1. EXECUTIVE SUMMARY

1.1 Introduction

The City of San Rafael's (City) Downtown area is a vibrant and sought after destination in Marin County and the Bay Area. With various types of new development continually occurring in the area, in addition to the transit center expansion, more visitors are anticipated to visit Downtown San Rafael potentially increasing the need for parking. The purpose of this study was to identify existing and future parking needs within Downtown San Rafael; recommend parking management strategies that maximize the supply and utilization of Downtown parking spaces (including those for bicyclists); and to develop viable options for a vehicular, pedestrian, and bicycle wayfinding program within the Downtown area. The study also developed parking strategies that will improve parking management and operations.

This report summarizes the process for the development of these recommendations, including a summary of existing conditions and findings, a summary of stakeholder outreach, and policy recommendations. Parking and wayfinding recommendations were formulated based on existing parking demands, future parking demand projections, future parking opportunities, and best management practices. The recommendations provide guidance for the City to properly plan for and manage parking in the Downtown area to meet and mitigate future parking demands.

1.2 Summary of Findings

Existing parking conditions in the Downtown area were evaluated and results indicate that even during times of highest use on typical weekdays and typical Saturdays, the Downtown area, as a whole, has more than enough parking to accommodate the existing demand. While there is excess parking for the overall area, on-street parking in the most popular areas (such as 4th Street between Lincoln Avenue and E Street) is fully occupied. Some private and public parking lots also exhibit excess demand. In each of the locations where individual streets or parking lots are inadequate to accommodate the demand, other public parking is available in locations that are within typical walking distances for a downtown. Additional detail is provided in Table 1 and in Section 2 of this report.

Multiple future-year parking scenarios were also evaluated. Based on the projections, it was found that the Downtown area will continue to operate with excess parking in both the near-term and the long-term conditions. As with existing conditions, several street blocks with on-street parking, as well as more off-street facilities, are expected to be fully occupied.

The only tested scenario that was found to have a parking deficit was a maximum development scenario in which underutilized parking lots were removed from the supply and replaced by development that did not provide any replacement parking spaces—creating a situation of increased demand and decreased supply. Additional detail for each of the future year scenarios is provided in Table 1 and in Section 4 of this report.

Table 1: Summary of Public Parking Supply and Demand

| Condition	Demand	Supply	Surplus or Deficit	Occupancy	Detail Shown in Table
Existing	5,032	7,827	2,795	64%	9
Near-Term	5,814	8,669	2,855	67%	11
Long-Term	5,991	8,715	2,724	69%	13
Maximum Development	7,182	7,097	-85	100%	14

1.3 Study Area and Project Process

This study focuses on an area within two distinct boundaries—the Downtown Planning Study Area boundary, and the area within a half-mile radius from the future location of the Downtown San Rafael Sonoma-Marin Area Rail Transit (SMART) station, which is anticipated to begin operations in Downtown San Rafael in 2017. These boundaries are shown in Figure 2 (Section 2). Wayfinding concepts and recommendations were focused within the Downtown Planning Study Area. Within the Downtown Planning Study Area, both on-street and off-street parking was studied. On-street parking was also studied within the half-mile radius from the SMART station. The area outside of the Downtown Planning Study Area, but within the half-mile radius of SMART, will be referred to as the "Edge of Downtown."

The project inventoried existing vehicle and bicycle parking facilities, the existing wayfinding system, and the pedestrian network within the vicinity of major parking and transit facilities. Weekday and weekend parking demand data was collected, and members of the public were surveyed to ascertain the existing constraints and demands on the Downtown parking supply.

Community input on parking and wayfinding conditions was gathered through online and in-person surveys and through a series of pop-up workshops.

Using the collected demand data, a parking model was developed and combined with information provided by the City on future development to project future parking demand in Downtown. Existing and projected parking demand information was used as a basis to formulate recommended changes to zoning and development standards, and parking management strategies. The project process is summarized in **Figure 1**.

