September 18, 2010

SF*park* Survey Deployment Plans

SFMTA | Municipal Transportation Agency

Section 1. Document Overview

SFMTA and the Department of Transportation emphasize careful data collection and evaluation of the SF*park* pilot projects. The Data Collection and Evaluation Plan provides an overview of what data SFMTA will collect during the pilot projects and how that data will be used to evaluate the pilot projects.

Surveys are a crucial part of the Data Collection and Evaluation Plan. SFMTA will execute the following surveys as part of the SF*park* pilot projects:

- Parking search time
- Sensor data validation (parking,roadway, and garage)
- Disabled placard usage and double parking
- Motorcycle parking occupancy
- Visitor / shopper intercept
- Unmetered parking occupancy
- Residential permit area parking occupancy and turnover

This document provides more detail about each planned survey, including a description of purpose, method, draft survey instruments (in the appendices), and schedule. Survey plans within the document will be refined before and during implementation, and if opportunities arise to lower costs.

Survey Schedule

Figure 1.1. Illustrates the proposed schedule for deployment of all surveys. Each individual deployment plan contained in this document includes more detailed information on the estimated implementation timeline.

Figure 1.1 - Survey Schedule

		2010												2011												2012											
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	**Parking Search Time**																																				
1.1	Pre-Control Test Survey																																				
1.2	Control Period Survey																																				
1.3	1st Pilot Period Survey																																				
1.4	2nd Pilot Period Survey																																				
1.5	3rd Pilot Period Survey																																				
1.6	On-going Testing Plan																																				
2	**Sensor Data Validation**																																				
2.1	Pre-Control Test Survey																																				
A	**Parking Sensors**																																				
A-2.1	1st Sensor Validation																																				
A-2.2	2nd Sensor Validation																																				
A-2.3	3rd Sensor Validation																																				
A-2.4	On-going Testing Plan																																				
B	**Road Sensors TBD**																																				
B-2.1	1st Sensor Validation																																				
B-2.2	2nd Sensor Validation																																				
B-2.3	3rd Sensor Validation																																				
B-2.4	On-going Testing Plan																																				
C	**Garage Sensors TBD**																																				
C-2.1	1st Sensor Validation																																				
C-2.2	2nd Sensor Validation																																				
C-2.3	3rd Sensor Validation																																				
C-2.4	On-going Testing Plan																																				
3	**Disabled Placard/ Double Parking Survey**																																				
3.1	Pre-Control Test Survey																																				
3.2	Control Period Survey																																				
3.3	1st Pilot Period Survey																																				
3.4	2nd Pilot Period Survey																																				
4	**Motorcycle Parking Occupancy Survey**																																				
4.1	Pre-Control Test Survey																																				
4.2	Control Period Survey																																				
4.3	Subsequent iterations																																				
5	**Visitor/Shopper Survey TBD**																																				
5.1	Contractor Procurement																																				
5.2	*Control Period Survey*																																				
5.3	*1st Pilot Period Survey*																																				
5.4	*2nd Pilot Period Survey*																																				

Section 2. Parking Search Time Survey

Purpose of Parking Search Time Survey

Increasing parking availability and reducing parking search time and variability in pilot areas will be a key measure of success for the SF*park* pilot projects. SFMTA will conduct parking search time surveys in the pilot and control areas to measure the impacts of the pilot projects on achieving these goals.

Methodology

The parking search time survey will use an easy to replicate method for measuring a proxy for parking search time that can be compared consistently over time. The survey methodology described below is diagramed in Figure 2.1. Additionally, Appendix 1 contains a sample data log that will be used by surveyors. The parking search time methodology is as follows:

1. Timing of the surveys will be coordinated with price changes so that data is collected towards the end of each price change cycle.
2. The surveys will be performed on bicycles along pre-defined survey routes.
3. Each route has a designated start point located at a major intersection; surveyors will begin each run at the near-side crosswalk of the intersection (See Figure 2.2).
4. Surveyors will note the start time and activate a stopwatch.
5. Surveyors will bicycle along the assigned route searching for a parking space. Surveyors will attempt to maneuver in traffic exactly as a passenger vehicle would while searching for parking and will follow all traffic laws.[1] Surveyors will continue to ride along the pre-assigned route until they find a vacant legal parking space to accommodate a full-sized sedan (e.g., Honda Accord).
6. Surveyors will be trained to follow consistent rules that remove, to the extent possible, subjective judgments about when and if a space is open. For example, one rule will be to not wait for drivers preparing to leave a parking space.
7. Once a suitable parking space is located, surveyors will turn the bicycle into the parking space (or to a ”safe harbor” at the side of the road), stop the stopwatch, and note the elapsed search time to the second. They will also record the number of times they passed the starting point before arriving at the vacant, legal parking space (i.e., the number of completed “laps” of the assigned parking search route).
8. Next, surveyors will note either the meter number of the metered space or the nearest physical address for unmetered spaces. If the space is controlled by a multi-space meter, surveyors will note both the two digit space number and the meter ID number.
9. After recording elapsed time and the meter number/location, the surveyor will restart the stop watch and return to the starting point (by his/her preferred route). The surveyor will wait until at least four minutes have elapsed before starting another search run (if the surveyor takes longer than four minutes to return to the starting intersection he/she should begin another search run immediately, without waiting).

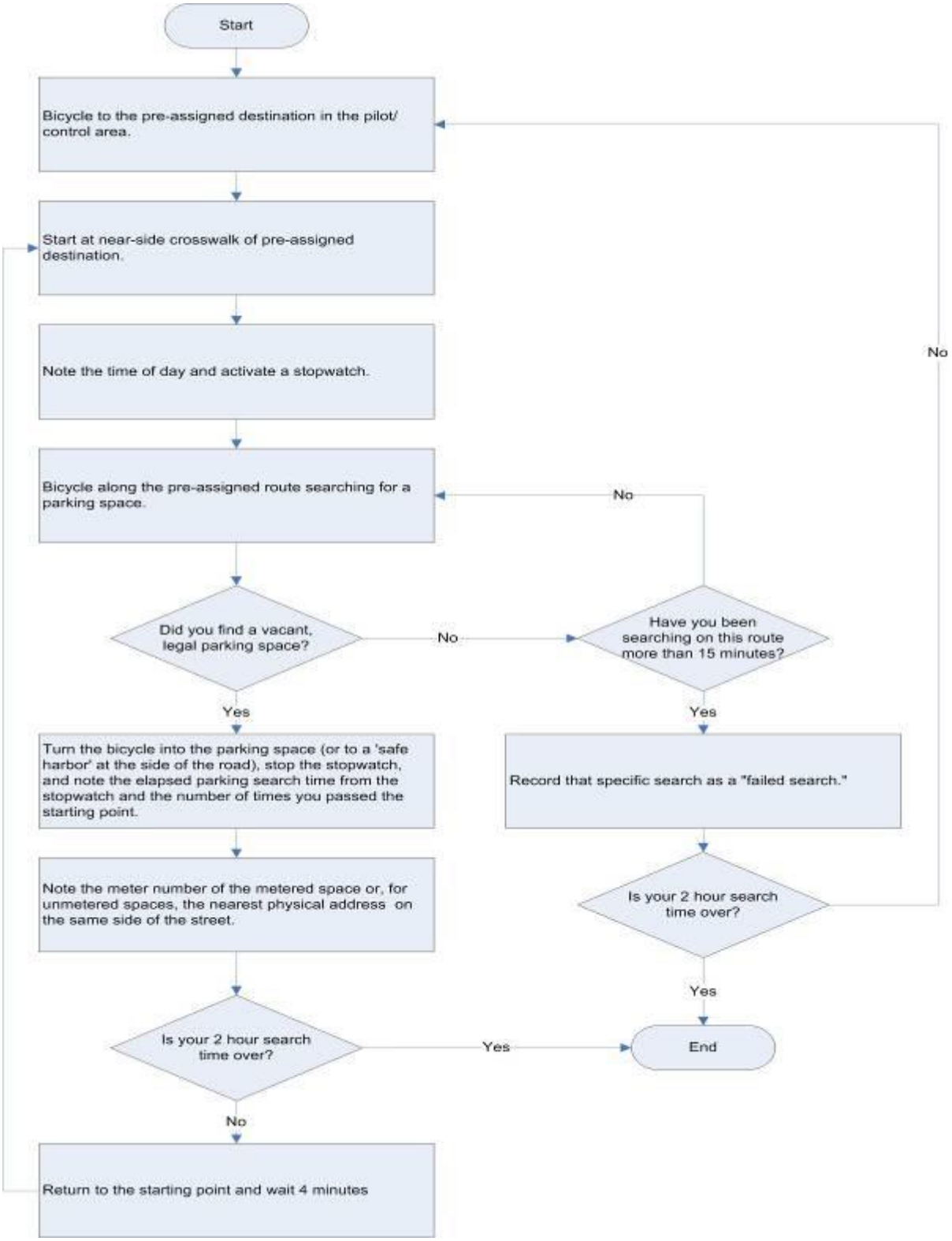
[1] Previous studies of parking search time have relied on surveyors riding bicycles and SFMTA desires to replicate that methodology. While on most of the survey streets, the speed limit for automobiles is 25 mph, studies have shown that drivers searching for parking typically slow to 12 mph, a comfortable speed for bicycles. SFMTA also believes that parking search time surveys conducted by bicycle will be safer than if conducted by automobile because they avoid double parking at the beginning of the survey (while surveyors take the start time and odometer reading). This methodology also reduces the equipment and personnel needs of conducting the survey, with a subsequent reduction in data collection costs.

10. Surveyors will have up to 30 minutes to find a parking space. If a parking space is not found within 30 minutes, the surveyor will record that search as a "failed search," return to the starting point, and then start a new search immediately, without waiting four minutes.[2]

During the data entry process, SFMTA staff will calculate total distance travelled during each run.

[2] A 30 minute cap on parking search time was chosen as a reasonable threshold for estimating the point when drivers will become frustrated and either (a) leave the area, (b) park in a garage or lot, or (c) park in an adjacent residential neighborhood. From a methodological perspective, it is also necessary to cap the time surveyors spend searching for parking, as it is possible that during peak times it may take much longer than 30 minutes to find a parking space, making it difficult for SFMTA to collect a sample size large enough to allow for statistical analysis.

Figure 2.1 - Parking Search Time Survey Workflow

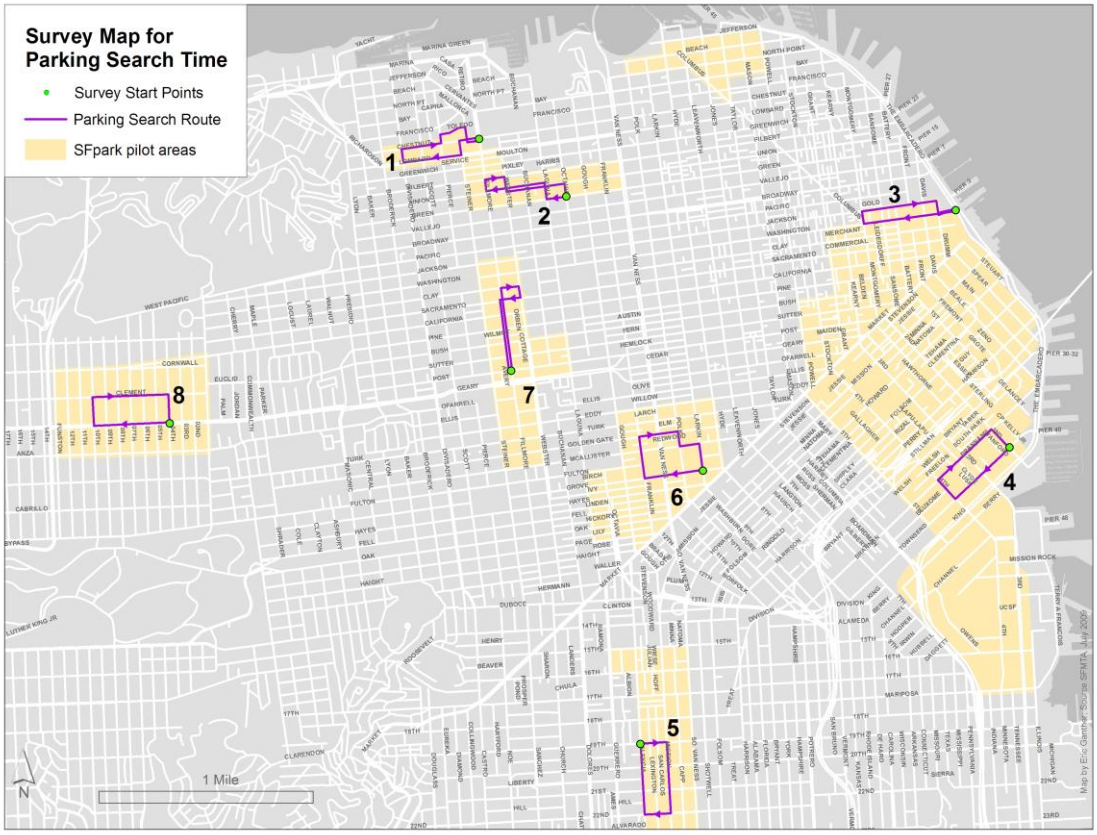


Sampling Plan

Many factors affect how people find parking: time of day, day of week, trip origin, price sensitivity, value of time, willingness or ability to walk, and perceptions of safety in a given area. In practice, drivers have different ways of searching for parking, and therefore take different search routes and experience varying search times for parking near the same destination. Some drivers, for example, may start near their destination and search in ever-widening concentric circles. Others, being more familiar with parking conditions near their destination, may park somewhere en route and walk the rest of the way. Still others may search in a random pattern driving down a particular “primary” street while periodically looking down “secondary” cross streets. In other words, there is no typical parking search behavior.

Therefore, to estimate parking search time, SFMTA will use pre-assigned starting points and carefully detailed search routes to ensure that data collection methodology is replicable, consistent, and readily comprehensible by surveyors. While using pre-assigned starting points and search routes will not precisely replicate all potential parking search behaviors, it will provide a reasonable proxy for actual parking search times. Also, since SFMTA is primarily interested in the potential effect of SF*park*-related changes on parking search times, this method of data collection offers the best opportunity for comparing parking search times between areas and across time for each iteration of the survey.

Figure 2.2 Parking Search Time Survey Map



The map in Figure 2.2 shows the starting points and search routes. During data collection, each surveyor will have a detailed map of their survey route, an example of which is shown in Appendix 2. The selected search routes exclude streets with peak-period tow-away zones and also exclude streets planned for closure due to construction. SFMTA may refine search routes slightly. However, once the first survey is conducted, the search routes will be fixed for the remainder of the pilot program.

Data will be collected on one weekday and on both weekend days. All weekday samples will be collected on Tuesday, Wednesday, or Thursday to ensure that the data is reflective of a typical weekday.[3] Weekend samples will be collected on Saturdays and Sundays.[4] In all cases, SFMTA will not schedule surveys in locations with special events that could distort parking search time data (e.g., parades, street fairs, close to street cleaning, or major sporting events).

The SFMTA will collect data during the following time periods:

- 8-10 am
- 12-2 pm
- 4-6 pm
- 8-10 pm

The range of hours for data collection is designed to ensure that data from both the morning and evening peak commute periods is collected, in addition to other periods of high parking demand such as dining/entertainment demand. Collecting data for several 2-hour periods over the course of a day also enables a comparison of parking search time between times when parking meters are operational and times when meters are non-operational and/or have lower levels of enforcement.[5]

To calibrate data collected by bicycle, the SFMTA will conduct a small sample of parking search timesurveys by automobile in order to calibrate the results of the bicycle based parking search time surveys. To complete this calibration for all routes, surveyors will conduct eight parking search time “runs” by automobile on each of the eight survey routes established for the standard bicycle-based parking search time surveys. This will result in a minimum of 64 search runs to be used for calibration of standard parking search time survey results. These surveys will be conducted by automobile, on the same routes, using the same survey methodology.. Figure 2.3 shows the estimated number of surveys that could be completed for each 3-day iteration of the Parking Search Time survey (consisting of one weekday, one Saturday, and one Sunday). This sampling plan assumes surveyors can collect, on average, six data samples per hour. In subsequent iterations of the survey, SFMTA expects that greater availability will decrease parking search time, which may lead to more than six data samples per hour. This sampling plan will allow SFMTA to collect sufficient sample sizes to estimate true mean parking search time within a reasonable level of certainty for:

- A typical weekday
- Saturdays

[3] Mondays and Fridays will be excluded due to the atypical travel patterns on these days.

[4] Sundays are generally excluded from transportation data collection due to the atypical travel pattern. However, in order to ensure adequate weekend sample sizes and to learn more about Sunday travel patterns when parking is not currently metered, data will be collected on Sundays.

[5] SFMTA may revise the sampling hours depending on the nature of the survey route or of parking management changes. For example, if metering hours are extended, SFMTA will extend sampling hours to ensure that data is collected during both metered and non-metered time periods.

- Sundays

These sample sizes will also allow SFMTA to compare parking search times in the control areas to those in pilot areas. In addition, by performing multiple iterations of the survey, once during the control phase, once at the beginning, once at the mid-point, and once at the end of the pilot phase), SFMTA will be able to evaluate changes in parking search time over time as a result of SF*park* policy and management changes.

Figure 2.3 - Sampling Plan for Each Survey Iteration

	Data Samples				
	Per period (2 hours)*	**Per Weekday (4 periods)**	**Per Saturday (4 periods)**	**Per Sunday (4 periods)**	**Total Samples per 3-Day Survey Iteration**
Pilot Areas					
Downtown	12	48	48	48	144
South Embarcadero	12	48	48	48	144
Mission	12	48	48	48	144
Civic Center	12	48	48	48	144
Fillmore	12	48	48	48	144
Marina	12	48	48	48	144
Pilot Subtotal	**72**	**288**	**288**	**288**	**864**
Control Areas					
Richmond	12	48	48	48	144
Union Street	12	48	48	48	144
Control Subtotal	**24**	**96**	**96**	**96**	**288**
Total (Pilot and Control)	**96**	**384**	**384**	**384**	**1152**

** Assumption: Surveyors collect an average of 6 samples per hour*

Predictive Modeling Plan

There are a number of factors that determine parking search time. The most important of these are the availability of parking spaces in the pilot or control area (occupancy), the distribution of available spaces, and travel speeds during the parking search. The simple model used in the sampling plan assumes that on-street parking spaces are distributed randomly and evenly throughout each pilot and control area and that searching speeds are roughly consistent with prevailing travel speeds in each pilot or control area.

The number of observations that must be collected to reliably derive actual parking search times within a reasonable range of confidence can vary widely, depending on the variability of parking search time in the area; the more variable parking search time, the more observations will be required to arrive at a reasonable derivation of the true mean search time.

Overall, the most important factor affecting the variability of search time is parking occupancy. In places and times with low or moderate parking occupancies, parking search time is very predictable and the true mean search time can be reasonably estimated with few observations. In places or times with very high parking occupancies, parking search time is far more variable and more observations will be required to estimate true mean search time. Figure 2.4 illustrates how a variety of occupancy conditions would affect search time under seven different “occupancy scenarios.”[6]

[6] In this model, let OCC = parking occupancy, and p the probability that any given space is vacant. Then p = 1 – OCC, and the number of spaces on average that a driver must pass by in order to find a vacant space is 1 / (1 – OCC). The variance is (1 − p)/p^2 = OCC x (1 – OCC)^2. If the survey completes n observations, and the average number of spaces passed by is X, then the standard error of X is sqrt (variance/n). SFMTA will use empirically-derived occupancy and parking search speed (from parking and roadway sensors) to calculate the expected search time. If there are S spaces per mile and cars looking

Figure 2.4 - Predicted Parking Search Times

	Scenario						
	A	B	C	D	E	F	G
Block length (feet)	400	400	400	400	400	400	400
Spaces per block	10	10	10	10	10	10	10
Spaces per foot	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Spaces per mile (S)	132	132	132	132	132	132	132
Number of Observations (N)	72	72	72	72	72	72	72
Parking Occupancy (OCC)	99%	98%	95%	90%	85%	80%	75%
Search speed - Miles per hour (M)	7	7	7	7	7	7	7
Probability a space is vacant (P)	1%	2%	5%	10%	15%	20%	25%
Average # spaces you needed to look at to find one	100	50	20	10	7	5	4
Feet per minute	440	440	440	440	440	440	440
Spaces per minute	15.40	15.40	15.40	15.40	15.40	15.40	15.40
Expected Search Time (minutes)	6.5	3.2	1.3	0.6	0.4	0.3	0.3
Variance	9900	2450	380	90	38	20	12
Standard Error of X (spaces)	11.7	5.8	2.3	1.1	0.7	0.5	0.4
Confidence Interval for Standard Error (Spaces)	22.98	11.43	4.50	2.19	1.42	1.03	0.80
Equivalent search time (minutes) +/-	0.761	0.379	0.149	0.073	0.047	0.034	0.027
Can predict with 95% confidence that mean search time...							
is less than __ minutes	8.0	4.0	1.6	0.8	0.5	0.4	0.3
is more than __ minutes	5.0	2.5	1.0	0.5	0.3	0.3	0.2

This predictive model suggests SFMTA can expect that parking search time will be longer at higher parking occupancies. For example, in scenario A, 99% occupancy and an average search speed of 7 miles per hour, SFMTA will expect search time to be about 6.5 minutes. At 98% occupancy (Scenario B), search time will be expected to fall to approximately 3.25 minutes.

As part of the SF*park* pilot projects, parking and roadway sensors will be used to gather information on parking occupancy and travel speeds through the pilot and control areas. As SFMTA gathers information about actual parking occupancies and travel speeds in the pilot and control areas, the agency will adjust the sampling plan using the outputs of this predictive model. In addition, SFMTA will use the data it collects during the first iteration of the survey to judge how accurately this model predicts search time, and it will calibrate and adjust the predictive model accordingly. For example, actual travel speeds may be higher than assumed by this predictive model in all but the most congested areas and times.

As noted below, if SFMTA determines that the predictive model can reliably predict parking search time (given empirically-derived travel speeds and parking occupancies as model inputs), the agency will use such model to predict parking search time. As a result, subsequent manual parking search time surveys may be reduced in scale, but would still be necessary and used for validation.

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for a space travel at M miles per hour, then each car passes S x M spaces per hour. Given these assumptions, the expected search time in hours is (1/(1-OCC))/SM.

To complement or replace this predictive modeling, the SFMTA may investigate utilizing a computer model and parking sensor data to have “virtual” bicyclists or cars track a search path until they “find" an empty space, as indicated by the sensor. This may allow the SFMTA to reduce the overall amount of manual data collected; if successful, manual data collection would be necessary occasionally to validate parking search time modeling results. The parking search time routes have been chosen, in part, based on the planned location of parking sensors to allow this option.

Schedule

SFMTA will complete four iterations of the survey. Surveys throughout the pilot and control areas will be conducted at the same time in order to minimize seasonal differences in travel patterns that may distort the data collection and subsequent analysis. Survey deployment will occur on the following schedule:

1. The control period survey - The first full iteration of the survey will be carried out in each area during the control “before” data collection period, after new meters have been installed. SFMTA expects that the control period surveys will be carried out in September and October 2010.
2. 1st pilot period survey - The next iteration of the survey will be carried out in March and April 2011.
3. 2nd pilot period survey – The next iteration of the survey will be carried out during in September and October 2011.
4. 3rd pilot period survey – The final iteration of the survey will be carried out during March and April 2012.
5. Ongoing Parking Search Time surveying – SFMTA will endeavor to find funding to continue to conduct parking search time surveys in the pilot and control areas on an ongoing basis after the conclusion of the USDOT-funded pilots. It is envisioned that the survey would be repeated every 12 to 24 months.

Estimated Effort

SFMTA expects to perform the parking search time survey with contract employees. Figure 2.5 provides an estimate of effort required for each survey iteration. This estimate includes surveyor time, data collection, data entry, and survey supervision and project management.

Data collection will be split into two 7-hour shifts, totaling 14 hours per day.

Figure 2.5 - Estimated Effort Per Survey Iteration

Personnel	Per Weekday	Per Saturday	Per Sunday	Total per route	Number of routes	Total Hours
Surveyor Hours	14	14	14	42	8	336
Calibration Survey Hours (by car)	28	28		56	1	56
Data Entry Hours						16
Supervisor Hours (pre and post survey)						60
Supervisor Hours (on-site management)	2	2	2	6	8	48
Project Management				3	8	244
Total	16	16	16	48		540

As described above, SFMTA will use the data it collects during parking search time surveys to test and calibrate the predictive parking search time model. If such a model can be shown to reliably predict parking search time

using empirically-derived data inputs for parking occupancies and travel speeds, SFMTA will use it to reduce the scale of the manual parking search time survey effort.

Section 3. Sensor Data Validation Survey

Purpose of Sensor Data Validation Survey

Three types of sensors will be used as part of the SF*park* pilot projects. The sensors will measure a number of critical metrics to test the effectiveness of the new meters and pricing strategies. The SF*park* data collection and evaluation plan, SFMTA plans to use three types of sensors:

1) Parking sensors to collect occupancy information for metered parking spaces and un-metered parking areas.

2) Roadway sensors to collect vehicle volumes and speeds.

3) Garage sensors to collect vehicle volumes as a means to record overall garage occupancy.

The SFMTA plans to conduct manual validation surveys for each type of sensor in the order the SFMTA is receiving consistent and accurate data. As part of this process, SFMTA will manually collect information in the pilot areas on parking occupancy, vehicle volume and speed, and garage ingress and egress, after the sensors have been installed and are operating. SFMTA will then compare the data results obtained by the sensors with those obtained by the manual surveys. Ongoing validation of sensor data streams will be critical for the operation and evaluation of the SF*park* pilot projects.

This sensor validation plan outlines a method for collecting high-quality data samples from manual surveys at a reasonable total labor cost. For example, in the parking sensor survey a single observer will record occupancy at 50-75 parking spaces for each test or "tour" of the blockfaces to be sampled.

Parking Sensors

The parking sensors will be installed at each parking space throughout the pilot and controls area. The sensors will determine whether or not a vehicle is parked as well as the length of parking sessions. A total of 8,255 parking sensors will installed and monitored through the data warehouse.

Methodology for Sensor Data Validation Survey

SFMTA surveyors will collect parking occupancy data from 11am to 4 pm on metered (non-holiday) weekdays. Observations will be made for each parking space on a specified route, yielding a total of 450-500 occupancy observations for over each day.

Each pilot and control area will have one or more tours (i.e., testing routes). For each tour, surveyors will collect data samples until the desired number of qualified parking events is observed. This takes on average between four and five hours. During each tour or survey, surveyors will collect data using the following method:

1. Randomly select an area with several meters where you can view the status of the spaces easily. For parallel spaces this will likely be about three spaces but for angled parking may be four or five.

2. Hold a stopwatch up and observe the time, including seconds.

3. Note the time in HH:MM:SS format for the spaces.

4. Observe the parking status of the spaces, described in Figure 3.2 – Parking Status Definitions and classify as one of the following[7]:
    - **Vacant**
    - **Occupied**

5. Note the parking status of the spaces on the data collection form.

6. Write the Meter ID numbers from the posts on the data collection form.

7. Move to the next section meters and repeat until you have observed 450 "vacant" or "occupied" parking instances.

Figure 3.1 – Sample Tour Route

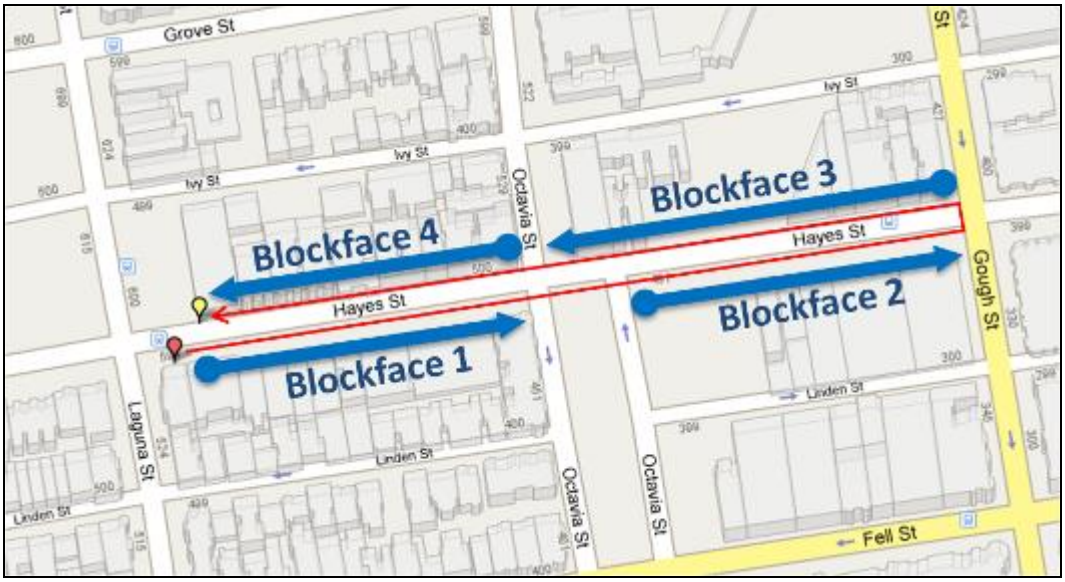


Figure 3.2 – Parking State Definitions

State	Description
Vacant	There is no vehicle inside of the bounds of the parking space.
Occupied	There is a stationary vehicle inside the space, and all four wheels are not moving. The car may be idling, but is not moving, and cannot be more than 6" up on the curb. In the case of undemarcated parallel spaces, some part of the car must be in line with the vehicle sensor.
Transition	A car is entering, or moving within the parking space There is a vehicle entering, leaving, or moving within the parking space. If any wheels are moving, the car is in transition.

[7] Do not collect samples for any spaces that would be classified as "transition" or "other," as described above. In other words, ignore observations of "transitions" or "other" in the data collection form. Valid samples must be for "vacant" or "occupied" spaces only.

Other	This includes instances of objects blocking a space, motorcycles, double parking, any vehicle projecting more than 2' into the space from an adjacent space, vehicles over 30' in length and vehicles and/or parking situations that cannot be correctly classified as Vacant, Occupied or Transition.

Sampling Plan

During each phase of the parking sensor validation survey, a series of tours will be completed in the pilot and control areas. Figure 3.3 –Sensor Deployments for each pilot and control area.

Figure 3.3- Sensor Deployments

Area	Number of Metered Spaces
Downtown	2,251
South Embarcadero	1,755
Civic Center	856
Mission	908
Fillmore	796
Marina	654
Fisherman's Wharf	807
West Portal (Control)	283
Union Street (Control)	309
Richmond (Control)	577
Total	8,255

Schedule

SFMTA will complete three iterations of the survey. Surveys throughout the pilot and control areas will be conducted at the same time in order to minimize seasonal differences in parking patterns that may distort the data collection and subsequent analysis. The validation will follow this schedule:

1. 1st Sensor Validation – Immediately following the installation of parking sensors, initial validation will take place, during September and October 2010.
2. 2nd Sensor Validation – The next iteration of the survey will be carried out during March and April 2011.
3. 3rd Sensor Validation – The final iteration of the survey will be carried out during September and October 2011.
4. Ongoing Sensor Validation - SFMTA expects that it will continue to monitor sensor performance in the pilot and control areas on an ongoing basis after the conclusion of the USDOT-funded pilots. It is now envisioned that the survey will be deployed every 12 to 24 months.

Estimated Cost

For parking sensor validation, there are 10 tour route requiring approximately five hours of data collection and one hour of travel time. Costs are summarized in Figure 3.5 – Parking Sensor Validation Cost Estimate.

Figure 3.5 - Parking Sensor Validation Cost Estimate

For each iteration (15 tours)	Hours	Cost per hour	Cost
Surveyors	105	$25	$2,625
Data entry	10	$25	$250
Project management (prep and on-site)	20	$110	$2,200
Total cost for one iteration			$5,075
Total cost for three iterations			$15,225

Roadway Sensors

The roadway sensors will be installed in the road and are designed to measure vehicle volumes, speeds, and point to point travel times. The total number of roadway sensors will depend on their cost, but SFMTA is tentatively planning to buy approximately 30 roadway sensor arrays from one vendor. To validate the roadway sensor data, we plan to randomly choose ten arrays to validate.

Methodology

1. To validate vehicle volume data, a survey will be conducted during which a surveyor will count vehicles as the cross the roadway sensor. The surveyor will monitor one sensor in one lane in one direction.
2. Using a hand tally counter to count the number of cars that cross the roadway sensor, the surveyor will count for 50 minutes.
3. Note the stop time.
4. After a ten minute break, the surveyor will note the resume time.
5. Again, using a hand tally counter to count the number of cars that cross the roadway sensor, the surveyor will continue counting for 50 minutes.
6. Note the end time.

Locations

At this time the roadway sensors have not be placed. Therefore we can not identify the test sites. However, the SFMTA will attempt to site these sensor arrays in a way that they will be able to capture on key corridors between pilot areas so that they capture broader point to point travel times in the City. This will help the National Evaluator determine changes in travel times on a broader scale. Draft location maps are included in Appendix 4.

Schedule

SFMTA plans to do three rounds of roadway sensor survey validation:

- The first test shortly after roadway sensor installation, approximately between September and October 2010.
- A second test six months later, approximately in February and March 2011.
- A third test eight months later, approximately in September and October 2011.

Estimated Effort

For roadway sensor validation, assuming five arrays and three survey iterations, there will be 15 total tests. Each test will require approximately two hours of data collection and one hour of travel time.

Garage Sensors

If technically feasible, the SFMTA may install garage sensors at or near the entrances to SFMTA-controlled parking garages in SF*park* pilot areas in order to measure vehicle entrances and exits, and therefore overall occupancy of each garage in real-time. If technically and financially feasible, SFMTA plans enough sensors to equip all entrances and exits for 14 garages to monitor vehicle ingress and egress.

Methodology

To validate garage sensor data, ten exits and/or entrances will be selected. A surveyor will be stationed to count vehicles as the cross the garage sensor. The surveyor will monitor one sensor in one lane in either an exit or entrance. Note the location and start time.

1. Using a hand tally counter to count the number of cars that cross the garage sensor, the surveyor will continue counting for 50 minutes.
2. Note the stop time.
3. After a ten minute break, the surveyor will note the resume time.
4. Again, using a hand tally counter to count the number of cars that cross the garage sensor, the surveyor will continue counting for 50 minutes.
5. Note the end time.

There are 14 SFMTA-controlled parking garages in the pilot areas:

- Civic Center, Civic Center
- Performing Arts, Civic Center
- Japan Center, Fillmore
- Japan Center Annex, Fillmore
- Lombard Street, Marina
- Ellis - O'Farrell, Downtown
- 5th & Mission, Downtown
- Moscone Center, Downtown
- Sutter-Stockton, Downtown
- Union Square, Downtown
- St. Mary's Square, Downtown
- Portsmouth Square, Downtown
- Golden Gateway, Downtown
- 16th & Hoff, Mission
- Mission-Bartlett, Mission

Schedule

SFMTA plans to do three rounds of parking, roadway, and garage validation:

- The first test shortly after roadway sensor installation, approximately between September and October 2010.
- A second test six months later, approximately in February and March 2011.
- A third test eight months later, approximately in September and October 2011.

