TRANSPORTATION IMPACT ANALYSIS GUIDELINES

WALKING/ACCESSIBILITY
MEMO APPENDICES

San Francisco Planning

APPENDIX A

Existing and Proposed Project Figure and Table Examples

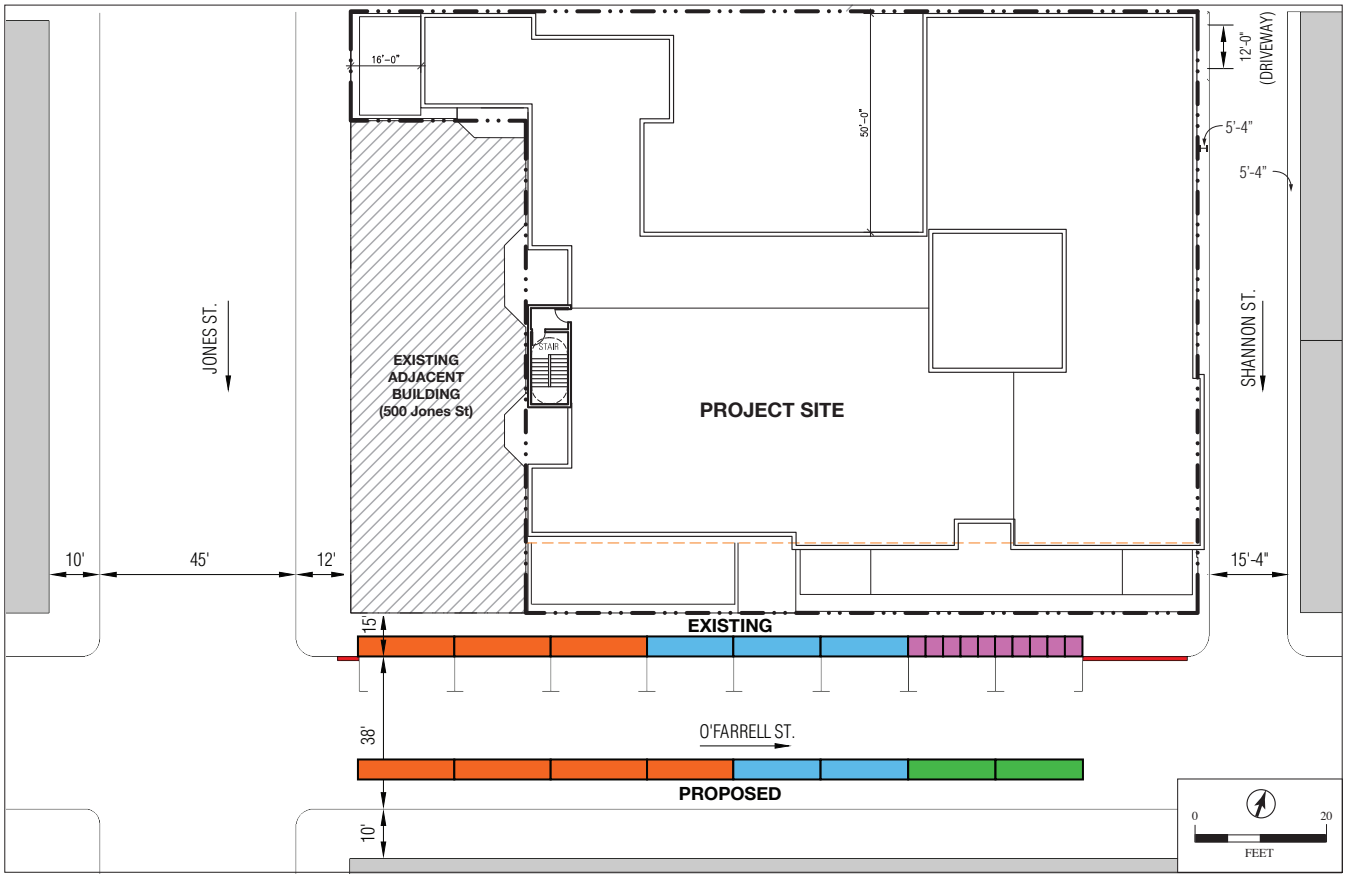
Introduction

Appendix A represents typical figures necessary to illustrate walking conditions included in a transportation study. All figures should include basic elements (e.g., north arrow, title, legend, references, acronyms, etc.). Symbology should reflect that documents may be printed in black and white. All figures and tables should include all the information the reader would need to understand the information presented. The figures presented below were from previous transportation studies and are illustrative only and may not include all the basic elements.