Figure 1: Project Process
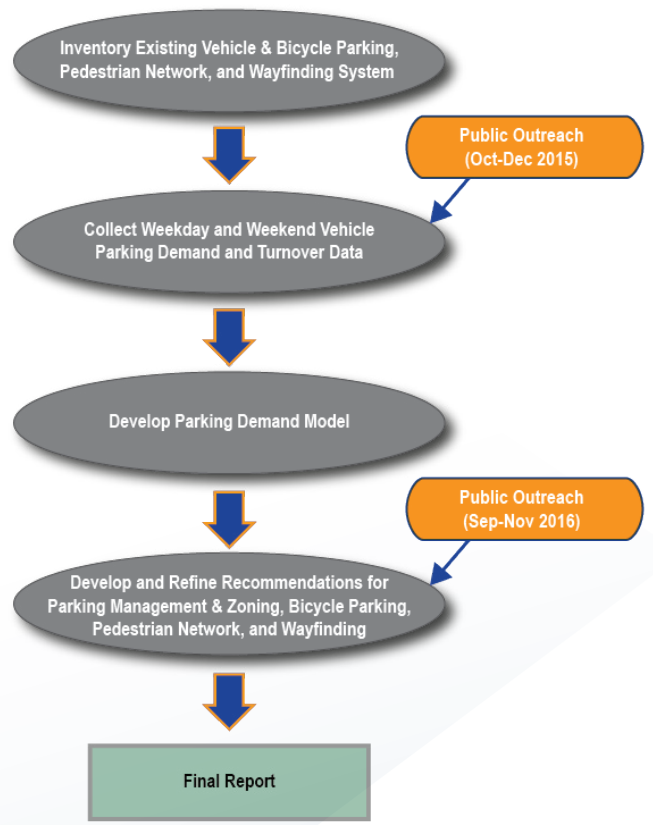
1.4 Summary of Recommendations

Even with the overall adequate supply of parking within the Downtown area, there are recommendations for improving conditions related to parking. These conditions include improvements to the pedestrian system, bicycle parking, zoning rules, parking management, and the areas that will most directly be impacted by the SRTC relocation and the arrival of the SMART train.

Table 2 summarizes the recommendations. Details on the recommendations and their derivation are included within the report. For the purposes of this study, the phases used to align recommendations and strategies are presented with the following time horizons, recognizing that the economy can either speed up or slow down these timeline estimates:

- Short-Term
  - 0-2 Years
  - Includes implementation of SMART Phase 1
- Mid-Term: 2-5 Years
  - SMART Phase 2
  - Relocation of SRTC
- Long-Term: Year 5 to 2040

Table 2: Recommendations

A cost rating is also provided ($ = low cost, $$ = medium cost, $$$ = high cost). Cost ratings consider both the monetary and staff resources needed to implement a recommendation.