Section 4. Disabled Placard Usage and Double Parking Survey

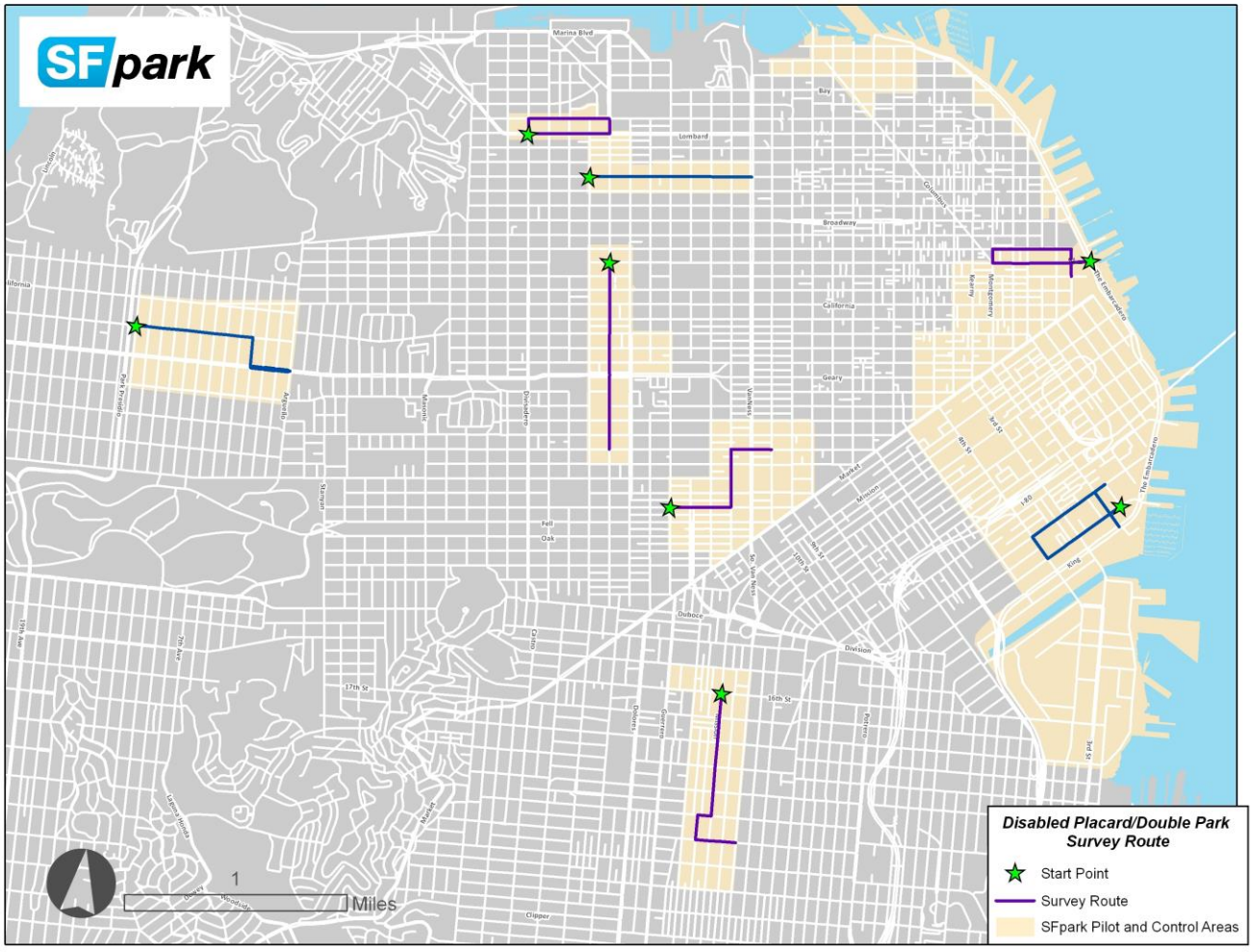
Purpose of Disabled Placard and Double Parking Survey

SFMTA plans to conduct a survey of disabled placard usage and double-parking in SF*park* pilot and control areas. Although parking sensors will provide a measure of length of stay and occupancy, gathering data on disabled placard usage will help to calibrate parking sensor and parking meter payment status data for some types of analysis. Double-parking will be gathered at the same time to help determine SF*park*'s impact on reducing one source of congestion. Surveyors will also identify the number of empty legal parking spaces on each block to provide a second measure of parking occupancy. In addition, surveyors will identify the number of temporarily unavailable parking spaces due to construction or other "temporary no-parking" event.

Methodology

Disabled placard and double parking (DPDP) surveying can be achieved simultaneously. A set of eight fixed routes will be surveyed (Figure 4.1 shows these routes). For each survey iteration, each route will be walked a total of eight times on each of two weekdays..

Figure 4.1 - Disabled Placard/Double Park Survey Map



For each iteration, data will be collected on two weekdays (Tuesday, Wednesday, or Thursday), that are not forecast for rain the day before. (This is necessary to keep conditions for data samples as consistent as possible across all routes and time periods. Each route has been designed to be walked in about one hour. On each day surveyors will collect data during the following time periods (completing two full laps of their assigned route during each time period):

Survey Time Periods	Survey Route Collection Hours
8-10 AM	8-9 AM
	9-10 AM
12-2 PM	12-1 PM
	1-2 PM
4-6 PM	4-5 PM
	5-6 PM
8-10 PM	8-9 PM
	9-10 PM

Surveys will not be scheduled for each route on the same day and/or time period as major events that would affect travel and parking demand for the same area (e.g., parades, street fairs, or major sporting events). Complete surveys will be performed in three iterations: once before, once during and once after the implementation of SF*park* policies.

Surveyors will be instructed to walk along the route and for each blockface, to note parking occupancy, temporary “no-parking” spaces, disabled placard, and double parking information in the data log. To collect parking occupancy data, surveyors will mark each legally available vacant and occupied metered spaces,noting the space’s parking regulation. All normally legal spaces that have temporary “no-parking” restrictions or are blocked (e.g trash dumpster, debris piles) will be noted, whether occupied or vacant so that they are removed from the block inventory during the time period the space is temporarily unavailable. Yellow metered loading zone spaces (with both yellow and red heads) will not be counted as occupied, vacant, or temporarily “no parking” during marked loading hours. However, when yellow metered spaces become available for general vehicular parking, the spaces will be counted as occupied, available, or temporary “no-parking”. Motorcycles are excluded.

For disabled placards, the surveyor will note the last three digits of the license plate number for vehicles displaying disabled placards or disabled license plates. This data will be compared to parking occupancy rates which can characterize the use of disabled placards for the same blockface over time or to make spatial comparisons.

For double parking events, surveyors will be instructed to systematically observe the street block at the beginning and end of each block. When safe to do so, surveyors will step into the crosswalk, looking both directions to observe and confirm whether double parking is occurring in either block on either side of the street along the study path. If a vehicle is double-parked on a blockface where data is being collected, the surveyor will note the following:

1. The last three digits of the license plate,

2. Whether the vehicle is a personal vehicle (“p”), commercial vehicle (“cv”), or government (“g”), which includes municipal, state and other official government related vehicles.

3. Whether or not the vehicle is idling (“i” for idling, “ni” for not idling).

Emergency vehicles are excluded. Data will be aggregated by block face and compared over different times. Appendix C shows a sample data log sheet and route maps that will be given to surveyors.

Schedule

SFMTA will complete at least three iterations of the survey. Survey deployment will occur on the following schedule:

1. The control period survey - The first iteration of the survey will be carried out in September, October, and November 2010.
2. 1st pilot period survey - The second iteration of the survey will be carried out in March and April 2011.
3. 2nd pilot period survey - The third iteration of the survey will be carried out in September and October 2011.

Estimated Effort

Figure 4.2 provides an estimate of effort for each iteration of survey implementation.

Figure 4.2 – Estimate of Effort per Iteration of Disabled Placard Usage and Double Parking Survey

	Total Hours
Total Surveyor Hours	336
Data Entry Hours	60
Total Supervisor hours (prep time)	35
Total Supervisor hours (on site)	100
Total Cost per Survey and Area	**531**

Section 5. Motorcycle Parking Occupancy Survey

As part of the SF*park* pilot projects, the SFMTA will use demand-responsive pricing to manage motorcycle parking availability just as it will for other types of metered on-street parking. However, the SFMTA will not use parking sensors for motorcycles because they are not consistently detected by sensors. In lieu of sensors, SFMTA will use manual methods to collect motorcycle parking availability.

Purpose of Motorcycle Parking Survey

SFMTA will gather data on motorcycle parking occupancy to:

- Provide motorcycle parking occupancy data in order to make pricing decisions.
- Compare occupancy rates over time to determine the impact of any changes in price on the availability of motorcycle spaces.

Secondarily, this will be a valuable test of using manual occupancy data collection for pricing decisions rather than automatic data collection via sensors as a basis for making pricing decisions.

Methodology

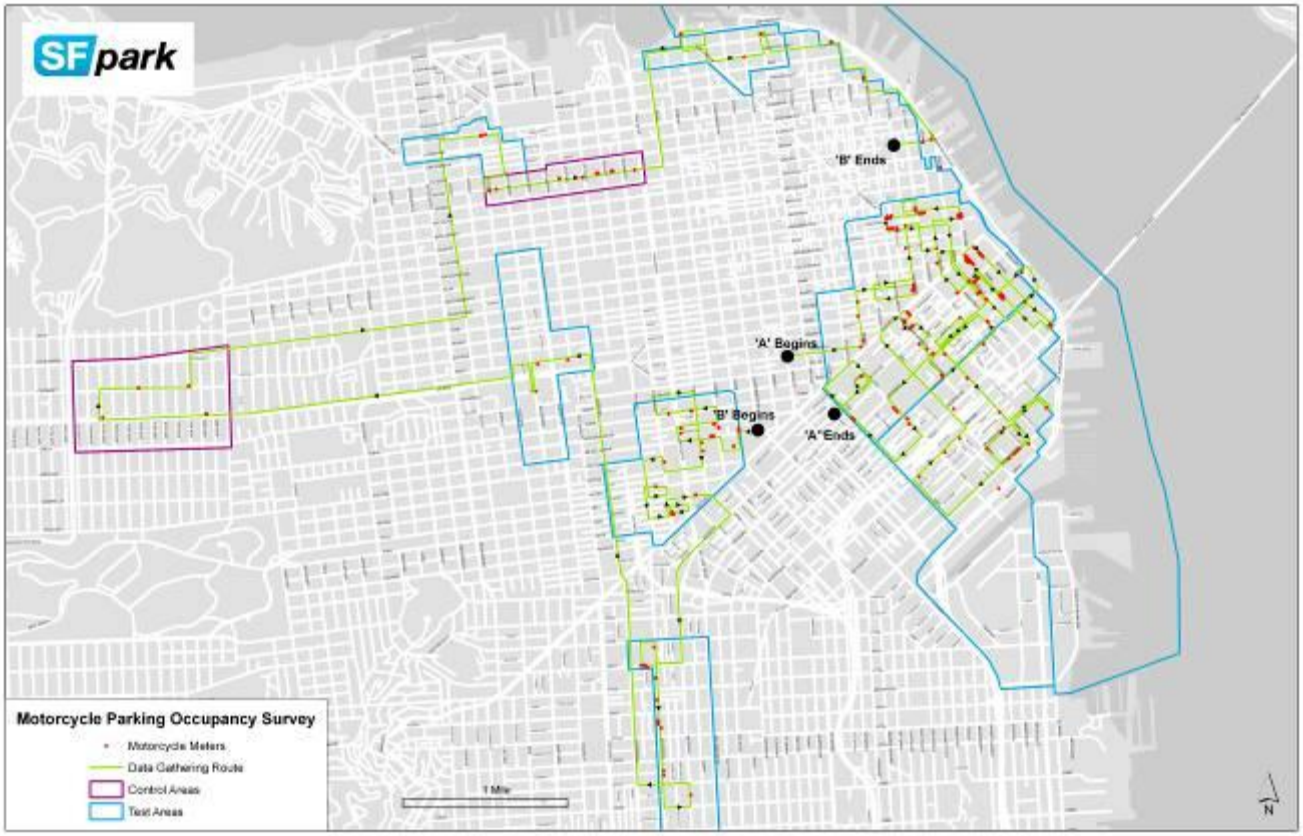
The SFMTA will manually collect occupancy data from all metered motorcycle spaces in pilot and control areas. This survey will be completed by vehicle by a team of two surveyors. One surveyor will drive and the other surveyor will take notes on occupancy and direct the driver as the team travels to each metered motorcycle space to observe occupancy.

The SFMTA will collect motorcycle parking occupancy data every twelve weeks (a total of eight iterations), with the goal of changing prices on motorcycle parking at most every twelve weeks. Data will be collected on one mid-week day (Tuesday, Wednesday, or Thursday) on days without rain to keep data samples consistent over weather changes. Two data collection routes, shown in Figure 5.1, have been drawn that will take approximately two hours each to complete. The routes may be modified slightly if new motorcycle parking is added. For each iteration, surveyors will collect data during the following time periods:

- 9-11 am
- 1-3 pm
- 7-9 pm

Motorcycle parking spaces are generally clearly marked by white lines showing where spaces begin and end. Surveyors will begin each data collection run with a list of motorcycle parking locations and the number spaces at that location. For each location, the surveyor will enter the number of occupied spaces and the number of illegally parked motorcycles. Appendix C shows a sample data collection form.

Figure 5.1- Motorcycle Parking Occupancy Route Map



Estimated Effort

The estimated effort for collecting the data for motorcycle parking is summarized in figure 5.2.

Figure 5.2- Motorcycle Parking Occupancy Survey Estimate of Effort

	Total Hours
Total Surveyor Hours	36
Data Entry Hours	6
Total Supervisor hours (prep time)	16
Total Supervisor hours (on site)	16
Total Cost	**74**

Section 6. Residential Spillover Survey

Purpose of Residential Spillover Survey

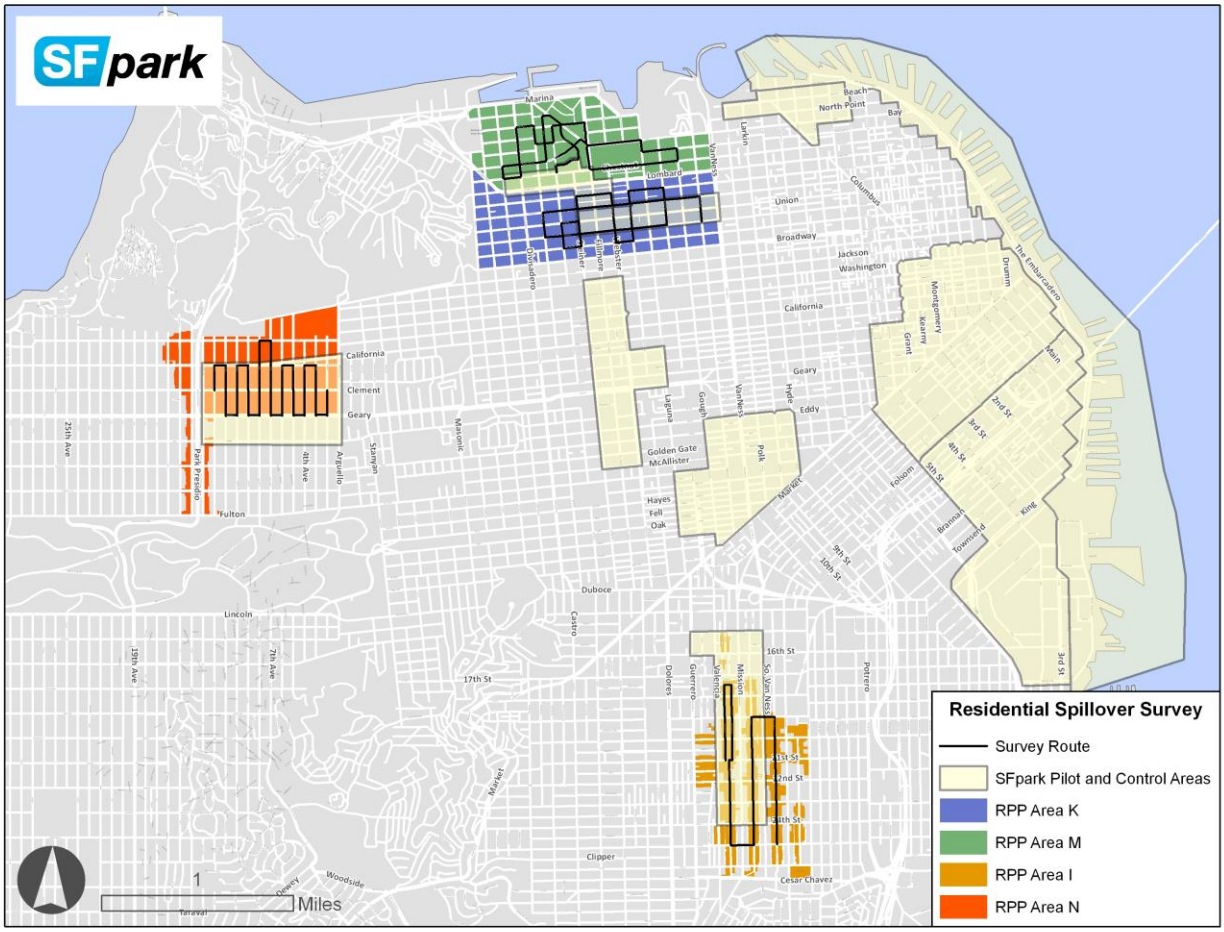
The primary objective of this survey is to measure to what extent the SF*park* pilot projects change occupancy and turnover in unmetered residential areas adjacent to metered commercial corridors. A secondary goal is to gather data to help SFMTA analyze the City's residential permit parking (RPP) program.

Methodology

In order to achieve both objectives, data will be collected in two pilot and two control areas with boundaries that geographically coincide with RPP areas. Every block that is part of an RPP area has a parking time limit for all drivers except those who have affixed on their vehicle a RPP permit that pertains to the respective area. Only residents of RPP areas can obtain a permit, and permits are only valid in the area where the resident lives (e.g., only someone who lives in Area N may obtain an "N" permit, and the permit only exempts that driver from time limits when he/she is parked on a block in Area N).[8] Figure A.1 shows the areas to be surveyed.

[8] Time limits and days/hours that RPP restrictions are in place vary by block, but a two hour time limit enforced between 8am and 6pm M-F is common.

Figure 6.1 – Residential Spillover Survey Areas



Mission and Marina (which correspond to RPP Areas I and M, respectively) will serve as the pilot survey areas, and Richmond and Union (RPP Areas N and K, respectively) will be the controls.

Surveyors will walk along a pre-assigned route in one of the survey areas. The routes include blocks that SFMTA considers to be prime locations for spillover parking from metered areas. Routes are designed to be completed in two hours or less.

For each block included in the survey plan, surveyors will only collect data on one side of the street. This will be done under the assumption that on residential streets, parking occupancy on one side of the street is a reasonable proxy for the other side. SFMTA will survey the blockfaces beforehand to inventory the existing supply. In addition, a survey of all routes will be completed beforehand to ensure that street cleaning will not be conducted on any of the surveyed blockfaces during the time of the study. SFMTA will use an estimate of 17' continuous linear curb to define one parking space. This survey will collect data on the following metrics:

- **Vehicle Occupancy.** Occupancy will be able to be determined by the number of license plates recorded for each blockface as a proxy for the number of vehicles on each blockface. This number will be divided into the total number of spaces on that blockface to derive a vehicle occupancy rate for the entire block. Surveyors will also note the number of spaces that are removed from active supply during their shift (e.g., spaces closed due to construction or white zones).

- **Share of RPP permit holders.** For every vehicle counted, surveyors will also note whether or not the vehicle has a valid RPP permit (valid is defined as a current San Francisco RPP permit)
- **Turnover.** For every vehicle counted, surveyors will also collect the last four characters/digits of license plate numbers. This information will be used to identify unique vehicles while still preserving personal information. SFMTA will compare the number of unique license plate numbers by blockface between survey periods to determine turnover.
- **Vehicles parked on-street blocking driveways.** Surveyors will note in a separate column when a vehicle is parked on-street but blocking a driveway (parallel to the curb). They will also note whether or not that vehicle displays a valid RPP permit. It is a common informal practice for drivers to park in front of their own driveway rather than in a regular curb space, which adds to the parking supply. Surveyors will *not* count vehicles that are parked inside of a driveway. For the purpose of this survey, we will consider vehicles completely blocking access to a driveway as a "blocked driveway" vehicle. **If access to the driveway is still available (e.g. the on-street vehicle is only encroaching a few inches or a foot), this will not be considered a vehicle blocking the driveway**.

Schedule

Data will be collected on the following days and time periods:

- Days
  - Weekday (Tuesday, or Thursday)
  - Saturday
- Times
  - 8-10am
  - 12-2pm
  - 4-6pm
  - 8-10pm

The majority of the blocks to be surveyed have a two hour time restriction for non-RPP permit holders. Because the survey periods are spaced two hours apart, SFMTA can also estimate how often non-permit holders overstay time limits.

Estimated Effort

In order to calculate turnover correctly, accurate license plate readings and recordings are critical for this study. For this reason, it is proposed that two surveyors be assigned to each route per time period to ensure that one surveyor can focus on checking RPP stickers for validity, reading license plate numbers and checking for blocked driveways while the second surveyor can focus on writing clear notes for each license plate number and taking other notes.

During the evening hours, darkness will result in reduced visibility for reading and recording license plate numbers. Having two surveyors will ensure that one can assist in providing light via flashlight or headlamp to help with all of the aforementioned tasks. This redundancy will also help in ensuring the survey routes can be completed within the 2-hour time period.

For this survey effort, we anticipate requiring two surveyors for each shift and study area with one supervisor for the project. Thus, on a day of data collection the following amount of effort will be required:

- 32 2-hour survey shifts for surveyors
- 2 7.5-hour shifts for supervisors (approximate)

Section 7. Parking Survey for Newly Metered Spaces

In September 2010, the SFMTA Board approved the addition of parking meters to 1,340 parking spaces, approximately half of which are within SF*park* pilot areas. To assess how adding meters in previously unmetered locations affects parking availability and length of stay, a survey will be conducted which will consist of "before" and "after" components related to the installation of the new meters. The "before" survey will be conducted in October and November of 2010. Meters will be installed in December 2010 through February 2011. An "after" survey will be conducted approximately 3 months after meter installation and is tentatively scheduled for May 2011.

Locations

SFMTA will survey areas that were recently legislated for meters and are located within the boundaries of the SF*park* pilot program. The specific locations to be surveyed are divided (below) into two groups.

Group One: "SOMA"

Street	From	To	Side
Townsend	4th St	7th St	Both
Bluxome	4th St	6th St	Both
Ritch	Brannan	Townsend	West
6th St	Townsend	Bluxome	Both
5th St	Townsend	Harrison	Both
Harrison	4th St	5th St	Both
Lapu Lapu	Harrison	Rizal	Both

Group Two: "Tenderloin"

Street	From	To	Side

Ellis	Jones	Hyde	Both
Hyde	Ellis	Post	Both
Leavenworth	Ellis	Geary	Both
Sutter	Jones	Leavenworth	Both

Data collection times and dates

In keeping with SFMTA parking survey procedures, data collection tours will start in each area at the following times:

- 8 am
- 10 am
- 12 pm
- 2 pm
- 4 pm
- 6 pm
- 8 pm

Data will be collected on two week days (Tuesday, Wednesday or Thursday) and two weekend days (Saturday and Sunday). Surveys will not be scheduled for each route on the same day and/or time period as major events that would affect travel and parking demand for the same area (e.g., parades, street fairs, or major sporting events). Data collection will be postponed if rain is forecast the day before. (This is necessary to keep conditions for data samples as consistent as possible across all routes and time periods)

Methodology

The purpose of this survey is to gather data which will help MTA determine parking availability and length of stay. This will be achieved by noting the last four digits of license plate numbers of all cars parked on listed streets at the above times. Data gathering routes will be standardized and followed for all survey days.

1. Parking supply and restrictions including street cleaning will be verified in advance of data gathering; this includes the number of spaces with yellow, blue, white, and green zones.
2. Data gathering routes will be mapped out to capture as much data as possible within two hours leaving sufficient time for rest breaks.
3. Data gatherers will record the last four digits of the license plate of each parked vehicle.
4. All vehicles will be recorded whether they are parked in a legal parking space, parked in front of a driveway, or parked illegally.

a. Vehicles parked across sidewalks at driveways will be counted.

b. Vehicles parked across sidewalks but not at a driveway will be noted.

c. Vehicles parked at loading docks will be counted.

d. Vehicles parked in driveways but not on the sidewalk will not be counted.

e. Vehicles parked in red, green, yellow, blue, or white zones will be noted.

    i. Spaces marked by a color curb or a special parking sign will be noted

    ii. In locations where curb painting is partially worn away, the space will be marked as that color zone if more than 50% of the color is visible.

    iii. At all locations where curb painting is worn away, the space will be noted for having a weathered curb color to ensure that parking spaces are designated properly in the data entry process.

f. Vehicles parked at pre-existing metered spaces along the route will be noted.

g. Motorcycles in designated motorcycle parking spaces are not counted. However, motorcycles parked perpendicular to the street will be noted. In addition, motorcycles that take the place of an entire car parking space (parking lengthwise, parallel to the curb), will be noted.

h. Vehicles double parked in traffic lanes will not be counted.

5. Data gatherers will record where spaces have been designated as temporary “no parking” spaces and spaces that are blocked.

6. A “parked vehicle” is one which is stopped for more than one minute. Emergency vehicles and buses are not considered parked vehicles.

Section 8. Visitor/Shopper Intercept Survey

SFMTA plans to deploy an intercept survey with a subsequent telephone follow-up survey of visitors and shoppers to SF*park* pilot and control areas. The purpose is to gather information needed for the National Evaluation of the Urban Partnership Program and for SFMTA to inform decision making on parking behaviors and preferences. These surveys, using a longitudinal and cross-sectional approach, will collect data on the changes of behaviors and perceptions as they relate to parking in San Francisco. The visitor/shopper survey will also provide some of the information necessary to measure the success of parking management policies in the pilot areas.

Purpose and Goals of the Visitor/Shopper Survey

The SF*park* Data Collection and Evaluation Plan identify the outcomes that SFMTA will measure to gauge the success of advanced parking management techniques during the pilot period. Of these overall goals, an intercept survey of visitors and shoppers will be used primarily to measure progress toward the following specific goals:

1. **Reduce parking search time:** Surveyors will ask drivers how much time they spent searching for parking. SFMTA will compare the findings with outcomes of its own parking search time surveys in both pilot and control areas.
2. **Increase parking turnover:** Surveyors will ask all visitors how much time they plan to spend in the pilot or control area. SFMTA will aggregate and compare findings with parking turnover data from curb sensors.
3. **Improve customer satisfaction with SFMTA parking management:** Surveyors will ask drivers to rate the ease of payment for parking, "user friendliness" of variable message signage, static wayfinding signage, 511, meters, off-street parking, parking enforcement, and overall satisfaction with SFMTA parking management.
4. **Improve the economic vitality of pilot areas:** Surveyors will ask visitors to estimate how much money they plan to spend in the pilot or control area during their visit, and how much they spend in a typical month.

In addition to measuring progress toward these specific goals, surveyors will collect information from each respondent about the nature of his or her trip, such as party size, mode choice, and home zip code. This additional information will allow SFMTA to gain a deeper understanding of travel behavior in each pilot and control area, and to compare progress toward project goals for different groups of travelers.

Surveyors will collect information from visitors in most pilot and control areas, once before the pilot phase is initiated (the control period), and twice during the pilot phase of SF*park* (see section on survey deployment schedule for more information). Following completion of the pilot phase of the project, SFMTA will continue to collect relevant survey data on an ongoing basis in order to a) monitor adherence to key SF*park* performance metrics for internal implementation purposes and b) provide a longitudinal data series for external evaluation of the SF*park* program's long-term impacts.

Ewald & Wasserman Research Consultants

For the Visitor/Shopper Intercept Survey, SFMTA has retained Ewald & Wasserman Research Consultants (E&W), a statistical consulting and full-service survey research organization, offering social science project conceptualization, implementation and management, qualitative and quantitative data collection and statistical analysis services. E&W is a Women-Owned and Small Business located in San Francisco and provides unique consulting support in the social science and behavioral research field. Clientele include state and federal agencies, institutions of higher learning and other organizations with a need for exceptional scientific research support.

Ewald & Wasserman Research Consultants operates a 20-station Computerized Telephone Data Collection Laboratory (CATI system) in their San Francisco office and conducts high-quality telephone surveys in multiple languages. E&W also offers Field Research Services with a professional and multi-lingual field staff, including intercepts, in-person interviews, door-to-door and field observations.

E&W's partners, Katrin Ewald and Lisa Wasserman, have over 22 years of combined experience in behavioral research and survey work with expertise in the traffic safety, pedestrian traffic interaction, and drinking and driving arenas of survey research implementation.

Visitor/Shopper Intercept Survey Methodology

Project Concept, Respondent Universe and Inclusion Criteria Process

The overall effort of this project is designed to determine, in a statistically sound and representative manner, behavioral change in conjunction with satisfaction about the parking experience, as well as improvement of the community value and vitality in San Francisco. In an assumed model of social cognitive theory behavioral change, defined here as selecting where to park or selecting not to drive and park, is affected by external and internal factors, as well as by attributes of the parking process in itself. The level to which a change of behavior is made easy for drivers, the higher will be the level of self-efficacy, the perception that one can make another driving and parking decision. By employing the multi-pronged approach of the SF*park* project, the behavioral change is ultimately facilitated by the provision of information sources and attainable alternatives, such as information systems to call or access on the internet as well as information on available off-street parking in nearby garages. The Visitor/Shopper Surveys will utilize a comprehensive and multi-modal approach to determine the level of changed behavior, together with other variables, by quantification of driver shift to public transportation, level of satisfaction with the parking experience, parking search times and on-street occupancy rates of parking spots.

The general methodological approach will include an intercept survey on location at multiple pilot and control sites followed by a telephone survey shortly after the intercept. In addition, SFMTA will conduct a smaller-scale pre-test project of both the intercept and telephone follow-up, to test the survey forms for comprehension and to evaluate possible site-specific additions and the recruit and response rate for intercept and follow-ups. The sample will be a stratified based on the control and pilot areas of the SF*park* project. SFTMA assumes that for each area about n=1,000 intercept recruits and n=750 telephone follow-up surveys need to be conducted, for a total of n=2,000 recruits per wave and an estimated n=1,500 telephone survey completes per wave. In order to reach this target, SFMTA estimates that about n=1,400 actual intercepts will occur in each the pilot and control areas to yield a respective qualified sample size of n=1,000. Since not every intercepted respondent will be eligible for the follow-up, SFMTA will also gather some data from respondents that did not drive to a target area

as well as respondents that never drive. Figure 6.1 below shows the approximate number of intercepted respondents, eligible respondents and assumed number of completed telephone surveys for both the project pre-test and main study.

The universe of respondents will be visitors to the key commercial corridors of the SF*park* project during the period of data collection for the Visitor/Shopper survey. These corridors are defined by parking management districts and distinguish three pilot and two control areas. In many of the pilot areas, a large majority of the on-street metered parking can be found on the major commercial corridors. To ensure representativeness of the targeted geographic areas, SFMTA will select multiple sites within each corridor and defined geographic area. Data collectors will be dispatched on all weekdays and during extended time frames. SFMTA assumes that to some extent respondents to these "shopper/visitor" intercept surveys will be disproportionally composed of shoppers, however every effort will be made to include any commuter travel, to the extent it exists, in the study areas in the data collection process.

The overall design of the Visitor/Shopper survey is a cross-sectional pre and post intervention design. It incorporates a cross-sectional data collection point prior to the implementation of the planned demand pricing for parking, and another cross-sectional wave of data collection after the implementation. The assumed differences in the findings of the study will be analyzed in relationship to the demand pricing project and will quantity the change in parking behavior and driving decisions, shifts in selected mode of transport and a modified selection process for on-street versus off-street parking. Additional outcomes might include the improvement of the economic vitality of target areas, as well as an increased level of customer satisfaction with SFMTA.

The data collected is intended to be congruent with the other data sources of SFMTA's SF*park* projects and is designed to fit the model of the UPP national data collection requirements.

Figure 8.1 – Project Pre-Test and Main Study Estimated Number of Surveys

	Pre-Test*	PILOT Areas**	CONTROL Areas**	TOTALS
Intercept screeners	267	1,400	1,400	3,067
Eligible Intercept Respondents	192	1,000	1,000	2,192
Telephone follow-up completes	**139**	**750**	**750**	1,639

*actual numbers **estimated numbers

The eligibility criteria for inclusion in the study will be determined at the time of the intercept when a respondent is approached by a field interviewer. Only respondents that are 18 years of age or older will be included in the intercept and will be asked further screening questions. Respondents who did not drive to the target area at the time of intercept (non-drivers), but who have done so in the past year, will be asked about their motivation not to use a car at the point of intercept. Field interview staff will keep a detailed tally of the status of all respondents approached. Respondents who did drive to the target area will be asked about purpose of visit, parking search time, convenience and location of parking, and their decision making process for choosing a parking spot. Additional intercept items will gauge the level of subjective influence of convenience on the parking decision-making process. Non-drivers that have driven to the target area in the past year will be invited for the follow-up telephone survey; respondents that never drive (never-drivers) will only complete the intercept and will not be

invited to the follow-up. A copy of the intercept form can be found in Appendix A.

Project Pre-Test Survey Administration

The protocol of survey administration and deployment will follow the guidelines outlined in the Main Survey Administration Section below. For the project pre-test survey, a total of 100 intercepts will be completed with eligible respondents: 50 in the project pilot areas of Marina, Downtown and Mission District and 50 in the project control area of Union Street. For the pre-test survey administration, only weekdays (Monday and Tuesday) will be selected, and the language of the intercepts and follow-up telephone surveys will be English only (see Figure 8.2).

Figure 8.2 –Project Pre-Test Survey Sites Pilot Area

Surveyor Location	Monday Hours	Tuesday Hours	Total Hours	Completed Surveys per hour	Weekday Surveys Completed
Marina 1 Chestnut St. (Steiner St & Pierce St)	5		5	~4	17
Downtown 1 Sutter St. (Kearny St & Sansome St)		5	5	~4	17
Mission 1 Valencia St. (20th St & 22nd St)	5		5	~4	16
Pre-Test Area Total	**10**	**5**	**15**	**~4**	**50**

SFMTA assumes that out of 130 intercepts, 100 will be determined as eligible and a total of 75 respondents will be interviewed in the follow-up telephone survey (see also Figure 6.1). Figures 8.2 and 8.3 display the projected number of locations per site for the pre-test survey, as well as the hours in the field with an estimation of the number of surveys to be completed in the allocated time period.

Figure 8.3 –Project Pre-Test Survey Sites Control Area

Surveyor Location	Monday Hours	Tuesday Hours	Total Hours	Completed Surveys per hour	Weekday Surveys Completed
Union 1 Union St. (Steiner St & Webster St)	6		6	~4	25
Union 2 Fillmore St. (Union St & Filbert St)		6	6	~4	25
Control Area Total	**6**	**6**	**12**	**~4**	**50**

The protocol for the intercept and telephone surveys to be conducted with each eligible respondent as well as the complete data collection procedure is described in the Survey Administration Section below.

Main Survey Administration

Intercept Location Scouting

Prior to the implementation of the project, SFMTA will conduct detailed location scouting to determine staff allocation at particular streets and intersections and to evaluate pedestrian flow and moving traffic at different hours of the day and on weekdays versus weekends. All locations will be scouted considering foot traffic in metered areas and proximity to public and private garages and parking lots, as well as proximity to commerce, dining and other potential destination points. The locations for each data collection point are defined as a one or two street block radius in between two intersections, and will include the block span and opposing block faces. Locations are to be split by a pair of field staff. This effort will allow for better and more effective staff positioning as well as the determination of alternative intercept sites for immediate change of field staff position based on need. These alternative options are necessary in case of unforeseen events that will force the field staff to another location, such as road or building construction with blocked sidewalks and streets.

The survey staff will be deployed in teams to a defined area and multiple staff will be engaged in the data collection in each target geographic. All field staff will, after on-site training, be equipped with cell phones and data collection tools, including sufficient data entry forms, and will be outfitted with field team polo shirts, name tags and caps to identify them as data collectors. A set of 'frequently asked questions' will be provided to field and telephone staff as guidelines for concise and consistent answers to anticipated respondent questions. The FAQs will also be provided and rehearsed during the staff trainings (see copy in Appendix C). The field team will also carry a letter of endorsement to provide to respondents who request more information or want to confirm the legitimacy of the data collection. This letter will also explain the study protocols and goals and will identify the project sponsor.

Time of Intercept Implementation

There are several factors, alone and in combination, that affect the decision making process of finding and choosing a parking spot; therefore the proposed data collection time frame is designed to capture various respondents with varying behavioral patterns for parking. Factors such as the value of time when searching, time of day, weekday versus weekend, price sensitivity, convenience and safety all determine to different degrees the parking outcome. While shoppers might place higher value on convenience when parking, neighborhood parkers might be more price sensitive; it is therefore imperative to capture respondents of varying needs and motivations at varying times and on varying days.

