0	0%	0	0%
NE 188TH ST FROM NE 187TH ST TO 12TH AVE NE	11	18	164%	1	9%
NE 188TH ST FROM 12TH AVE NE TO 15TH AVE NE	18	9	50%	9	50%
NE 189TH ST FROM 5TH AVE NE TO STREET END	3	2	67%	1	33%
NE 189TH ST FROM STREET END TO 8TH AVE NE	NP	NP	NP	NP	NP
NE 189TH ST FROM 8TH AVE NE TO 10TH AVE NE	33	11	33%	12	36%
NE 189TH CT FROM STREET END TO 5TH AVE NE	6	3	50%	2	33%
NE 190TH ST FROM 8TH AVE NE TO 10TH AVE NE	45	10	22%	11	24%
NE 190TH ST FROM 10TH AVE NE TO 11TH AVE NE	26	1	4%	1	4%
NE 190TH PL FROM STREET END TO 5TH AVE NE	5	2	40%	1	20%
NE 191ST ST FROM 3RD AVE NE TO STREET END	5	3	60%	1	20%
NE 192ND ST FROM 3RD AVE NE TO 5TH AVE NE	28	3	11%	3	11%
NE 193RD ST FROM 1ST AVE NE TO 3RD AVE NE	34	9	26%	7	21%
NE 193RD ST FROM 3RD AVE NE TO 5TH AVE NE	35	7	20%	8	23%
NE 194TH ST FROM STREET END TO 10TH AVE NE	22	16	73%	10	45%
NE 195TH ST FROM 5TH AVE NE TO 7TH AVE NE	8	2	25%	2	25%
NE 195TH ST FROM 7TH AVE NE TO STREET END	4	7	175%	6	150%
NE 195TH ST FROM STREET END TO 10TH AVE NE	8	2	25%	5	63%
NE SERPENTINE PL FROM NE 175TH ST TO 5TH AVE NE	15	12	80%	6	40%
NE SERPENTINE PL FROM 5TH AVE NE TO 7TH AVE NE	12	1	8%	2	17%

STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
NE SERPENTINE PL FROM 7TH AVE NE TO 8TH AVE NE	9	3	33%	1	11%
NE SERPENTINE PL FROM 8TH AVE NE TO 8TH LN NE	11	2	18%	2	18%
NE SERPENTINE PL FROM 8TH LN NE TO 9TH CT NE	5	1	20%	1	20%
NE SERPENTINE PL FROM 9TH CT NE TO 10TH AVE NE	6	3	50%	0	0%
NE SERPENTINE PL FROM 10TH AVE NE TO 11TH AVE NE	14	13	93%	8	57%
NE SERPENTINE PL FROM 11TH AVE NE TO STREET END	6	20	333%	14	233%
STONE AVE N FROM N 180TH ST TO N 182ND PL	17	8	47%	5	29%
STONE AVE N FROM N 182ND PL TO N 183RD ST	15	1	7%	1	7%
STONE AVE N FROM N 183RD ST TO N 184TH CT	16	4	25%	3	19%
STONE AVE N FROM N 184TH CT TO N 185TH ST	6	2	33%	0	0%
STONE AVE N FROM N 185TH ST TO N 188TH ST	29	7	24%	4	14%
STONE AVE N FROM N 188TH ST TO N 191ST ST	24	1	4%	1	4%
STONE AVE N FROM N 191ST ST TO N 192ND ST	11	10	91%	8	73%
SUNNYSIDE AVE N FROM N 180TH ST TO STREET END	32	10	31%	10	31%
SUNNYSIDE AVE N FROM N 190TH ST TO STREET END	7	1	14%	1	14%
WALLINGFORD AV N FROM N 180TH ST TO N 181ST ST	8	3	38%	2	25%
WALLINGFORD AV N FROM N 181ST ST TO N 183RD ST	18	7	39%	8	44%
WALLINGFORD AV N FROM N 183RD ST TO N 185TH ST	19	7	37%	8	42%
WALLINGFORD AV N FROM N 185TH ST TO N 188TH ST	37	18	49%	13	35%
WALLINGFORD AV N FROM N 188TH ST TO N 189TH ST	4	0	0%	3	75%
WALLINGFORD AV N FROM N 189TH ST TO N 190TH ST	17	5	29%	7	41%
WAYNE AVE N FROM N 180TH ST TO STREET END	5	1	20%	1	20%