Recommendation	Timing	Report Section	Cost	Intended Outcome	Options
Parking Management					
Time Limits					
Within Existing Downtown Parking District					
Maintain the existing two-hour time limit for metered parking on weekdays.	Short-term	2.6	0	No change recommended for weekday: spaces are occupied and surveys showed little request for extended hours.	Increase weekday time limit to three hours with a premium rate: While there was not a strong demand shown for an extension during the week, it would provide the benefits of easier communication for additional time on Saturday and it will be a benefit to some users. The potential negatives are that it will reduce turnover on the busiest streets, leading to longer walks for up to 50% of mid-day parkers This may also entice more employees to use on-street parking; therefore, if a longer time period is used, the one-hour extension should be at a premium rate. An appropriate premium rate may be twice the standard hourly rate.
					Decrease weekday time limit to one hour. This will increase turnover and number of parkers who can park closer to their destination. This will create problems for parkers who need to park for just over one hour (e.g. those who drive Downtown for lunch).
On Saturday allow for meter feeding to extend stays for an additional hour (from 2 hours to 3 hours) with the extra hour being charged at a premium rate. An appropriate premium rate may be twice the standard hourly rate.	Short-term	2.6	$	Respond to requests for extended parking on Saturday. This will provide greater a comfort level for parkers who may like to spend approximately two hours Downtown.	Provide one-hour extension at standard rate. This will decrease turnover on the busiest streets, leading to longer walks for up to 50% of parkers. This may entice more employees to use on-street parking.
					Provide two-hour extension at a increasing premium rate; this will help mitigate reduced turnover by discouraging some from choosing the extra hour or second hour.
Vicinity of Downtown SMART Station					
Upon opening of the new SMART station, use signs and information boards to encourage drivers to use the long-term parking at the 3rd & Lootens parking garage	Short-term	4.6	$	Direct long-term parkers to the available garage to improve their experience and maximize the use of existing, available parking	Also post information on City website.
Change the time limit of the eight, on-street metered parking spaces on Tamalpais Avenue between 4th St and Fifth Avenue from two hours to 10 hours	Short-term	4.6	$	Accommodate some of the anticipated SMART parking demand	Alternately, using a shorter time limit will effectively remove these spaces from use by most SMART users, thereby moving more SMART parking demand farther from the station, which would be in conflict with the goal of encouraging people to use the train.
Maintain the 10-hour time limit already in place at on-street spaces on Tamalpais Avenue between Fifth Street and Mission Avenue.	Short-term	4.6	0	Accommodate some of the anticipated SMART parking demand.	Alternately, using a shorter time limit will effectively remove these spaces from use by most SMART users, thereby moving more SMART parking demand farther from the station.
After finalization and approval by City Council, implement the short-term recommendations from the 2017 SRTC/SMART station plan.	Short-term	4.6	0	Consistency with station area planning: prepare for SMART.	Draft recommendations include actions for 2017 implementation, including significant changes to operations and parking near the station.
Rates					
Establish a formal system within City code that provides a basis for on-street and off-street rates to be reviewed routinely and adjusted based on a specified set of performance metrics without having City Council adopt the specific rates	Short-term	4.7, 5.2	0	Provide Parking Services staff the flexibility to manage the parking system to optimum occupancy levels. Routine review and potential adjustment of rates could occur as frequently as twice per year for on-street parking and once per year for off-street parking.	City code could be modified to allow rate changes at the discretion of Parking Services staff within a given hourly rate range. An example is that the rates could be allowed to be adjusted by staff up to a maximum allowable standard rate of $4 per hour for on-street parking. This would provide staff with the flexibility to create annual or semi-annual adjustments based on an ongoing monitoring of parking usage within Downtown.
					Alternately, city code could be modified to allow rate changes at the discretion of staff without setting limits on the rates. The maximum frequency of changes (e.g. annual, semi-annual, or other) could be codified.