FIGURE 1

Site Plan/Ground Floor Plan

Figure 1 is an example of a site plan that includes a detailed description of existing and proposed on-street loading. When developing a map similar to the one shown, include the linear dimensions of the existing and proposed loading zones, match the color of the zones to those used in the SFMTA Color Curb Program, and make existing and proposed changes explicit.



PARKING SPACE KEY

- YELLOW ZONE - COMMERCIAL LOADING SPACE (METERED M-F 9AM-4PM)
- GENERAL PARKING SPACE (METERED)
- GENERAL PARKING METERED/PASSENGER LOADING/UNLOADING ZONE DURING CHURCH SERVICES
- PASSENGER LOADING/UNLOADING AT ALL TIMES

FIGURE 2

Walking/Accessibility Circulation

Figure 2 shows a walking and accessibility circulation map, including circulation from surrounding streets and internal circulation. The dotted lines represent primary street access for people walking and the straight lines represent secondary access.

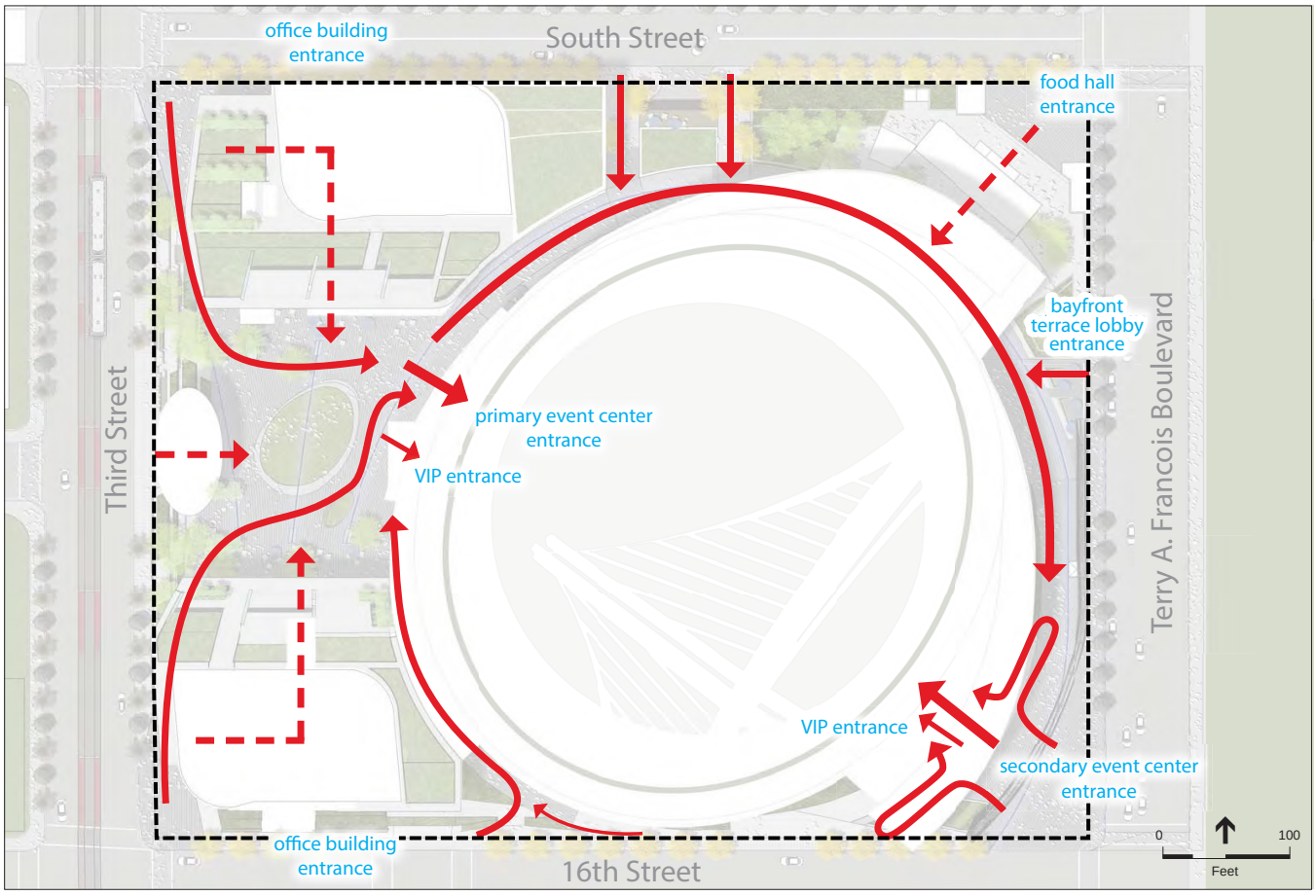


TABLE 1

Existing Project Site Characteristics

Table 1 below presents typical project characteristics for existing conditions on the project site. The table should include all necessary information to describe the existing conditions (e.g., existing land use types, parking, and loading information). As shown in Table 1, 'x' represents numerical values that would need to be provided and be consistent with project plans.

Existing Project Site Characteristics		Address (Building 1)	Address (Building 2)	TOTAL
Gross Square Footage by Use	Land Use 1	**XXX,XXX**	**XXX,XXX**	**XXX,XXX**
	Land Use 2	**XXX,XXX**	**XXX,XXX**	**XXX,XXX**
	Land Use 3	**XXX,XXX**	**XXX,XXX**	**XXX,XXX**
Residential Unit Mix	Two-bedroom units+	**X**	**X**	**X**
	TOTAL	**X**	**X**	**X**
Affordable Housing Units (by age and/or income level)	Percentage by income level	**X**	**X**	**X**
	Percentage by age	**X**	**X**	**X**
Hotel Rooms	Number of rooms	**X**	**X**	**X**
Entertainment Venues	Number of seats	**X**	**X**	**X**
Schools	Number of students	**X**	**X**	**X**
Freight/Service Loading		**Number, location, and dimensions of on-street and/or off-street freight/service loading associated with the uses at this building location**	**Number, location, and dimensions of on-street and/or off-street freight/service loading associated with the uses at this building location**	**X**