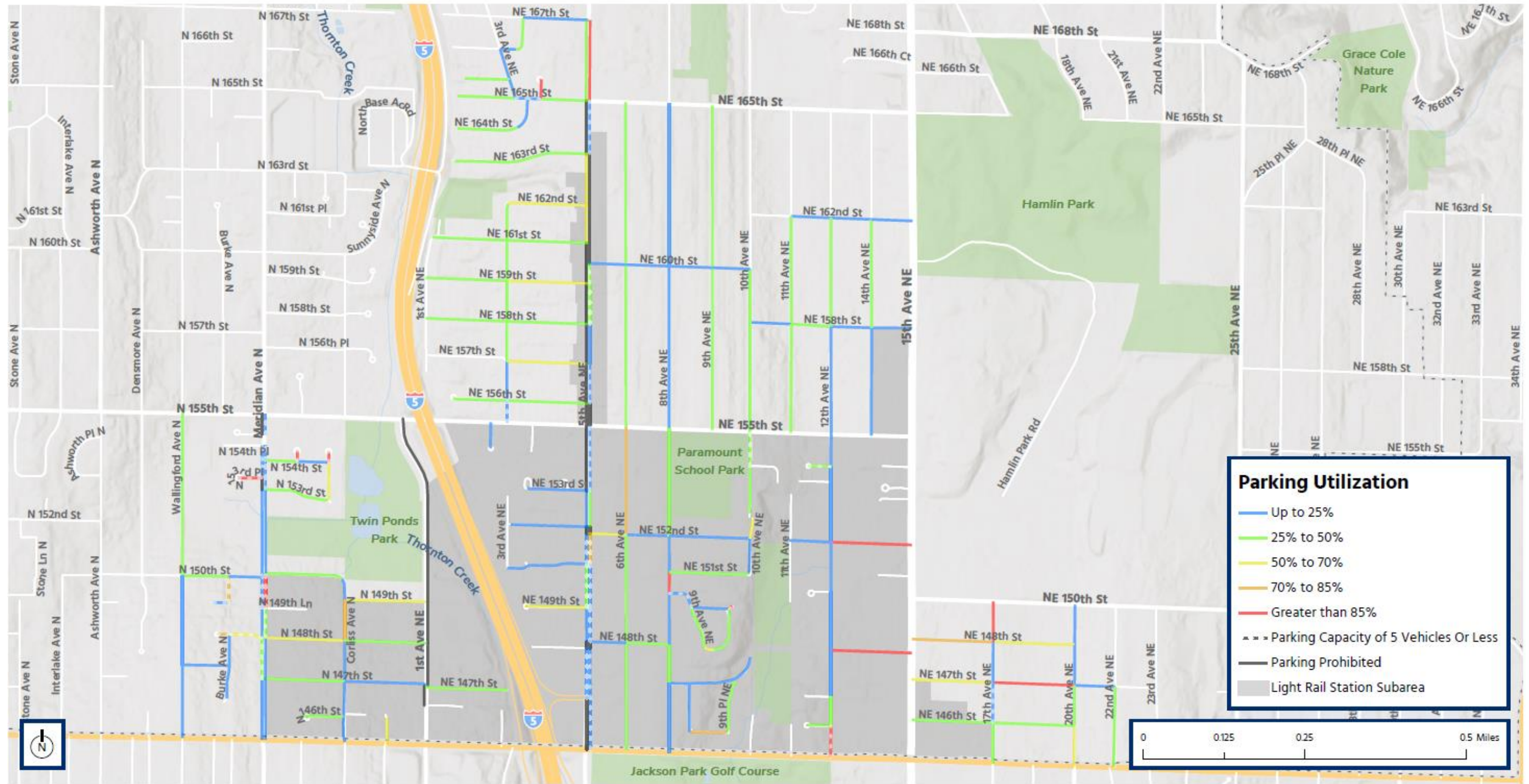
STREET SEGMENT NAME	CAPACITY				3:30-6AM COUNTS				3:30-6AM DEMAND				10-11AM COUNTS				10-11AM Demand			
	N	S	W	E	N	S	W	E	N	S	W	E	N	S	W	E	N	S	W	E
10TH AVE NE: NE 175TH ST TO NE SERPENTINE PL			4	3			0	0			0%	0%			0	2			0%	67%
10TH AVE NE: NE SERPENTINE PL TO NE 177TH PL			6	8			0	3			0%	38%			0	4			0%	50%
10TH AVE NE: NE 177TH PL TO NE 178TH PL			NP	2			NP	3			NP	150%			NP	1			NP	50%
10TH AVE NE: NE 178TH PL TO NE 180TH ST			7	3			0	2			0%	67%			1	0			14%	0%
10TH AVE NE: NE 180TH ST TO NE 182ND ST			9	5			4	1			44%	20%			4	5			44%	100%
10TH AVE NE: NE 182ND ST TO NE 185TH ST			17	8			4	5			24%	63%			5	2			29%	25%
10TH AVE NE: NE 185TH ST TO NE 188TH ST			6	15			0	6			0%	40%			3	4			50%	27%
10TH AVE NE: NE 188TH ST TO NE 189TH ST			NP	7			NP	3			NP	43%			0	2			NP	29%
10TH AVE NE: NE 189TH ST TO NE 190TH ST			NP	5			NP	4			NP	80%			0	4			NP	80%
15TH AVE NE: NE 170TH ST TO NE 171ST ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
15TH AVE NE: NE 171ST ST TO NE 172ND ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
15TH AVE NE: NE 172ND ST TO NE 175TH ST			NP	6			NP	0			NP	0%			NP	0			NP	0%
15TH AVE NE: NE 175TH ST TO NE 177TH ST			TL	2			TL	2			TL	100%			TL	2			TL	100%
15TH AVE NE: NE 177TH ST TO NE 179TH ST			TL	4			TL	3			TL	75%			TL	3			TL	75%
15TH AVE NE: NE 179TH ST TO NE 180TH ST			lul	TL			lul	TL			lul	TL			lul	TL			lul	TL
15TH AVE NE: NE 180TH ST TO 15TH PL NE			NP	2			NP	2			NP	100%			NP	2			NP	100%
15TH AVE NE: 15TH PL NE TO 24TH AVE NE			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
15TH AVE NE: 24TH AVE NE TO NE 188TH ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
15TH AVE NE: NE 188TH ST TO NE PERKINS WY			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
1ST AVE NE: N 185TH ST TO N 187TH ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
1ST AVE NE: N 187TH ST TO N 188TH ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
1ST AVE NE: N 188TH ST TO N 190TH ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
1ST AVE NE: N 190TH ST TO N 190TH CT			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
1ST AVE NE: N 190TH CT TO N 192ND ST			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
1ST AVE NE: N 192ND ST TO N 193RD ST			2	NP			0	NP			0%	NP			0	NP			0%	NP
5TH AVE NE: NE SERPENTINE PL TO NE 178TH ST			1	4			0	1			0%	25%			0	1			0%	25%
5TH AVE NE: NE 178TH ST TO NE 178TH PL			2	4			0	2			0%	50%			0	2			0%	50%
5TH AVE NE: NE 178TH PL TO NE 179TH PL			5	4			2	1			40%	25%			0	2			0%	50%
5TH AVE NE: NE 179TH PL TO NE 180TH ST			2	4			0	0			0%	0%			0	0			0%	0%
5TH AVE NE: NE 180TH ST TO NE 182ND CT			3	9			2	1			67%	11%			2	1			67%	11%
5TH AVE NE: NE 182ND CT TO NE 183RD CT			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
5TH AVE NE: NE 183RD CT TO 7TH AVE NE			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
5TH AVE NE: NE 185TH ST TO NE 189TH ST			NP	10			NP	4			NP	40%			0	1			NP	10%
5TH AVE NE: NE 189TH ST TO NE 189TH CT			NP	2			NP	0			NP	0%			0	0			NP	0%
5TH AVE NE: NE 189TH CT TO NE 190TH ST			2	NP			0	NP			0%	NP			0	NP			0%	NP