Recommendation	Timing	Report Section	Cost	Intended Outcome	Options
Consider a pricing structure within this framework in which prices are adjusted upward or downward based on the following target metrics for the Downtown area: adjustments to reflect changes in the true cost of parking, managing the overall Downtown area to a typical peak period occupancy of 75% to 85%, and managing individual facilities to a maximum occupancy of 95%. Individual facilities consist of surface lots, garages, and aggregated blocks of on-street parking. It is recommended that off-street parking rates and enforcement rates be reviewed annually and that on-street rates be reviewed as frequently as twice per year. This recommendation requires monitoring actual parking usage on an annual or semi-annual basis. If pursued, this variable pricing approach could be started as a pilot project. (This recommendation is similar to the prior item, but is not dependent on staff having the flexibility to adjust rates without adoption of the new rates by the City Council).	Short-term	4.7, 5.2	$$	Use variable rates to manage the overall Downtown parking supply and the supply of individual streets and off-street facilities in a manner that meets the City's objectives.	Keep existing pricing, as it will not improve turnover in high-demand locations or increase parking in underutilized areas; but is easier for the public to understand and easier to advertise.
					Increase rate from $1.50 to $2.50 per hour on 4th Street from Lincoln Avenue to E Street to increase turnover and increase the likelihood of available parking while leaving the off-street parking rates unchanged. Observe parking during peak times with a goal of having 10 to 20 spaces of the 144 total spaces open and available. Confirm that demand is shifting to the less-expensive parking structures and not just leaving the City.
					If $2.50 per hour does not increase availability, consider raising rate to $3.50 per hour on 4th Street meters.
					Extend rate increases to adjacent on-street parking, if demand warrants.
Other Management Activities					
Monitor the free time-limited on-street parking east of Highway 101 and on Lincoln Avenue north of Fifth Avenue; consider stricter enforcement of time limits if it is observed that vehicles use those spaces for SMART parking.	Short-term	4.6	$	Maintain availability of spaces for local use.	Monitor and provide warnings prior to enhanced enforcement: provides a grace period after opening of SMART station.
					Begin aggressive enforcement in conjunction with opening of the SMART station; potentially creating an immediate change in behavior.
Public outreach as the new SMART station is opening with suggested parking locations—paper and website versions. Use the same outreach to also inform about enforcement of parking regulations in time-limited zones, as well as residential areas.	Short-term	4.6	$	Proactively manage anticipated SMART parking.	
Upon opening of new SMART station: place signs or information boards near station to alert motorists of available parking at parking garage at 3rd & Lootens.	Short-term	4.6	$	Proactively manage anticipated SMART parking.	
Monitor free, unrestricted on-street parking in the Montecito, Lincoln/San Rafael Hill, and Dominican/Black Canyon neighborhoods. If it is observed that vehicles use those spaces for SMART parking, initiate dialogue with these neighborhoods about the City's residential permit parking program.	Short-term	4.6	$	Maintain availability of spaces for local use and minimize automobile intrusion in residential areas.	
Seek enforcement of parking regulations at Caltrans Park & Ride lots.	Short-term	4.7	$	Preserve the Park & Ride spaces for the intended users (motorists using ridesharing, transit, or bikes). Overnight parking for camping and parking for local land use access is not allowed.	With the opening of the new SMART service, the City may seek to have spaces leased by Caltrans to local businesses returned to public availability for commuters.
Initiate dialogue with operators and managers of privately held parking facilities in an effort to create shared parking opportunities in the future, such as the use of parking at San Rafael Corporate Center for SMART/SRTC parking.	Short-term	4.6, 4.7	$	Begin planning for the future with an intent of having agreements that will accommodate growth in parking demand.	
Zoning and Development Standards					
Adopt clear and strategic Guiding Principles as formal policies for the operation and management of public parking, as stated in City code chapter 14.18.010.	Short-term	5.2	$	Allow Parking Services staff to implement and fulfill the City's goal for parking.	
Amend 14.18.040: Add language stating that approved parking for developments may be made available to the public (and not just users of the subject land use) to encourage that all parking approved under 14.18.040 (A – F) be made available to the public.	Short-term	5.2C	$	Increase supply available to the public by providing incentives to owners of private parking facilities.	
Modify 14.18.060 A – Downtown Parking Assessment District: Consider expanding Downtown Parking district boundaries.	Short-term	5.2D	$	If desired, expand the boundaries to reflect current or desired land uses and parking patterns in the blocks adjacent to the current district.	If there is interest, the City should consider expanding the district boundaries east toward US 101 and west toward or past E Street.
					An option is to leave the district boundaries unchanged and not provide the benefits of the Downtown district to nearby areas.