Intercept surveys will take place Monday through Saturday as outlined in Figure 8.4 below. The suggested shifts will capture morning and evening peak commuter travel hours plus the time frame in-between peaks to capture a wide range of visitors traveling to the target areas. To reduce any systematic bias, SFMTA will include all weekdays from Monday to Friday in the weekday data collection plan; Sundays will be excluded since on-street parking is not charged on that day. Even though traffic patterns and parking needs might differ between weekdays, the suggested approach will allow for a measure of difference between single days while the aggregate analysis will provide sufficient data for the pre and post test comparison of the demand pricing implementation for weekdays and weekends.

The projected shifts will cover all weekdays from 9am to 8pm and Saturdays from 11am to 8pm. The Saturday data collection time frame will be shorter since there is very limited commuter traffic assumed. Actual shift length will be adjusted based on number of locations per site and number of surveys completed. The number of data

collection hours per shift will range from 4 to 6 hours, which will include break times, and average at 5.5 hours of data collection per shift.

Figure 8.4 - Sample Surveyor Shift Distribution

	Data Collection Time Frame	Morning	Afternoon	Evening	Total # Hours per Day	Estimated # surveys per day
Monday	9am - 8pm	9am - 12pm	12pm - 4pm	4pm - 8pm	11	50
Tuesday	9am - 8pm	9am - 12pm	12pm - 4pm	4pm - 8pm	11	50
Wednesday	9am - 8pm	9am - 12pm	12pm - 4pm	4pm - 8pm	11	50
Thursday	9am - 8pm	9am - 12pm	12pm - 4pm	4pm - 8pm	11	50
Friday	9am - 8pm	9am - 12pm	12pm - 4pm	4pm - 8pm	11	50
Saturday	11am – 8pm	11am – 3:30pm	3:30pm - 8pm		9	40
	Total				**64**	**290**

SFMTA also assumes that the completion rate per hour will differ by location as well as during the shifts; all numbers are therefore averaged approximations. The actual shifts allocated for data collection per day and the time length per shift will be fixed within the shown ranges to be repeatable in subsequent waves of data collection.

In case weather conditions should not allow for intercepts, the data collection on such a day would be suspended and repeated in the subsequent week to substitute the missing day. Additionally, all intercepts will only be conducted during daylight hours.

The intercept respondent approach will follow a randomized method of recruit, based on the number of pedestrians in the defined target radius for each surveyor. Every second pedestrian or driver who just parked a vehicle in the targeted geographic area of a field staff will be approached and a screening attempt will be made. For groups of pedestrians, interviewers will select the second person of the group (counted from left and excluding minors); for multiple respondents exiting a car, the surveyor will approach the driver of the vehicle. To improve the overall response rate field staff will offer quarters to drivers who just parked their vehicle and are feeding the parking meter. This is a minimal cost which will not create a respondent bias due to the small amount of the incentive, but will improve the response rate in the intercept recruit.

Field staff will avoid interviewing a respondent twice and they will also keep records of every refusal on a specifically designed data tally sheet. When a respondent agrees to participate in the intercept, the surveyor will complete an interview using a pen and paper form, which will take less than 4 minutes to complete. All completed survey forms will be marked as to day, time, and location and stored for data entry later in the day. At the end of the intercept survey, surveyors will recruit eligible participants to be contacted by phone for a follow up interview to review the results of the shopping and parking experience. For respondents who refuse to be interviewed in the follow-up, or who do not wish to give out their phone number, field staff will attempt a refusal conversion by conveying the importance of the project and the need to follow-up with each respondent. Additionally, for all other questions, a toll-free number will be provided for respondents to call in and confirm the authenticity of the study effort.

For the main survey data collection, the intercept form as well as the follow-up telephone survey will be offered in English, Spanish and Chinese (Cantonese and Mandarin) and will be administered by bilingual field staff. The interviews of both intercept and telephone surveys will be conducted in the language preferred by the respondent.

Telephone Follow-Up Survey

At the end of each shift (at 7pm) the field staff or field supervisor will return to the data collection office in downtown San Francisco and the completed intercept forms will be data entered using a written computer program for electronic data entry. The tailored program will only allow specific data entry ranges and options to avoid data entry errors. After the completion of the data entry, the collected data and the telephone contact information of all respondents will be attempted via telephone using a computer assisted telephone interviewing system (CATI). The CATI system will host the programmed survey instrument and electronically manages the telephone sample and dispositions of all telephone calls. The automation of the follow-up phone call will allow for:

- callback management (automatic re-scheduling of “No Answer” / “Answering Machine” callbacks);
- sample distribution (i.e., foreign language interviews and refusal conversions);
- callback reporting (daily reports on the schedule of callbacks for the next day);
- sample disposition reporting (snapshots of the status of the sample by disposition);
- transaction reporting (accounting of sample cases by disposition by contact attempt);
- interviewer scheduling (reporting the optimal workstation staffing given the sample available and the callbacks scheduled for the following day).

The time frame goal for the telephone follow up is to reach respondents within 24 hours of the intercept to further interview them about their experiences in the target geographic and to collect demographic information. The CATI telephone survey will, in addition to English, also be programmed in Spanish and Chinese. Interviews will be conducted on weekdays from 3pm to 9pm and on weekends from 12pm to 6pm.

The telephone survey will be less than 10 minutes in length and administered based on the respondent’s language preference by bilingual interviewers. Up to 10 attempts will be made to reach a respondent at different hours of the day. All telephone staff will be trained on the subject matter. All staff will have received an on-line certification through the Office of Human Research Protection (OHRP) and will be monitored in real time at 1:5 supervisor to interviewer ratio.

Telephone survey items will include the recall of available sources of information regarding parking pricing and availability, the perceived satisfaction with these sources, and recalled cost of parking. Additional items will include questions on the convenience and ease of payment for parking and on the amount of money spent in the target area overall. Furthermore, basic demographic data aligned to the Urban Partnership Program demographic question set will be collected. A copy of the telephone follow-up survey can be found in Appendix B.

SFMTA assumes a 75% response rate for the telephone follow-up study, resulting in a total of 1,500 completed surveys, about 750 from each of the pilot and control areas.

Sampling Plan

For the main study pilot and control areas, SFMTA will place surveyors at central locations along key commercial corridors in some pilot and control areas. For larger areas with multiple commercial corridors, such as Downtown, surveyors will be placed strategically to achieve a balance between the district's main commercial areas. Surveyors will be positioned at the same locations along the corridor during subsequent iterations of the survey (follow-up surveys in 2011).

Figures 8.5a and 8.5b below illustrate the currently assumed number of locations per site for the three pilot survey areas: Downtown/SOMA, Marina and Mission. The table delineates the estimated number of weekday and weekend hours of data collection needed per location. The three selected pilot locations intentionally exclude pilot areas that are designated as "special events" sites, such as Fillmore and Civic Center, or are mainly tourist areas, such as Fisherman's Wharf. This is to ensure representativeness of the San Francisco driving population in the collected data.

Figure 8.5a - Sample Surveyor Distribution for Pilot Survey Area – Part A

Downtown / SOMA	Weekday Hours	Weekend Hours	Total Hours	Est. Completed Surveys/Hour	Weekday Surveys Completed	Weekend Surveys Completed
Downtown #1 (Sutter @ Kearny - Sansome)	18	6	24	5	90	30
Downtown #2 (Front @ Clay - California)	12	4	16	5	60	20
Downtown #3 (Mission @ 2nd -3rd)	12	4	16	5	60	20
Downtown #4 (Spear @ Mission - Folsom)	12	4	16	5	60	20
Downtown Total	**54**	**18**	**72**	**5**	**270**	90
					Total	**360**

Marina	Weekday Hours	Weekend Hours	Total Hours	Est. Completed Surveys/Hour	Weekday Surveys Completed	Weekend Surveys Completed
Marina #1 (Chestnut @ Steiner - Pierce)	12	4	16	5	60	20
Marina #2 (Fillmore @ Lombard - Chestnut)	12	4	16	5	60	20
Marina #3 (Pierce @ Lombard - Chestnut)	12	4	16	5	60	20
Marina #4 (Chestnut @ Scott - Divisadero)	12	4	16	5	60	20
Marina Total	**48**	**16**	**64**	5	240	80
					Total	**320**

Mission	Weekday Hours	Weekend Hours	Total Hours	Est. Completed Surveys/Hour	Weekday Surveys Completed	Weekend Surveys Completed
Mission #1 (Valencia @ 20th - 22nd)	12	4	16	5	60	20
Mission #2 (Mission @ 16th - 18th)	12	4	16	5	60	20
Mission #3 (22nd @ Valencia - Mission)	12	4	16	5	60	20
Mission #4 (Mission @ 21st - 23rd)	12	4	16	5	60	20
Mission Total	**48**	**16**	**64**	5	240	**80**
					Total	**320**

The assumed total number of intercepts in the target three locations is approximately 1,400 completed intercept surveys, out of which 1,000 will be eligible for and included in the telephone follow-up. The estimated number of completes per hour reflects the completed intercepts with eligible respondents.

Figure 8.5b - Sample Surveyor Distribution for Control Survey Area – Part B

Inner Richmond (Control Area)	Weekday Hours	Weekend Hours	Total Hours	Est. Completed Surveys/Hour	Weekday Surveys Completed	Weekend Surveys Completed
Richmond #1 (Geary @ 4th - 5th)	14	4	18	5	70	20
Richmond #2 (Geary @ 6th - 7th)	14	4	18	5	70	20
Richmond #3 (8th @ Geary - California)	14	4	17	5	70	20
Clement #4 (Clement @ 5th - 7th)	16	8	24	5	80	40
Clement #5 (Clement @ 7th - 9th)	14	4	17	5	70	20
Inner Richmond Total	**72**	**24**	**96**	**5**	**360**	120
					Total	**480**

Figure 8.5b continued.

Union Street (Control Area)	Weekday Hours	Weekend Hours	Total Hours	Est. Completed Surveys/Hour	Weekday Surveys Completed	Weekend Surveys Completed
Union Street #1 (Union @ Steiner - Webster)	24	8	32	5	120	40
Union Street #2 (Fillmore @ Union - Filbert)	18	6	24	5	90	30
Union Street #3 (Union @ Webster - Laguna)	18	6	17	5	90	30
Union Street #4 (Union @ Laguna - Gough)	18	6	24	5	90	30
Union Street Total	**78**	**26**	**104**	**5**	**390**	**130**
					Total	**520**

Figure 8.6- Survey Response Goals

Area	Weekday Hours	Weekend Hours	Total Hours	Est. Completed Surveys/Hour	Weekday Surveys Completed	Weekend Surveys Completed	Total Surveys Completed
Downtown / SOMA	54	18	72	5	270	90	360
Mission	48	16	64	5	240	80	320
Marina	48	16	64	5	240	80	320
Inner Richmond	72	24	96	5	360	120	480
Union Street	78	26	104	5	390	130	520
Totals	**300**	**100**	**400**	**25**	**1500**	**500**	
						Total	**2000**

The number of survey completes per target area are outlined above in Figure 8.6. The sample sizes for the pilot area and for the control area (n=1,000 respectively) are sufficient in size and are representative of the targeted respondent universe, thereby allowing for representative baselines of the geographic areas as well as for a statistical comparison of both areas.

This will effectively create a data timeline in a pre and post test design, which will allow for an analysis of change in driver behavior with regard to parking cost, convenience and parking search time, as well as the perception of satisfaction with the SFMTA parking management. Additionally, the collected data can be utilized to evaluate any improvement of economic vitality in the SF*park* pilot areas.

The number of completed intercept and telephone surveys per area within the pilot and control area of SF*park* are large enough in size to conduct, if necessary, a comparison of behavioral change over time and between areas. Figure 6.7 below shows the confidence interval for each target area. The confidence intervals for the pilot and control areas, as well as overall, assume a 95% confidence level for both the intercept and telephone data. The estimated population size for the calculations is assumed at 1,000,000 to include all potential visitors in a year-span and for a conservative measure of the underlying sample size.

For the Mission, Downtown/SOMA and Marina areas, the project pre-test locations overlap partly with the actual study locations. For the main section of both intercept and telephone surveys, the data from the project pre-test can be added, which will improve the confidence interval even further.

Figure 8.7- Survey Confidence Intervals at 95% Confidence Level for Intercept and Telephone Data

Area	Total Intercepts Completed*	Confidence interval	Total Telephone Surveys Completed (excluding project pre-test completes)	Confidence interval
Downtown / SOMA (Pilot)	360	5.16	270	5.96
Mission (Pilot)	320	5.48	240	6.33
Marina (Pilot)	320	5.48	240	6.33
TOTAL PILOT AREA	**1000**	**3.10**	**750**	**3.58**
Inner Richmond (Control)	480	4.47	360	5.16
Union Street (Control)	520	4.30	390	4.96
TOTAL CONTROL AREA	**1000**	**3.10**	**750**	**3.58**
TOTAL STUDY	**2000**	**2.19**	**1500**	**2.53**

*number of completed intercepts eligible for telephone survey follow-up

Strategies for Dealing with Potential Non-Response Bias

Potential non-response during the intercept will be tested by comparing characteristics of the sample population with selected observable characteristics of non-respondents. The date, time, location and size of parties and any other information obtainable from respondents refusing the survey will be recorded in a survey tally which every interviewer will carry during the intercept data collection.

Non-response bias during the telephone survey will be limited to an assumed eligible sample population, since all records to be dialed were recruited during the intercept and are therefore, by default, considered eligible. At

the point of contact, the respondent may refuse to participate, may start the interview but later refuse to continue, or may postpone all or part of the interview for a later time. These scenarios will require a callback to be made and if contact with this respondent is unsuccessful after all callback protocols are satisfied, that record will be treated as a "non-response." For the telephone survey follow-up, SFMTA will minimize non-response through refusal conversion, higher number of callbacks at different times and on different days, and sample management which will allow for accurate and timely scheduling.

For respondents who refuse the telephone survey follow up, SFMTA will make at least one refusal conversion attempt to improve response rates. Refusal conversions are made by trained staff who will reiterate the importance of the study and the need to have a completed telephone survey for the respondent's data to be included in the final analysis.

The results of the non-response analysis will be reported in sample dispositions and aggregate format and will be discussed in the final report.

Data Processing

SFMTA will enter all the data from the intercept forms into electronic format and will assign each respondent a unique identifying number, which will allow a unique variable for the conjunction of the intercept and telephone survey data.

All open-ended data will be entered verbatim and then coded electronically by specifically trained project supervisors. For this purpose, the verbatim data will be loaded into an Excel sheet and coding categories will be developed for each question with an open-end based on the comments entered. All ambiguous and hard-to-code answers will be flagged; in a second step the project manager will review all coded answers by category and correct flagged responses.

The final data will be provided in SPSS format with data labels and data values and will be ready for analysis. Other electronic formats will be provided as needed to feed the data into existing data warehouses.

SFMTA will conduct a descriptive analysis and comparative analysis of all the findings and will develop an analysis plan to guide the process.

Schedule

In each project pilot and control area, SFMTA will complete two iterations of the survey, a pre-test survey and a subsequent main study. The survey deployment will occur on the following schedule:

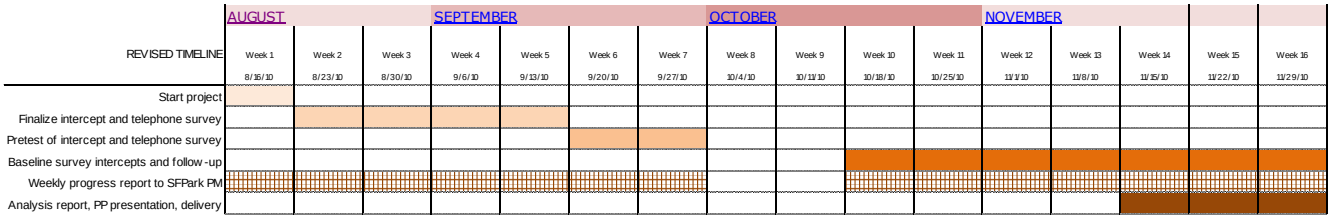
1. Pre-test Survey - SFMTA will test the intercept and telephone follow-up surveys in three pilot areas and one control area prior to the implementation of the main study. The pre-test survey will allow SFMTA to better estimate expected response rates, rate of survey collection, reliability of the survey instruments and any other factors influencing the data collection process. The estimated timeline for the pre-test study, as outlined in Figure 6.8 below, is the week of September 20, 2010.
2. Main Study Survey (Baseline Survey) - The subsequent iteration of the survey will be the actual main study, which will be informed by the results of the pre-test study. The main study part of the Shopper/Visitor Survey will be implemented starting the week of September 27, 2010 and is estimated to take about four weeks for data collection. The actual data collection will consist of the completion of 2,000 intercept surveys, 1,000 each in the SF*park* pilot area and in the SF*park* control area. All intercept surveys will be followed-up with a telephone survey within 24 hours of the intercept.

3. 2nd Survey (1st Cross-sectional Follow-Up Survey) - The second iteration of the survey will be carried out 12 months later in the same format of intercept with telephone survey follow-up. As now envisioned, this would occur during September and October 2011.
4. Ongoing Shopper/Visitor surveying - SFMTA expects that it will continue to survey shoppers and visitors to the pilot and control areas on an ongoing basis after the conclusion of the USDOT-funded pilots. It is now envisioned that the survey will be deployed every 24 months. Content of the surveys may be adjusted to accommodate particular concerns that arise at a later time.

Timeline

The estimated project timeline, including the material development, pre-test survey and implementation of the main project is outlined in Figure 8.8 below.

Figure 8.8 Overview of Project Timeline



Appendix A

Parking Search Time Survey Materials

Parking Search Time Survey

Practical Instructions

The parking search time survey is meant to learn how long it typically takes a vehicle to find a parking space in each study area at different times and different days of the week. To test parking search time, ride your bicycle as a motor vehicle would, while search for parking along your assigned route. Your job is to follow the specific route, repeatedly during two survey periods in each shift, ending each search when you find an available and legal parking space, or after 30 minutes have elapsed. Each survey period is two hours long (8:00 AM-10:00 AM and 12:00 PM-2:00 PM for Shift 1, and 4:00 PM-6:00 PM, and 8:00 PM-10:00 PM for Shift 2). Please review and refer to the detailed instructions below.

Your field supervisor today is: _____ at _____(cell).

Date: _____ Surveyor name: _____.

Shift (circle): ***7:30 AM – 2:30 PM*** ***3:30 PM – 10:30 PM***

What you'll need:

Bicycle, helmet, clipboard, pencil, orange vest, stopwatch, business cards of field supervisor, watch/clock

Methods:

1. Wear your helmet and orange or yellow reflective vest throughout the duration of your time working on this survey. All surveyors working shift 2 (3:30 PM to
2. Review your detailed map to become familiar with the route.
3. Unless you arrive less than 15 minutes before the start of your first survey period (8:00 AM, for shift 1, or 4:00 PM for shift 2), ride the entire route once without collecting any data to become familiar with the route and any potential safety hazards or other issues (e.g. temporary street closure; street cleaning, etc.). If you identify a hazard or issue that you think may make it unsafe or impractical to travel the route by bicycle, please notify the supervisor listed above immediately. At the start of each survey period (e.g. 8:00 AM-10:00 AM, 12:00 PM-2:00 PM, 4:00 PM-6:00 PM, and 8:00 PM-10:00 PM), begin at the specified starting intersection with the stopwatch around your neck or wrist.
4. Record your start time (to the minute) on the data collection form; then quickly store your clipboard materials quickly in your bag.
5. Start your stopwatch and then immediately proceed along your route by bicycle, searching for parking.

6. Where safe, operate the bicycle as you would a car, waiting in line at stoplights, taking the whole right lane when possible and moving in a linear path. At red lights, you may turn right after stopping (if no vehicles are ahead of you in the right turn lane and no vehicles are coming from your left). Pull your bike over into the first empty, legal parking spaces on your right side and stop your stopwatch. (See the attached handout, entitled "What to Look For," for examples of legal and illegal parking spaces. If you have a question about whether or not a particular parking space is legal, pull into the space on your bicycle and review any information on the meter, or associated sign [temporary or permanent], to identify whether or not the parking space is legal at the exact time that you are attempting to park there, before stopping your stopwatch [note: some spaces, especially load zones are legal to park in only after 6:00 PM, but the hours and restrictions vary by lot and by space, so be sure to review the sign before stopping your watch. Note that where there is a discrepancy between the sign and the curb painting/marking, the sign is the final indicator of the legality or illegality of parking in the associated space at that time of day].
7. Do not estimate or measure the time it would take a vehicle to parallel park.
8. If you do not find a space after 30 minutes of searching, return to the starting intersection for your assigned route, by whatever route you prefer (walking, or operating as a bicyclist, if you prefer (e.g. passing cars on the right in a designated bicycle lane). If you have returned to the starting point after a 30 minute "failed search," begin a new search immediately (starting at # 4, above), WITHOUT waiting four minutes as you are required to do after each successful search (see # 11, below).
9. Step onto the sidewalk and pull out your clipboard. Fill in the "# laps" (If you have found a parking space before completing one full lap of the route, mark "0"), indicate whether the search was a "Failed search (yes/no)" (i.e. you did not find an available and legal parking space within 30 minutes), and if the space is legal to park in at the moment, note the "Meter ID #" or address, if there is no meter at the parking space you found. For parking spaces with multi-space parking meters, please note BOTH the parking space # (writing "S#____"), AND the Meter ID # (writing "M# _____) in the appropriate column on the data collection form.
10. Start your stop watch and return to the starting intersection for your assigned route, by whatever route you prefer (walking, or operating as a bicyclist, if you prefer (e.g. passing cars on the right in a designated bicycle lane).
11. Once you've returned to the starting intersection, begin another parking search run **only after waiting until at least four minutes have passed since your last search ended.**

Tips:

- Act like a car as much as possible while on your search. Take up the whole lane and wait in line at stop signs.
- Stow everything so you are as safe as possible
- When returning to your start point, feel free to get there however you prefer; walking is fine if it is fastest.

Problems/Contact:

- Time is of the essence.
- If someone asks what you are doing, tell them you are working on a time-sensitive survey collecting non-identifying information. If they press for more information, simply give them the business card of your field supervisor of that day.
- Call your field supervisor if you see a problem along your route, are unsure how to proceed, or have questions.
- Your field supervisor today is: _____ at _____ (cell).

Parking Search Time

What to look for:

You are only looking for legal, metered spaces.

despite the curb cut, this is a legal parking space because it has a meter- DO count it

If you see a car preparing to vacate a spot, do not wait for it. Keep going.

If you are going down a one-way street, you can find parking on either side of the street if the road has one or two lanes.

one-way street: look for parking on both sides

one-way street: look for parking on both sides

If you are going down a two-way street, only find parking on your right hand side. Don't pull any U-turns to get to parking.

two-way street: only look on right side

two-way street: only look on right side

two-way street: only look on right side

Be sure to check meter regulation details if you are not sure. Sometimes the same meter will have mutliple roles throughout the day. If the space is available for "normal" parking at the time you are surveying, count it as parking supply. Regulations may change part way through your shift. For example, a space could be van-pool only until 9am, but if your shift is 8-10am, at 9am you'd start counting it as "normal" parking supply. When in doubt, just remember to pretend you are a regular vehicle seeking a legal, metered parking space.

Yellow & Red Zones & Meters


Parking OK Depending on Time of Day

Loading Zones and Meters
- Times vary
- In general, not a "legal" space during daytime hours
- M-Sat
- Often "legal" evenings and Sunday
- **Verify time of hours if you see a space available and log down**

Green Zones & Meters


Parking OK

Short-term Parking and Meters
- Legal spaces
- Generally only allow parking for shorter periods (e.g., 30 min)
- **PARKING OK HERE**

Red No Parking Zones

No Parking

Red curb
- No parking allowed
- DO NOT park in these locations

Blue Zones

No Parking

Disabled Parking
- No parking allowed
- Do not park in these locations

White Zones

No Parking

Passenger Loading Zone
- DO NOT park in white zones

Parking Search Time Survey Data Collection Form

SFpark

Name: _____

Route: _____ **Date:** _____

Time (circle one): 8-10am 12-2pm 4-6pm 8-10pm

Survey Run	Start Time (min & sec)	Elapsed Time (min & sec)	Number of Laps	Failed Search? (Y/N)	Meter ID of found metered parking space OR Nearest address of found unmetered parking space
Search 1					
Search 2					
Search 3					
Search 4					
Search 5					
Search 6					
Search 7					
Search 8					
Search 9					
Search 10					
Search 11					
Search 12					
Search 13					
Search 14					
Search 15					
Search 16					
Search 17					
Search 18					
Search 19					
Search 20					
Search 21					
Search 22					
Search 23					
Search 24					
Search 25					

1. A failed search means that you could not find a vacant legal parking space able to accommodate an average-sized passenger vehicle after 30 minutes of searching.

2. If you passed the starting point before 30 minutes was up or before you found a parking space, mark "2" laps; otherwise, enter "1."

Parking Search Time Survey

(Calibration by Auto)

Practical Instructions

The parking search time survey is meant to learn how long it typically takes a vehicle to find a parking space in each study area at different times and different days of the week. Your job is to drive the specified route repeatedly, ending each search when you find an available and legal parking space, or after 30 minutes have elapsed. Each survey period is two hours long (8:00 AM-10:00 AM and 12:00 PM-2:00 PM for Shift 1, and 4:00 PM-6:00 PM, and 8:00 PM-10:00 PM for Shift 2). Please review and refer to the detailed instructions below.

Your field supervisor today is: _____ at _____(cell).

Date: _____ Surveyor name: _____.

Shift (circle): ***7:30 AM – 2:30 PM*** ***3:30 PM – 10:30 PM***

Route: _____

What you'll need:

Vehicle, clipboard, pencil, stop watch, time of day watch or clock, business cards of field supervisor

Methods:

12. Review your detailed map to become familiar with the route.
13. Before the start of your first survey period (8:00 AM, for shift 1, or 4:00 PM for shift 2), drive the entire route once without collecting any data to familiarize yourself with the route, identifying and making note of any safety hazards, temporary parking restrictions or other issues (e.g. temporary street closure; street cleaning, etc.). If you identify a hazard or issue that you think may make it impractical to drive along the route, please notify the supervisor immediately.
14. You will work in teams, with two surveyors in each vehicle: One to drive, and one to manage the stop-watch and take notes.
15. At the start of each survey period (e.g. 8:00 AM-10:00 AM, 12:00 PM-2:00 PM, 4:00 PM-6:00 PM, and 8:00 PM-10:00 PM), begin at the specified starting intersection; if possible at the side of the intersection nearest to the direction you will be traveling to follow your specified route.
16. Record your start time by the minute on the data collection form/
17. Start your stopwatch and then immediately proceed along your route searching for an available on-street parking space.
18. Once you find what looks like an available parking space, stop the vehicle in front of the space in the position from which you would normally begin backing in to the space in order to parallel park.

19. See the attached handout, entitled "What to Look For," for examples of legal and illegal parking spaces. If you have a question about whether or not a particular parking space is legal, review any information on the meter, or associated sign [temporary or permanent], to identify whether or not the parking space is legal at the exact time that you are attempting to park there. Do not stop the watch while you review the signs (Note: some spaces, especially load zones, are legal to park in only after 6:00 PM, but the hours and restrictions vary by lot and by space, so be sure to review the sign before stopping your watch. Where there is a discrepancy between the sign and the curb painting/marking, the sign is the final indicator of the legality or illegality of parking in the associated space at that time of day).
20. If it is NOT legal to park in the space, keep stopwatch running and continue along the route, looking for the next available and legal parking space.
21. Once you have confirmed that the space is legal, stop the watch before backing in to the parking space. Do not estimate or measure the time it would take a vehicle to parallel-park or add the time it takes you to parallel-park to your search time for each run.
22. Once you have safely parked the vehicle, make the following notes on the data collection forms:
    a. fill in the "# laps" (If you have found a parking space before completing one full lap of the route, mark "0"),
    b. indicate whether the search was a "Failed search (yes/no)" (i.e. you did not find an available and legal parking space within 30 minutes), and
    c. if the space is legal to park in at the moment, note the "Meter ID #" or address, if there is no meter at the parking space you found. For parking spaces with multi-space parking meters, please note BOTH the parking space # (writing "S#____"), AND the Meter ID # (writing "M# _____) in the appropriate column on the data collection form.
23. After recording the search time and space number in the data collection form, as described in (11), start your stop watch and return to the starting intersection for your assigned route, by whatever legal route you prefer.
24. Once you've returned to the starting intersection, begin another parking search run **only after waiting until at least four minutes have passed since your last search ended.**
25. If you do not find a space after 30 minutes of searching, return to the starting intersection for your assigned route, record the search as a "Failed Search" on the data collection form, and immediately begin a new search run, *WITHOUT* waiting four minutes.

Problems/Contact:

- Time is of the essence.
- If someone asks what you are doing, tell them you are working on a time-sensitive survey collecting non-identifying information. If they press for more information, simply give them the business card of your field supervisor of that day.
- Call your field supervisor if you see a problem along your route, are unsure how to proceed, or have questions.
- Your field supervisor today is: _____ at _____ (cell).

Parking Search Time Survey Data Collection Form (Validation by Auto)

SFpark

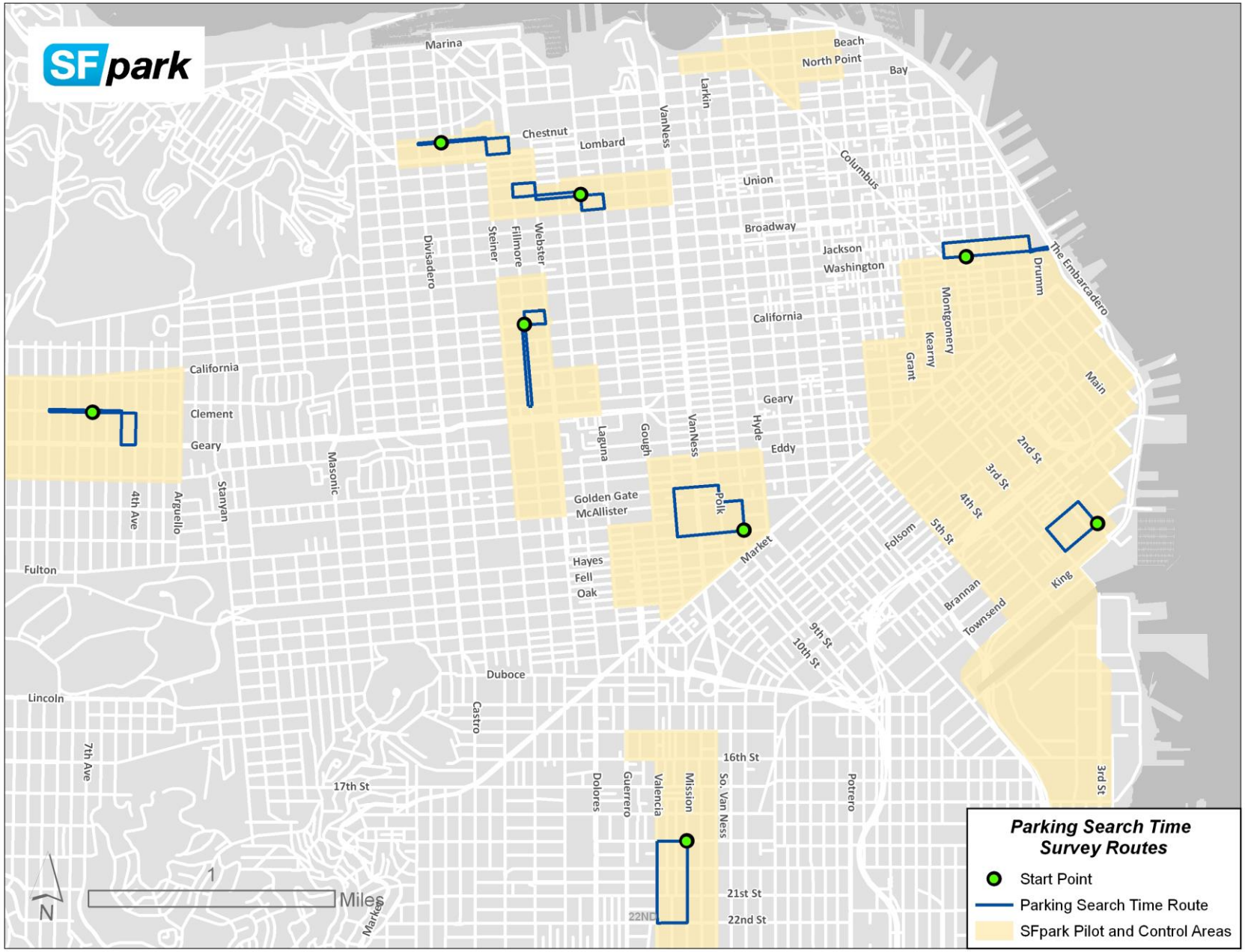
Name(s): _____

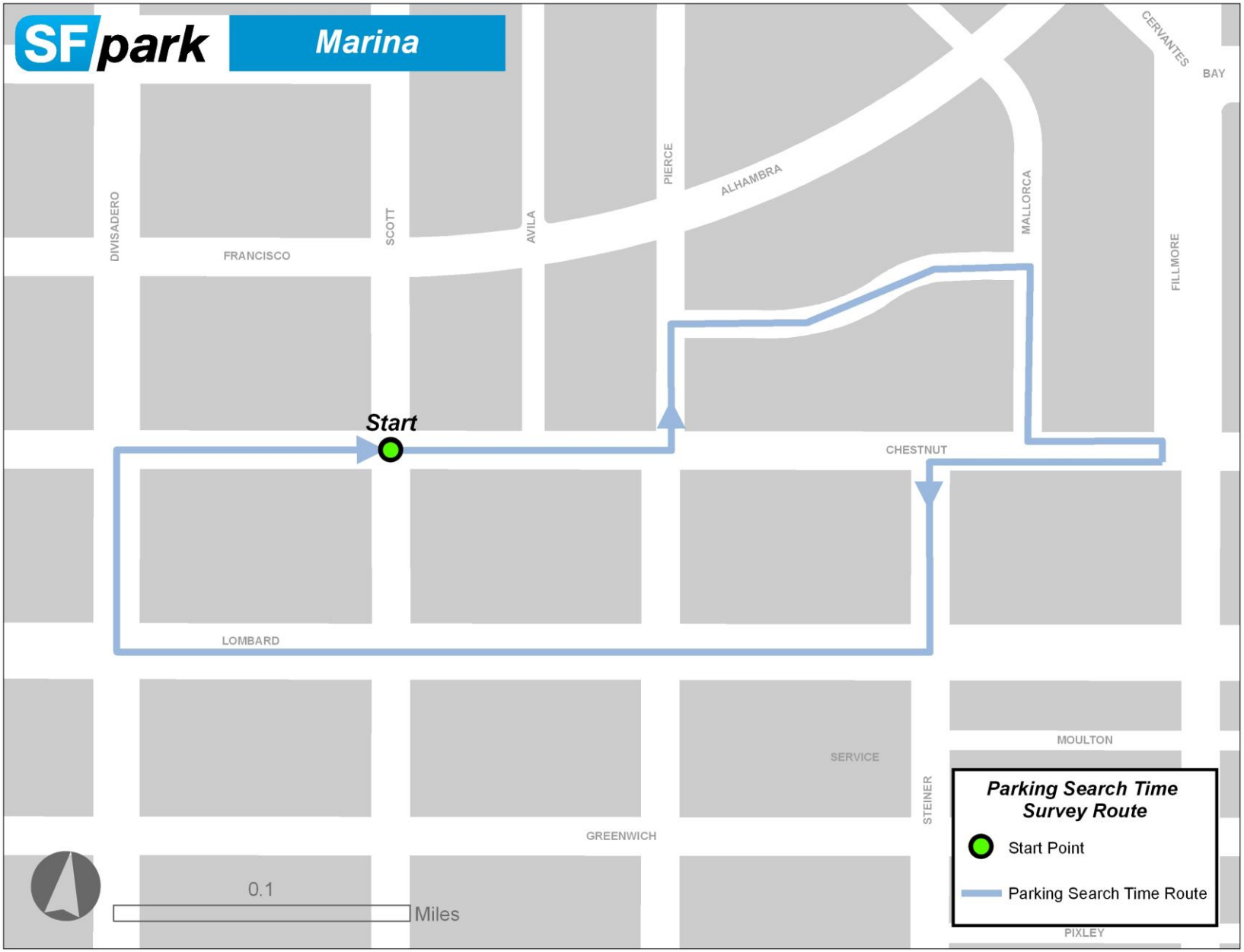
Route: _____ **Date:** _____

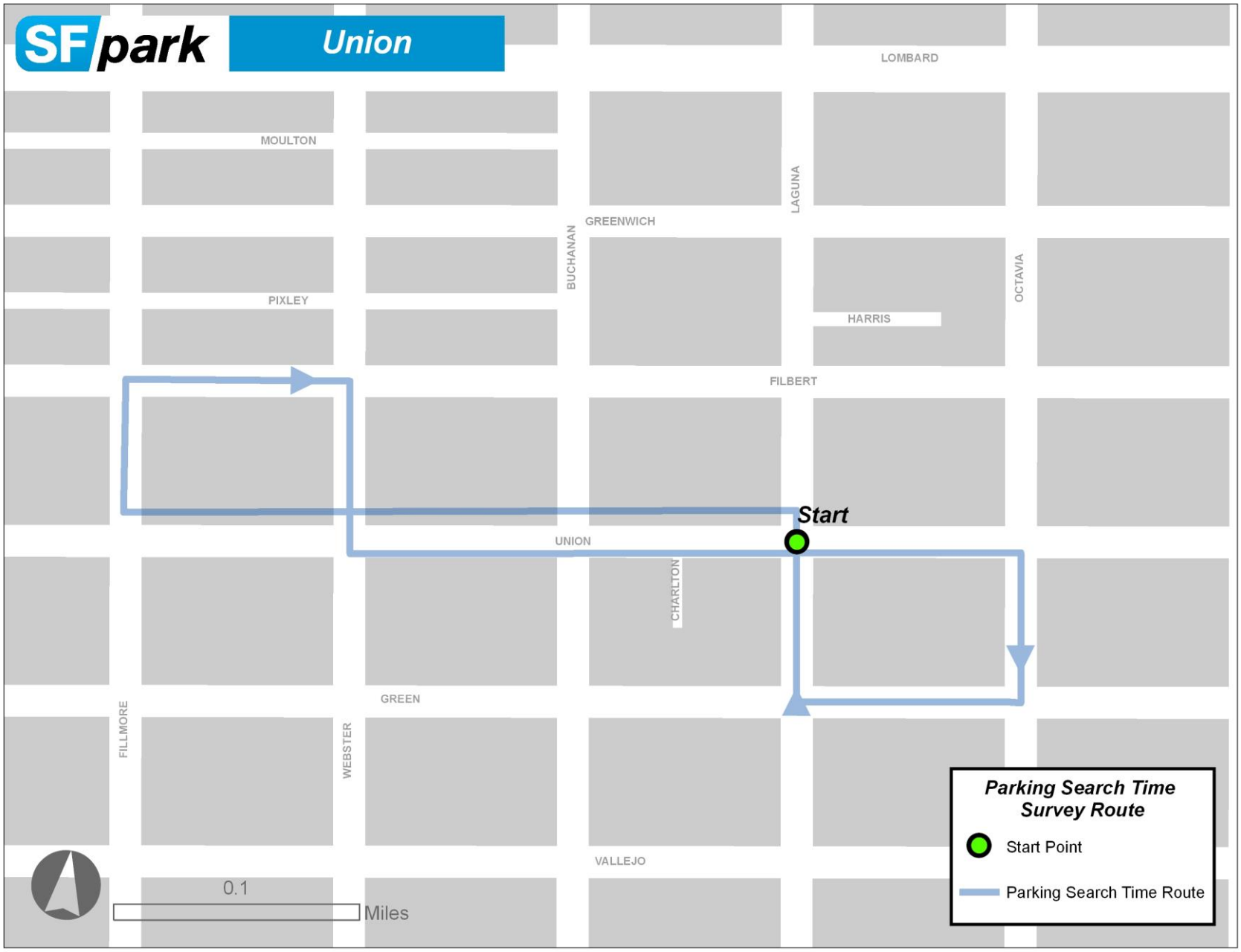
Time (circle one): 8-10am 12-2pm 4-6pm 8-10pm