Passenger Loading		**Number, location, and dimensions of on-street and/or off-street passenger loading associated with the uses at this building location**	**Number, location, and dimensions of on-street and/or off-street passenger loading associated with the uses at this building location**	**X**
Automobile Parking and Car-share	Number of spaces	**X**	**X**	**X**

Source: **xxxxxx**

TABLE 2

Proposed Project Characteristics/Project Summary

Table 2 below presents typical project characteristics for proposed project conditions on the site. The table should include all necessary information to describe the proposed project conditions (e.g., proposed land use types, parking, and loading information). Similar to Table 1, 'x' represents numerical values that would need to be provided and be consistent with project plans.

Project Characteristic		Address (Building 1)	Address (Building 2)	TOTAL
Gross Square Footage by Use	Land Use 1	**xxx,xxx**	**xxx,xxx**	**xxx,xxx**
	Land Use 2	**xxx,xxx**	**xxx,xxx**	**xxx,xxx**
	Land Use 3	**xxx,xxx**	**xxx,xxx**	**xxx,xxx**
Residential Unit Mix	Two-bedroom units+	**x**	**x**	**x**
	TOTAL	**x**	**x**	**x**
Affordable Housing Units (by age and/or income level)	Percentage by income level	**x**	**x**	**x**
	Percentage by age	**x**	**x**	**x**
Hotel Rooms	Number of rooms	**x**	**x**	**x**
Entertainment Venues	Number of seats	**x**	**x**	**x**
Schools	Number of students	**x**	**x**	**x**
Freight/Service Loading		**Number, location, and dimensions of on-street and/or off-street freight/service loading associated with the uses at this building location**	**Number, location, and dimensions of on-street and/or off-street freight/service loading associated with the uses at this building location**	**x**
Passenger Loading		**Number, location, and dimensions of on-street and/or off-street passenger loading associated with the uses at this building location**	**Number, location, and dimensions of on-street and/or off-street passenger loading associated with the uses at this building location**	**x**
Automobile Parking and Car-share	Number of spaces	**x**	**x**	**x**