| Recommendation	Timing	Report Section	Cost	Intended Outcome	Options
Clarify 14.18.060 A – Downtown Parking Assessment District: Waiver of first 1.0 of FAR does not imply that City facilities are intended to accommodate the waived demand.	Short-term	5.2D	$	Provide clarity of language reflecting that the existing waiver of a portion of demand reflects actual parking demand within the parking district.	
Clarify 14.18.080 – Parking requirement for reciprocal uses with shared parking facilities.	Short-term	5.2E	$	Clean up language to reflect City's policy.	
Revise 14.18.220 B - On-site and remote parking: Allow remote parking to be a greater distance for uses within Downtown district.	Short-term	5.2H	$	Allow remote parking areas for land uses within Downtown Parking district to be a greater distance, reflecting people's tolerance for walking downtown.	Eliminate 500-foot radius and allow remote parking to be located anywhere within the Downtown Parking district.
					An alternate to eliminating the 500-foot radius limit would be to create a larger radius that better reflects typical pedestrian tolerance for walking in a downtown setting; use a 1,300-foot or 1,500-foot radius instead of the current limit.
Revise 14.18.120 to add an additional exemption to tandem parking to allow for implementation of automated parking or other mechanical parking devices.	Short-term	5.2.1	0	Allow for innovative parking solutions.	
Simplify minimum parking requirements for the Downtown area, as now provided in Chapter 14.18.040.	Medium-term	5.2B	$$	Update language to make it clearer for developers, and easier to administer.	Simplify from 50 land use types to five general land use types. This action would require a specific data collection and analysis effort in order to determine appropriate replacement rates.
					Combine some of the land use types to simplify development and review.
Initiate a pilot program to reduce minimum parking requirements in the Downtown area by 20 percent from current levels (Option 2, as described).	Medium-term	5.3	$	Allow new development in the Downtown area to build less parking, if desired, in order to reduce the oversupply of parking.	Option 1: the current code may be maintained, which allows for special studies to justify reduced parking.
					Option 2: the current minimum requirements could be reduced for a period of years. This requires monitoring of the parking supply to determine the effect on the overall availability of parking in the Downtown area. Based on observations, the reductions could be continued, discontinued, or increased (e.g. going from 10% to 20%).
					Option 3: eliminate minimum parking requirements in the Downtown area for a period of years, allowing developers to provide the amount of parking that they determine to be appropriate. This requires monitoring of the parking supply to determine the effect on the overall availability of parking in the Downtown area. Based on observations, the provision for market based parking could be continued or discontinued.
Establish design standards (exterior and ground floor) for parking garages.	Medium-term	5.2G	$$$	Make parking garages more attractive to users and, where appropriate, more active relative to the adjacent street.	For new parking structures in areas with a high amount of pedestrian traffic or active adjacent uses, standards for design could be implemented that require appropriate ground floor design.
Consider revisions to parking dimension requirements within Downtown garages.	Medium-term	5.2F	$	If adopted, reduced dimension requirements would allow for smaller floor plates of garages within the Downtown area, creating more affordable parking structures.	Downtown District parking structures already allow for reductions of dimensions below the standards outside of the Downtown area. Further reductions may be achievable.
City to undertake an effort to develop a shared parking arrangement with owners of private parking facilities to enter into a shared parking program that is offered to the public in a common and seamless basis. Recommendation includes the need to amend 14.18.040 to add language stating that approved parking for developments may be made available to the public and/or used to satisfy parking requirements for other developments.	Long-term	5.4	$$	Increase the visible and known supply of parking available to the public by creating a common awareness and advertising program.	
Provide reductions in parking requirements for developers who provide bicycle parking.	Long-term	6.4	$	Improve conditions for cyclists by providing more convenient parking.	Allow reduction of one automobile space for every five bike spaces.
					Allow reduction of one automobile space for every 10 bike spaces.
Encourage bicycle parking for new, multi-unit residential developments.	Long-term	6.4	$	Improve conditions for cyclists by providing more convenient parking.	Options include allowing for higher density in exchange for bike parking.