STREET SEGMENT NAME	CAPACITY				3:30-6AM COUNTS				3:30-6AM DEMAND				10-11AM COUNTS				10-11AM Demand			
	N	S	W	E	N	S	W	E	N	S	W	E	N	S	W	E	N	S	W	E
5TH AVE NE: NE 190TH ST TO NE 190TH PL			NP	8			NP	0			NP	0%			NP	0			NP	0%
5TH AVE NE: NE 190TH PL TO NE 192ND ST			NP	1			NP	1			NP	100%			NP	0			NP	0%
5TH AVE NE: NE 192ND ST TO NE 193RD ST			NP	5			NP	1			NP	20%			NP	2			NP	40%
5TH AVE NE: NE 193RD ST TO NE 195TH ST			1	5			0	2			0%	40%			0	1			0%	20%
ASHWORTH AVE N: N 180TH ST TO N 183RD ST			NP	NP			NP	NP			NP				NP	NP			NP	
ASHWORTH AVE N: N 183RD ST TO N 185TH ST			6	2			2	0			33%	0%			2	0			33%	0%
ASHWORTH AVE N: N 185TH ST TO N 188TH ST			12	2			0	3			0%	150%			0	2			0%	100%
ASHWORTH AVE N: N 188TH ST TO N 190TH ST			13	4			5	1			38%	25%			2	2			15%	50%
ASHWORTH AVE N: N 190TH ST TO N 192ND ST			8	4			2	4			25%	100%			3	3			38%	75%
MERIDIAN AVE N: N 178TH ST TO N 179TH ST			10	6			0	0			0%	0%			0	0			0%	0%
MERIDIAN AVE N: N 179TH ST TO N 180TH ST			9	12			0	0			0%	0%			0	0			0%	0%
MERIDIAN AVE N: N 180TH ST TO N 183RD ST			17	21			1	0			6%	0%			1	0			6%	0%
MERIDIAN AVE N: N 183RD ST TO N 184TH ST			2	2			1	1			50%	50%			1	0			50%	0%
MERIDIAN AVE N: N 184TH ST TO N 184TH PL			NP	NP			NP	NP			NP	NP			NP	NP			NP	NP
MERIDIAN AVE N: N 184TH PL TO N 185TH ST			6	NP			0	NP			0%	NP			0	NP			0%	NP
MERIDIAN AVE N: N 185TH ST TO N 187TH ST			3	3			2	0			67%	0%			2	4			67%	133%
MERIDIAN AVE N: N 187TH ST TO N 188TH ST			3	2			2	0			67%	0%			3	1			100%	50%
MERIDIAN AVE N: N 188TH ST TO N 189TH ST			2	7			0	1			0%	14%			0	1			0%	14%
MERIDIAN AVE N: N 189TH ST TO N 190TH ST			9	7			0	3			0%	43%			0	2			0%	29%
NE 175TH ST: 12TH AVE NE TO 15TH AVE NE	6	NP			7	NP					117%	NP			7	NP			117%	NP
NE 180TH ST: 10TH AVE NE TO 11TH AVE NE	3	6			0	0					0%	0%			1	0			33%	0%
NE 180TH ST: 11TH AVE NE TO 12TH AVE NE	5	6			9	5					180%	83%			2	4			40%	67%
NE 180TH ST: 12TH AVE NE TO 14TH AVE NE	NP	9			NP	6					NP	67%			NP	7			NP	78%
NE 180TH ST: 14TH AVE NE TO 15TH AVE NE	NP	11			NP	20					NP	182%			NP	11			NP	100%
NE 185TH ST: 2ND AVE NE TO 3RD AVE NE	NP	6			NP	5					NP	83%			NP	3			NP	50%
NE 185TH ST: 3RD AVE NE TO 5TH AVE NE	NP	8			NP	8					NP	100%			NP	4			NP	50%
NE 185TH ST: 5TH AVE NE TO 5TH AVE NE	NP	NP			NP	NP					NP	NP			NP	NP			NP	NP
NE 185TH ST: 5TH AVE NE TO 8TH AVE NE	NP	5			NP	0					NP	0%			NP	0			NP	0%
NE 185TH ST: 8TH AVE NE TO 9TH AVE NE	NP	11			NP	1					NP	9%			NP	8			NP	73%
NE 185TH ST: 9TH AVE NE TO 10TH AVE NE	NP	6			NP	0					NP	0%			NP	2			NP	33%
NE PERKINS WY: 10TH AVE NE TO 11TH AVE NE	NP	2			NP	0					NP	0%			NP	0			NP	0%
NE PERKINS WY: 11TH AVE NE TO 12TH AVE NE	NP	NP			NP	NP					NP	NP			NP	NP			NP	NP
NE PERKINS WY: 12TH AVE NE TO 15TH AVE NE	NP	12			NP	7					NP	58%			NP	3			NP	25%



