Seattle Department of Construction and Inspections

Tip 135

Seattle Permits

— part of a multi-departmental City of Seattle series on getting a permit

Parking Utilization Studies

October 5, 2022

The purpose of this Tip is to explain how to prepare a parking utilization study. A parking utilization study documents how many legal on-street parking spaces are available within a specific walking distance of a project or development site and the extent to which those spaces are actually used. This provides a useful tool for assessing the potential impacts of a project that is expected to generate spillover parking demand.

How to Prepare a Parking Utilization Study

Parking utilization studies can be prepared by a land use or transportation consultant, or by another member of the development team. The typical parking utilization study includes the following steps:

1. **Define the study area.** The study area is generally within an 800-foot walking distance of the subject property. The distance should be measured along normal routes where a pedestrian would walk such as the sidewalk or edge of the road. When defining the study area, note any potential barriers, such as major arterials, and geographic features, such as ravines or bluffs, that might discourage people from parking on adjacent streets. These potential barriers and geographic features may constrain the streets included in the analysis.

   The development team should submit a vicinity plan that identifies the subject property and shows the blocks within the specified walking distance in all directions from the property. SDCI has maps available for the public to view that contain information about the size of lots, lengths of blocks, and widths of streets that can help in determining the study area.

2. **Determine the legal parking supply.** Once the walking distance is mapped, it becomes clear which blocks need to be included in the parking study.

   Only those block fronts or portions of block fronts within the identified distance from the site need to be included in the study. The development team will need to analyze each block front or portion of block front within the study area to determine the number of legal on-street parking spaces available. An example of a vicinity plan and block front data sheet is included at the end of this document.

   On each block front data sheet, complete the top portion of the sheet that identifies which block front is being surveyed, the name of the person(s) collecting data, and the date that the data were collected. A large circle with an "N" in the middle is on the bottom portion of the sheet; indicate the "north" direction by darkening the area between the directional lines in the circle.

   Clearly show the location of each driveway, fire hydrant, stop sign, and similar street features on each block front data sheet. In addition, certain distances adjacent to these features cannot legally be used for parking and should be shown on the sheets. A list of the common street features and the associated restricted distances from these features is provided below.

Required Clear Distances From Common Street Features (RCW 46.61.570)

Note: A controlled intersection is one where a traffic light, stop sign, or yield sign is installed.

Controlled intersections:

- Distance from crosswalk at overhead traffic signal: **20 feet***
- Distance from side-mounted signal (no overhead signal): **30 feet**
- Distance from the sidewalk at an intersection controlled by a stop or yield sign: **30 feet**

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Uncontrolled intersections:

- Distance from the crosswalk of an uncontrolled intersection, including at T-intersections: **20 feet***
- Distance from edge of pavement of an uncontrolled intersection with no sidewalk: **30 feet (RCW 46.04.160)***

Other clearances:

- Each side of a driveway or alley: **5 feet**
- Each side of a fire hydrant: **15 feet**
- Special zones (no parking, loading, time-limited parking, metered parking, bus zone): **No added area beyond the length of the zone**

** Crosswalks may be marked or unmarked. In the case of unmarked crossings, the crosswalk is the extension of the intersecting sidewalk. If there is no sidewalk, the crosswalk extends 10' from the edge of roadway pavement (RCW 46.04.160).*

The person conducting the study can find the length of the block face from the SDCI geographic information system (GIS) maps. They will need to measure the width of driveways, placement of hydrants and street signs, etc. Once they have this information, they can determine the unobstructed lengths of street between street features available for legal on-street parking based on the chart below. They should note these lengths on each block front plan.