Recommendation	Timing	Report Section	Cost	Intended Outcome	Options
Bicycle Parking					
Along 4th Street, install single inverted U-shaped bike racks in feasible locations where they are currently not currently available. New bicycle parking should not block the pedestrian movement on the sidewalks.	Short-term	6.4	$$	Improve conditions for cyclists by providing more convenient parking. It is desirable to have smaller installations in more locations distributed throughout the Downtown area in order to get the designated bicycle parking closer to the destinations of riders.	The most suitable location for this is along the north side of 4th Street between Court Street and E Street.
					Other suitable locations include the north side of the Cijos Street/4th Street intersection, and short-term uses on 4th Street east of Highway 101 (may be disrupted by SMART).
Install a bicycle corral on 4th Street adjacent to City Plaza.	Short-term	6.4	$	Improve conditions for cyclists by providing more convenient parking.	An on-street corral replaces one on-street vehicle parking space with eight to 12 bicycle parking spaces.
Install bicycle rooms/cages near SMART/SRTC and major employment centers.	Medium-term	6.4	$$	Improve conditions for cyclists by providing more convenient parking and better facilities.	Preferred locations in San Rafael would be in the relocated transit center and in the Downtown garages (A Street or C Street) to encourage bicycle commuting to and from Downtown employers.
					Within the Downtown garages, existing vehicle parking spaces can be converted into a bicycle cage space by utilizing fencing and an access-controlled gate.
					If a bicycle cage is infeasible at the relocated transit center due to space constraints, instead consider using bicycle lockers for their smaller footprint.
Evaluate proposed bike share station locations as part of Bay Area Bike Share via TAM.	Medium-term	6.4	$$	Improve non-automobile movement through the City.	Station locations proposed at SRTC, City Plaza, and the West End.
					An alternate that TAM may pursue is a bike share program that uses smaller footprint stations in more locations.
Pedestrian Network					
Stripe limit lines separately from crosswalk striping at the following intersections: • 2nd Street and Lincoln Avenue • 2nd Street and Lindaro Street • 3rd Street and Lincoln Avenue • 3rd Street and Lindaro Street • 3rd Street and Hetherton Street • 3rd Street and Tamalpais Avenue	Short-term	7.3	$$	Improve pedestrian safety and encourage walking.	This recommendation is subject to revision based on a more detailed study at 3rd Street and Hetherton Street that is being undertaken by the City.
Restripe crosswalks at the following intersections to increase pedestrian visibility; priority should be given to the crossings in front of 3rd Street and 2nd Street traffic: • 2nd Street and Lincoln Avenue • 2nd Street and Lindaro Street • 3rd Street and Lincoln Avenue • 3rd Street and Lindaro Street	Short-term	7.3	$$	Improve pedestrian safety and encourage walking.	Additional locations that may need restriping may be suggested by stakeholders.
Install warning signs or barriers in the vicinity of 3rd St and Lindaro Street to encourage crossing of 3rd Street only in the marked crosswalk.	Short-term	7.3	$$	Improve pedestrian safety and encourage walking.	This recommendation is subject to revision based on a more detailed study that is being undertaken by the City.
Widen and repair sidewalks along West Tamalpais Avenue between 3rd Street and 4th Street.	Medium-term	7.3	$$$	Improve pedestrian safety and encourage walking.	Explore option to improve sidewalks as part of SMART station interim improvements as part of a complete review of Tamalpais Avenue.

Recommendation	Timing	Report Section	Cost	Intended Outcome	Options
Improve pedestrian access between Caltrans Park & Ride lots and SRTC.	Medium-term	7.3	$$$	Improve pedestrian safety and encourage walking.	Where feasible, widen sidewalks on the east side of Hetherton between Mission and 3rd Street. This recommendation is subject to revision based on a more detailed study at 3rd & Hetherton that is being undertaken by the City.
					If sidewalk improvements are not feasible, use signage or barriers to direct pedestrians to cross Hetherton Street and utilize the Puerto Suello multi-use path as a north-south connection.
Provide a pedestrian path east of the Lincoln Avenue SRCC parking garage that connects Lincoln Avenue to 2nd Street along the western bank of Mahon Creek.	Medium-term	7.3	$$	Improve pedestrian safety and encourage walking.	
Implement pedestrian improvements associated with 2012 SMART station plan.	Medium-term	7.2	$$$	Improve pedestrian safety and encourage walking.	In addition to the 2012 report, updated SMART station recommendations are being developed separately from this report.
Install curb bulb-outs where feasible to reduce pedestrian crossing distances.	Medium-term	7.2	$$$	Improve pedestrian safety and encourage walking	Potential locations for this improvement include the northern leg of the 3rd/Tamalpais intersection and the southern leg of the 4th/Tamalpais intersection.
Wayfinding & Public Outreach					
Consider implementing end-user technologies, such as a mobile-responsive website or text-message maps to enhance wayfinding in the Downtown, if cost-effective.	Short-term	7.3	$$$	Improve information to occassional visitors to Downtown, such as whether parking is available and assisting in finding the most convenient available locations.	At a minimum, update City website to direct motorists to default locations. Confirm that commercial driving mapping programs such as Google and Inrix display the key City parking facilities.
Consider temporary marketing and promotional programs targeted at both businesses and visitors: Make more people aware of the availability of parking and the convenience and preference for the use of garages.	Short-term	8.2	$$	Make business owners and visitors aware of the location and availability of parking within the Downtown area.	Possible options include advertising, one month promotions of free/discounted garage parking, and providing a limited number of free one-hour vouchers to all merchants.
Implement an integrated program for outreach, information, and promotion. Plan on a multi-year campaign that will improve awareness over time.	Medium-term	8.2	$$	Make business owners and visitors aware of the location and availability of parking within the Downtown area.	
Implement the proposed signage improvements in the Downtown area.	Medium-term	8.4	$$$	Improve physical signing and markings for occassional visitors.	All or part of the proposed package may be implemented.
Explore the feasibility of implementing a variable messaging system (VMS) based parking guidance system in the Downtown area.	Medium-term	8.7	$$$	Improve physical signing and markings for occassional visitors.	