PARKING UTILIZATION

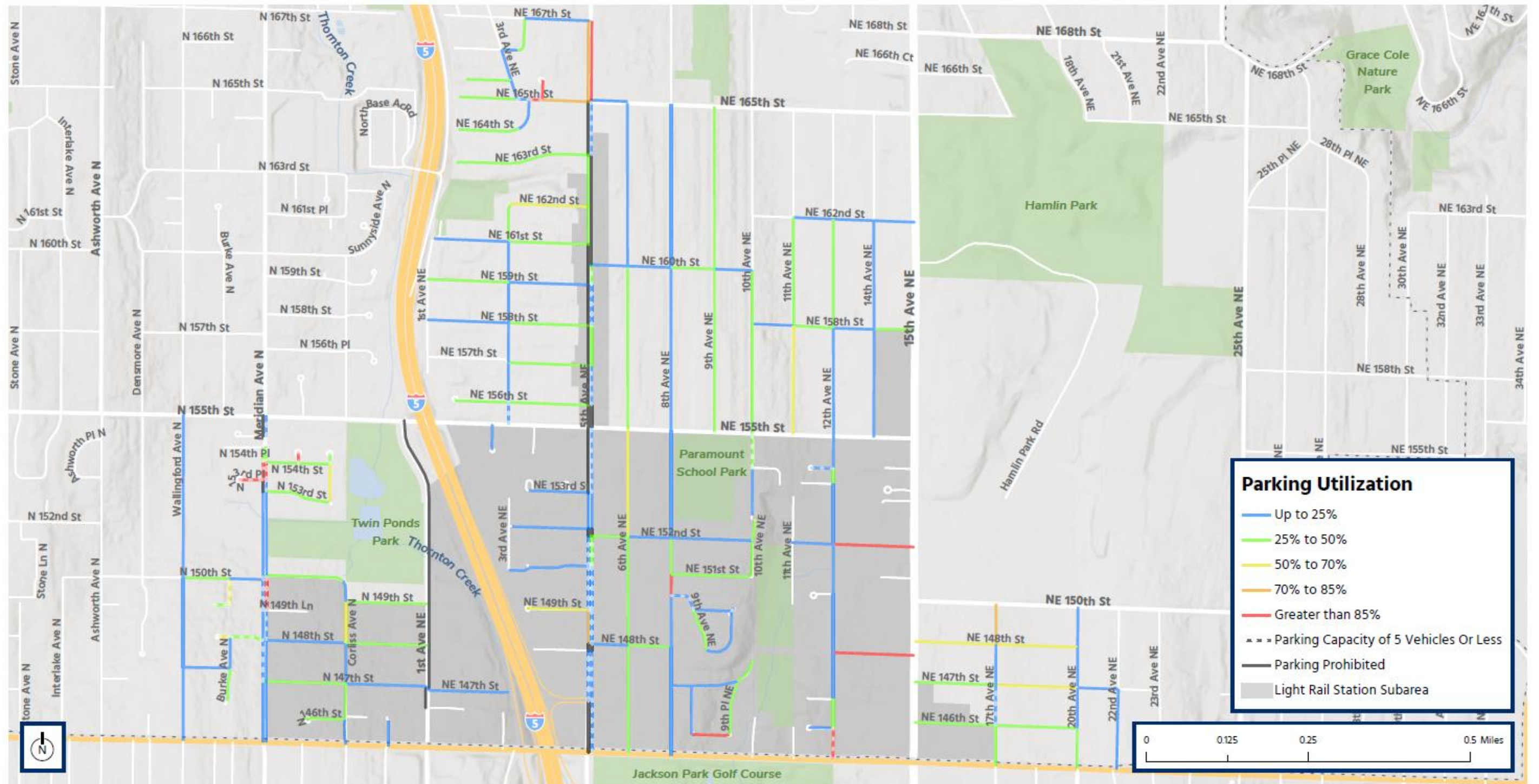
Shoreline South Station Area - Early AM Demand