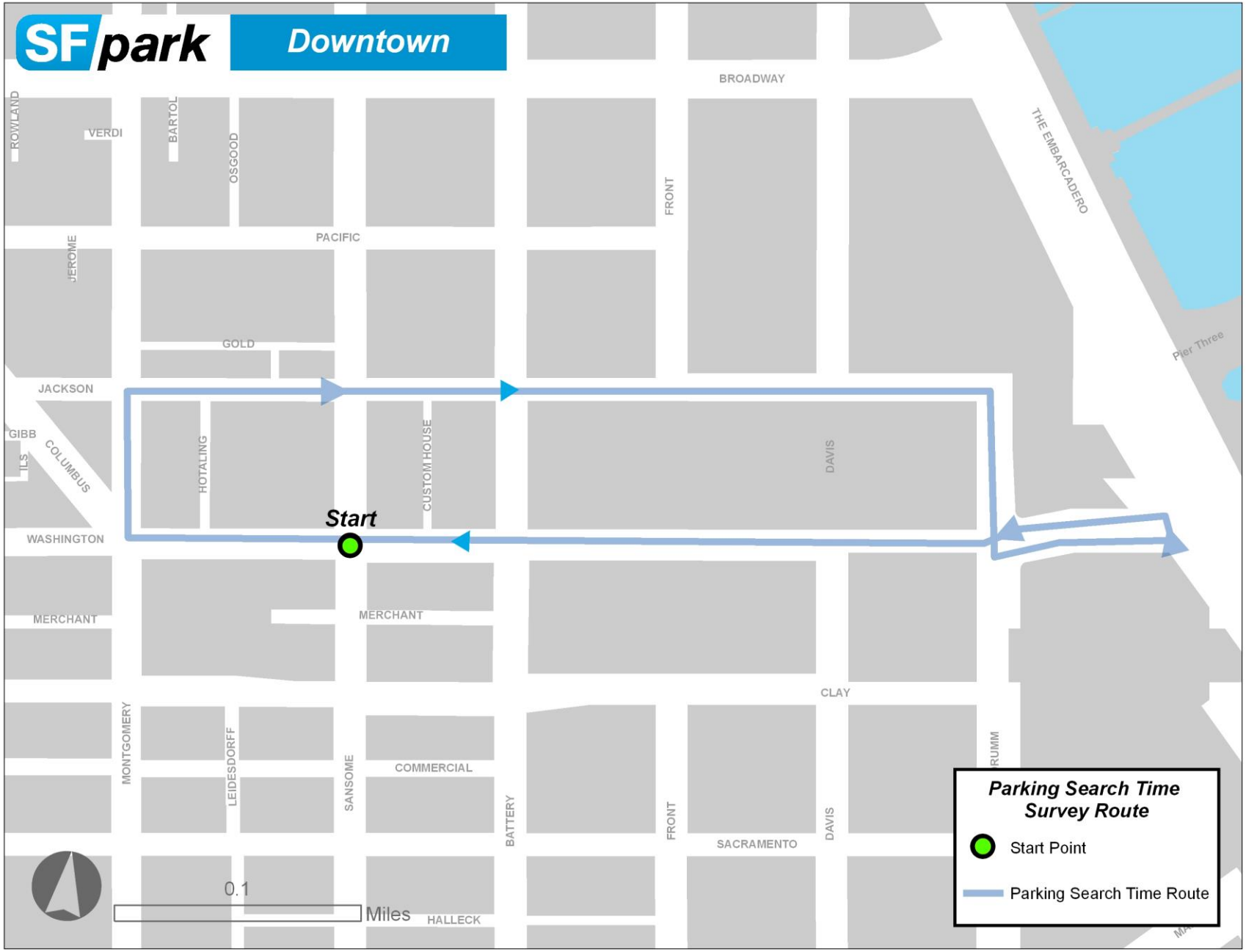
Survey Run	Start Time (min & sec)	Elapsed Time (min & sec)	Number of Laps	Failed Search? (Y/N)	Meter ID of found metered parking space OR Nearest address of found unmetered parking space
Search 1					
Search 2					
Search 3					
Search 4					
Search 5					
Search 6					
Search 7					
Search 8					
Search 9					
Search 10					
Search 11					
Search 12					
Search 13					
Search 14					
Search 15					
Search 16					
Search 17					
Search 18					
Search 19					
Search 20					
Search 21					
Search 22					
Search 23					
Search 24					

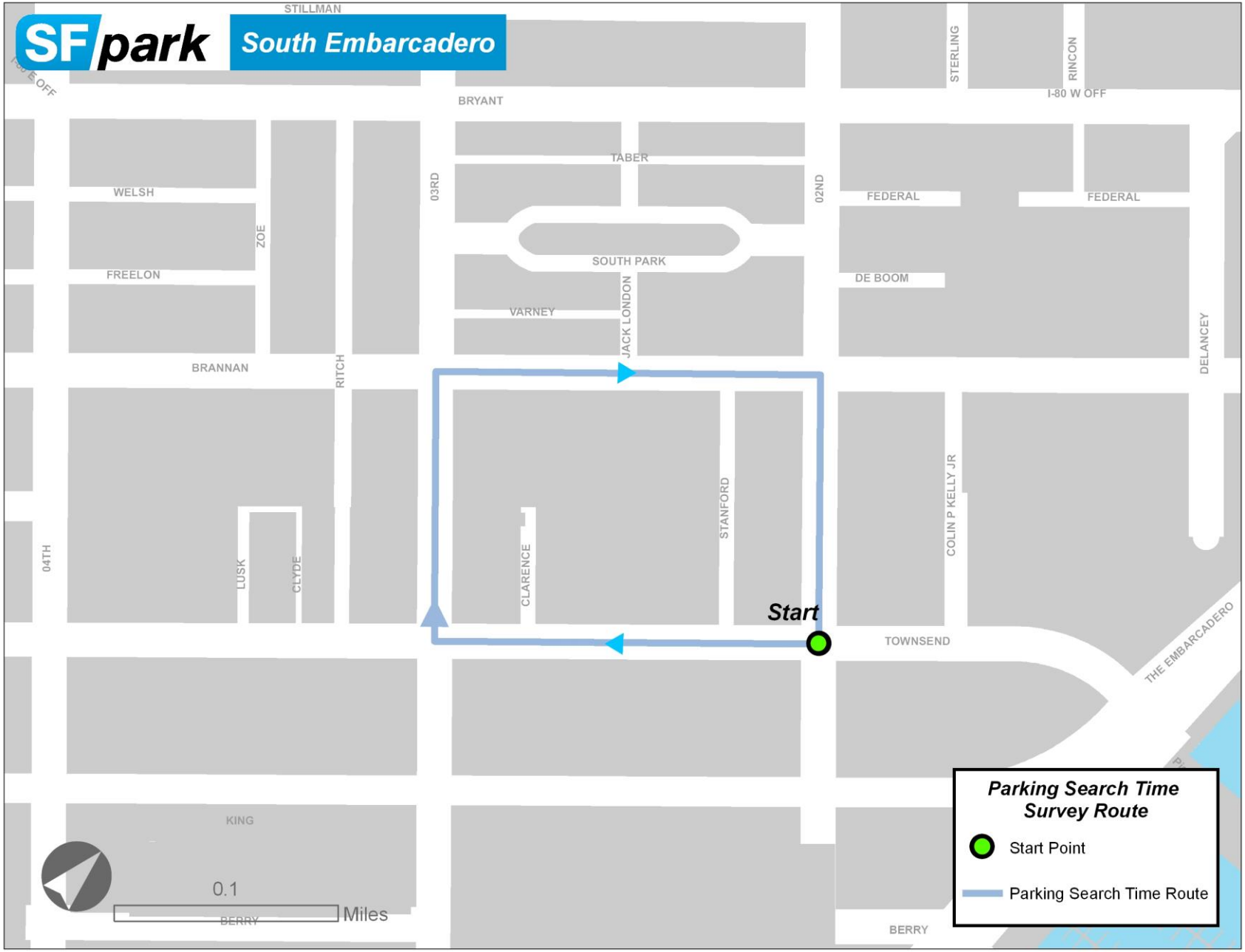
1. A failed search means that you could not find a vacant legal parking space able to accommodate an average-sized passenger vehicle after 30 minutes of searching.
2. If you passed the starting point before 30 minutes was up or before you found a parking space, mark "2" laps; otherwise, enter "1."

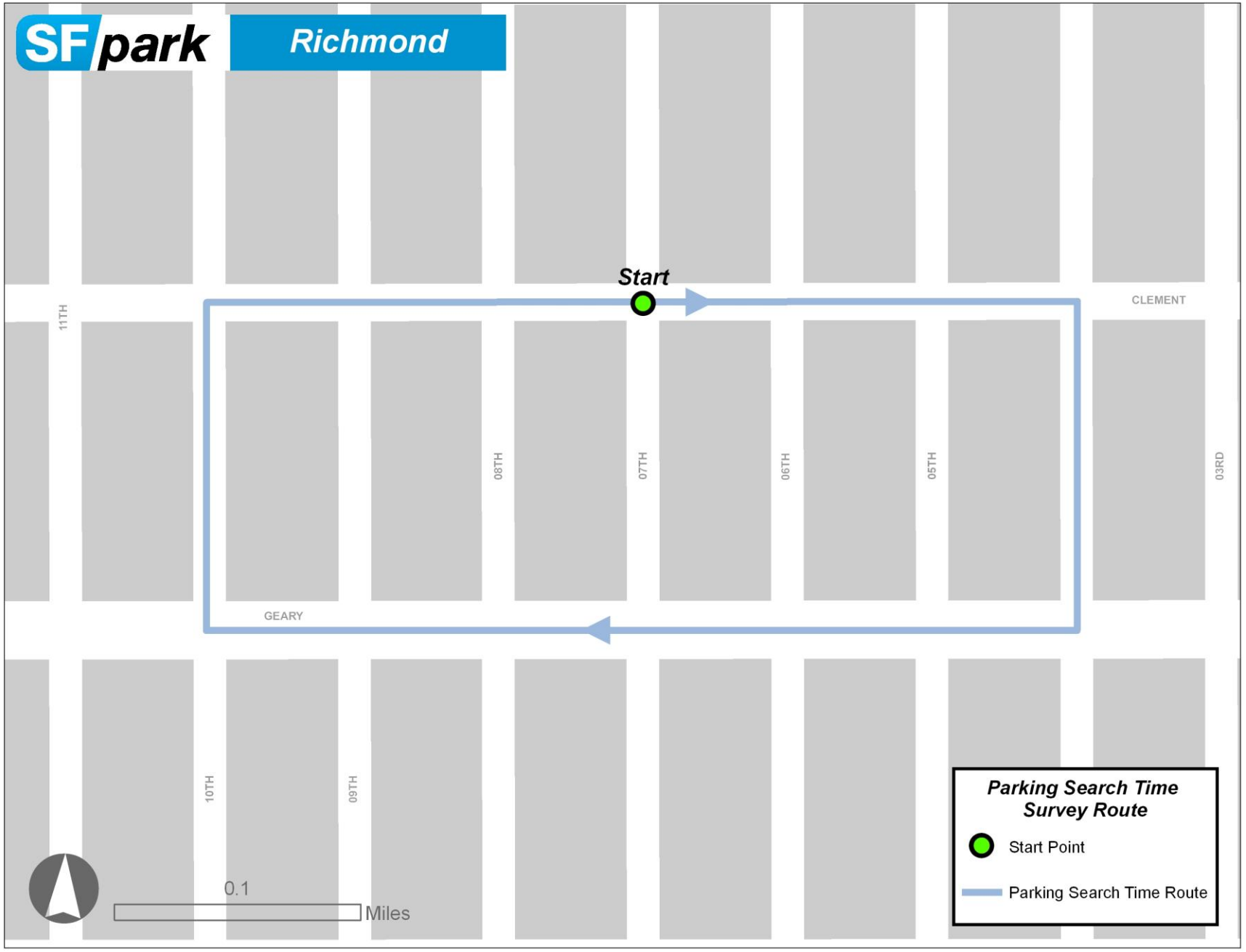

SFpark
Marina
Chestnut
Lombard
Union
Broadway
California
Clement
Geary
Fulton
Lincoln
Duboce
Hayes
Fell
Oak
Golden Gate
McAllister
Market
Eddy
Ellis
O'Farrell
Jackson
Washington
Beach
North Point
Bay
Larkin
VanNess
Columbus
Divisadero
Steiner
Fillmore
Webster
Laguna
Gough
Hyde
Polk
Masonic
Stanyan
Arguello
4th Ave
7th Ave
Castro
Dolores
Guerrero
Valencia
Mission
So. Van Ness
Potrero
16th St
17th St
21st St
22nd St
22ND
Drumm
The Embarcadero
Montgomery
Kearny
Grant
Main
2nd St
3rd St
4th St
5th St
Folsom
King
Brannan
Townsend
9th St
10th St
Market
N
1
Miles
Parking Search Time Survey Routes
Start Point
Parking Search Time Route
SFpark Pilot and Control Areas

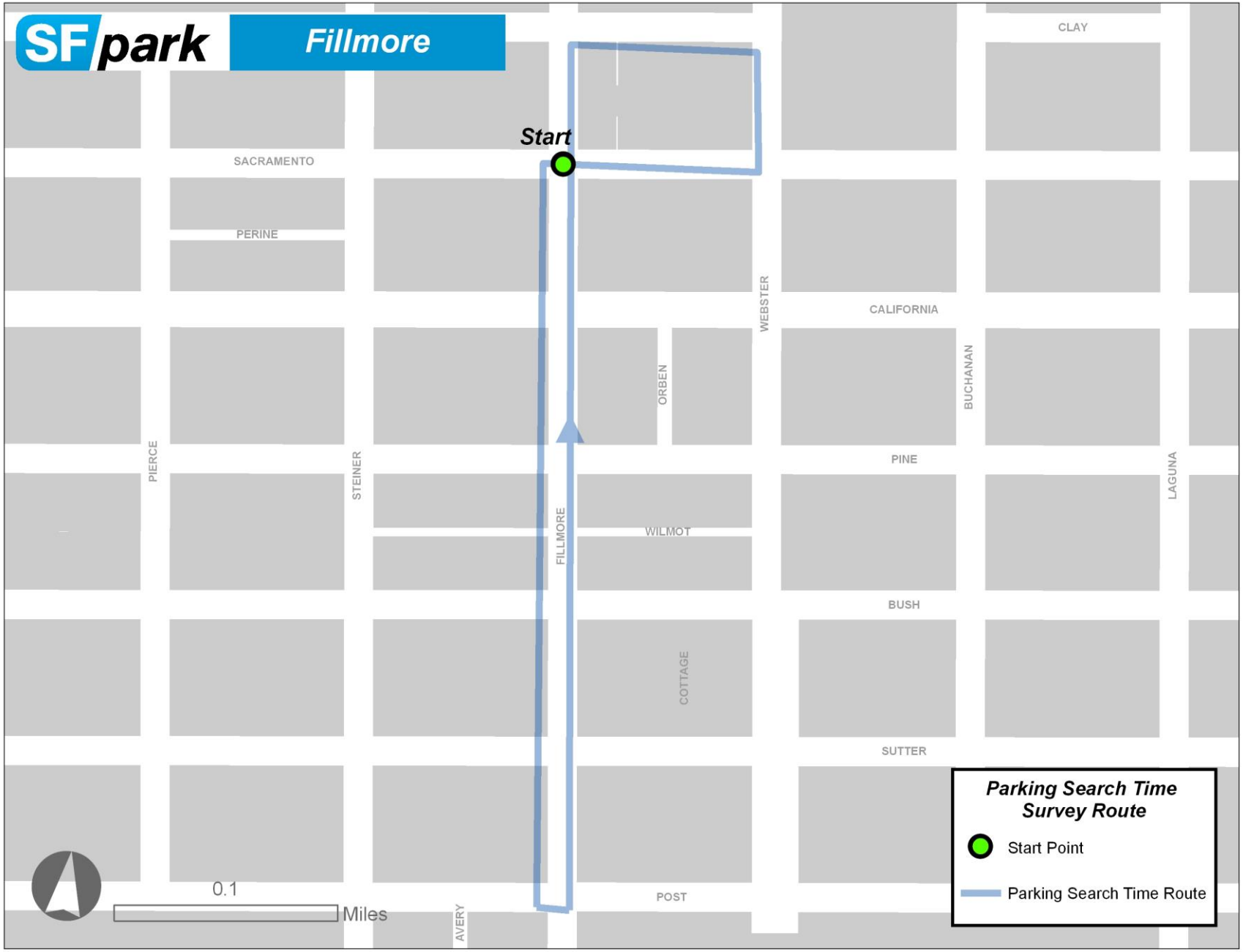

SFpark
Marina
CERVANTES
BAY
DIVISADERO
SCOTT
AVILA
PIERCE
ALHAMBRA
MALLORCA
FILLMORE
FRANCISCO
Start
CHESTNUT
LOMBARD
SERVICE
STEINER
MOULTON
GREENWICH
PIXLEY
Parking Search Time Survey Route
Start Point
Parking Search Time Route
0.1
Miles

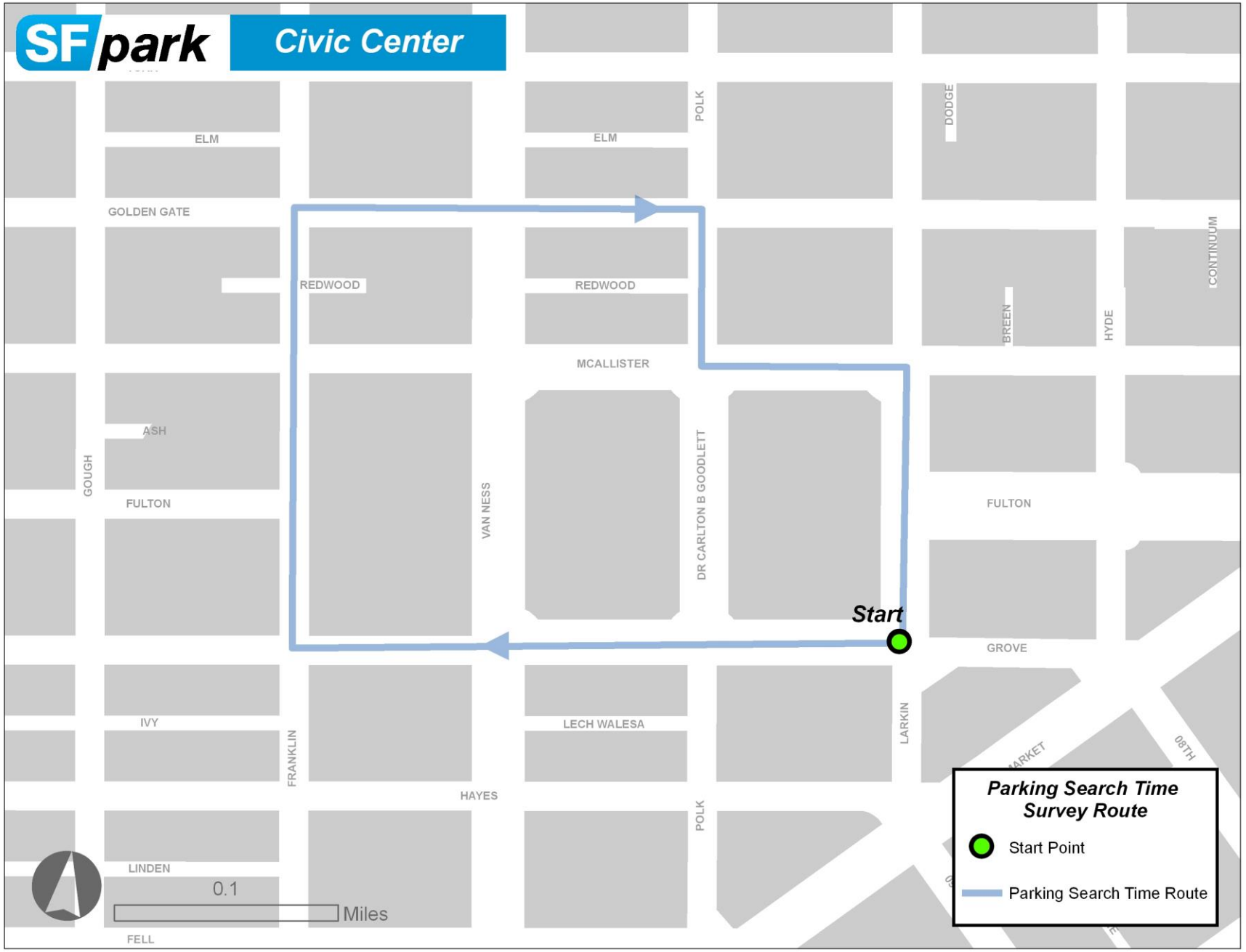

SFpark
Union
LOMBARD
MOULTON
LAGUNA
GREENWICH
BUCHANAN
OCTAVIA
PIXLEY
HARRIS
FILBERT
Start
UNION
CHARLTON
GREEN
FILLMORE
WEBSTER
VALLEJO
0.1
Miles
Parking Search Time Survey Route
Start Point
Parking Search Time Route

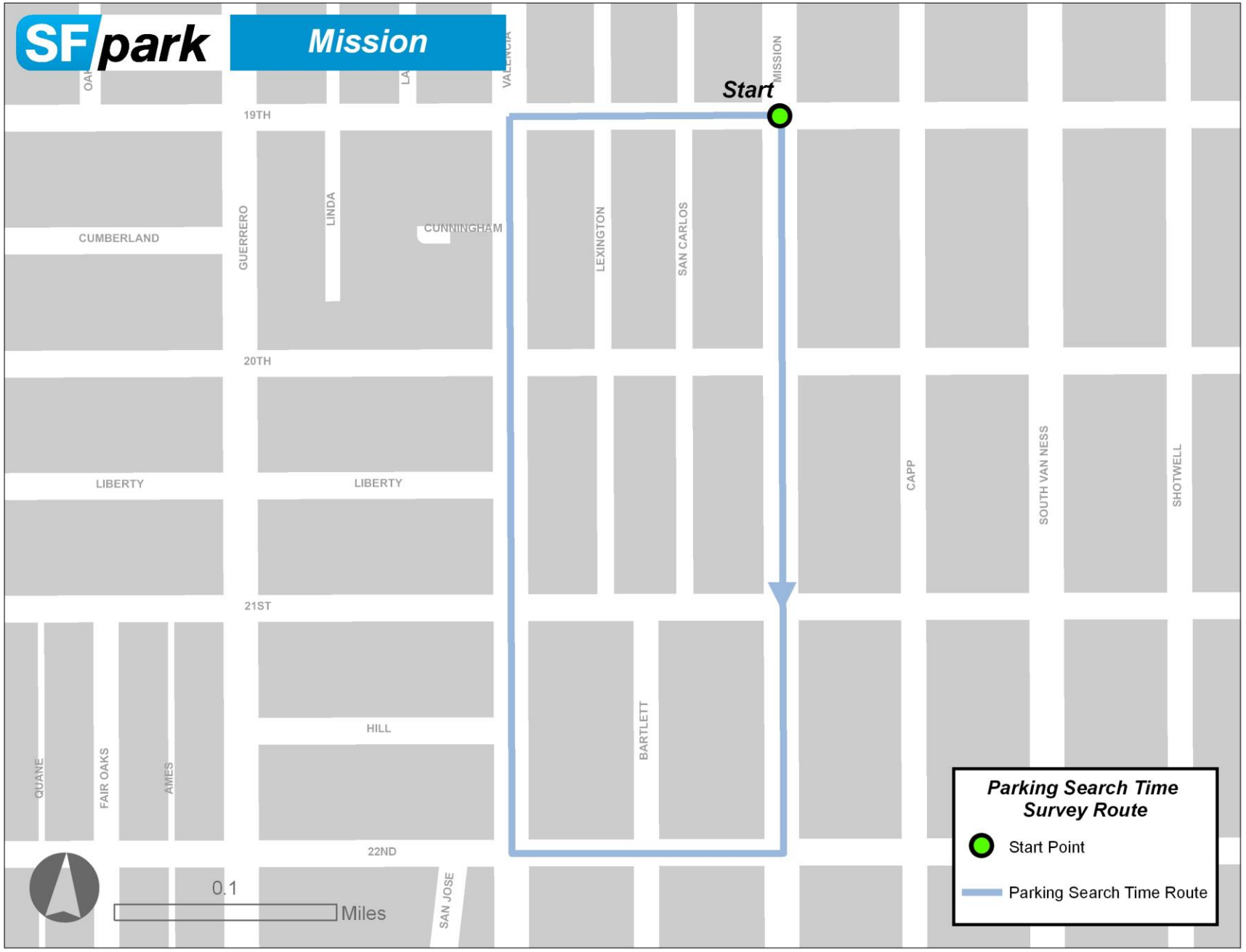

SFpark
Downtown
BROADWAY
ROWLAND
VERDI
BARTOL
OSGOOD
FRONT
THE EMBARCADERO
PACIFIC
JEROME
GOLD
Pier Three
JACKSON
GIBB
ILS
COLUMBUS
HOTALING
CUSTOM HOUSE
DAVIS
Start
WASHINGTON
MERCHANT
MERCHANT
CLAY
MONTGOMERY
LEIDESDORFF
SANSOME
COMMERCIAL
BATTERY
FRONT
SACRAMENTO
DAVIS
0.1
Miles
HALLECK
Parking Search Time Survey Route
Start Point
Parking Search Time Route


SFpark
South Embarcadero
STILLMAN
BRYANT
STERLING
RINCON
I-80 W OFF
TABER
WELSH
03RD
02ND
FEDERAL
FEDERAL
ZOE
SOUTH PARK
FREELON
DE BOOM
VARNEY
JACK LONDON
DELANCEY
BRANNAN
RITCH
04TH
LUSK
CLYDE
CLARENCE
STANFORD
COLIN P KELLY JR
Start
TOWNSEND
THE EMBARCADERO
KING
BERRY
0.1
Miles
Parking Search Time Survey Route
Start Point
Parking Search Time Route


SFpark
Richmond
Start
CLEMENT
11TH
08TH
07TH
06TH
05TH
03RD
GEARY
10TH
09TH
0.1
Miles
Parking Search Time Survey Route
Start Point
Parking Search Time Route


SFpark
Fillmore
Start
SACRAMENTO
PERINE
CLAY
WEBSTER
CALIFORNIA
ORBEN
BUCHANAN
PIERCE
STEINER
PINE
LAGUNA
FILLMORE
WILMOT
BUSH
COTTAGE
SUTTER
POST
AVERY
0.1
Miles
Parking Search Time Survey Route
Start Point
Parking Search Time Route


SFpark
Civic Center
ELM
ELM
POLK
DODGE
GOLDEN GATE
REDWOOD
REDWOOD
CONTINUUM
BREEN
HYDE
MCALLISTER
ASH
GOUGH
FULTON
VAN NESS
DR CARLTON B GOODLETT
FULTON
Start
GROVE
IVY
FRANKLIN
LECH WALESA
LARKIN
HAYES
POLK
LINDEN
FELL
0.1
Miles
Parking Search Time Survey Route
Start Point
Parking Search Time Route


SFpark
Mission
Start
19TH
20TH
21ST
22ND
CUMBERLAND
LIBERTY
LIBERTY
HILL
GUERRERO
LINDA
CUNNINGHAM
LEXINGTON
SAN CARLOS
MISSION
CAPP
SOUTH VAN NESS
SHOTWELL
BARTLETT
QUANE
FAIR OAKS
AMES
SAN JOSE
0.1
Miles
Parking Search Time Survey Route
Start Point
Parking Search Time Route

Appendix B

Sensor Data Validation Survey Materials

Example Data Collection Sheets

The example sheet below would be for block face 1 in the figure above.