Figure 2: Study Area Boundaries
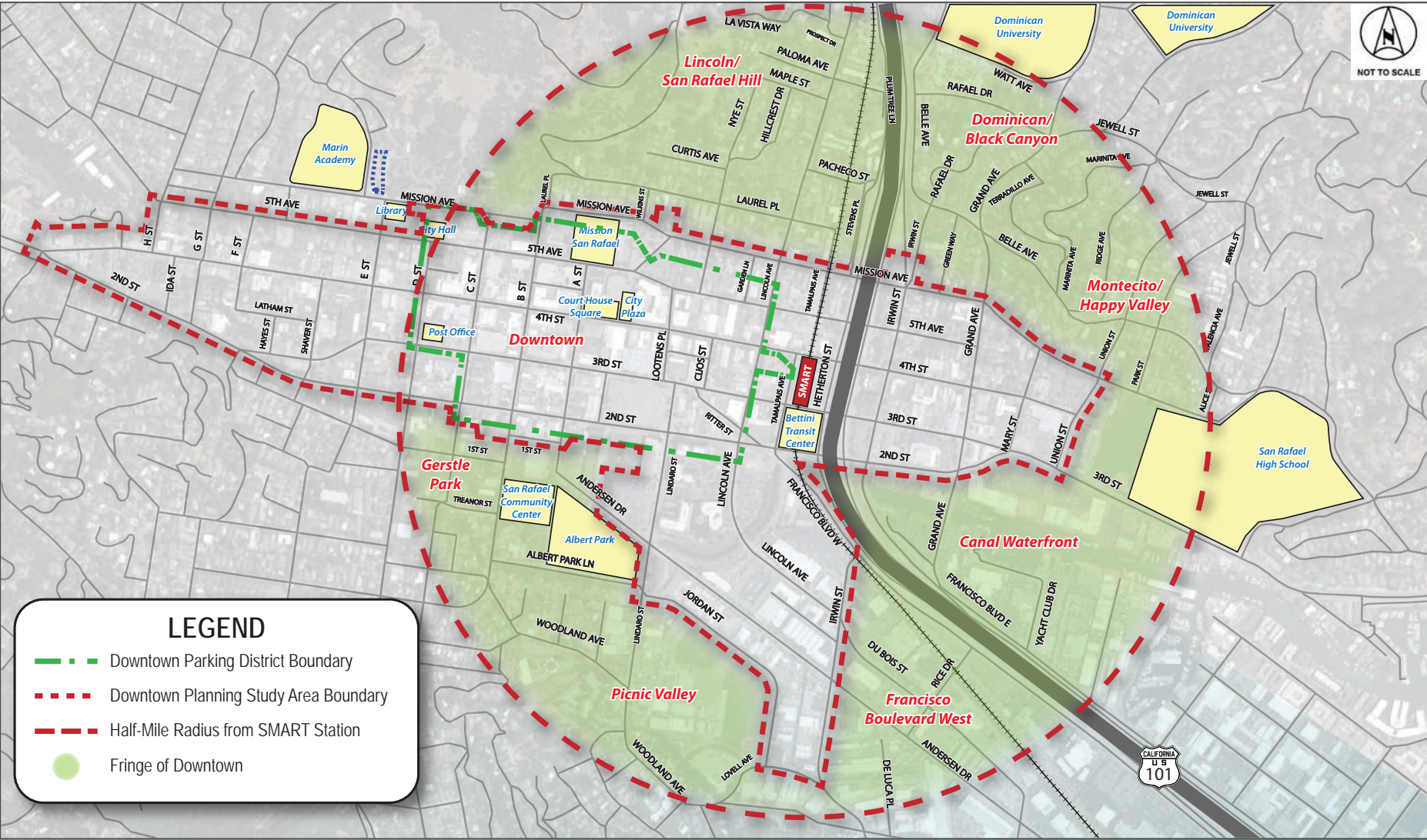
2.0 Existing Conditions