PARKING UTILIZATION

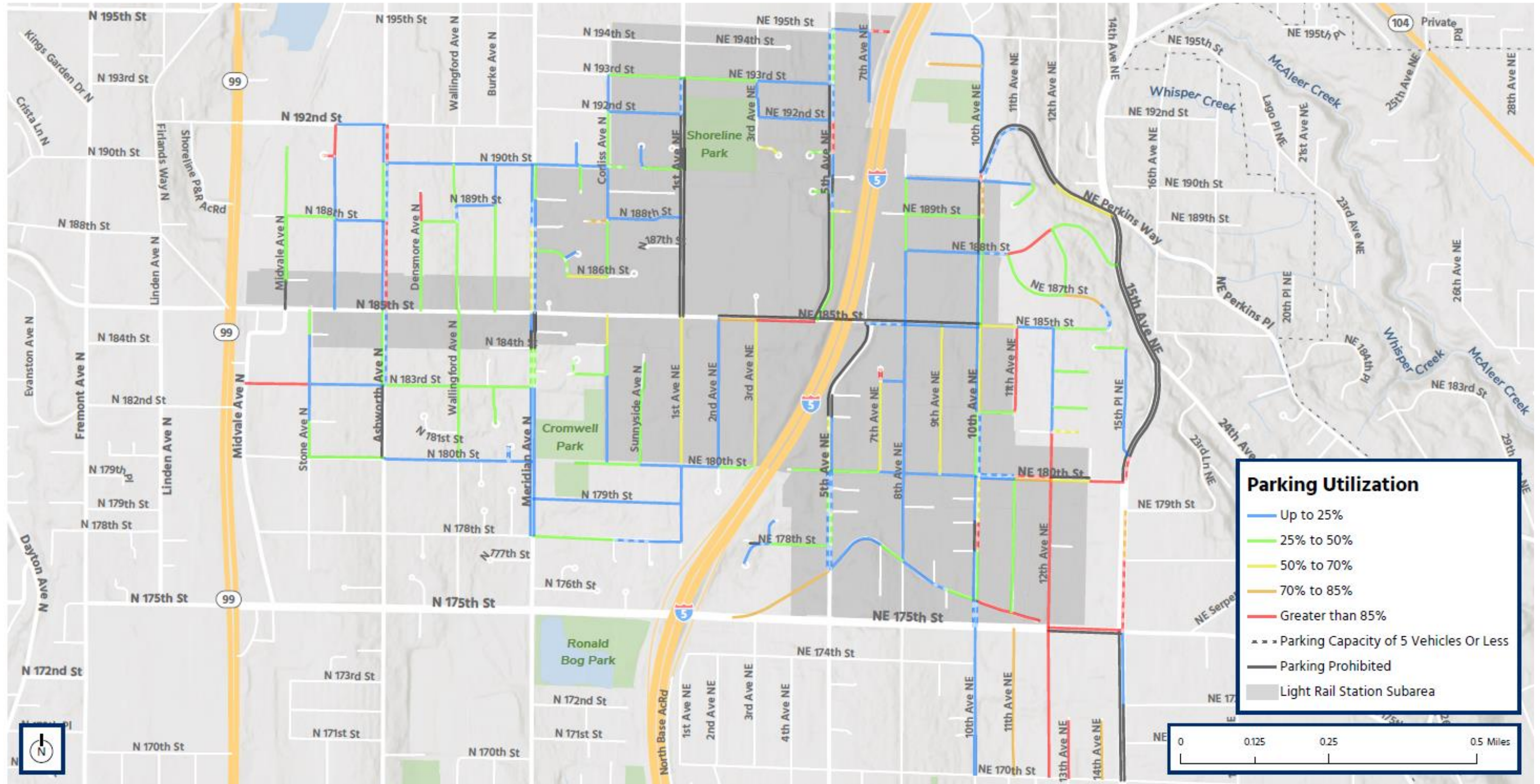
Shoreline South Station Area - Late AM Demand