Blockface ONE

START Time: _____:_____

	CHECK ONLY ONE OF THESE:					
Meter #	**Vacant**	**Occupied**	**Entering**	**Exiting**	**Other**	**NOTES:**
5370	❑	❑	❑	❑	❑ notes	
5350	❑	❑	❑	❑	❑ notes	
5330	❑	❑	❑	❑	❑ notes	
5310	❑	❑	❑	❑	❑ notes	
5290	❑	❑	❑	❑	❑ notes	
5270	❑	❑	❑	❑	❑ notes	
5250	❑	❑	❑	❑	❑ notes	
5230	❑	❑	❑	❑	❑ notes	
5210	❑	❑	❑	❑	❑ notes	
5190	❑	❑	❑	❑	❑ notes	
5170	❑	❑	❑	❑	❑ notes	
5150	❑	❑	❑	❑	❑ notes	
5130	❑	❑	❑	❑	❑ notes	
5110	❑	❑	❑	❑	❑ notes	
5090	❑	❑	❑	❑	❑ notes	
5070	❑	❑	❑	❑	❑ notes	
5050	❑	❑	❑	❑	❑ notes	
5030	❑	❑	❑	❑	❑ notes	

END Time: _____:_____

Sample Roadway Sensor Collection Form

Date: _____

Street_____ Between_____ and _____

Direction (circle one): Northbound Southbound Eastbound Westbound

Lane number, starting from leftmost/fast lane to rightmost/slow lane (circle one): One Two Three

	Start Time	End Time	Number of cars
First Shift			
Second Shift			

Sample Garage Sensor Collection Form

Date: _____

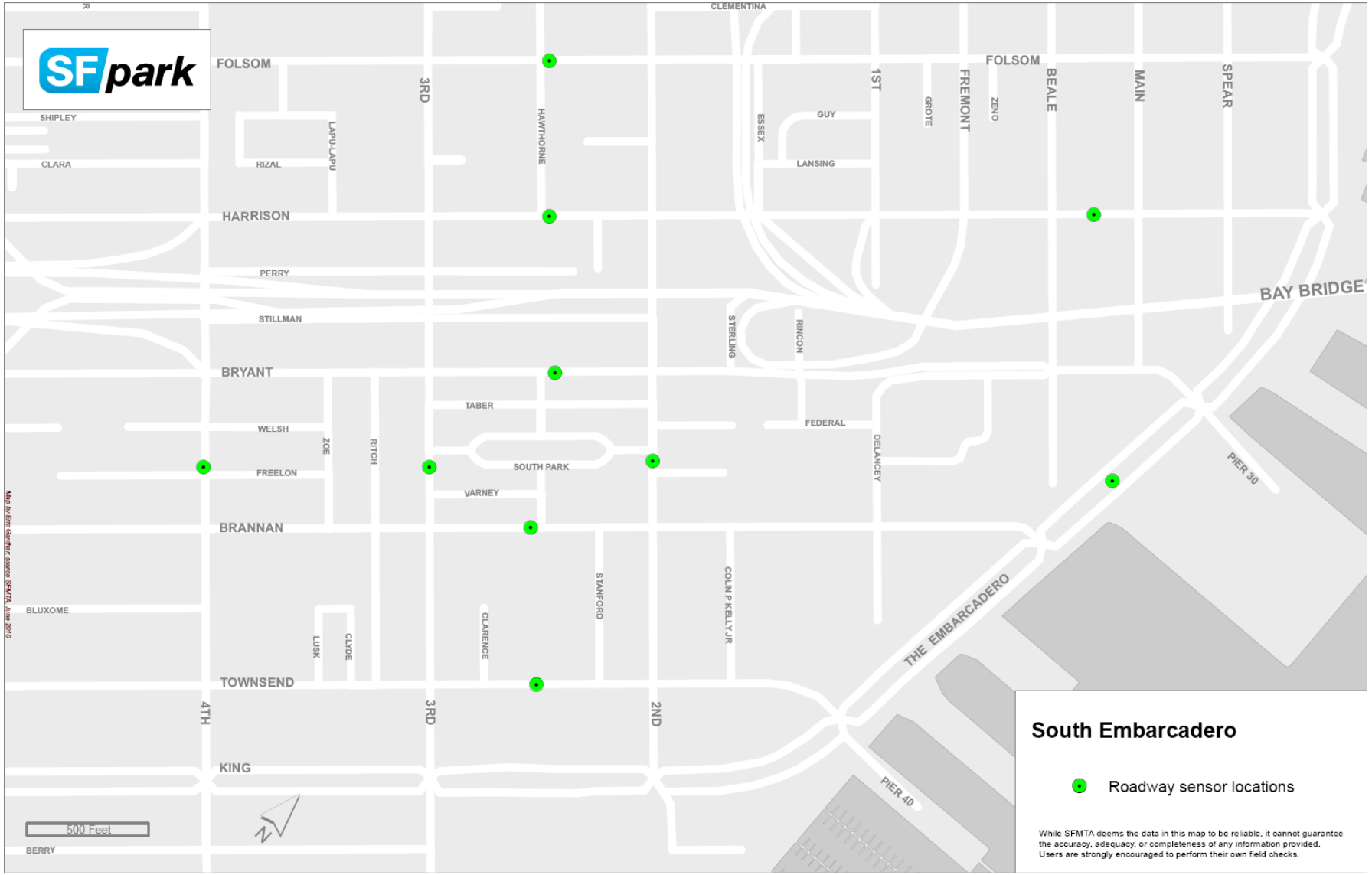
Garage_____

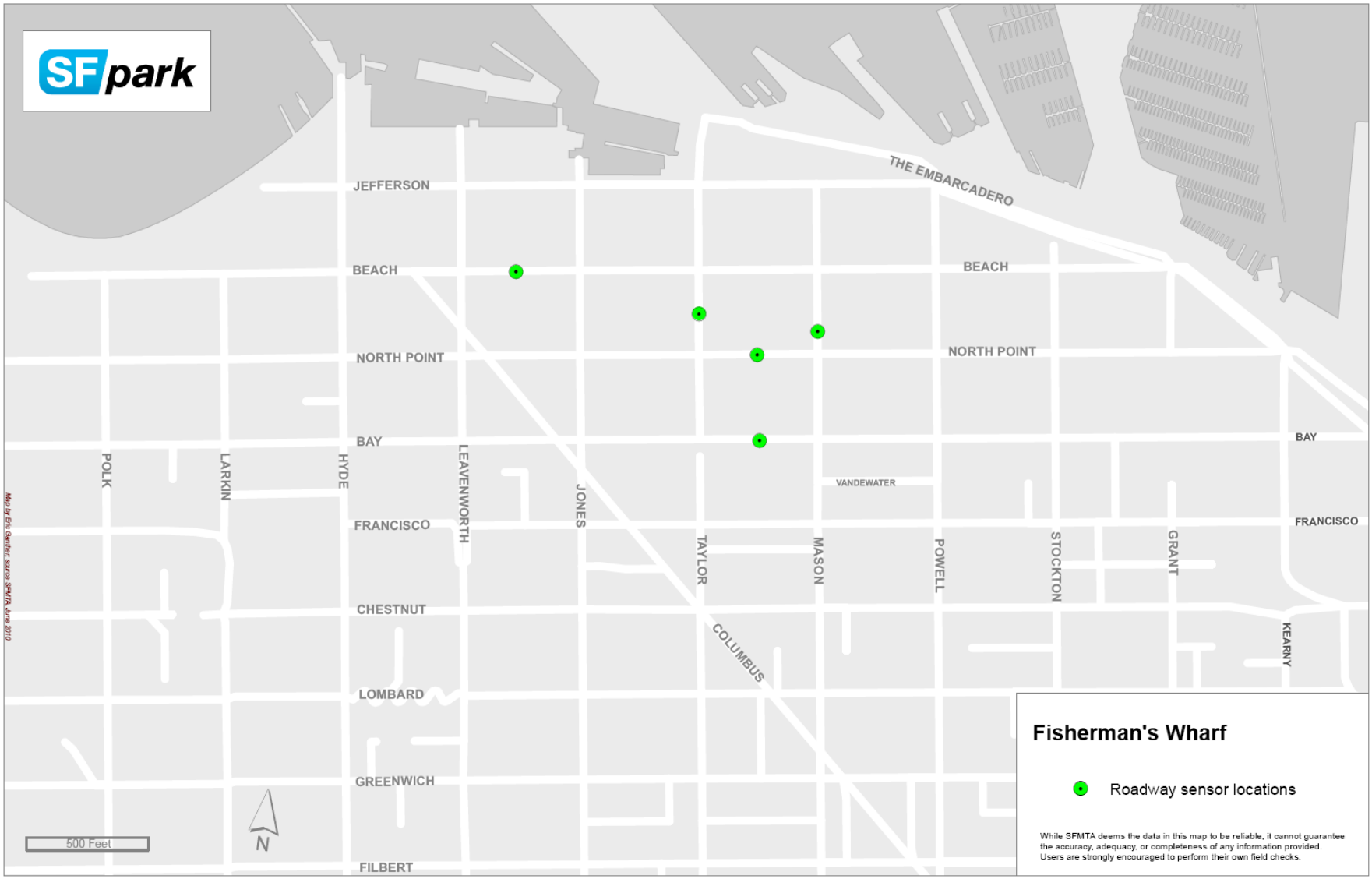
Direction (circle one): Entrance Exit

Lane number, starting from leftmost to rightmost (circle one): One Two Three

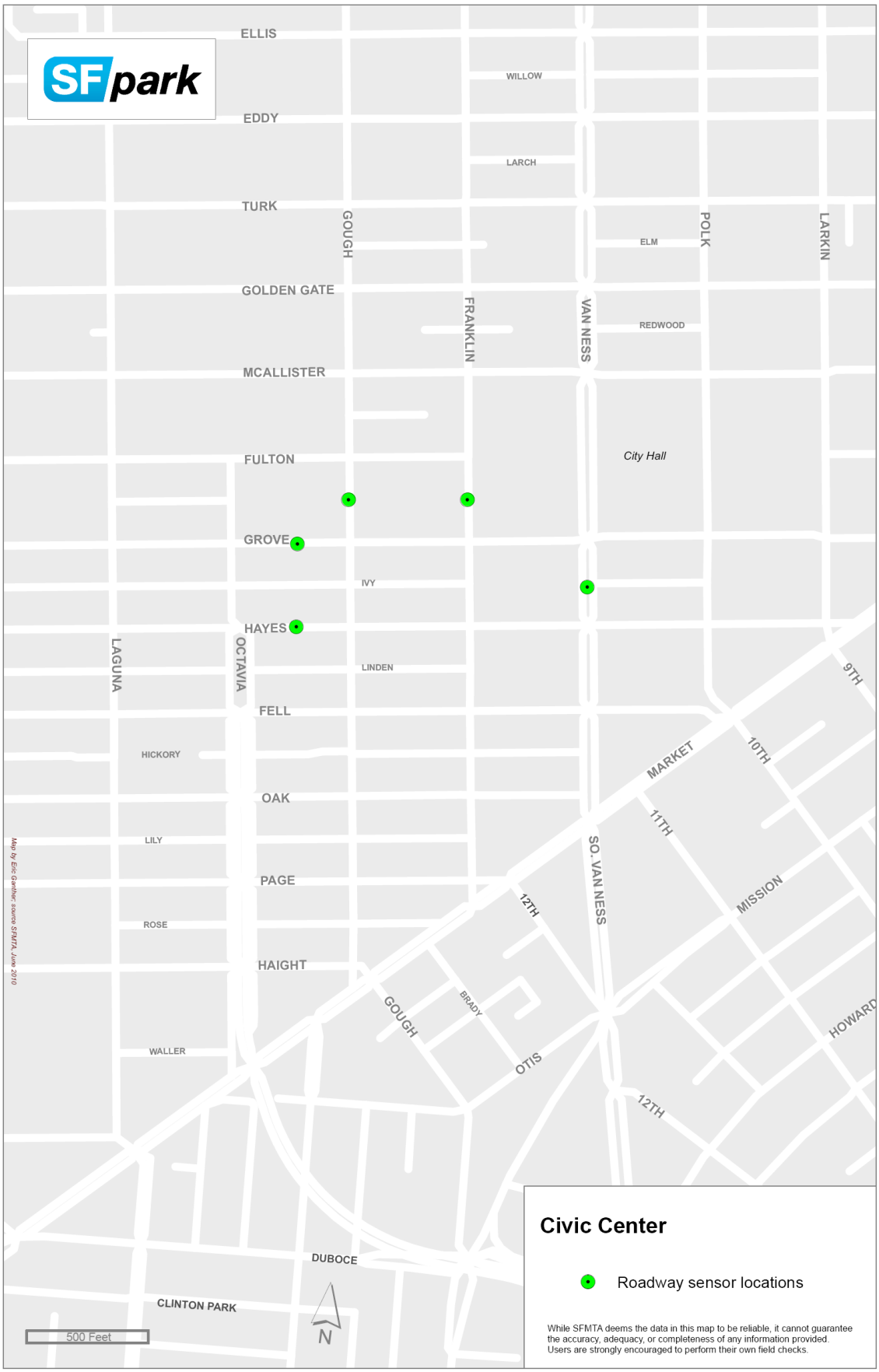
	Start Time	End Time	Number of cars
First Shift			
Second Shift			

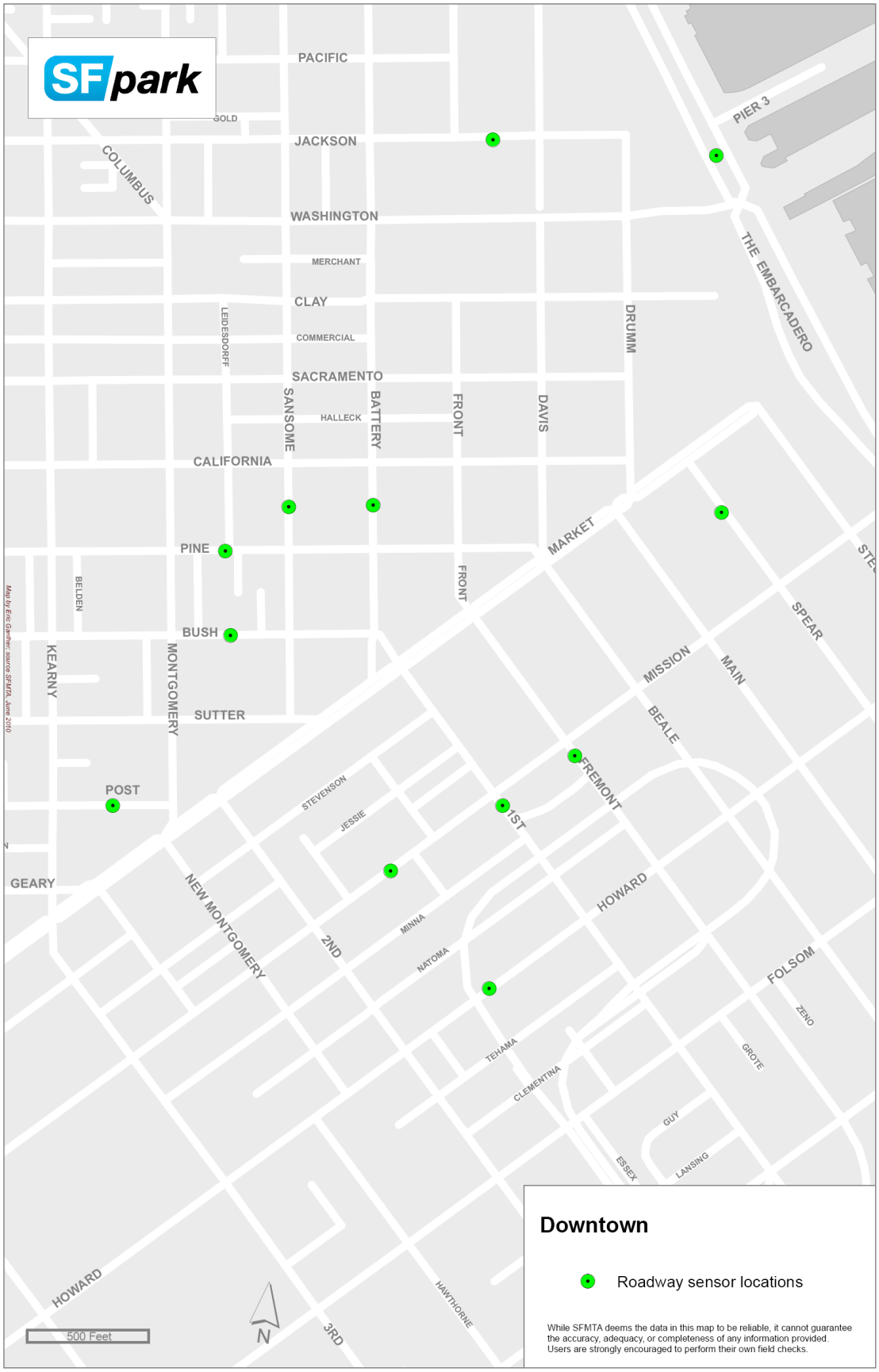
Roadway Sensor Location
Maps

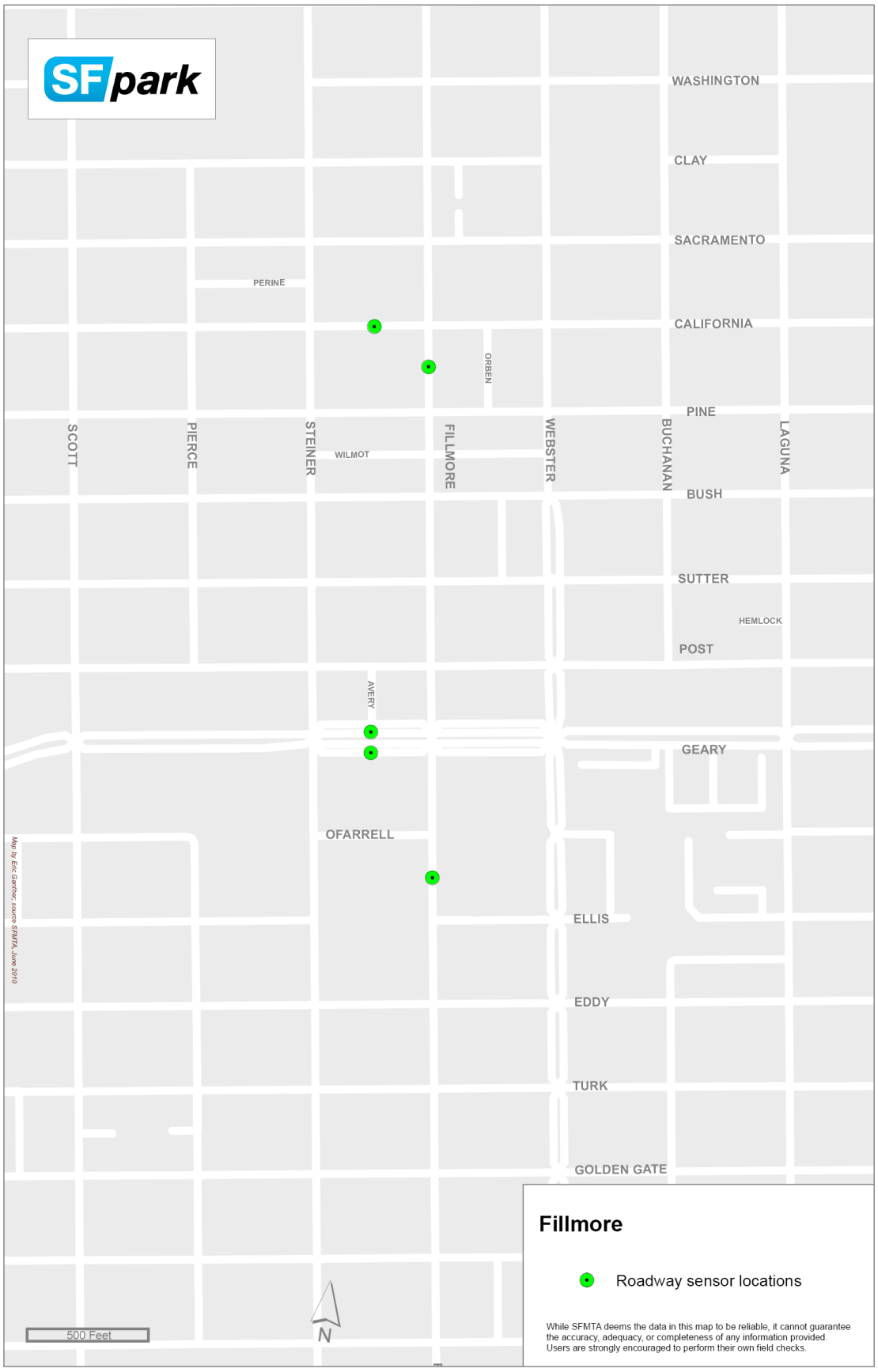

SFpark
FOLSOM
SHIPLEY
CLARA
RIZAL
LAPU-LAPU
3RD
HAWTHORNE
CLEMENTINA
ESSEX
GUY
LANSING
1ST
GROTE
FREMONT
ZENO
FOLSOM
BEALE
MAIN
SPEAR
HARRISON
PERRY
STILLMAN
BAY BRIDGE
STERLING
RINCON
BRYANT
TABER
WELSH
ZOE
RITCH
FREELON
SOUTH PARK
VARNEY
FEDERAL
DELANCEY
PIER 30
BRANNAN
BLUXOME
LUSK
CLYDE
CLARENCE
STANFORD
COLIN P KELLY JR
THE EMBARCADERO
TOWNSEND
4TH
3RD
2ND
KING
PIER 40
BERRY
500 Feet
Map by Eric Gaynor, source SFMTA, June 2010
South Embarcadero
Roadway sensor locations
While SFMTA deems the data in this map to be reliable, it cannot guarantee the accuracy, adequacy, or completeness of any information provided. Users are strongly encouraged to perform their own field checks.

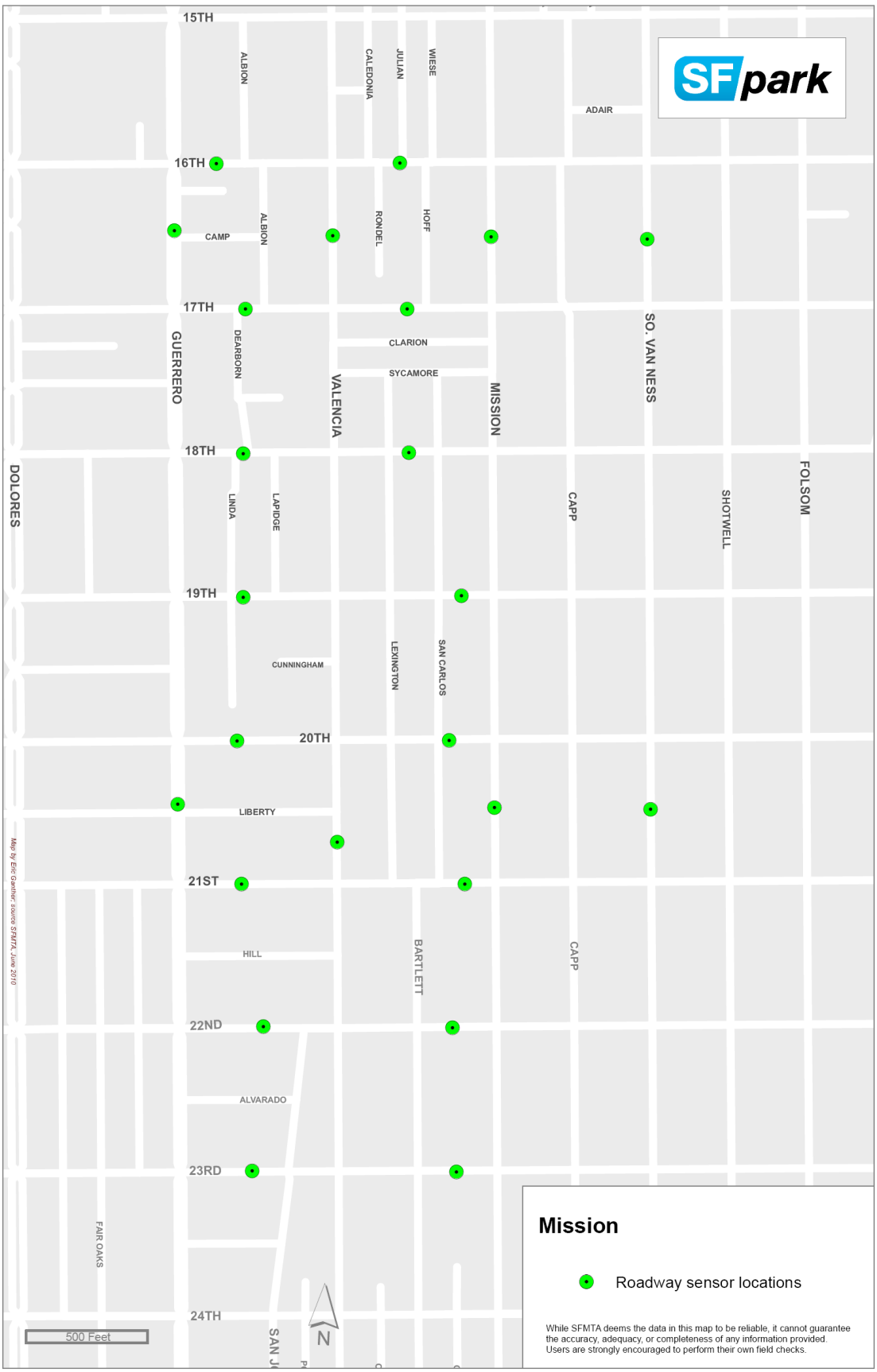

SFpark
JEFFERSON
THE EMBARCADERO
BEACH
BEACH
NORTH POINT
NORTH POINT
BAY
BAY
POLK
LARKIN
HYDE
LEAVENWORTH
JONES
VANDEWATER
FRANCISCO
FRANCISCO
TAYLOR
MASON
POWELL
STOCKTON
GRANT
CHESTNUT
COLUMBUS
KEARNY
LOMBARD
GREENWICH
FILBERT
500 Feet
N
Map by Eric Gaither, source SFMTA, June 2010
Fisherman's Wharf
Roadway sensor locations
While SFMTA deems the data in this map to be reliable, it cannot guarantee the accuracy, adequacy, or completeness of any information provided. Users are strongly encouraged to perform their own field checks.


SFpark
CAPRA
BAY
FRANCISCO
ALHAMBRA
AVILA
TOLEDO
MALLORCA
CHESTNUT
MAGNOLIA
RICHARDSON
LOMBARD
BRODERICK
DIVISADERO
SCOTT
PIERCE
STEINER
MOULTON
FILLMORE
WEBSTER
GREENWICH
PIXLEY
BUCHANAN
LAGUNA
HARRIS
OCTAVIA
GOUGH
FILBERT
UNION
CHARLTON
GREEN
VALLEJO
BROADWAY
500 Feet
N
Marina-Union
Roadway sensor locations
While SFMTA deems the data in this map to be reliable, it cannot guarantee the accuracy, adequacy, or completeness of any information provided. Users are strongly encouraged to perform their own field checks.


SFpark
ELLIS
EDDY
TURK
GOLDEN GATE
MCALLISTER
FULTON
GROVE
HAYES
FELL
OAK
PAGE
HAIGHT
WALLER
DUBOCE
CLINTON PARK
WILLOW
LARCH
ELM
REDWOOD
IVY
LINDEN
LILY
ROSE
HICKORY
GOUGH
FRANKLIN
VAN NESS
POLK
LARKIN
OCTAVIA
LAGUNA
SO. VAN NESS
MARKET
MISSION
9TH
10TH
11TH
12TH
BRADY
OTIS
HOWARD
City Hall
500 Feet
N
Map by Eric Gaeither; source SFMTA, June 2010
Civic Center
Roadway sensor locations
While SFMTA deems the data in this map to be reliable, it cannot guarantee the accuracy, adequacy, or completeness of any information provided. Users are strongly encouraged to perform their own field checks.


SFpark
PACIFIC
JACKSON
WASHINGTON
MERCHANT
CLAY
COMMERCIAL
SACRAMENTO
HALLECK
CALIFORNIA
PINE
BUSH
SUTTER
POST
GEARY
HOWARD
MARKET
MISSION
BEALE
FREMONT
1ST
2ND
NEW MONTGOMERY
STEVENSON
JESSIE
MINNA
NATOMA
TEHAMA
CLEMENTINA
FOLSOM
ZENO
GROTE
GUY
ESSEX
LANSING
HAWTHORNE
3RD
HOWARD
COLUMBUS
LEIDESDORFF
SANSOME
BATTERY
FRONT
DAVIS
DRUMM
THE EMBARCADERO
PIER 3
SPEAR
MAIN
BELDEN
KEARNY
MONTGOMERY
Map by Eric Gaeither; source SFMTA, June 2010
500 Feet
N
Downtown
Roadway sensor locations
While SFMTA deems the data in this map to be reliable, it cannot guarantee the accuracy, adequacy, or completeness of any information provided.
Users are strongly encouraged to perform their own field checks.


SFpark
WASHINGTON
CLAY
SACRAMENTO
PERINE
CALIFORNIA
ORBEN
PINE
SCOTT
PIERCE
STEINER
WILMOT
FILLMORE
WEBSTER
BUCHANAN
LAGUNA
BUSH
SUTTER
HEMLOCK
POST
AVERY
GEARY
OFARRELL
ELLIS
EDDY
TURK
GOLDEN GATE
Map by Eric Gardner, source SFMTA, June 2010
500 Feet
N
Fillmore
Roadway sensor locations
While SFMTA deems the data in this map to be reliable, it cannot guarantee the accuracy, adequacy, or completeness of any information provided. Users are strongly encouraged to perform their own field checks.


15TH
ALBION
CALEDONIA
JULIAN
WIESE
ADAIR
SFpark
16TH
CAMP
ALBION
RONDELL
HOFF
17TH
GUERRERO
DEARBORN
VALENCIA
CLARION
SYCAMORE
MISSION
SO. VAN NESS
18TH
DOLORES
LINDA
LAPIDGE
CAPP
SHOTWELL
FOLSOM
19TH
CUNNINGHAM
LEXINGTON
SAN CARLOS
20TH
LIBERTY
21ST
HILL
BARTLETT
CAPP
22ND
ALVARADO
23RD
FAIR OAKS
24TH
500 Feet
N
Map by Eric Gardner source SFMTA, June 2010
Mission
Roadway sensor locations
While SFMTA deems the data in this map to be reliable, it cannot guarantee the accuracy, adequacy, or completeness of any information provided.
Users are strongly encouraged to perform their own field checks.

Appendix C

Disabled Placard/ Double Parking (DPDP) Survey Materials

Disabled Placard/Double Parking Survey

Practical Instructions

This survey has four parts:

- *Counting the frequency of **disabled placards** displayed on cars parked at meters*
- *Counting the frequency of cars **double parked** in the street.*
- *Counting the **total number of parked cars** per block so we can calculate percentages of disabled placards and double parking.*
- *Counting the number of **temporary no parking spaces** so an accurate number of available spaces can be determine for that day.*

Each route is performed by one person and should take you about an hour or less.

Your field supervisor today is: _____ at _____(cell).

Date: _____ Day of the Week: _____

Surveyor : _____ Route: _____

Starting Intersection _____

Shift (Circle one): ***Work SHIFT 1: 7:30AM-10:30AM AND 11:30AM-2:30PM***

Work SHIFT 2: 3:30PM-6:30PM AND 7:30PM-10:30PM

What you'll need:

Clipboard, pencil, business cards of field supervisor, watch/cell phone (all to be provided at the training)

Methods:

1. Begin at the specified start point, following the route and collecting data on the side of the street specified on your data log. On some stretches you will not be recording data but simply proceeding through- areas that have no parking. The block will still be noted on your data entry sheet in case any double parking occurs.

Disabled Placards

2. Check for disabled placards and plates, recording the last three digits of the license plate in your data log. If the plate is a disabled plate, also write "dp" at the end in addition to the last three full-size digits.

Parking Occupancy

3. As you walk, make a tick mark for all vehicles on the block that are parked in a legal parking space in the "OCCUPIED" box,
   a. For 2 cars mark , for 8 cars mark 
   b. Mark empty spaces in the "AVAILABLE" box with the same type of tick marks.
   c. Only mark as "occupied" or "available" those spaces that a typical sedan style personal vehicle may legally park in at the exact time of day and day of week that you are surveying the location. Where meters are located, these are spaces with dark gray meters or green meters. **Yellow meters** *allow* general parking during parts of the day, such as ***evenings*** and on ***some weekend days***. Vehicles parked in these spaces during general parking hours, not loading hours, should also be counted because they are legal for personal vehicles. Do not count yellow meters at all during loading hours (not occupied, not available, and not "blocked".)

Temporary No-Parking/"Blocked" Spaces

4. Mark the number of TEMPORARY NO-PARKING spaces in the "BLOCKED" box. This can include spaces that have:
   a. temporary no parking signs
   b. blocked by an object such as a dumpster or construction equipment Make sure to take **note dates and times** of temporary no-parking signs. Many are not available to general parking during daytime hours but are available during evenings. If the sign indicates you can park there after 6pm, count the space as a normal "AVAILABLE" or "OCCUPIED" space during those hours.

Double Parking

5. Vehicles are "double parked" if:
   a. parked in the traffic lane or at least over 2 feet from the curb and partially or fully blocking traffic (car may be idling or have engine off)
   b. AND the vehicle has not moved for more than 30-seconds.
6. To identify double-parked vehicles: When you reach the end of each block, walk into the cross walk (safely) and note if any vehicles are double parked on either side of the block you just walked, and the block you are about to begin. Record any double-parked vehicle license numbers and mark the code for the type of vehicle that is double parked ("cv"= commercial vehicle, "p"= personal vehicle, "g" = government vehicle), noting also whether the vehicle is idling (i=idling), or not idling (ni=not idling). If you cannot read the license number, describe the vehicle. If there are no double parked vehicles, mark an "L" in the "double park" column to confirm that you "looked" to check for double parked vehicles.

Tips:

Data Collecting

- Maintain your focus: This survey involves counting multiple things at one time.
- Accuracy is important, so if you feel you lost track, please double check.
- Be sure to mark the number of cars for each block face.

Disabled Placards

- There are three types of disabled parking permits: red or blue hanging placards, license plates. See the “what to look for section below”. Note that occasionally they may not be hanging from the rear view mirror, but may be placed on the dashboard.

Temporary No Parking/ “Blocked” Spaces

- There are several things to keep an eye out for this:
    a. No parking signs on parking meter poles or saw horses with blinking lights
    b. Note the two types of temporary “no parking” signs – one looks like a paper version of a normal “no parking” sign, and the other is a diamond, with text in orange
    c. Look for objects blocking normal parking spaces such as dumpsters or construction equipment
    d. Make sure to only mark these spaces if parking is unavailable at the time you pass (note dates and hours) and that it is for a metered space.

Double Parking

- There will not likely be double parked vehicles on every block, so don’t forget to keep looking! Look for double parked vehicles systematically, checking at the end of each block, and marking “L” when you see no cars.

Problems/Contact:

- If someone asks what you are doing, let them know you are working on a time-sensitive survey, collecting non-identifying information. If they press for more information, give them the business card of your field supervisor.
- Call your field supervisor whenever you see a problem along your route, are unsure how to proceed, or have questions.

What to look for:

Counting total number of spaces

Count cars in marked spaces with parking meters. Count a space as occupied only if a vehicle is in the space as you walk past it. The blue car on right is not “parked” fully so you would count it as an “available” space.

Disabled Placards

Disabled placards and license plates can look like this:

Sometimes the placard may be placed on the dashboard and not hung from the rearview mirror.

Record the last three digits of the license plate of all disabled permit and double parked vehicles:

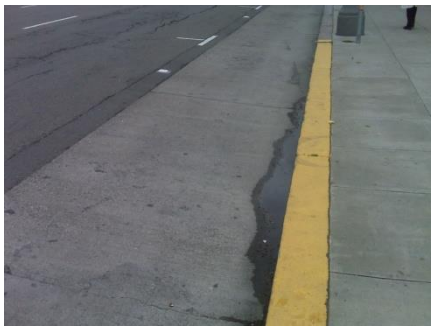
Only count placards/plates at legal parking spaces, not at *red zones or near hydrants*

Do NOT count vehicles in blue zones.

Do NOT count Vanpool spots.

To know if some spots are legal, you'll have to pay attention to signage:

Yellow and White curb zones are not legal to park in unless it is outside of posted hours.



DO count vehicles in green zones.

DO count meters, even if they are broken.