Source: **xxxxxx**

TABLE 3

Peak Hour Counts for People Walking at Study Intersections

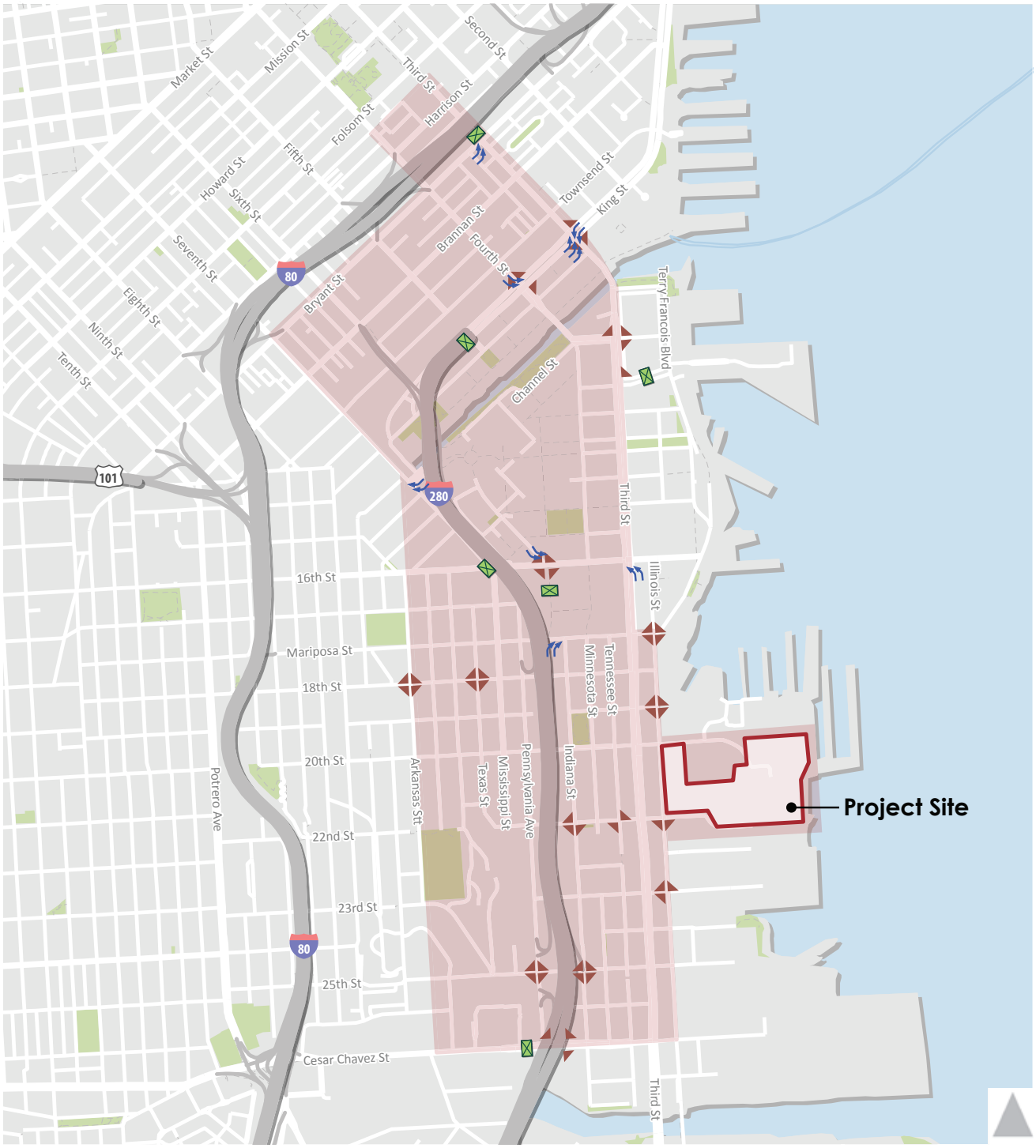
Table 3 below shows the typical format to present counts of people walking at all identified project intersections/street segments. 'X' represents the volume of people walking that were observed during counts.

Intersection	Intersection Leg Counts at Peak Period (INSERT TIME)				TOTAL
	North	South	East	West	
Intersection 1	x	x	x	x	x
Intersection 2	x	x	x	x	x
Intersection 3	x	x	x	x	x
Intersection 4	x	x	x	x	x

FIGURE 3

Walking Network

Figure 3 is an example of mapping the existing network as it relates to people walking within a project study area, with a focus on missing features for the network. Inclusion of this figure would be appropriate in the Existing Baseline section.