PARKING UTILIZATION

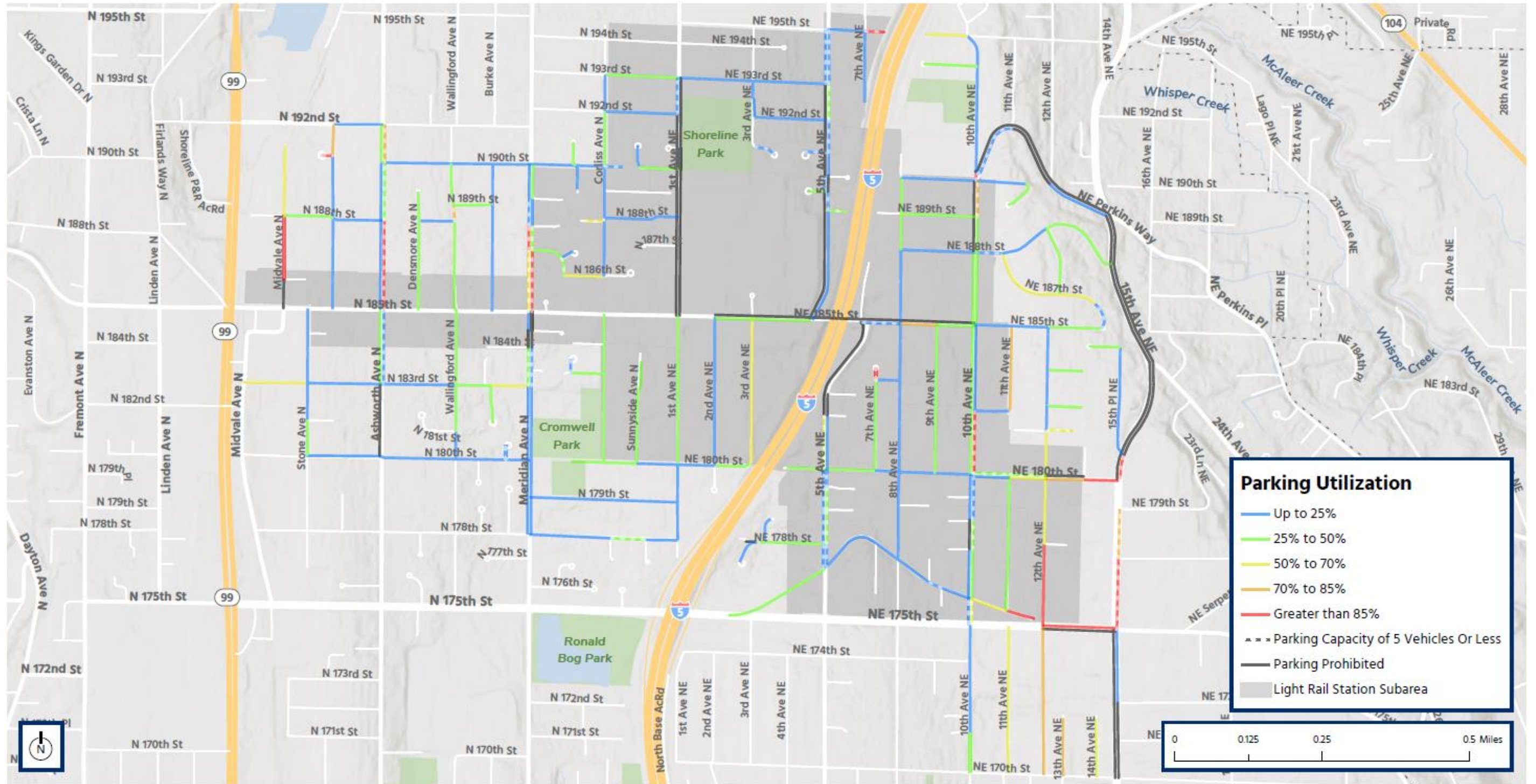
Shoreline North Station Area - Early AM Demand





PARKING UTILIZATION

Shoreline North Station Area - Late AM Demand



Appendix D – Street Segments with Utilization over 70%

145th Area					
STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
17TH AVE NE FROM NE 148TH ST TO NE 150TH ST	7	7	100%	5	71%
NE 147TH ST FROM 17TH AVE NE TO 20TH AVE NE	20	19	95%	12	60%
NE 152ND ST FROM 12TH AVE NE TO 15TH AVE NE	18	16	89%	17	94%
NE 148TH ST FROM 12TH AVE NE TO 15TH AVE NE	24	21	88%	23	96%
4TH AVE NE FROM NE 165TH ST TO STREET END	7	6	86%	6	86%
8TH AVE NE FROM NE 150TH ST TO NE 151ST ST	7	6	86%	6	86%
CORLISS AVE N FROM N 148TH ST TO N 149TH ST	12	9	75%	7	58%
6TH AVE NE FROM NE 152ND ST TO NE 155TH ST	38	28	74%	22	58%
NE 146TH ST FROM 9TH AVE NE TO 9TH PL NE	7	5	71%	6	86%
NE 148TH ST FROM 15TH AVE NE TO 17TH AVE NE	34	24	71%	23	68%
NE 165TH ST FROM 4TH AVE NE TO 5TH AVE NE	15	4	27%	12	80%
5TH AVE NE FROM NE 165TH ST TO NE 167TH ST	15	9	60%	13	87%