Double Parked Vehicles

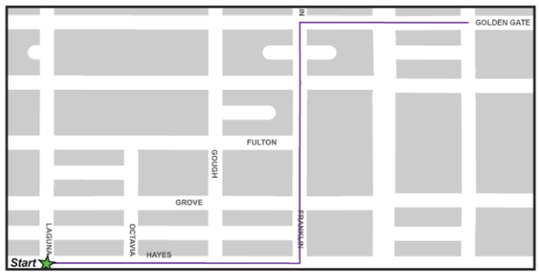
A double parked delivery truck is shown below, left (marked by an“X”):

SFpark **Civic Center**

cv = commercial vehicle p = personal vehicle

g = government vehicle i / ni = idling / not idling

L = looked



Street	Cross Streets	Disabled	Double
HAYES	Laguna & Octavia		
north			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FRANKLIN	Hayes & Grove		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
HAYES	Octavia & Gough		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FRANKLIN	Grove & Fulton		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
HAYES	Gough & Franklin		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FRANKLIN	Fulton & McAllister		
Occupied			
Available			
Blocked			

DP-DP

Comments (note location)

Name & Date

8-9am 9-10am 12-1pm 1-2pm

4-5pm 5-6pm 8-9pm 9-10pm

SFpark **Union**

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

3

Name & Date

cv = commercial vehicle p = personal vehicle
g = government vehicle i / ni = idling / not idling
L = looked

Street	Cross Streets	Disabled	Double
UNION	Octavia & Laguna		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Laguna & Buchanan		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Webster & Fillmore		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Buchanan & Webster		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Fillmore & Steiner		
Occupied			
Available			
Blocked			

Comments (note location)

DP-DP

SFpark **Civic Center**

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

2

Name & Date

cv = commercial vehicle p = personal vehicle
g = government vehicle i / ni = idling / not idling
L = looked

Street	Cross Streets	Disabled	Double
FRANKLIN	McAllister & Golden Gate		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
GOLDEN GATE	Franklin & Van Ness		
north			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
GOLDEN GATE	Van Ness & Franklin		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
GOLDEN GATE	Van Ness & Polk		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FRANKLIN	Golden Gate & McAllister		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
GOLDEN GATE	Polk & Van Ness		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FRANKLIN	McAllister & Fulton		
Occupied			
Available			
Blocked			

Comments (note location)

DP-DP

Street	Cross Streets	Disabled	Double
FRANKLIN	Fulton & Grove		
Occupied			
Available			
Blocked			

SFpark **Civic Center** 3

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

Name & Date

cv = commercial vehicle p = personal vehicle
g = government vehicle i / ni = idling / not idling
L = looked

Street	Cross Streets	Disabled	Double
FRANKLIN	Grove & Hayes		
Occupied			
Available			
Blocked			

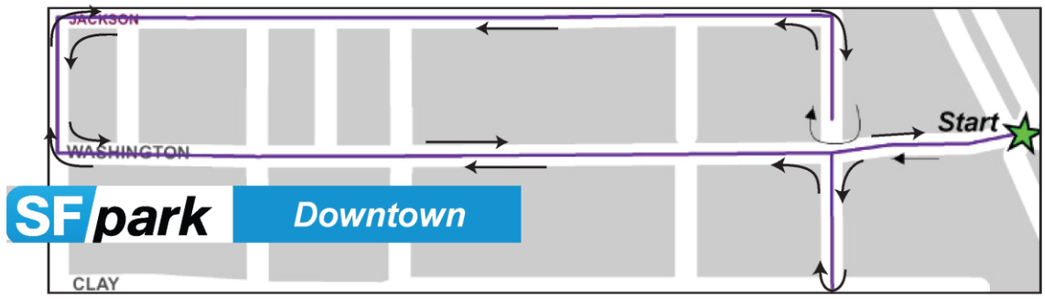
Street	Cross Streets	Disabled	Double
HAYES	Octavia & Laguna		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
HAYES	Franklin & Gough		
south			
Occupied			
Available			
Blocked			

Comments (note location)

Street	Cross Streets	Disabled	Double
HAYES	Gough & Octavia		
Occupied			
Available			
Blocked			

DP-DP



Street	Cross Streets	Disabled	Double
WASHING.	Embarcadero & Drumm		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Drumm & Davis		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
DRUMM	Washington & Clay		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Davis & Front		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
DRUMM	Clay & Washington		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Front & Battery		
Occupied			
Available			
Blocked			

Comments (note location)

Name & Date

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

DP-DP

cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

SFpark **Downtown**

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

2

Name & Date

Street	Cross Streets	Disabled	Double
WASHING.	Battery & Sansome		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Sansome & Montgomery		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
MONTGO.	Washington & Jackson		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
JACKSON	Montgomery & Sansome		
north			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
JACKSON	Sansome & Battery		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
JACKSON	Battery & Front		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
JACKSON	Front & Davis		
Occupied			
Available			
Blocked			

Comments (note location)

DP-DP

cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

Street	Cross Streets	Disabled	Double
JACKSON	Davis & Drumm		
Occupied			
Available			
Blocked			

SFpark **Downtown**

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

3

Name & Date

cv = commercial vehicle p = personal vehicle
g = government vehicle i / ni = idling / not idling
L = looked

Street	Cross Streets	Disabled	Double
DRUMM	Jackson & Washington		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
JACKSON	Davis & Front		
Occupied			
Available			
JACKSON			
Blocked			

Street	Cross Streets	Disabled	Double
DRUMM	Washington & Jackson		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
	Front & Battery		
Occupied			
Available			
JACKSON			
Blocked			

Street	Cross Streets	Disabled	Double
JACKSON	Drumm & Davis		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
	Battery & Sansome		
Occupied			
Available			
Blocked			

DP-DP

Comments (note location)

SFpark **Downtown**

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

4
DP-DP

Name & Date

Street	Cross Streets	Disabled	Double
JACKSON	Sansome & Montgomery		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
MONTGO.	Jackson & Washington		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Montgomery & Sansome		
north			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Sansome & Battery		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Battery & Front		
Occupied			
Available			
Blocked			

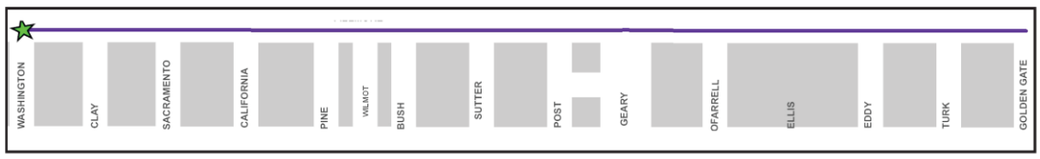
Street	Cross Streets	Disabled	Double
WASHING.	Front & Davis		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Davis & Drumm		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Drumm & Embarcadero		
Occupied			
Available			
Blocked			

cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

comments can be made on the back



SFpark **Fillmore** DP-DP

Street	Cross Streets	Disabled	Double
FILLMORE	Washington & Clay		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	California & Pine		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Clay & Sacramento		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Pine & Bush		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Sacramento & California		
Occupied			
Available			
Blocked			

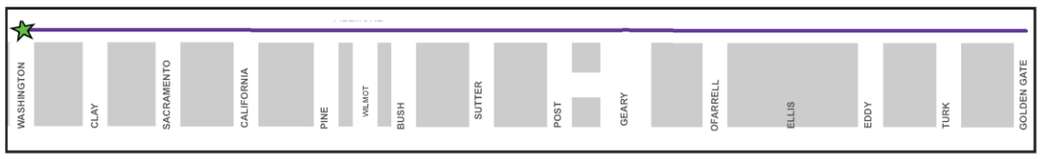
Street	Cross Streets	Disabled	Double
FILLMORE	Bush & Sutter		
Occupied			
Available			
Blocked			

Comments (note location)

Name & Date

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

cv = commercial vehicle p = personal vehicle
g = government vehicle i / ni = idling / not idling
L = looked



SFpark **Fillmore** DP-DP

Street	Cross Streets	Disabled	Double
FILLMORE	Washington & Clay		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	California & Pine		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Clay & Sacramento		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Pine & Bush		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Sacramento & California		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Bush & Sutter		
Occupied			
Available			
Blocked			

Comments (note location)

Name & Date

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

SFpark **Fillmore**

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

3
DP-DP

Name & Date

cv = commercial vehicle p = personal vehicle
g = government vehicle i / ni = idling / not idling
L = looked

Street	Cross Streets	Disabled	Double
FILLMORE	Golden Gate & Turk		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Turk & Eddy		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	O'Farrell & Geary		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Eddy & Ellis		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Geary & Post		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Ellis & O'Farrell		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Post & Sutter		
Occupied			
Available			
Blocked			

Comments (note location)

SFpark **Fillmore**

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

4
DP-DP

Name & Date

Street	Cross Streets	Disabled	Double
FILLMORE	Sutter & Bush		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Bush & Pine		
Occupied			
Available			
Blocked			

cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

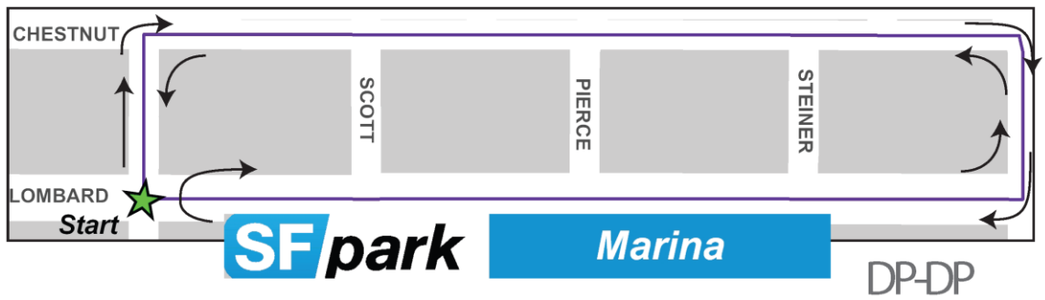
Street	Cross Streets	Disabled	Double
FILLMORE	Pine & California		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Sacramento & Clay		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	California & Sacramento		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Clay & Washington		
Occupied			
Available			
Blocked			

Comments (note location)



Street	Cross Streets	Disabled	Double
DIVIS	Lombard & Chestnut		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CHESTNUT	Pierce & Steiner		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CHESTNUT	Divis. & Scott		
north			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CHESTNUT	Steiner & Fillmore		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CHESTNUT	Scott & Pierce		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Lombard & Chestnut		
east			
Occupied			
Available			
Blocked			

Comments (note location)

Name & Date

8-9am 9-10am 12-1pm 1-2pm

4-5pm 5-6pm 8-9pm 9-10pm

cv = commercial vehicle p = personal vehicle

g = government vehicle i / ni = idling / not idling

L = looked

Street	Cross Streets	Disabled	Double
LOMBARD	Lombard & Fillmore		
south			
Occupied			
Available			
Blocked			

SFpark **Marina**

8-9am 9-10am 12-1pm 1-2pm

4-5pm 5-6pm 8-9pm 9-10pm

2 DP-DP

Name & Date

cv = commercial vehicle p = personal vehicle

g = government vehicle i / ni = idling / not idling

L = looked

Street	Cross Streets	Disabled	Double
LOMBARD	Steiner & Pierce		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
LOMBARD	Divis. & Scott		
north			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
LOMBARD	Pierce. & Scott		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
LOMBARD	Scott & Pierce		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
LOMBARD	Scott & Divis.		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
LOMBARD	Pierce & Steiner		
Occupied			
Available			
Blocked			

Comments (note location)

SFpark **Marina**

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

3 DP-DP

Name & Date

cv = commercial vehicle p = personal vehicle
g = government vehicle i / ni = idling / not idling
L = looked

Street	Cross Streets	Disabled	Double
LOMBARD	Steiner & Fillmore		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
FILLMORE	Lombard & Chestnut		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CHESTNUT	Pierce. & Scott		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CHESTNUT	Fillmore & Steiner		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CHESTNUT	Scott & Divis		
Occupied			
Available			
Blocked			

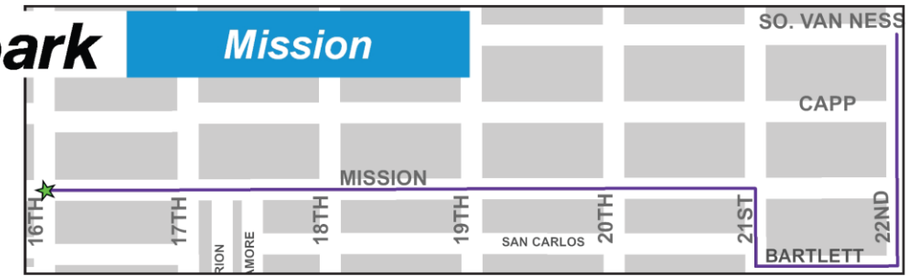
Street	Cross Streets	Disabled	Double
CHESTNUT	Steiner & Pierce		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
DIVIS	Chestnut & Lombard		
east			
Occupied			
Available			
Blocked			

Comments (note location)

SFpark

DP-DP



Street	Cross Streets	Disabled	Double
MISSION	16th & 17th		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
MISSION	19th & 20th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
MISSION	17th & 18th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
MISSION	20th & 21st		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
MISSION	18th & 19th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
21st St.	Mission & Bartlett		
south			
Occupied			
Available			
Blocked			

Comments (note location)

Name & Date

8-9am 9-10am 12-1pm 1-2pm

4-5pm 5-6pm 8-9pm 9-10pm

cv = commercial vehicle p = personal vehicle

g = government vehicle i / ni = idling / not idling

L = looked

SFpark **Mission**

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

2
DP-DP

Name & Date

cv = commercial vehicle p = personal vehicle
g = government vehicle i / ni = idling / not idling
L = looked

Street	Cross Streets	Disabled	Double
BARTLETT	21st & 22nd		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
22nd St.	Bartlett & Mission		
north			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
22nd St.	S. Van Ness & Capp		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
22nd St.	Mission & Capp		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
22nd St.	Capp & Mission		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
22nd St.	Capp & S. Van Ness		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
22nd St.	Mission & Bartlett		
Occupied			
Available			
Blocked			

Comments (note location)

SFpark **Mission**

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

3
DP-DP

Name & Date

cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

Street	Cross Streets	Disabled	Double
BARTLETT	22nd & 21st		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
21st St.	Bartlett & Mission		
north			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
MISSION	19th & 18th		
Occupied			
Available			
Blocked			

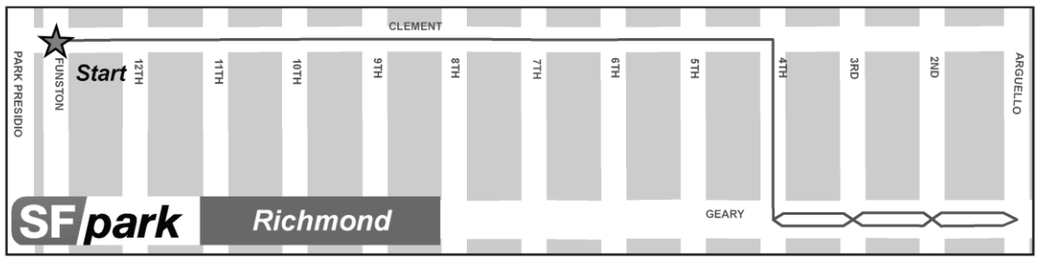
Street	Cross Streets	Disabled	Double
MISSION	21st & 20th		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
MISSION	18th & 17th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
MISSION	20th & 19th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
MISSION	17th & 16th		
Occupied			
Available			
Blocked			

Comments (note location)



Street	Cross Streets	Disabled	Double
CLEMENT	Funston & 12th		
north			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	10th & 9th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	12th & 11th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	9th & 8th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	11th & 10th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	8th & 7th		
Occupied			
Available			
Blocked			

Comments (note location)

DP-DP

Name & Date

8-9am 9-10am 12-1pm 1-2pm

4-5pm 5-6pm 8-9pm 9-10pm

cv = commercial vehicle p = personal vehicle

g = government vehicle i / ni = idling / not idling

L = looked

SFpark **Richmond** 2

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

Name & Date

Street	Cross Streets	Disabled	Double
CLEMENT	7th & 6th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	6th & 5th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	5th & 4th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
4TH	Clement & Geary		
east	METER ONLY		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
GEARY	4th & 3rd		
north			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
GEARY	3rd & 2nd		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
GEARY	2nd & Arguello		
Occupied			
Available			
Blocked			

Comments (note location)

DP-DP

cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

SFpark **Richmond** 3

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

Name & Date

Street	Cross Streets	Disabled	Double
GEARY	Arguello & 2nd		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
GEARY	2nd & 3rd		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
GEARY	3rd & 4th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
4TH	Geary & Clement		
west	METER ONLY		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	4th & 5th		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	5th & 6th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	6th & 7th		
Occupied			
Available			
Blocked			

Comments (note location)

DP-DP

cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

SFpark Richmond

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

4

Name & Date

Street	Cross Streets	Disabled	Double
CLEMENT	7th & 8th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	8th & 9th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	9th & 10th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	10th & 11th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	11th & 12th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
CLEMENT	12th & Funston		
Occupied			
Available			
Blocked			

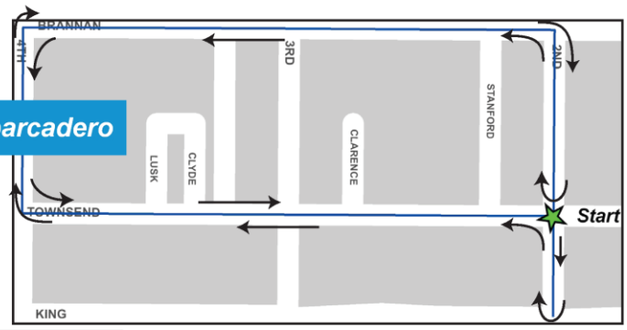
Comments (note location)

DP-DP

cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

SFpark **South Embarcadero**

DP-DP



Street	Cross Streets	Disabled	Double
2ND	Townsend & King		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
TOWNSEND	3rd & 4th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
2ND	King & Townsend		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
4TH	Townsend & Brannan		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
TOWNSEND	2nd & 3rd		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
BRANNAN	4th & 3rd		
north			
Occupied			
Available			
Blocked			

Comments (note location)

Name & Date

8-9am 9-10am 12-1pm 1-2pm

4-5pm 5-6pm 8-9pm 9-10pm

cv = commercial vehicle p = personal vehicle

g = government vehicle i / ni = idling / not idling

L = looked

SFpark South Embarcadero

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

2
DP-DP

Name & Date

Street	Cross Streets	Disabled	Double
BRANNAN	3rd & 2nd		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
2ND	Brannan & Townsend		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
	Townsend & Brannan		
2ND			
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
BRANNAN	2nd & 3rd		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
BRANNAN	3rd & 4th		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
4TH	Brannan & Townsend		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
TOWNSEND	4th & 3rd		
north			
Occupied			
Available			
Blocked			

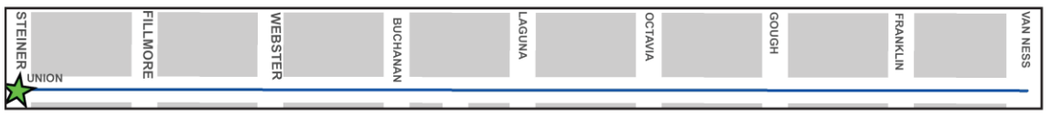
Street	Cross Streets	Disabled	Double
TOWNSEND	3rd & 2nd		
Occupied			
Available			
Blocked			

cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

comments can be made on the back

SFpark Union

DP-DP



Street	Cross Streets	Disabled	Double
UNION	Steiner & Fillmore		
north			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Buchanan & Laguna		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Fillmore & Webster		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Laguna & Octavia		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Webster & Buchanan		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Octavia & Gough		
Occupied			
Available			
Blocked			

Comments (note location)

Name & Date

8-9am 9-10am 12-1pm 1-2pm

4-5pm 5-6pm 8-9pm 9-10pm

cv = commercial vehicle p = personal vehicle

g = government vehicle i / ni = idling / not idling

L = looked

SFpark **Union**

8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

2

Name & Date

cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

Street	Cross Streets	Disabled	Double
UNION	Gough & Franklin		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Franklin & Van Ness		
Occupied			
Available			
Blocked			

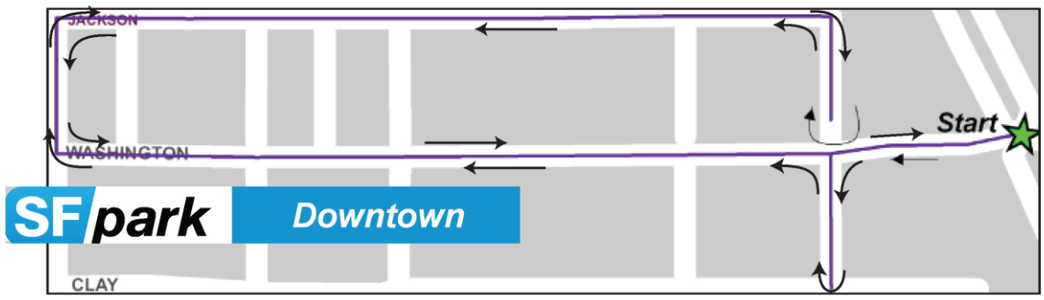
Street	Cross Streets	Disabled	Double
UNION	Franklin & Gough		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Van Ness & Franklin		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
UNION	Gough & Octavia		
Occupied			
Available			
Blocked			

Comments (note location)

DP-DP



Street	Cross Streets	Disabled	Double
WASHING.	Embarcadero & Drumm		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Drumm & Davis		
south			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
DRUMM	Washington & Clay		
east			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Davis & Front		
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
DRUMM	Clay & Washington		
west			
Occupied			
Available			
Blocked			

Street	Cross Streets	Disabled	Double
WASHING.	Front & Battery		
Occupied			
Available			
Blocked			

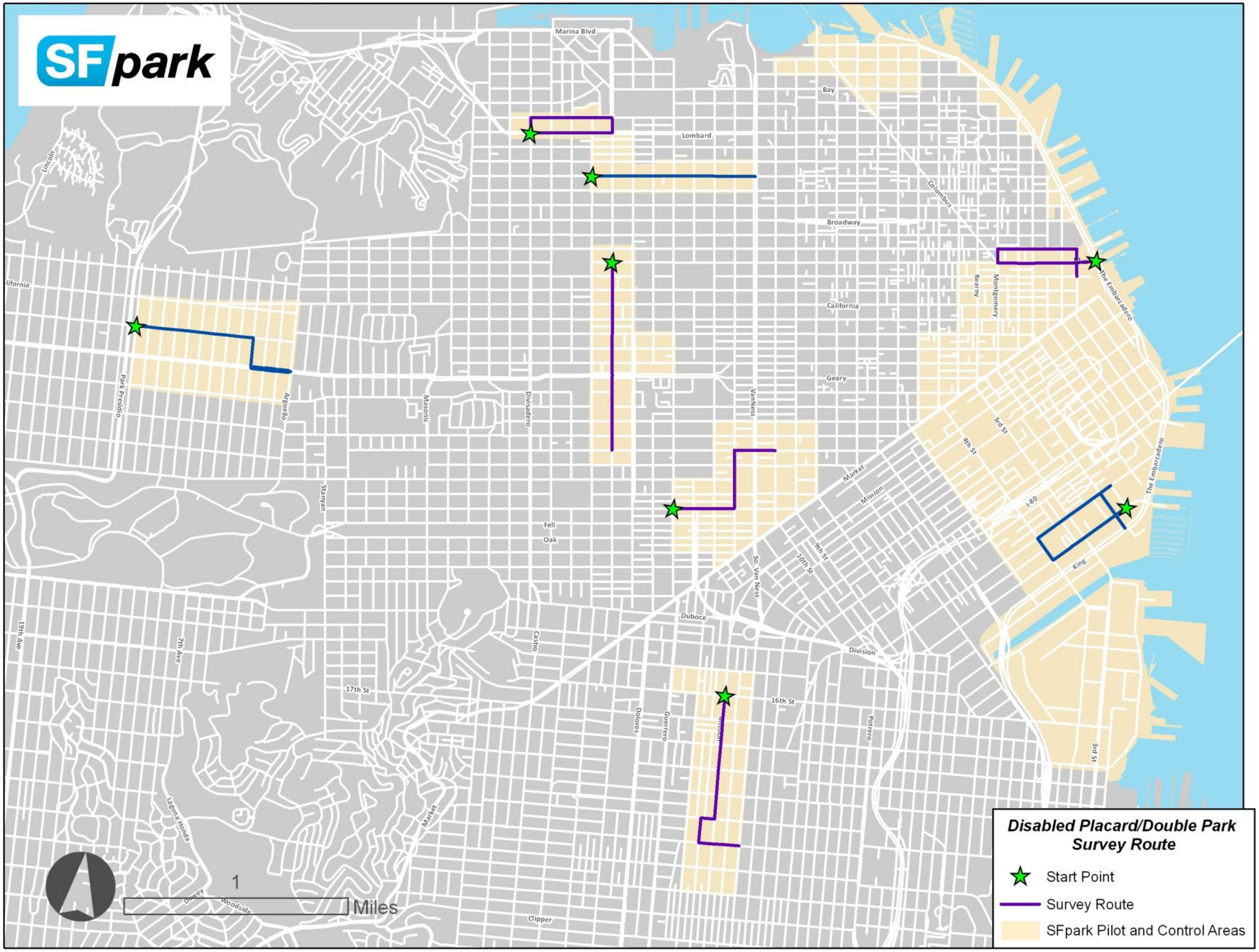
Comments (note location)

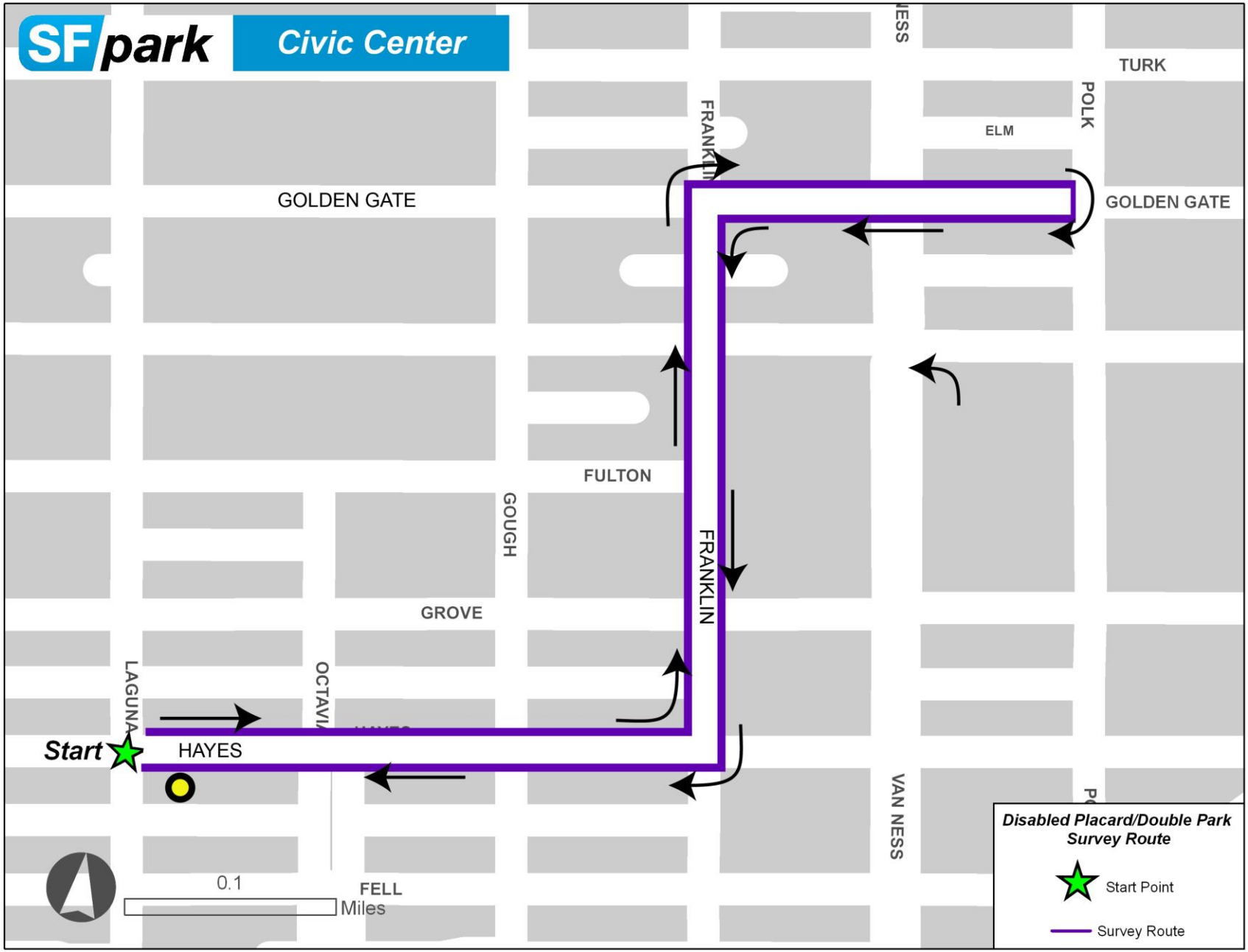
Name & Date

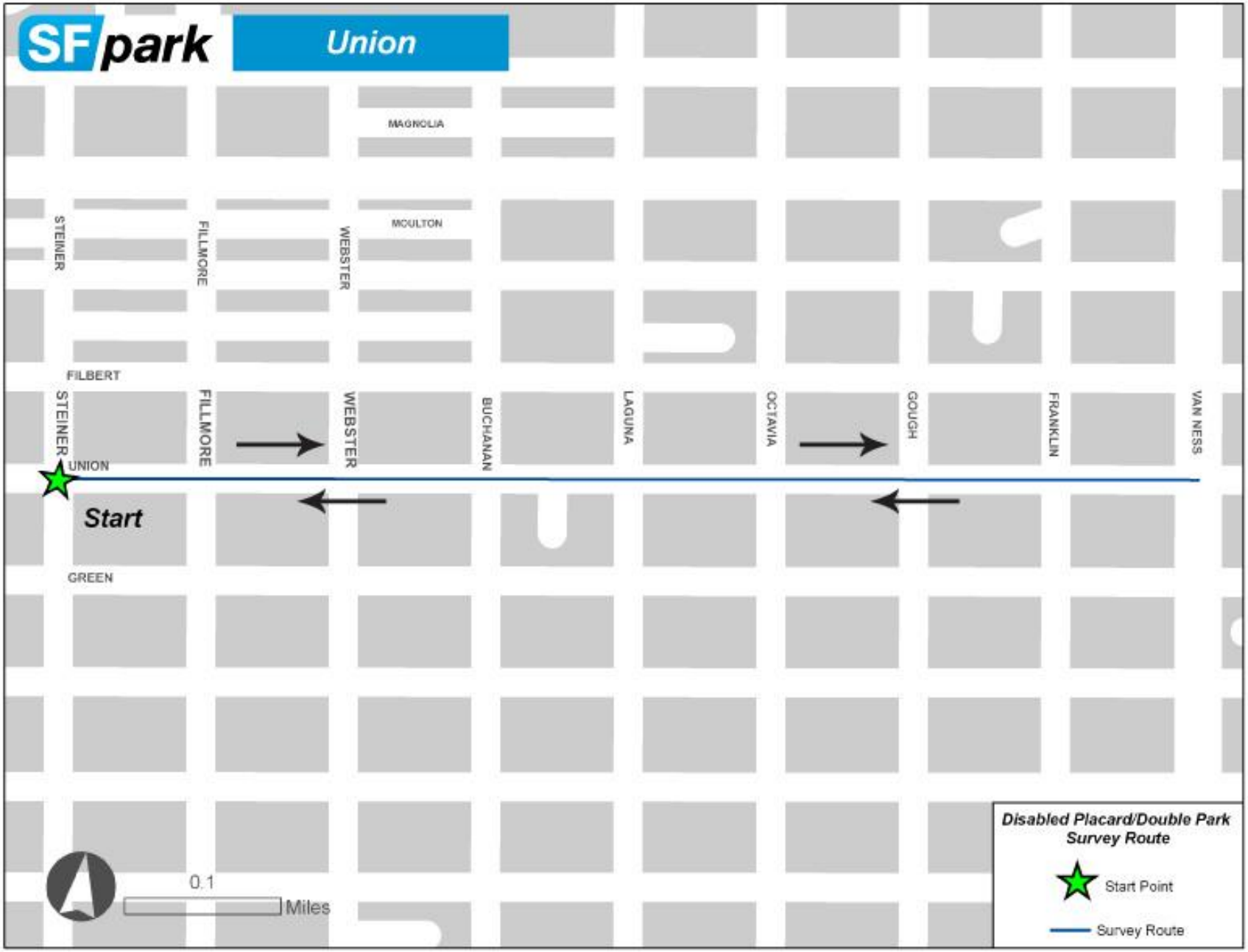
8-9am 9-10am 12-1pm 1-2pm
4-5pm 5-6pm 8-9pm 9-10pm

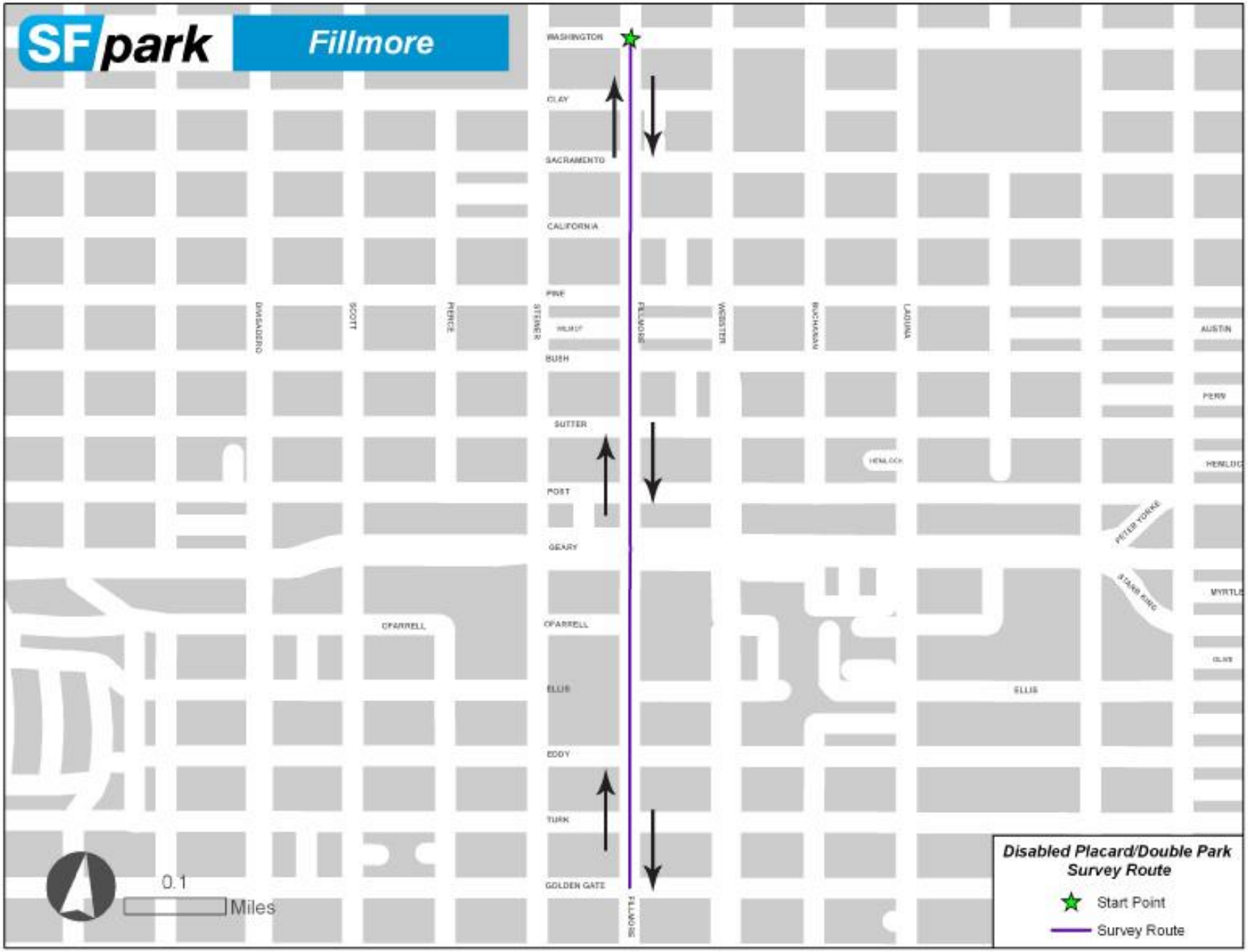
DP-DP

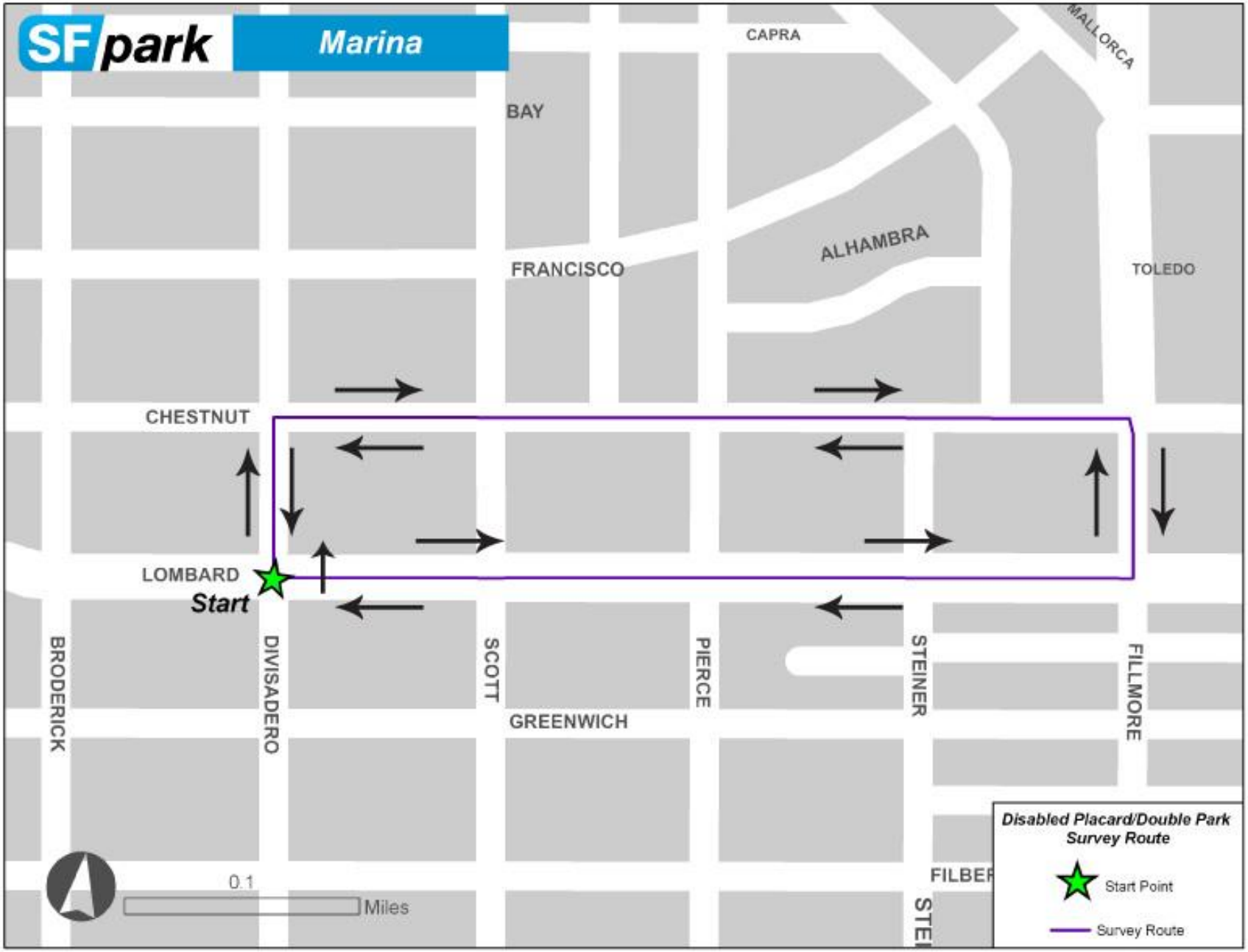
cv = commercial vehicle
p = personal vehicle
g = government vehicle
i / ni = idling / not idling
L = looked