APPENDIX B

Mitigation and Improvement Measures

MITIGATION MEASURES FOR LAND USE DEVELOPMENT PROJECTS LOCATED WITHIN AN AREA PLAN

Balboa Park Station Area Plan

Improvement Measure: Provide signals with countdown indicators at all major intersections and at crosswalks that connect to the MUNI light rail stops and Balboa Park BART Station.

Eastern Neighborhoods Rezoning and Area Plan

Improvement Measure E-1: Pedestrian Circulation E.1.a. As an improvement measure to improve pedestrian conditions in the Eastern Neighborhoods, community-supported planning efforts as part of MTA's Livable Streets program should be conducted to identify specific improvements to enhance pedestrian travel and safety in each neighborhood.

E.1.b. As an improvement measure to facilitate completion of the sidewalk network in areas where substantial new development is projected to occur, property owners should be encouraged to develop improvement or assessment districts to fund improvements to the sidewalk network adjacent to parcels where new development is not anticipated to occur.

Market and Octavia

No applicable mitigation and improvement measures were identified.

Transit Center District Plan

M-TR-4a: Widen Crosswalks. To ensure satisfactory pedestrian level of service at affected crosswalks, the Municipal Transportation Agency, Sustainable Streets Division, could conduct periodic counts of pedestrian conditions (annually, for example) and could widen existing crosswalk widths, generally by 1 to 3 feet, at such times as pedestrian LOS is degraded to unacceptable levels.

M-TR-5: Garage/Loading Dock Attendant. If warranted by project-specific conditions, the project sponsor of a development project in the Plan area shall ensure that building management employs attendant(s) for the project's parking garage and/or loading dock, as applicable. The attendant would be stationed as determined by the project specific analysis, typically at the project's driveway to direct vehicles entering and exiting the building and avoid any safety-related conflicts with people walking on the sidewalk during the a.m. and p.m. peak periods of traffic and pedestrian activity, with extended hours as dictated by traffic and pedestrian conditions and by activity in the project garage and loading dock. (See also Mitigation Measure M-TR-4b, above.) Each project shall also install audible and/or visible warning devices, or comparably effective warning devices as approved by the Planning Department and/or the Sustainable Streets Division of the Municipal Transportation Agency, to alert people walking of the outbound vehicles from the parking garage and/or loading dock, as applicable.

MITIGATION AND IMPROVEMENT MEASURE EXAMPLES

The following lists the typical types of measures that can mitigate or lessen impacts to people walking for each significance criterion:

EXAMPLE 1 Potentially Hazardous Conditions

- Establish safe site distances (e.g., daylighting, relocation of curb cuts or new structures);
- Widen existing sidewalks or install sidewalks where none exist;
- Relocate entrances/exits for people walking away from off-street garage/loading docks;
- Manage freight and service deliveries (e.g., active loading managment plan)
- Employ queue abatement measures or pursue deisgn modifications to off-street vehicular entrances/exits to accommodate queing vehicles (see queue abatement language below)
- Install visible and/or audible warning devices at off-street vehicular driveways to alert both people walking and driving of activity at the driveway;
- Provide on-site signage promoting safety for people walking (e.g., signage at the garage exit reminding motorists to slow down and yield to people walking in the sidewalk);
- Facilitate safe crossings (e.g., stop-controlled intersections, installation of signal heads with countdown timers; installation of audible warning devices, refuge islands);
- Provide roadway designs that slow vehicle speeds such as traffic calming measures (e.g., bulb-outs, chicanes, speed humps, tighter turning radii)
- Remove turn pockets
- Signalize vehicle turning movements and restrict vehicle movements on red
- Signal changes such as reducing signal cycle lengths or leading intervals for people walking; and
- Provide network improvements such as crosswalks, shorter blocks, mid-block crossings, or mid-block alleys between the project site and intersections, adjacent transit stations/stops, and other major destinations