Number of Legal On-Street Parking Spaces

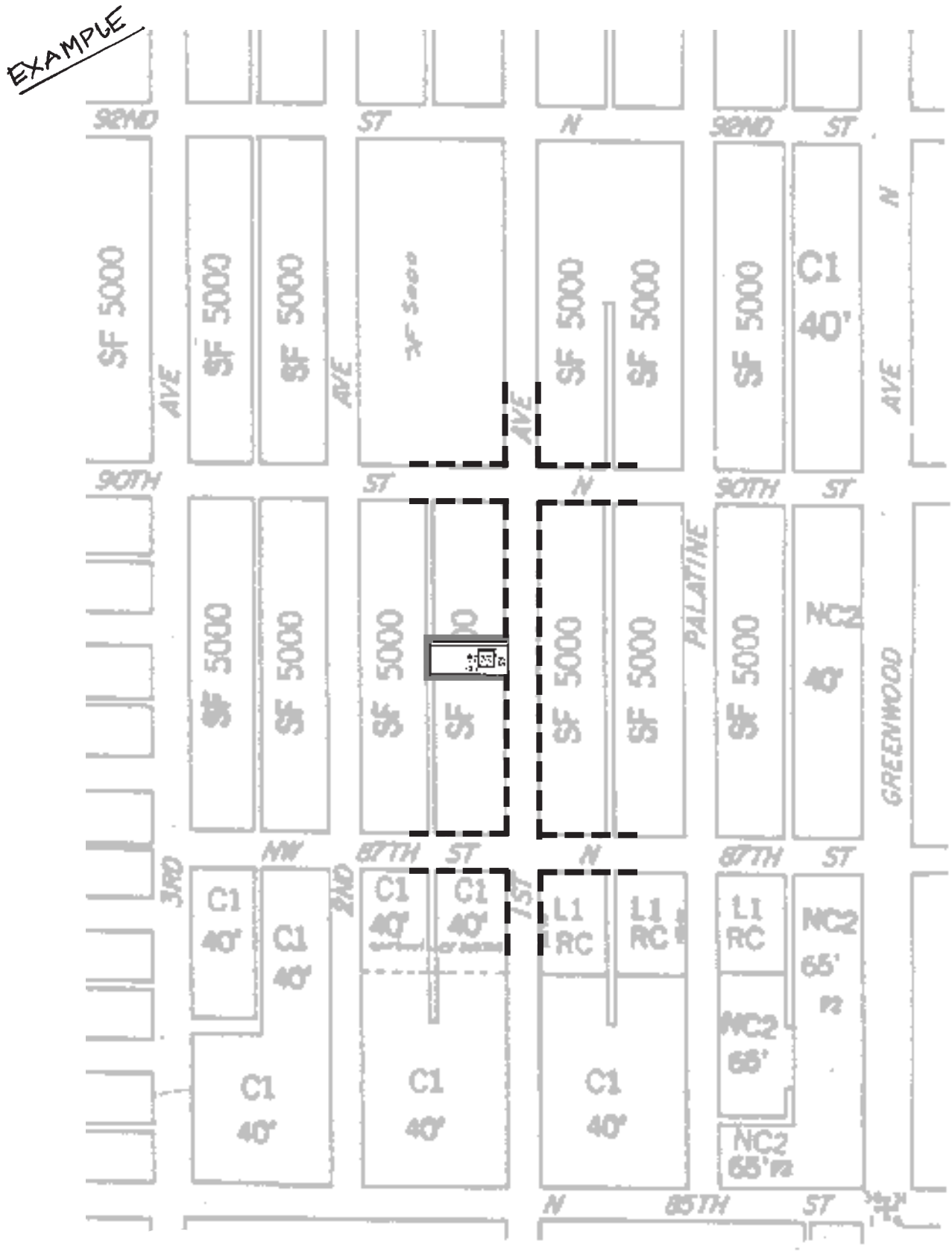
Distance	Number of Spaces	Distance	Number of Spaces
16-31 feet	1	168-183 feet	9
32-53 feet	2	184-205 feet	10
54-69 feet	3	206-221 feet	11
70-91 feet	4	222-243 feet	12
92-107 feet	5	244-259 feet	13
108-129 feet	6	260-281 feet	14
130-145 feet	7	282-297 feet	15
146-167 feet	8	298-319 feet	16