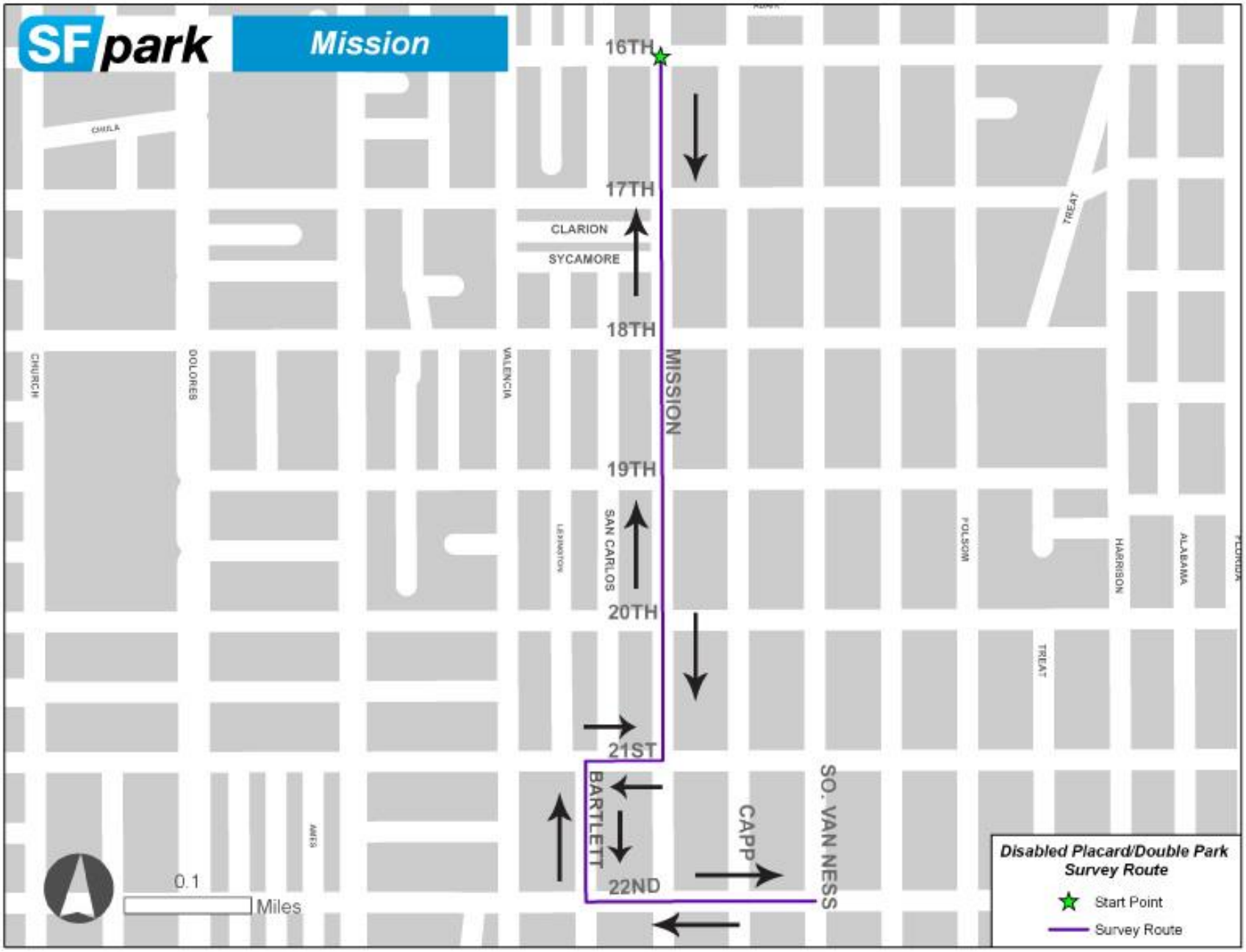

SFpark
Marina Blvd
Bay
Lombard
Lincoln
Columbus
Broadway
Kearny
Montgomery
The Embarcadero
California
Geary
Park Presidio
Arguello
Masonic
Divisadero
VanNess
3rd St
4th St
Market
Mission
I-80
Stanyan
Fell
Oak
9th St
10th St
So. Van Ness
King
Duboce
Division
19th Ave
7th Ave
Castro
17th St
16th St
Dolores
Guerrero
Potrero
Laguna Honda
Market
Clipper
1
Miles
Disabled Placard/Double Park
Survey Route
Start Point
Survey Route
SFpark Pilot and Control Areas

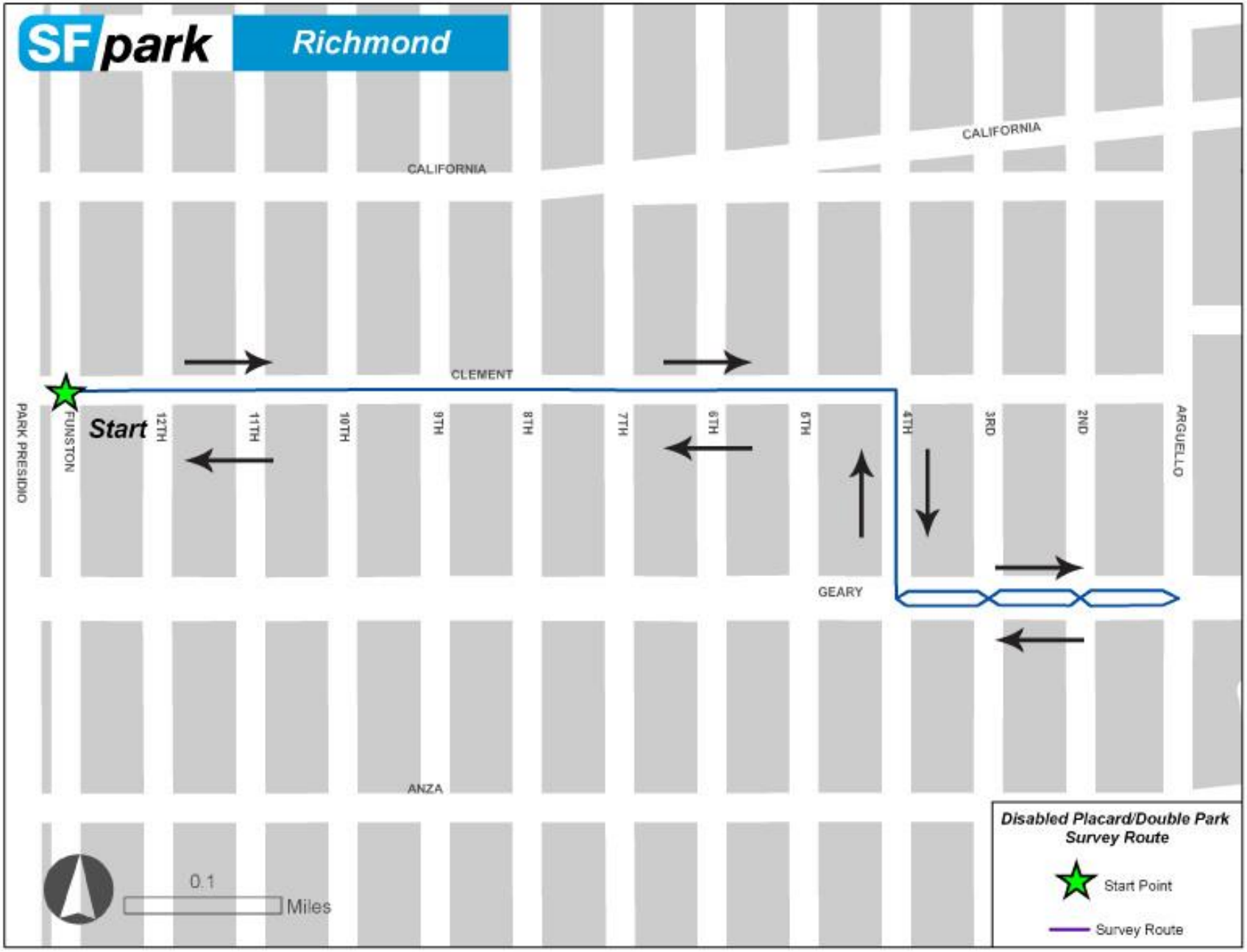

SFpark
Civic Center
TURK
POLK
ELM
FRANKLIN
GOLDEN GATE
GOLDEN GATE
FULTON
GOUGH
FRANKLIN
GROVE
LAGUNA
OCTAVIA
Start
HAYES
VAN NESS
FELL
0.1
Miles
Disabled Placard/Double Park Survey Route
Start Point
Survey Route

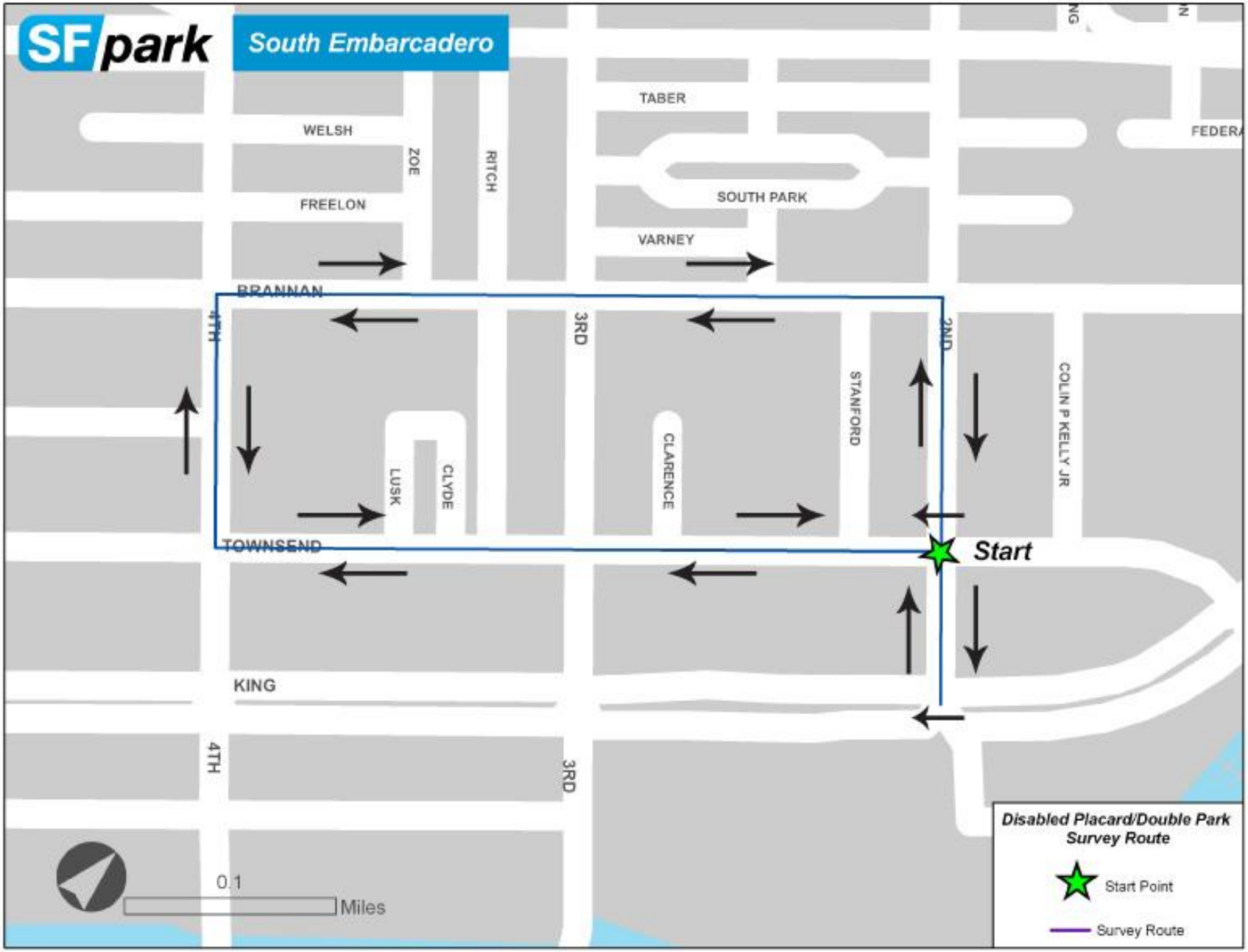

SFpark
Union
MAGNOLIA
MOULTON
STEINER
FILLMORE
WEBSTER
FILBERT
BUCHANAN
LAGUNA
OCTAVIA
GOUGH
FRANKLIN
VAN NESS
UNION
Start
GREEN
0.1
Miles
Disabled Placard/Double Park
Survey Route
Start Point
Survey Route

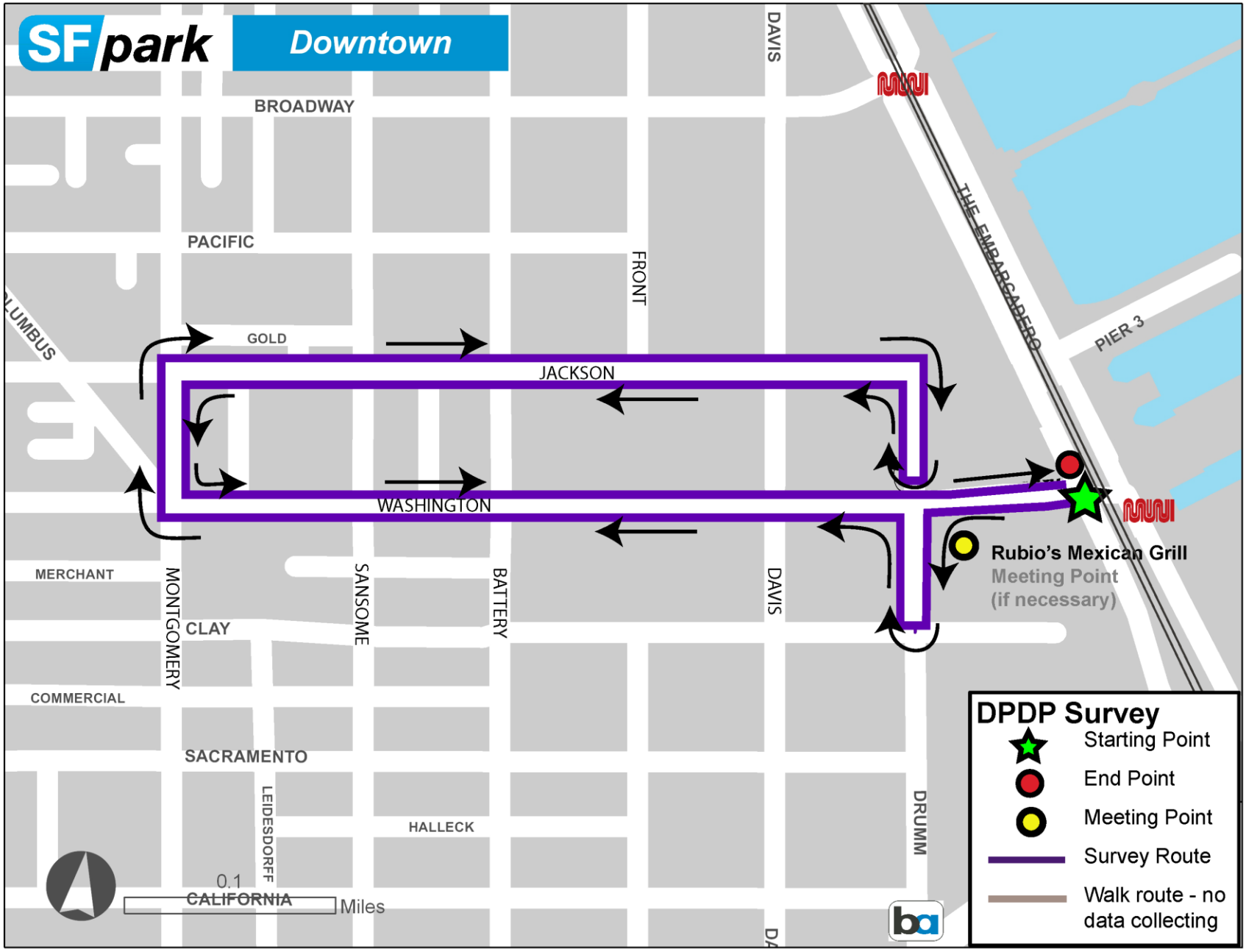

SFpark
Fillmore
WASHINGTON
CLAY
SACRAMENTO
CALIFORNIA
PINE
BUSH
SUTTER
POST
GEARY
O'FARRELL
ELLIS
EDDY
TURK
GOLDEN GATE
DIVISADERO
SCOTT
PIERCE
STEINER
FILLMORE
WEBSTER
BUCHANAN
LAGUNA
AUSTIN
PERRY
HEMLOCK
PETER YORKE
MYRTLE
OLIVE
STARR KING
0.1
Miles
Disabled Placard/Double Park Survey Route
Start Point
Survey Route


SFpark
Marina
CAPRA
MALLORCA
BAY
ALHAMBRA
FRANCISCO
TOLEDO
CHESTNUT
LOMBARD
Start
BRODERICK
DIVISADERO
SCOTT
PIERCE
STEINER
FILLMORE
GREENWICH
FILBER
STE
0.1
Miles
Disabled Placard/Double Park
Survey Route
Start Point
Survey Route


SFpark
Mission
16TH
17TH
CLARION
SYCAMORE
18TH
MISSION
19TH
SAN CARLOS
20TH
21ST
BARTLETT
22ND
CAPP
SO. VAN NESS
CHURCH
DOLORES
VALENCIA
FOLSOM
HARRISON
ALABAMA
TREAT
0.1
Miles
Disabled Placard/Double Park Survey Route
Start Point
Survey Route


SFpark
Richmond
CALIFORNIA
CALIFORNIA
CLEMENT
Start
PARK PRESIDIO
FUNSTON
12TH
11TH
10TH
9TH
8TH
7TH
6TH
6TH
4TH
3RD
2ND
ARGUELLO
GEARY
ANZA
0.1
Miles
Disabled Placard/Double Park
Survey Route
Start Point
Survey Route


SFpark
South Embarcadero
TABER
WELSH
ZOE
RITCH
FREELON
SOUTH PARK
VARNEY
BRANNAN
4TH
3RD
2ND
STANFORD
COLIN P KELLY JR
LUSK
CLYDE
CLARENCE
TOWNSEND
Start
KING
4TH
3RD
0.1
Miles
Disabled Placard/Double Park Survey Route
Start Point
Survey Route


SFpark
Downtown
BROADWAY
PACIFIC
GOLD
JACKSON
WASHINGTON
MERCHANT
CLAY
COMMERCIAL
SACRAMENTO
CALIFORNIA
HALLECK
DAVIS
FRONT
BATTERY
SANSOME
MONTGOMERY
LEIDESDORFF
DRUMM
THE EMBARCADERO
PIER 3
Rubio's Mexican Grill
Meeting Point
(if necessary)
0.1
Miles
DPDP Survey
Starting Point
End Point
Meeting Point
Survey Route
Walk route - no data collecting

Appendix D

Motorcycle Parking Occupancy Survey Materials

Motorcycle Occupancy Survey
Route B

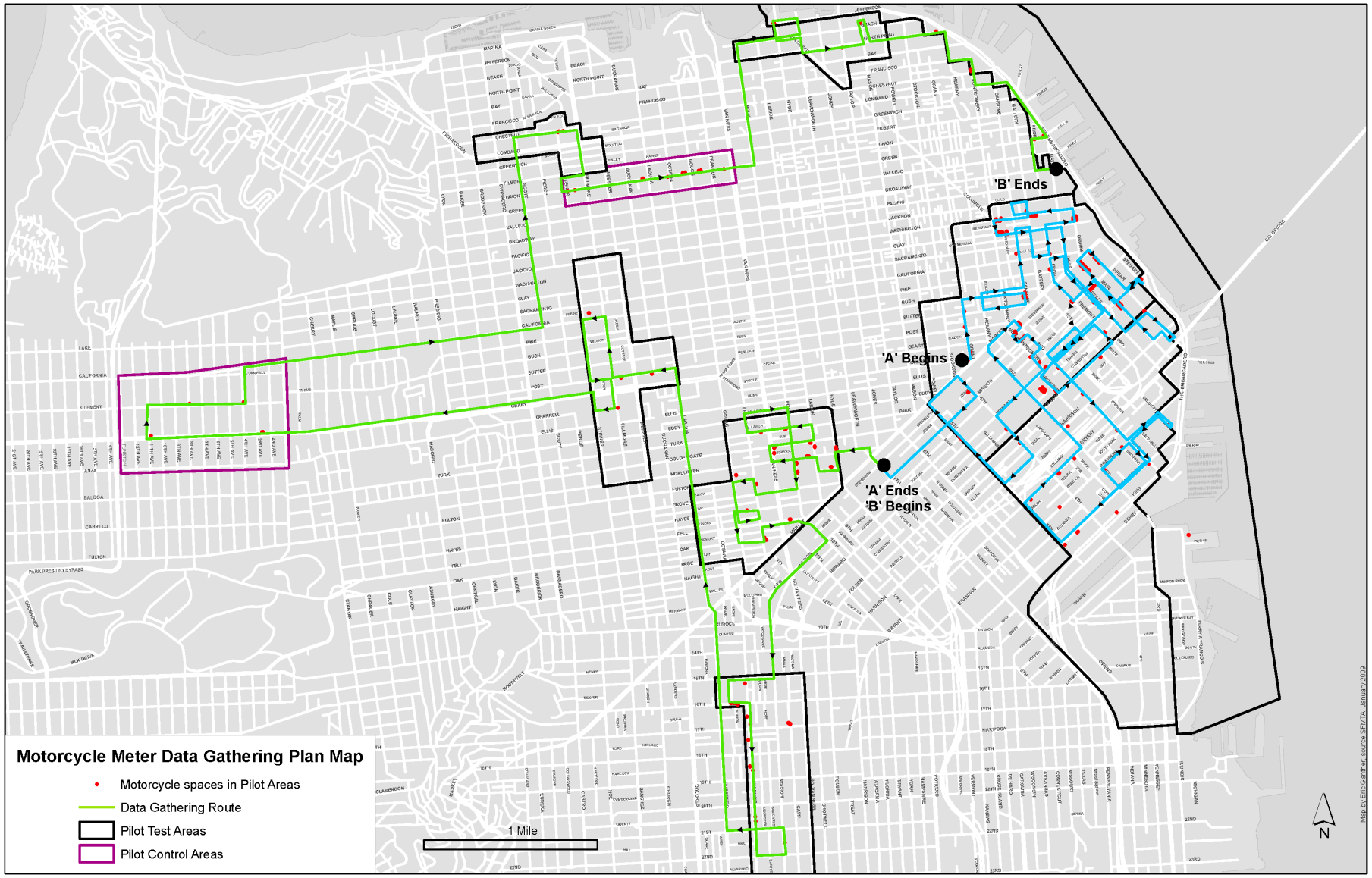
Please note any change in parking supply or other abnormalities off to the side!

Names: _____

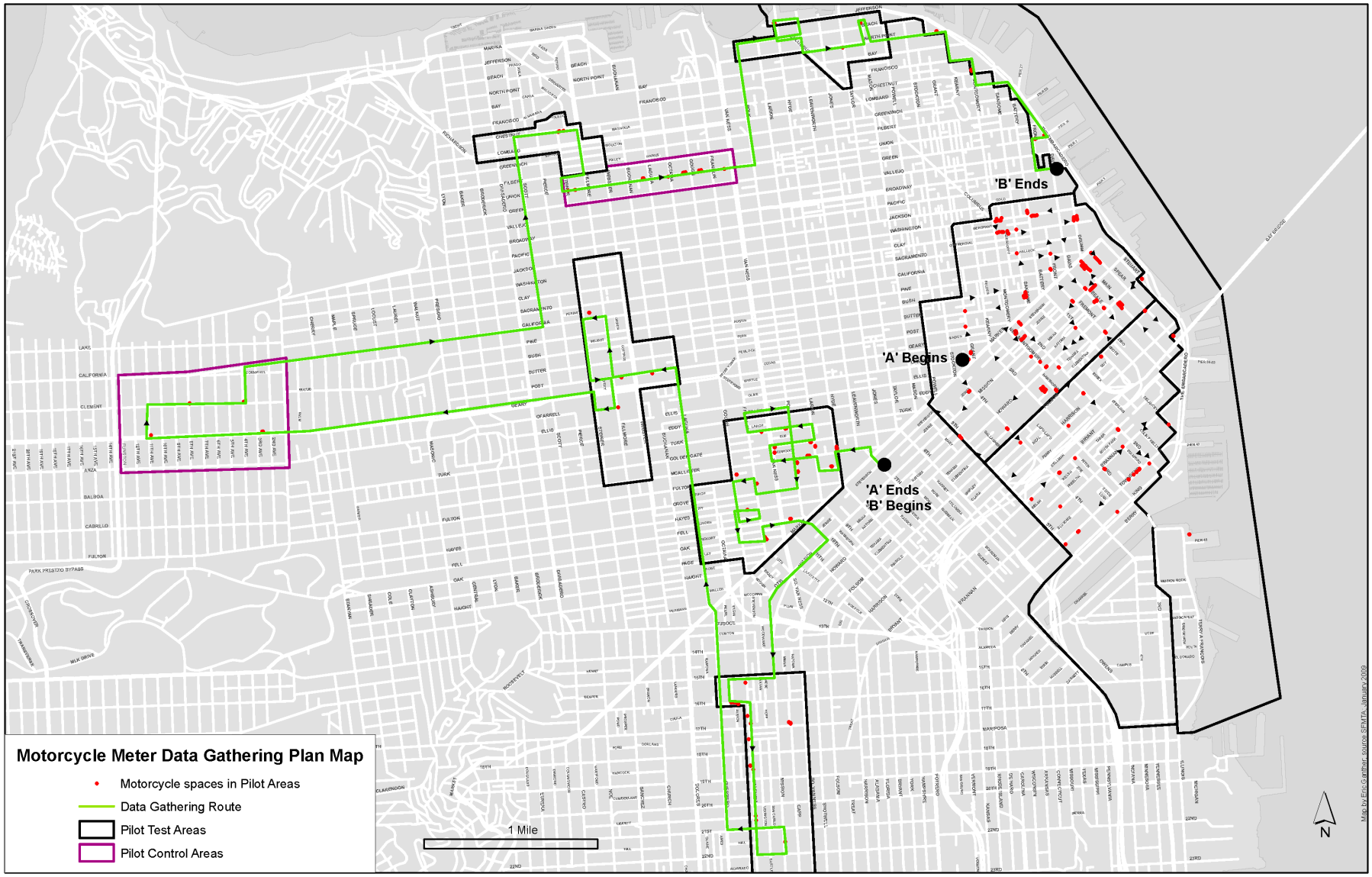
Date: _____

Time: _____

Location	Side of Street	Time Observed	Official Spaces	Full Spaces	Illegally Parked
50 Hyde (@ intersection)	R		30		
120 Fulton	R		3		
320 McAllister	R		13		
540 Van Ness	R		4		
599 Golden Gate	R		2		
401 Golden Gate	R		16		
620 Turk	R		12		
720 Turk	R		6		
298 Polk	L		6		
250 Polk	L		7		
460 Franklin	R		6		
350 Hayes	R		4		
97 Oak	L		3		
98 Oak	R		3		
99 Oak	L		4		
50 Fell	L		12		
420 Valencia	L		12		
3160 16th	R		3		
3150 16th	L		5		
3139 16th	R		6		
550 Valencia	R		2		


'B' Ends
'A' Begins
'A' Ends
'B' Begins
Motorcycle Meter Data Gathering Plan Map
Motorcycle spaces in Pilot Areas
Data Gathering Route
Pilot Test Areas
Pilot Control Areas
1 Mile
N
Map by Eric Gardner source SFMTA, January 2009


Motorcycle Meter Data Gathering Plan Map
Motorcycle spaces in Pilot Areas
Data Gathering Route
Pilot Test Areas
Pilot Control Areas
'A' Begins
'A' Ends
'B' Begins
1 Mile
N
JACKSON
WASHINGTON
CLAY
SACRAMENTO
CALIFORNIA
PINE
BUSH
SUTTER
POST
GEARY
OFARRELL
ELLIS
EDDY
TURK
MARKET
MISSION
HOWARD
FOLSOM
HARRISON
BRYANT
BRANNAN
KING
BERRY
4TH
5TH
6TH
7TH
8TH
1ST
2ND
3RD
STEVENSON
JESSIE
MINNA
NATOMA
TEHAMA
CLEMENTINA
HARRIET
RUSS
MOSS
SHERMAN
COLUMBIA
SHIPLEY
CLARA
LANGTON
RAUSCH
MARY
GALLAGHER
RIZAL
LAPU-LAPU
PERRY
STILLMAN
RITCH
ZOE
WELSH
FREELON
TABER
SOUTH PARK
STANFORD
DOWNING
BLUXOME
LUSK
CLYDE
ESSEX
GUY
ZENO
BROTE
HAWTHORNE
STERLING
DELANCEY
ROLIN P KELLY JR
THE EMBARCADERO
PIER 30-32
PIER 40
BAY BR
VAN NESS
FRANKLIN
POLK
LARKIN
HYDE
LEAVENWORTH
JONES
TAYLOR
MASON
POWELL
STOCKTON
GRANT
KEARNY
MONTGOMERY
SANSOME
BATTERY
FRONT
DAVIS
DRUMM
BEALE
MAIN
SPEAR
STEUART
FREMONT
NEW MONTGOMERY
MERCHANT
COMMERCIAL
HALLECK
BELDEN
MAIDEN
AUSTIN
FERN
HEMLOCK
CEDAR
MYRTLE
OLIVE
WILLOW
LARCH
ELM
REDWOOD
PETER YORKE
STARR KING
Map by EnvS-Gantner source SFMTA, January 2009


'B' Ends
'A' Begins
'A' Ends
'B' Begins
Motorcycle Meter Data Gathering Plan Map
Motorcycle spaces in Pilot Areas
Data Gathering Route
Pilot Test Areas
Pilot Control Areas
1 Mile
N
Map by Eric Gaither, source SFMTA, January 2009

Appendix E

Residential Spillover Parking (RSP) Survey Materials

Residential Parking Permit (RPP) Spillover Survey

Practical Instructions

SFpark

The Residential Parking Permit (RPP) Spillover Survey is meant to better understand parking demand in residential areas near busy commercial corridors. There are four specific characteristics that we'll be capturing in this survey:

1) *Parking space occupancy (Is a vehicle in the space or not)*
2) *Parking turnover (How often does the vehicle change in that space)*
3) *Do parked vehicles have a valid RPP Permit (and for what zone?)*
4) *Is a vehicle blocking an driveway (curb cut)*

Please review and refer to the detailed instructions below.

Your field supervisor in the AM is Brian Stokle at: 415-646-5000
in the PM: Paul Supawanich at 678-612-2327

Date: Saturday November 6th, 2010 Surveyor name: _____.

Shift (circle): *8AM-10AM* *12PM-2PM* *4PM-6PM* *8PM-10PM*

Route (circle): *Mission* *Marina* *Richmond* *Union*

What you'll need:

Data collection sheets, clipboard, pencil, business cards of field supervisor. If you're working an 8PM-10PM shift, you will also need a flashlight and your partner (evening shift will be conducted in pairs)

Methods:

1. **Before** starting the survey – be sure to make sure you place your name, date, shift, and any other requested information on all of the data sheets. This is very important and is easy to forget!

2. You should have a few moments before your shift begins, so please review the provided route sheet to familiarize yourself with the study area and note the side of each street where you should be surveying.

3. When your shift begins, you and your partner should follow the designated route and pay attention to **parked vehicles** or **other items occupying parking spots** (this includes dumpsters, construction restrictions, or other) – see below for more info. These are considered occupied spaces. **Do not** survey spaces that contain parking meters.

   If a parking space is occupied, you will record the following data on the data entry sheet. A snapshot of the data entry sheet is found below.

Block **1**			
Plate #	RPP	BD	Notes

Plate#: *write down the LAST four digits of the license plate (WRITE LEGIBLY)*
RPP[1]: *If the vehicle has a valid permit for your respective survey area zone, please circle the letter*

[1] Note! A Valid RPP permit is one that is a San Francisco RPP Permit that is currently valid. (valid in October 2010 onward)

of that RPP zone, if it is from another zone, write in the letter of that zone.
***BD:** indicates if the vehicle or object blocks a driveway (note with an "X). More info on blocked driveways below.*
***Notes:** write down any anomalies or other considerations*

If spaces are blocked due to temporary no parking signs, construction, or otherwise, please note that in the Plate # or Notes field. Feel free to use additional space if necessary to describe the situation. It is likely there will be oddities along your route – so please use the notes field as much as necessary.

4. Once you complete a block face, move onto the next section of your data collection sheet. Each section should be labeled with the appropriate street and street segments. **Be sure that you're on the correct side of the street**

5. Once completed with your route, please review your data to ensure legibility and that all blocks were covered. At this time, return to the start point to complete another route or take a break if you have ample time. When all runs of the survey are complete, be sure to return all provided materials and survey forms within 24 hours of completion of the survey to the Nelson\Nygaard office at 785 Market Street, Floor 13.

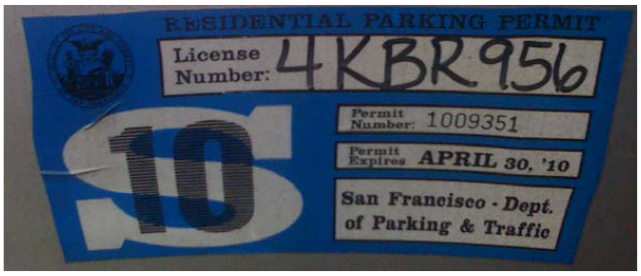
Tips:

- The routes will sometimes require up to two hours each, so please move expediently through your route
- **Blocked driveways** include any on-street vehicle that is functionally blocking access to a driveway. This does not include vehicles parked on the sidewalk. If it is questionable – please provide context in the notes section. If a vehicle is partially blocking a driveway, but access is still possible, this should not be marked as "BD"
- Note motorcycles that are parked on the curb in addition to zones/equipment that take up potentially occupiable space.

Problems/Contact:

- While unlikely, you may run out of spaces on your data collection sheet due to the number of vehicles. If this happens, use the margin below to fill in responses.
- If someone asks what you are doing, tell them you are working on a time-sensitive survey collecting non-identifying information. If they press for more information, simply give them the business card of your field supervisor of that day.

Please see the below examples of San Francisco Residential Parking Permits. However, note that these permits are invalid due to their expiration date
(at left, expires on Feb 18, 2010, and at right, expires April 30, 2010).