EXAMPLE 2 Accessibility

- Construct, upgrade, or redesign curb ramps and sidewalks to be ADA compliant;
- Provide adequate sidewalks (e.g., effective widths, paths of travel)
- Widen existing sidewalks or install sidewalks where none exist);
- Employ queue abatement measures or pursue design modifications to off-street vehicular entrances/exits to accommodate queuing vehicles (see queue abatement language below)
- Povide network improvements such as crosswalks, shorter blocks, mid-block crossings, or mid-block alleys between the project site and intersections, adjacent transit stations/stops, and major destinations
- Place physical structure underground or in another location to maintain access for people walking
- Place wayfinding signs to direct people walking towards entrances/exits

QUEUE ABATEMENT SAMPLE LANGUAGE

Update the sample language, particularly in the second and third paragraphs, to reflect the conditions at the project site and the characteristics of the project. The language should provide specific proactive measures to prevent queues from taking place, as opposed to mitigating the queue after it occurs.

It will be the responsibility of the owner/operator of any off-street parking facility with more than 20 parking spaces (excluding loading and car-share spaces) to ensure that vehicle queues do not occur regularly on the public right-of-way. A vehicle queue is defined as one or more vehicles (destined to the parking facility) blocking any portion of any public street, alley, or sidewalk for a consecutive period of 3 minutes or longer on a daily or weekly basis.

If a recurring queue occurs, the owner/operator of the parking facility will employ abatement methods as needed to abate the queue. Appropriate abatement methods will vary depending on the characteristics and causes of the recurring queue, as well as the characteristics of the parking facility, the street(s) to which the facility connects, and the associated land uses (if applicable).

Suggested abatement methods include but are not limited to the following: redesign of facility to improve vehicle circulation and/or on-site queue capacity; employment of parking attendants; installation of LOT FULL signs with active management by parking attendants; use of valet parking or other space-efficient parking techniques; use of off-site parking facilities or shared parking with nearby uses; use of parking occupancy sensors and signage directing drivers to available spaces; TDM strategies such as additional bicycle parking, customer shuttles, delivery services; and/or parking demand management strategies such as parking time limits, paid parking, time-of-day parking surcharge, or validated parking.

If the Planning Director, or his or her designee, suspects that a recurring queue is present, the Planning Department will notify the property owner in writing. Upon request, the owner/operator will hire a qualified transportation consultant to evaluate the conditions at the site for no less than 7 days. The consultant will prepare a monitoring report to be submitted to the Planning Department for review. If the Planning Department determines that a recurring queue does exist, the facility owner/operator will have 90 days from the date of the written determination to abate the recurring queue or conflict.

APPENDIX C

Planning Code Compliance Checklist

Below is a planning code compliance checklist template as it relates to all transportation topics. In addition to the project's transportation demand management program application, land use table, and worksheet, please fill out and include as an appendix to the transportation study.

Project Description: [Briefly describe the proposed project]

Use District: [Include the use district(s)]

Topic	Planning Code Reference	Planning Code Requirement	Proposed Project	Existing Conditions
Vehicle Parking (Off-Street)	§ 151 Required	[Add applicable information]	[Add applicable information]	[Add applicable information]
	§ 151.1 Permitted	[Add applicable information]	[Add applicable information]	
Car-Share Parking (Off-Street)	§ 166 Required	[Add applicable information]	[Add applicable information]	[Add applicable information]
	§ 166(6)(c) Permitted	[Add applicable information]	[Add applicable information]	
Bicycle Parking	§ 155.2 Required (Table 155.2)	[Add applicable information]	[Add applicable information]	[Add applicable information]
Freight Loading and Service Vehicles (Off-Street)	§ 152, 152.1, 152.2 Required (Tables 152, 152.1, 152.2)	[Add applicable information]	[Add applicable information]	[Add applicable information]
Off-Street Parking, Freight Loading, and Service Vehicles	§ 154(b), 155(s)(4) Required	[Add applicable information]	[Add applicable information]	[Add applicable information]
Protected Street Frontages	§ 155(r) Required	[Add applicable information]	[Add applicable information]	[Add applicable information]
Tour Bus Loading Spaces	§ 162 Required	[Add applicable information]	[Add applicable information]	[Add applicable information]
Public Realm Changes	§ 138.1 Streetscape and Pedestrian Improvements	[Add applicable information]	[Add applicable information]	n/a
	§ 270.2 Mid-block Alleys in Large Lot Developments	[Add applicable information]	[Add applicable information]	n/a