185th Area					
STREET SEGMENT NAME	CAPACITY	3AM-6AM COUNTS	3AM-6AM DEMAND	10AM-NOON COUNTS	10AM-NOON DEMAND
NE SERPENTINE PL FROM 11TH AVE NE TO STREET END	6	20	333%	14	233%
NE 188TH ST FROM NE 187TH ST TO 12TH AVE NE	11	18	164%	1	9%
12TH AVE NE FROM NE 175TH ST TO NE 177TH ST	24	31	129%	26	108%
12TH AVE NE FROM NE 170TH ST TO NE 175TH ST	44	56	127%	35	80%
12TH AVE NE FROM NE 177TH ST TO NE 180TH ST	22	24	109%	14	64%
12TH AVE NE FROM NE 180TH ST TO NE 181ST PL	14	14	100%	9	64%
13TH AVE NE FROM 12TH PL NE TO STREET END	28	28	100%	21	75%
DENSMORE AVE N FROM N 188TH ST TO STREET END	10	10	100%	5	50%
11TH AVE NE FROM NE 182ND ST TO NE 185TH ST	33	32	97%	25	76%
NE SERPENTINE PL FROM 10TH AVE NE TO 11TH AVE NE	14	13	93%	8	57%
STONE AVE N FROM N 191ST ST TO N 192ND ST	11	10	91%	8	73%
N 183RD ST FROM MIDVALE AVE N TO STONE AVE N	21	18	86%	11	52%
11TH AVE NE FROM NE 170TH ST TO NE 175TH ST	35	28	80%	18	51%
NE SERPENTINE PL FROM NE 175TH ST TO 5TH AVE NE	15	12	80%	6	40%
14TH AVE NE FROM NE 170TH ST TO STREET END	27	20	74%	18	67%
NE 187TH ST FROM 12TH AVE NE TO 14TH AVE NE	11	8	73%	7	64%
NE 194TH ST FROM STREET END TO 10TH AVE NE	22	16	73%	10	45%
MIDVALE AVE N FROM N 185TH CT TO N 188TH ST	16	6	38%	16	100%
10TH AVE NE FROM NE 180TH ST TO NE 182ND ST	14	5	36%	9	64%
ASHWORTH AVE N FROM N 185TH ST TO N 188TH ST	14	3	21%	2	14%
ASHWORTH AVE N FROM N 190TH ST TO N 192ND ST	12	6	50%	6	50%
NE 175TH ST FROM 12TH AVE NE TO 15TH AVE NE	6	7	117%	7	117%
NE 180TH ST FROM 11TH AVE NE TO 12TH AVE NE	11	14	127%	6	55%

NE 180TH ST FROM 12TH AVE NE TO 14TH AVE NE	9	6	67%	7	78%
NE 180TH ST FROM 14TH AVE NE TO 15TH AVE NE	11	20	182%	11	100%
NE 185TH ST FROM 2ND AVE NE TO 3RD AVE NE	6	5	83%	3	50%
NE 185TH ST FROM 3RD AVE NE TO 5TH AVE NE	8	8	100%	4	50%
NE 185TH ST FROM 8TH AVE NE TO 9TH AVE NE	11	1	9%	8	73%

Note: Arterial street utilization was summarized for the segment for this table - Appendix B splits out spaces and utilization by side of street, as does the map in Appendix C. Additionally, this table only depicts segments with parking capacity over 5.

Appendix E – Parking Demand Projection Assumptions

185th Subarea	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Households ¹	3317	3418	3449	3596	3742	3889	4035	4182	4328	4475	4621	4768	4914	5061	5207	5354	5500
Estimated Total Parking Demand - Conservative Car Ownership ²	6634	6836	6898	7191	7484	7777	8070	8363	8656	8949	9242	9535	9828	10121	10414	10707	11000
Estimated Total Parking Demand - Reduced Car Ownership ³												9447	9652	9857	10062	10268	10473
Estimated On Site Parking Available ⁴	5537	5632	5661	5798	5935	6038	6141	6243	6346	6448	6551	6653	6756	6858	6961	7063	7166
Estimated On Street Parking Demand - Conservative Car Ownership ⁵	1097	1204	1237	1393	1549	1739	1929	2120	2310	2501	2691	2882	3072	3263	3453	3644	3834
Estimated On Street Parking Demand - Reduced Car Ownership ⁶												2794	2896	2999	3101	3204	3307
Estimated On Street Parking Utilization - Conservative Car Ownership ⁷	34%	37%	39%	44%	48%	54%	60%	66%	72%	78%	84%	90%	96%	102%	108%	114%	120%
Estimated On Street Parking Utilization - Reduced Car Ownership ⁸												87%	91%	94%	97%	100%	103%
145th Subarea	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Households ¹	3467	3476	3480	3637	3794	3952	4109	4266	4423	4580	4738	4895	5052	5209	5366	5524	5681
Estimated Total Parking Demand - Conservative Car Ownership ²	6934	6952	6960	7274	7589	7903	8218	8532	8846	9161	9475	9790	10104	10418	10733	11047	11362
Estimated Total Parking Demand - Reduced Car Ownership ³												9695	9915	10135	10356	10576	10796
Estimated On Site Parking Available ⁴	5748	5756	5760	5908	6055	6165	6275	6385	6495	6605	6715	6825	6935	7045	7155	7265	7375
Estimated On Street Parking Demand - Conservative Car Ownership ⁵	1186	1196	1200	1367	1534	1738	1943	2147	2351	2556	2760	2964	3169	3373	3577	3782	3986
Estimated On Street Parking Demand - Reduced Car Ownership ⁶												2870	2980	3090	3200	3310	3420
Estimated On Street Parking Utilization - Conservative Car Ownership ⁷	35%	35%	36%	41%	46%	52%	58%	65%	71%	77%	83%	89%	95%	102%	108%	114%	120%
Estimated On Street Parking Utilization - Reduced Car Ownership ⁸												86%	90%	93%	96%	100%	103%

¹ See "Study Area Household Growth Assumptions" table below

² Based on continued average car ownership of 2 cars/household

³ Based on 1.4 cars per new household starting in 2030

⁴ Based on existing conditions and accounting for an average of .9375 stalls per unit until 2024, reducing by 25% in 2024 and subsequent years

⁵ Based on existing conditions, accounting for 2 cars/household

⁶ Based on existing conditions, accounting for 1.4 cars/household starting in 2030

⁷ Estimated conservative demand divided by on street capacity

⁸ Estimated reduced car ownership demand divided by on street capacity

Study Area Household Growth Assumptions	145 th Subarea	185 th Subarea
2014 Households ¹	3467	3310
2019 Households ²	3467	3317
2020 Households ³	3476	3418
2021 Households ⁴	3480	3449
2035 Household Threshold ⁵	5681	5500
Households added per year (assuming linear growth 2021-2035)	157.2	146.5

¹ From 145th/185th Subarea Final Environmental Impact Statements.