3. **Define the study time.** The survey should be conducted at least two different days, on Tuesday, Wednesday, or Thursday of the same or successive weeks. Typically, the parking study should be conducted during the time(s) of greatest on-street parking demand.
4. **Count the parked cars.** Once the parking capacity of the area has been established, count the actual number of parked cars along a block face during the time period determined above. Note the actual number of parked cars and the time and date of the count on the block front data sheet. The study should include cars parked on the street in places that are not legal to indicate the actual parking demand in the study area.
5. **Calculate the rate of parking utilization.** Determine the rate of parking utilization by performing the following calculations:
   - Add the total number of parked cars counted on the two survey days and divide the sum by two; this results in the average number of parked cars.
   - Divide the average number of parked cars by the sum of the legally available number of parking spaces for each block front, then multiply that fraction by 100. This results in the percent of parking utilization for the study period. An example of the summary sheet for these calculations is included at the end of this document.

Blank block front plan data sheets and parking utilization summary sheets are provided at the end of this publication.

Access to Information

Links to electronic versions of SDCI Tips, Director's Rules, and the Seattle Municipal Code are available on our website at **www.seattle.gov/sdci**.



MAP FOR 400' STUDY
(Not to scale)

Block Front Plan Data Sheet EXAMPLE

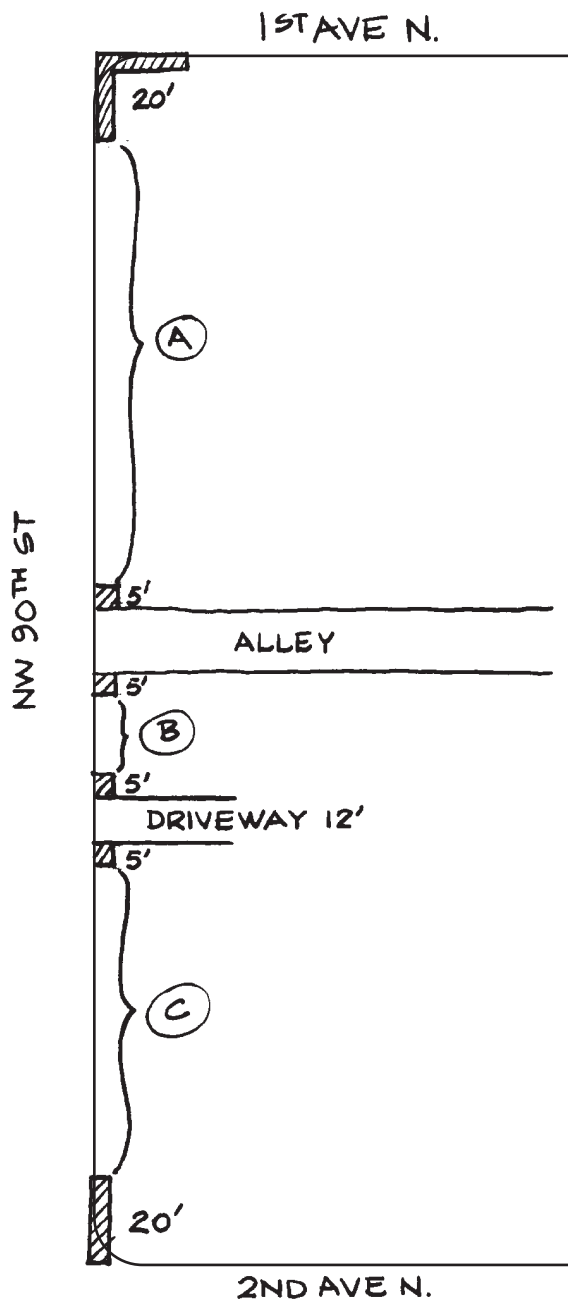
Street name NW 90TH ST

Date

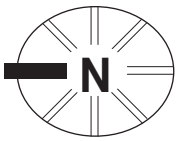
Segment of street BETWEEN 1ST & 2ND AVE N.

Name of Data Collector

Complete one sheet for each block front within the study area.
A block front is defined as one side of the block, from cross-street to cross-street.