Sample RSP Survey Data Collection Form

Surveyor Name: *Enter Name Here*

DATE (circle one) **Sat Nov 6th**

TIME (Circle one) **8AM-10AM** **12PM-2PM** **4PM-6PM** **8PM-10PM**

1) Record last four characters of license plate for each vehicle on specified block
2) For each vehicle, denote vehicle's RPP permit letter (if none, leave blank), if vehicle is blocking a driveway place an "X" under BD
3) If vehicle has no license plate or similar place vehicle description under "Plate #" and describe situation in "Notes"
4) For unoccupied spaces due to construction, dumpsters, etc. - place description under "Plate #" and describe situation in "Notes"

Block 5	**FILBERT** (Webster>Fillmore, N)		
Plate #	RPP	BD	Notes
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		

Block 7	**FILBERT** (Steiner>Pierce,N)		
Plate #	RPP	BD	Notes
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		

Block 6	**FILBERT** (Fillmore>Steiner, N)		
Plate #	RPP	BD	Notes
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
	K		
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Block 8	**FILBERT** (Pierce>Scott, N)		
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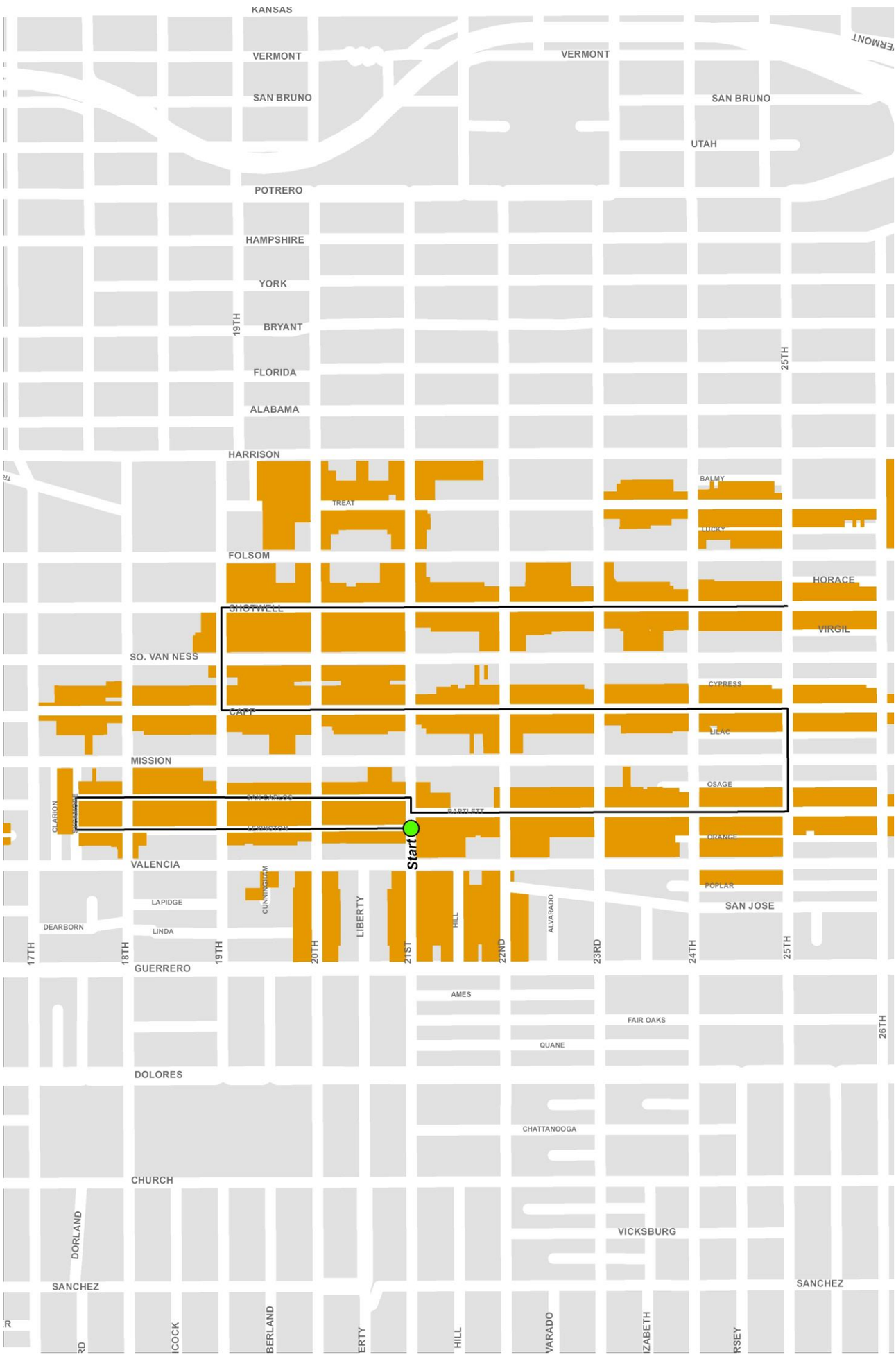
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SAN BRUNO
POTRERO
HAMPSHIRE
YORK
BRYANT
FLORIDA
ALABAMA
HARRISON
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25TH
TREAT
FOLSOM
HORACE
VIRGIL
SHOTWELL
SO. VAN NESS
CYPRESS
MISSION
OSAGE
BARTLETT
ORANGE
Start
VALENCIA
POPLAR
SAN JOSE
LAPIDGE
DEARBORN
LINDA
CUNNINGHAM
LIBERTY
HILL
ALVARADO
17TH
18TH
19TH
20TH
21ST
22ND
23RD
24TH
25TH
GUERRERO
AMES
FAIR OAKS
QUANE
26TH
DOLORES
CHATTANOOGA
CHURCH
VICKSBURG
SANCHEZ
SANCHEZ

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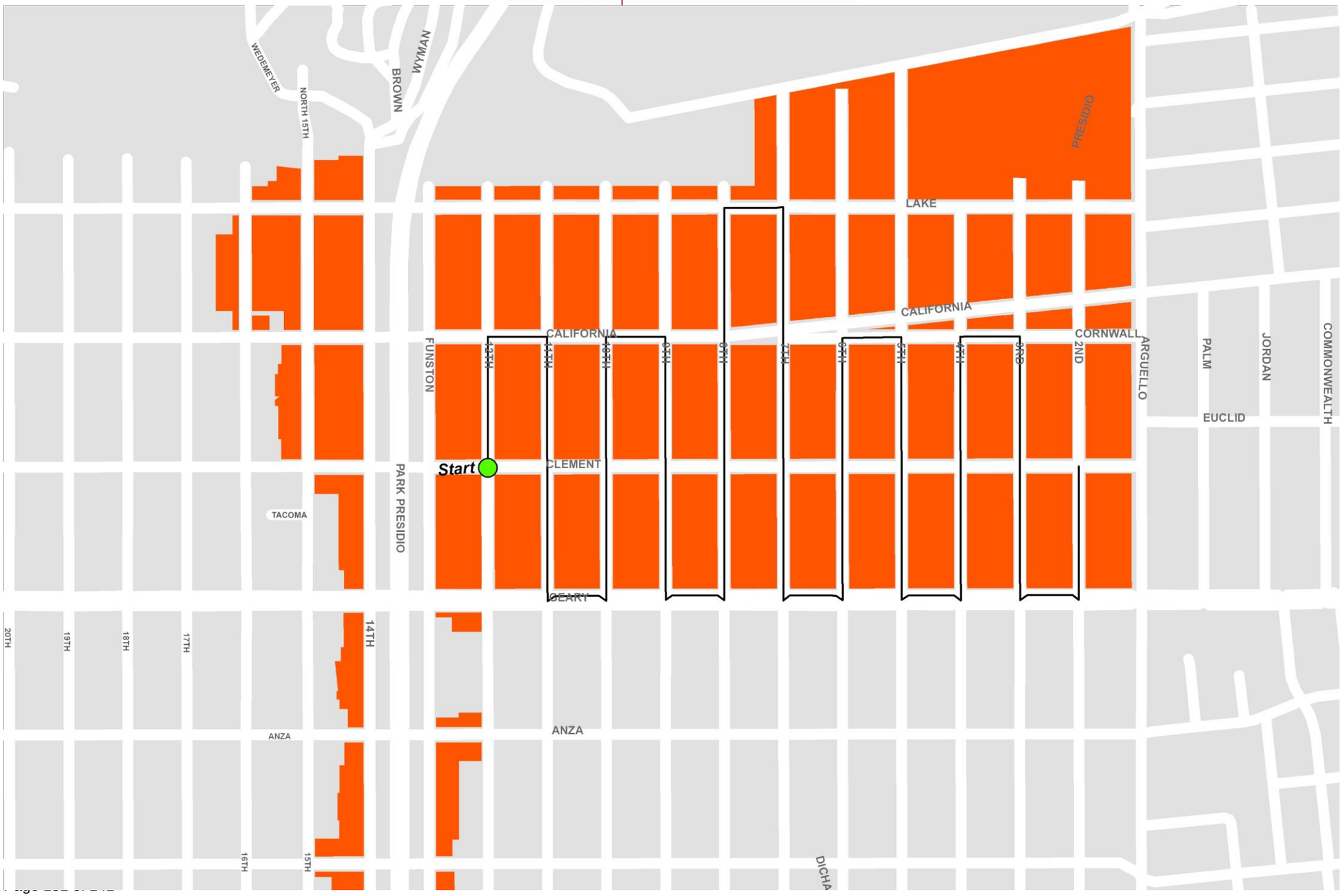

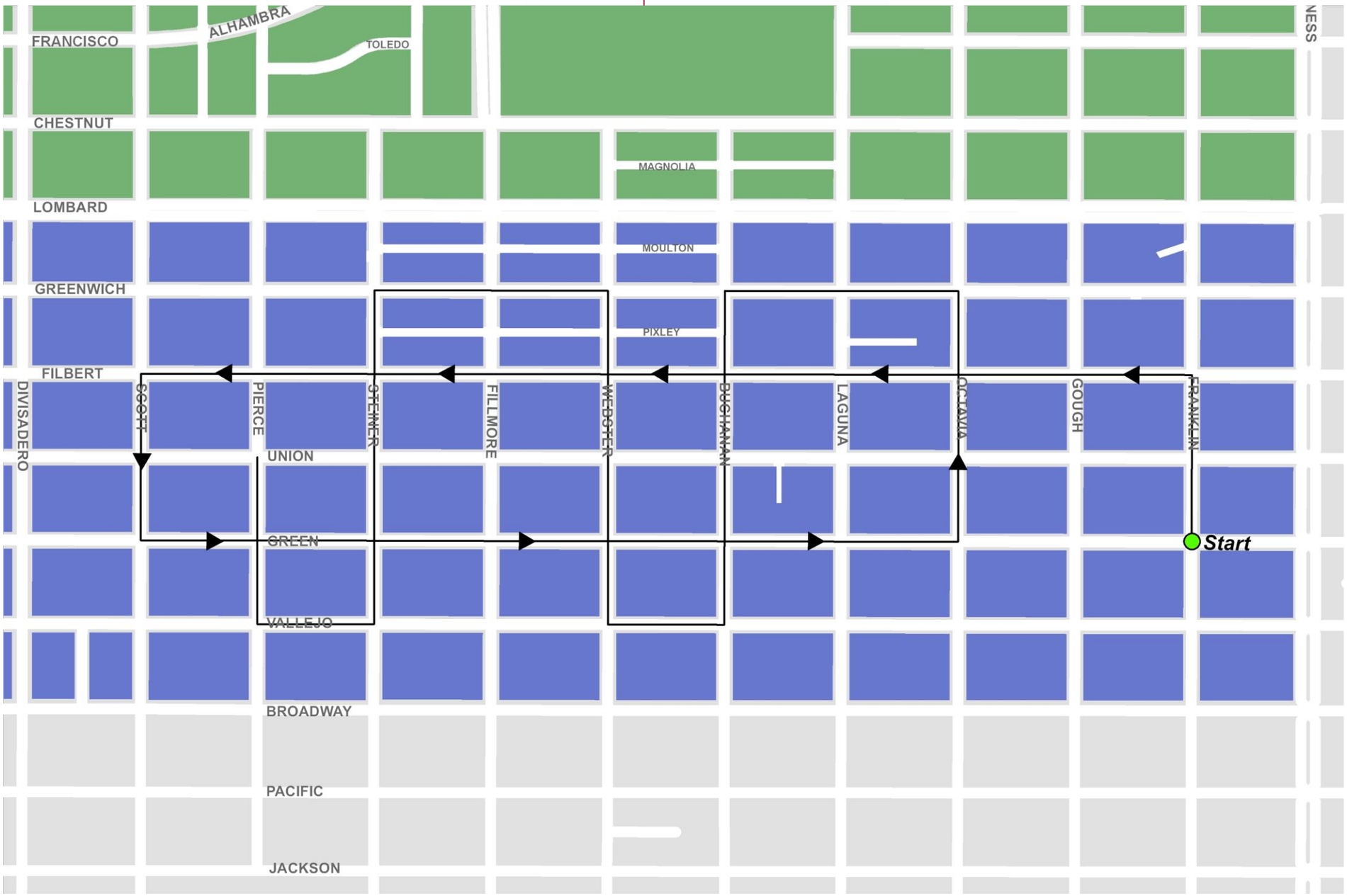
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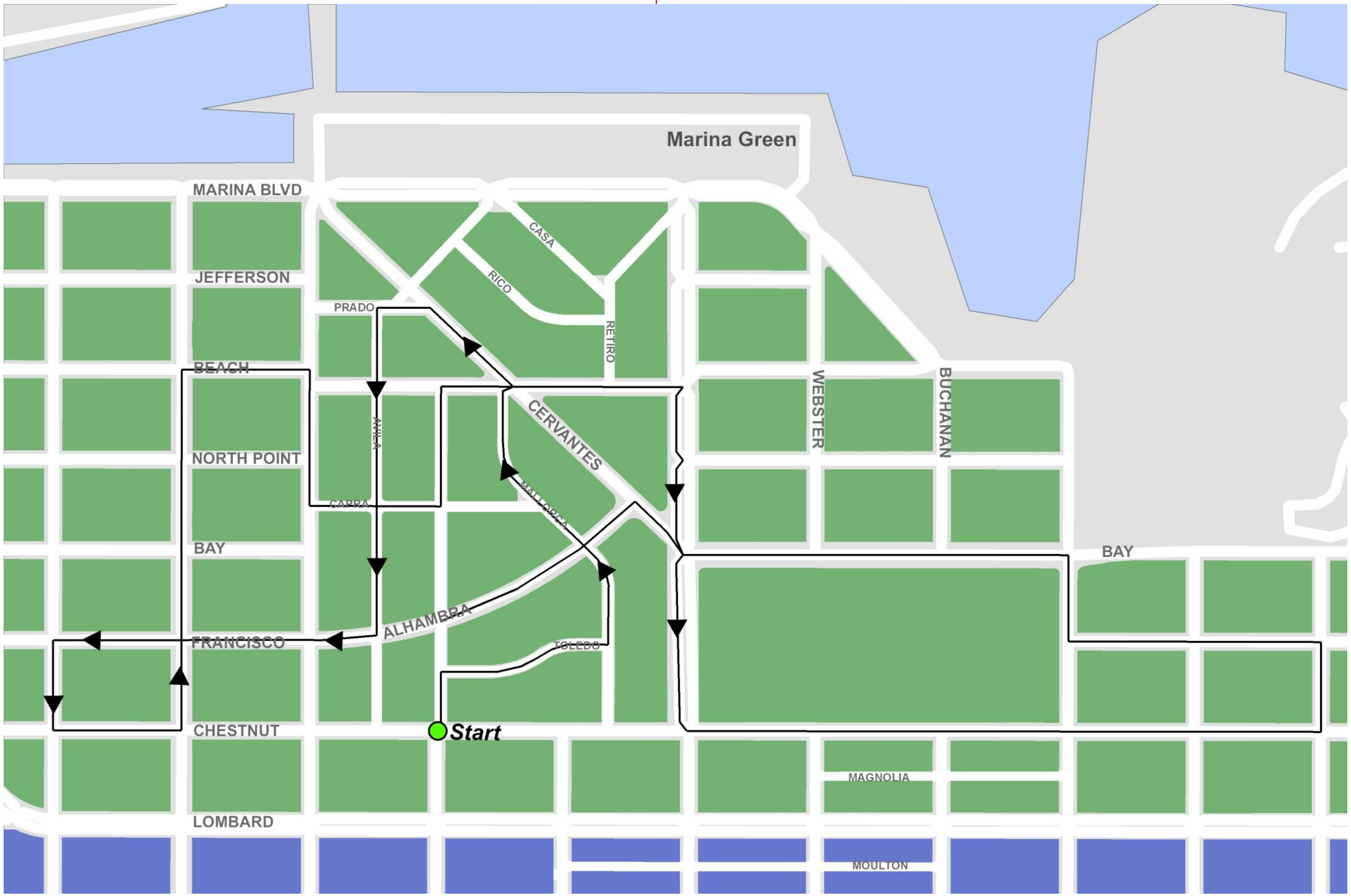
SCOTT
PIERCE
STEINER
FILLMORE
WEBSTER
BUCHANAN
LAGUNA
OCTAVIA
GOUGH
FRANKLIN
UNION
GREEN
VALLEJO
BROADWAY
PACIFIC
JACKSON
Start


Marina Green
MARINA BLVD
JEFFERSON
BEACH
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FRANCISCO
CHESTNUT
LOMBARD
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RICO
RETIRO
AVILA
CAPRA
CERVANTES
MALLORCA
ALHAMBRA
TOLEDO
WEBSTER
BUCHANAN
BAY
MAGNOLIA
MOULTON
Start

Appendix F

New Meter (NM) Survey Materials

New Meter Parking Survey

Practical Instructions

The new meter parking survey is meant to learn about the characteristics of certain parking spaces before new parking meters are installed. There are four specific characteristics that we'll be capturing in this survey:

1) *Parking space occupancy (Is a vehicle in the space or not)*
2) *Parking turnover (How often does the vehicle change in that space)*
3) *What type of space is the vehicle in? (color curb?)*
4) *Is a driveway blocked?*

Please review and refer to the detailed instructions below.

Your field supervisor today is: _____ at _____(cell).

Date: _____ Surveyor name: _____.

Route: _____ Starting Intersection: _____

Shift (circle): *8AM-10AM* *10AM-12PM* *12PM-2PM* *2PM-4PM*
4PM-6PM *6PM-8PM* *8PM-10PM*

What you'll need:

Data collection sheets, clipboard, pencil, business cards of field supervisor, Flashlight (if you're working a shift from 6PM or later), partner (evening shifts will be conducted in groups of two)

Methods:

1. Before starting the survey – be sure to make sure you place your name, date, shift, and any other requested information on all of the data sheets. This is very important and is easy to forget!

2. You should have a few moments before your shift begins, so please review the provided route sheet to familiarize yourself with the study area and note the side of each street of you survey area.

3. When your shift begins, you and your partner should follow designated route and pay attention to

    - **parked vehicles** – and their license plates
    - **driveway and loading docks** – sometimes parked cars block driveways or loading docks
    - **parking regulations** - curb colors and parking signage
    - **other items occupying parking spots** (this includes dumpsters, debris piles or other obstructions
    - **temporary no-parking restrictions** due to construction or events – see below for more info.

c. If less than 50% of curb area is colored then it is UNR, but if more than 50% of paint remains, the regulation is that color. Still note "crusty" whether or not space is UNR or a color.

Problems/Contact:

- If someone asks what you are doing, tell them you are working on a time-sensitive survey collecting non-identifying information. If they press for more information, simply give them the business card of your field supervisor of that day.
- If you are confronted with a dangerous situation, or a dangerous person, use common sense and remove yourself from the situation. You may go away from your study are to reach a safe area if necessary. Once in a safe location, contact your supervisor to inform him of the situation and be given instructions on how to proceed.

In future forms, photos will be added to show examples of "crusty" sidewalks, temporary "no parking" signs, and blocked driveways.

Yellow Zones (includes yellow and red meters)

Green Zones & Meters

Red No Parking Zones

Blue Zones

White Zones

You will record the following information if a parking space **is occupied** by a vehicle. A snapshot of the data entry sheet is found to the right.

11	Street:			Between:	&
12	Type	BD	Const	Plate #	Notes
13	*example: UNR*	BD	Const	*A123*	
14		BD	Const		
15		BD	Const		

Type: *indicate the type of parking space (a general space is considered unregulated) See other color curbs on the back of this sheet.*

BD: *indicates if the vehicle or object blocks a driveway (Circle "BD"). If vehicle is blocking a loading dock, circle "BD" and write "LD" in notes.*

Const: *indicates if a SPACE (occupied or not) is unavailable due to temporary "no parking" restrictions or blocked by an object such as a dumptster, debris, or object (Circle "Constr).*

Plate#: *write down the LAST four digits of the license plate (WRITE LEGIBLY)*

Notes: *write down any anomalies or other considerations. If a space is already metered, not "meter" in the notes section.*

Feel free to use additional space if necessary to describe the situation. It is likely there will be oddities along your route – so please use the notes field as much as necessary.

4. Once you complete a block face, move onto the next section of your data collection sheet. Each section should be labeled with the appropriate street and street segments. Be sure that you're on the correct side of the street.

5. Once completed with your route, please review your data to ensure legibility and that all blocks were covered. At this time, return to the start point to complete another route or take a break if you have ample time. When the survey is complete, be sure to return all provided materials and survey forms within 24 hours of completion of the survey.

Tips:

- For evening shifts, you will be working in pairs. While you can distribute and share tasks, one person (the writer) will focus on writing clearly and legibly, while the other (the reader) collects the relevant information and verbally passes it to the writer.
- The routes will require up to two hours each, so please move expediently through your route
- Blocked driveways include any on-street vehicle that is functionally blocking access to a driveway. Note vehicles parked on the sidewalk as "DP" but note "sidewalk parking" in notes. If it is questionable – please provide context in the notes section.
- DO NOT record motorcycles parked in designated motorcycle parking spaces.
- DO record motorcycles parked on-street in undesignated spaces
    a. In notes section indicate "moto" or "scooter" when observing a motorcycle
    b. Make an additional special note when motorcycles occupy a full auto parking space, including unmarked parallel parking motorcycles
- Colored Curb Parking
    a. Note all colored curb parking by regulation
    b. If curb paint is faded or severely flecked, note the curb as "crusty" + the specific color (e.g. if curb is partially painted in green, write "crusty green" in the notes

Sample New Meter (NM) Survey Data Collection Form

Surveyor Name: *Enter Name Here*

DATE **November** _____

Day of week (circle one) **M Tu W Th F Sat Sun**

TIME (Circle one) **8AM 10AM 12PM 2PM 4PM 6PM 8PM**

INSTRUCTIONS
1) For each parked vehicle, write parking regulation type by color or UNR for normal
2) If vehicle is blocking a driveway circle "BD ", if in loading dock write "LD"
3) If SPACE is blocked by construction or limited by temporary "no parking" during date & hour of your survey, circle "Constr"
4) Record last 4 digits of license # for each vehicle on each block. Note "moto" if motorcycle or scooter si in a normal car space, NOT in a designated motorcycle space
5) If vehicle has no license plate or similar place vehicle description under "Plate #" and describe situation in "Notes"

UNR=unregulated, GRE= green/short term, WHI=white curb, YEL=loading/yellow, BLU=disabled, RED=red curb, MET=meter (note colored meter)

Street:			Between: &	
Type	BD	Const	Plate #	Notes
example: UNR	BD	Const	*A123*	
	BD	Const		
	BD	Const		
	BD	Const		
	BD	Const		
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	BD	Const		

Street:			Between: &	
Type	BD	Const	Plate #	Notes
example: GRE	BD	Const	*Toyota*	*Green Prius*
	BD	Const		
	BD	Const		
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	BD	Const		

Street:			Between: &	
Type	BD	Const	Plate #	Notes
example: GRE	BD	Const		*dumpster*
	BD	Const		
	BD	Const		
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	BD	Const		
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	BD	Const		

Street:			Between: &	
Type	BD	Const	Plate #	Notes
example: WHI	BD	Const	*Z789*	*Hotel*
	BD	Const		
	BD	Const		
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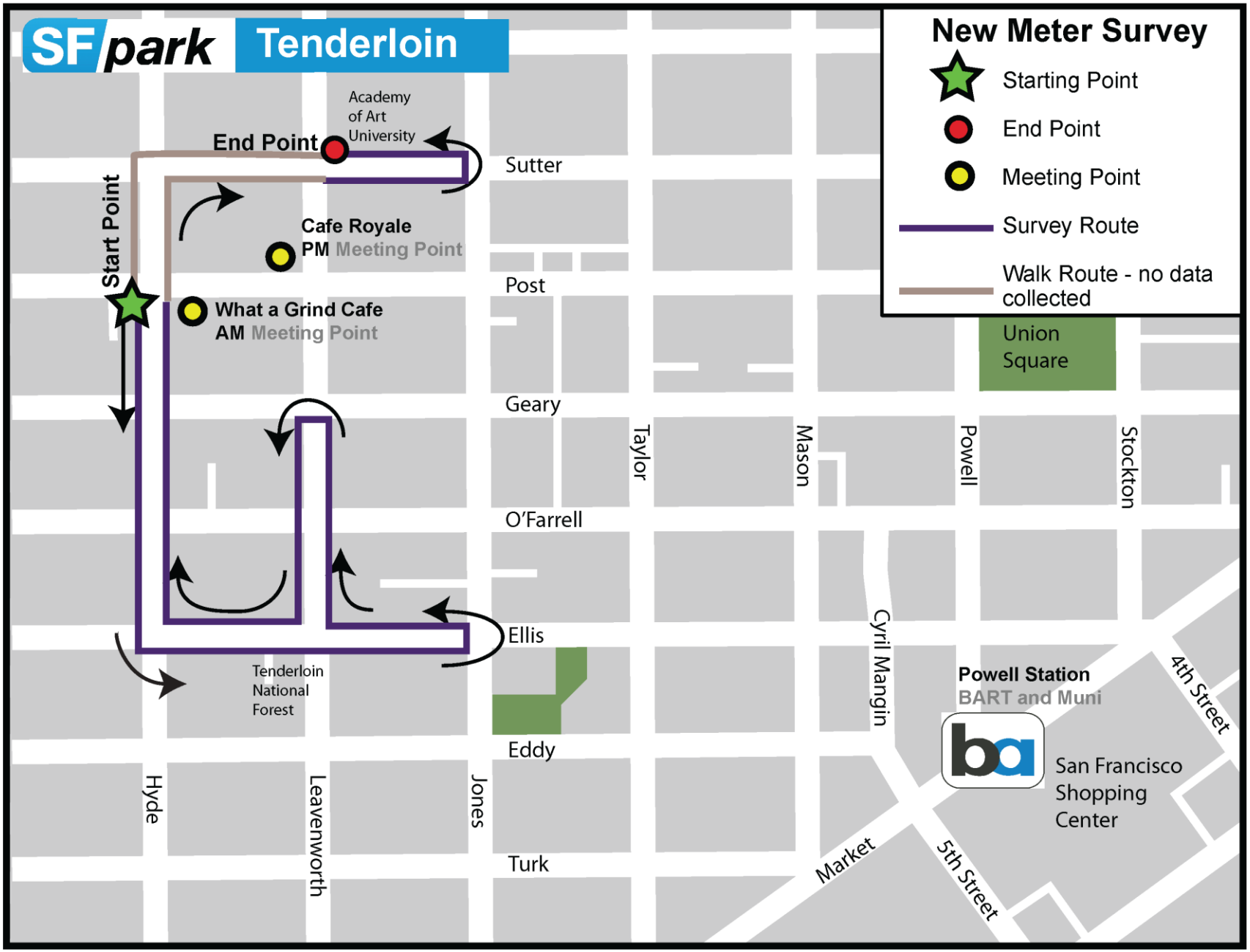
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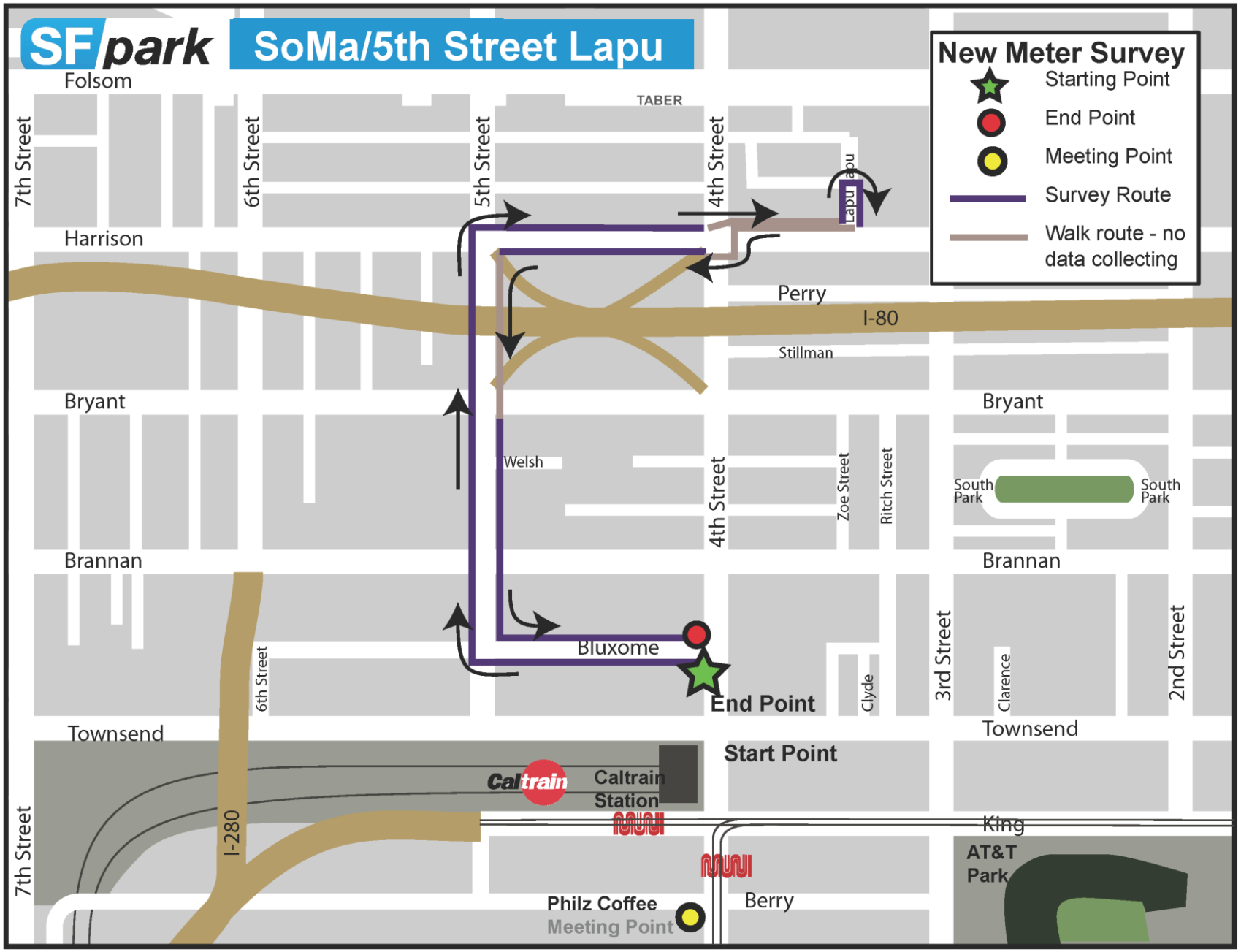
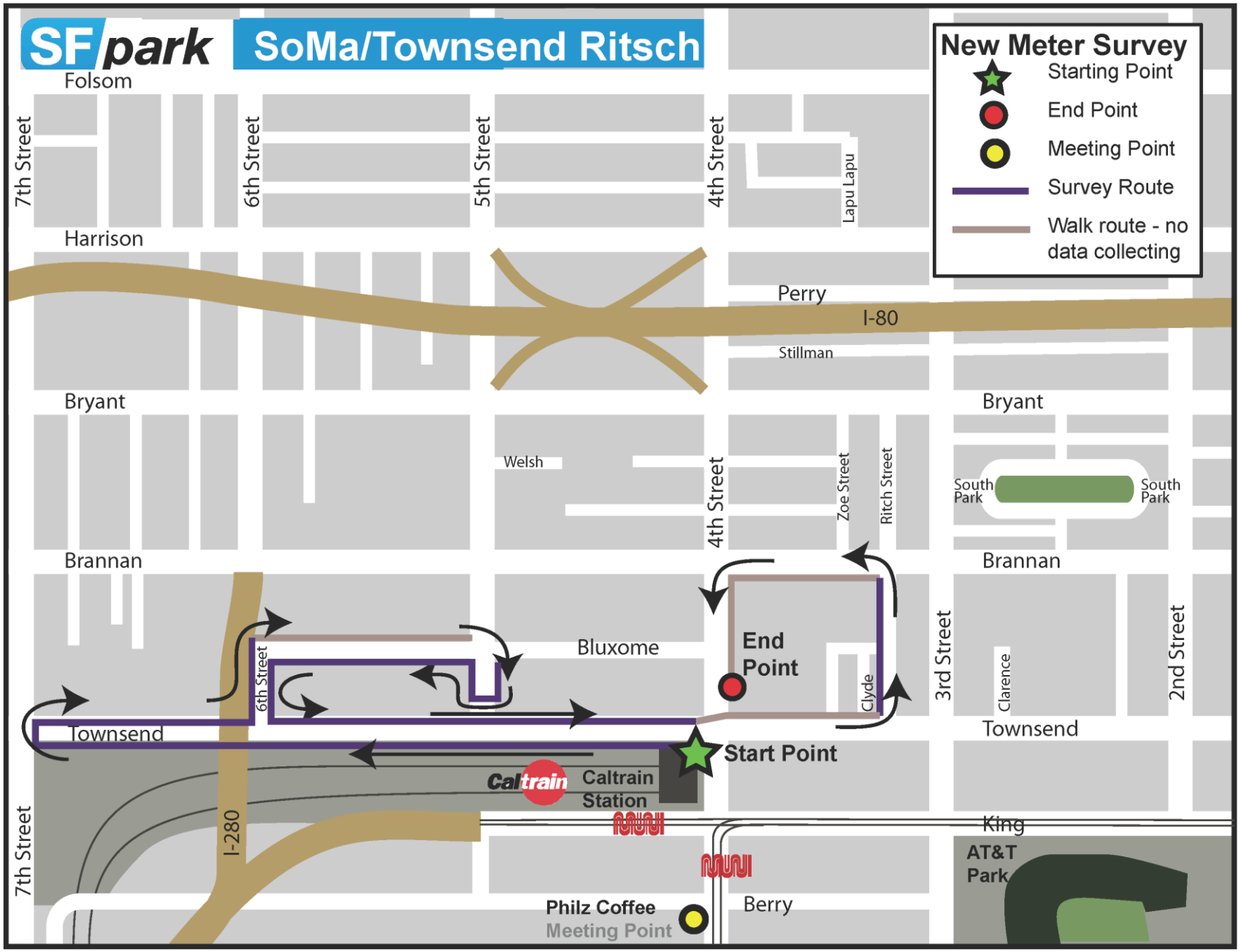
New Meter Survey
Starting Point
End Point
Meeting Point
Survey Route
Walk Route - no data collected
Academy of Art University
End Point
Start Point
Cafe Royale
PM Meeting Point
What a Grind Cafe
AM Meeting Point
Sutter
Post
Geary
O'Farrell
Ellis
Eddy
Turk
Union Square
Taylor
Mason
Powell
Stockton
Cyril Mangin
4th Street
5th Street
Market
Hyde
Leavenworth
Jones
Tenderloin National Forest
Powell Station
BART and Muni
San Francisco Shopping Center


SFpark
SoMa/5th Street Lapu
New Meter Survey
Starting Point
End Point
Meeting Point
Survey Route
Walk route - no data collecting
Folsom
TABER
7th Street
6th Street
5th Street
4th Street
Lapu Lapu
Harrison
Perry
I-80
Stillman
Bryant
Welsh
Zoe Street
Ritch Street
South Park
Brannan
Bluxome
End Point
Clyde
3rd Street
Clarence
2nd Street
Townsend
Start Point
Caltrain
Caltrain Station
I-280
King
AT&T Park
Philz Coffee
Meeting Point
Berry


SFpark
SoMa/Townsend Ritsch
New Meter Survey
Starting Point
End Point
Meeting Point
Survey Route
Walk route - no data collecting
Folsom
7th Street
6th Street
5th Street
4th Street
Lapu Lapu
Harrison
Perry
I-80
Stillman
Bryant
Welsh
Zoe Street
Ritch Street
South Park
Brannan
Bluxome
End Point
Clyde
3rd Street
Clarence
2nd Street
Townsend
Start Point
Caltrain
Caltrain Station
King
AT&T Park
I-280
Philz Coffee
Meeting Point
Berry