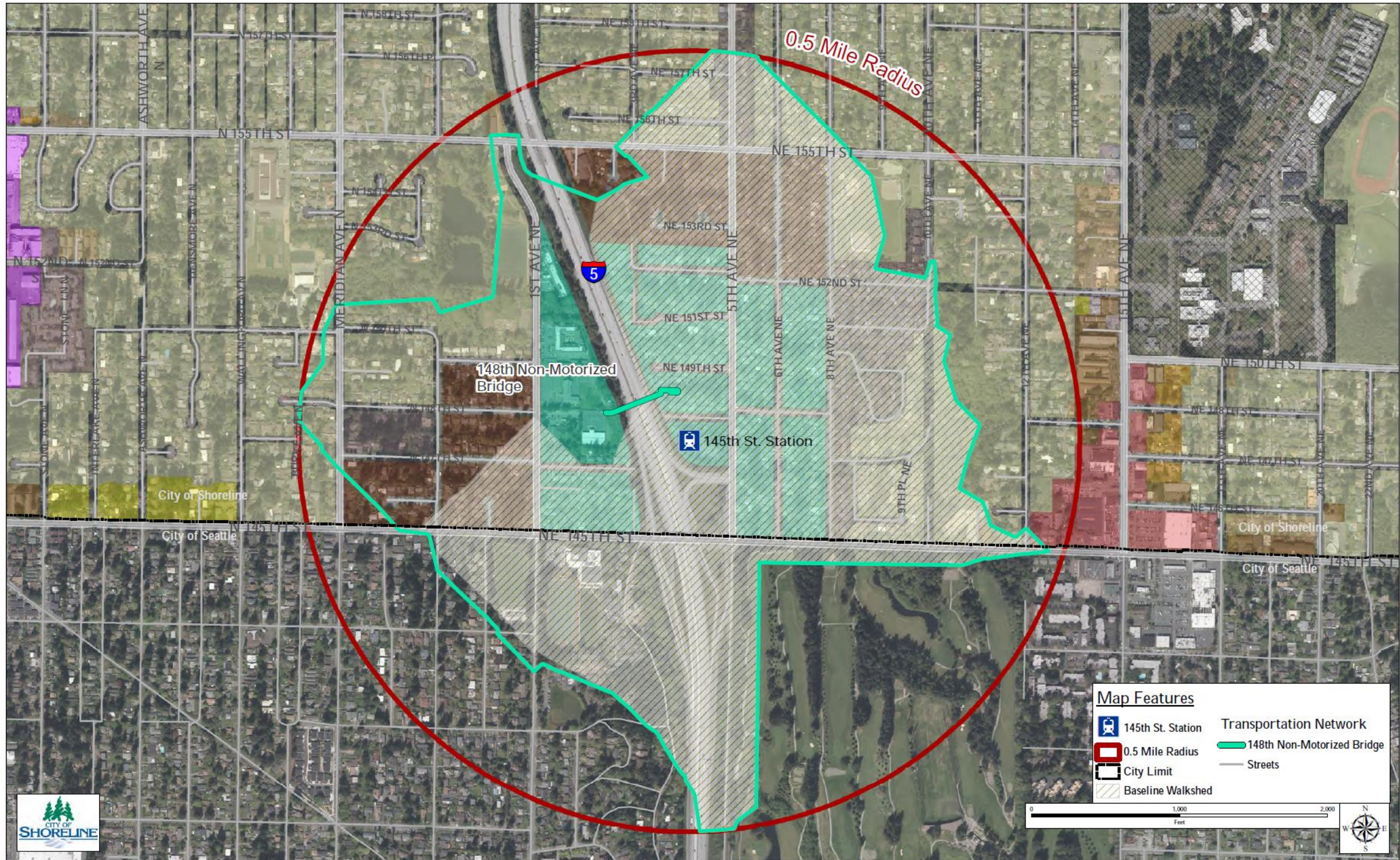
² 2014 household baseline + net new households added by permits finalized through 12/31/2018

³ Prior year households + net new households added by permits finalized between 1/1/2019 and 12/31/2019.

⁴ Prior year households + net new households added by permits finalized between 1/1/2020 and 12/31/2020.

⁵ Based on upper threshold for household growth shown in Table 3.2-13 from 145th/185th Subarea Final Environmental Impact Statements.

Study Area On Street Parking Capacity Assumptions	Number of on-street parking spaces (2019)	Number of on-street parking spaces (2020)	Number of on-street parking spaces (2021)
145 th Study Area	3434	3399	3321
185 th Study Area	3227	3221	3195





15-MINUTE WALKSHED

Shoreline North/185th Station