Segment of street	Length of segment	Number of legal parking spaces
A	102'	5
B	18'	1
C	72'	4
	Total number of legal parking stalls, this block front	10
	Actual cars parked, this block front	1st Night 4
		2nd Night 6



Parking Utilization Summary Sheet EXAMPLE

Address of Subject property 8735 1ST AVE N.

Name of Property Owner MRS INLAW APT.

SDCI Project #

Name of person(s) or consultant preparing Parking Utilization Study MRS INLAW APT.

Dates that parking survey information was gathered 9/6/96, 9/8/96, 9 P.M.

Total number of on-street parked cars on the 1st night of parking survey (A)	4
Total number of on-street parked cars on the 2nd night of parking survey (B)	6
Average number of on-street parked cars within 400 feet of the subject site [(A + B) divided by 2] (C)	5
Total number of legal on-street parking spaces available within 400 feet of the subject property (D)	10

Parking Utilization Rate

(C divided by D) x 100 = Parking Utilization Rate

5 divided by 10 = 0.5 x 100 = 50%

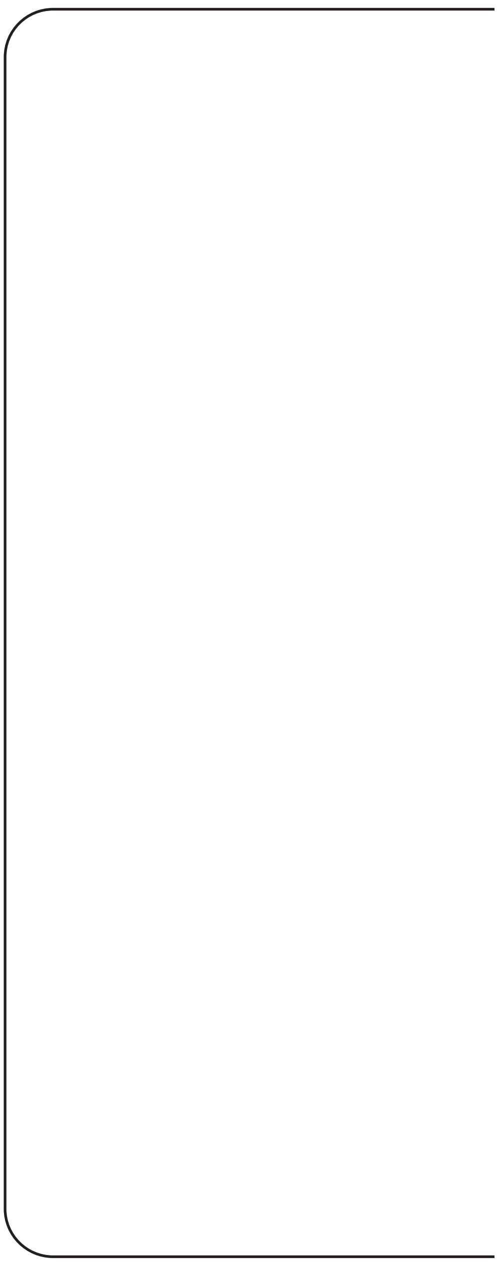
Block Front Plan Data Sheet

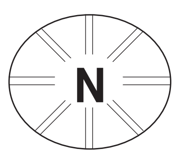
Street name ______________________ Date ______________________

Segment of ______________________ Name of Data ______________________

______________________ ______________________

Complete one sheet for each block front within the study area.
A block front is defined as one side of the block, from cross-street to cross-street.





	1st Night
	2nd Night

Parking Utilization Summary Sheet

Address of Subject property _____

Name of Property Owner _____

SDCI Project # _____

Name of person(s) or consultant preparing Parking Utilization Study _____

_____

Dates and times that parking survey information was gathered _____

Total number of on-street parked cars on the 1st night of parking survey (A) _____

Total number of on-street parked cars on the 2nd night of parking survey (B) _____

Average number of on-street parked cars within 400 feet of the subject site [(A + B) divided by 2] (C) _____

Total number of legal on-street parking spaces available within 400 feet of the subject property (D) _____

Parking Utilization Rate

(C divided by D) x 100 = Parking Utilization Rate

_____ divided by _____ = _____ x 100 = _____%