As part of the initial phase of the study, an assessment of the existing parking conditions within the study area was conducted. The assessment included:

- Existing parking supply;
- Current restrictions and time limits;
- Existing parking demand; and
- Parking duration and turnover.

2.1 Study Area

Parking conditions were assessed within both the Downtown Planning Study Area boundary and the area within a half-mile radius from the future location of the Downtown San Rafael Sonoma-Marin Area Rail Transit (SMART) station. These boundaries are shown in **Figure 2,** on page 8. Public parking facilities (on-street parking and City-owned off-street lots/garages) were studied within the Downtown Planning Study Area boundary and the half-mile radius from SMART. Within the Downtown Planning Study Area—which represents the core of Downtown San Rafael—the Caltrans Park & Ride lots under Highway 101 and other privately-owned parking facilities were also studied. For the remainder of this report, the area outside of the Downtown Planning Study Area, but within the half-mile radius of SMART, will be referred to as the "Edge of Downtown". Data and information collected in the Edge of Downtown will be supplemental to the analysis of the Downtown Planning Study Area, which is the primary focus of this study.

2.2 Data Collection Methodology

Existing weekday and weekend parking data was collected through parking inventory and occupancy surveys, which were performed in August 2015 by Kimley-Horn and Wiltec Traffic Data Services. Parking data included the following:

- Inventory of on-street and off-street parking spaces by block face (north, south, east, west) and by individual parking lot/garage;
- Review of current parking pricing, time limits, and other restrictions;
- Weekday parking occupancy survey data collected every two hours from 9:00 AM to 9:00 PM (collected Wednesday, August 26th, 2015);
- Weekend (Saturday) parking occupancy survey data collected every two hours from 9:00 AM to 9:00 PM (collected Saturday, August 29th, 2015); and
- Parking turnover data collected for on-street and off-street public parking locations during typical weekday and weekend (Saturday) conditions.

Surveys were performed on specific days of the week to make sure that they would be representative of typical weekday and weekend parking demand. Employee parking demand is typically higher during weekday business hours, while Saturdays are typically peak demand weekend days because residents and out of town visitors are attracted by the shopping, dining, entertainment, and other leisure activities in the Downtown vicinity. Based on input from City staff and review of historic parking activity/revenue trends within the Downtown area, the data collection efforts were scheduled for late August in order to secure surveys that reflected the peak parking demand period of the year (August-October). Surveys excluded any parking facilities that were closed for construction, as well as private lots with access restrictions.

To conduct the parking surveys, each block within the study area was assigned a number (as shown in **Figure 3**. Each block face was labeled north (N), south (S), east (E), and west (W) for collecting on-street parking data. For off-street parking data collection, each off-street lot or garage was designated a lot ID number. Where pavement markings were not present, the number of spaces was estimated by visual observation. During data collection, the number of occupied spaces was counted at each on-street and off-street location every two hours.

Detailed parking supply and occupancy data for all on-street and off-street parking areas is included in the **Appendix**.

Figure 3: Parking Study Area Block Numbers

2.3 Existing Parking Supply
On-Street Parking Supply

The supply of on-street parking within the Downtown Planning Study Area consists of parallel parking that is either metered, free with a two-hour time limit, or free with no time limit. The Downtown Planning Study Area contains a total of 1,627 on-street parking spaces. The Edge of Downtown contains 1,490 total spaces and consists largely of unrestricted parallel parking on residential streets. A breakdown of the on-street parking by type is shown in **Table 3**. **Figure 4**, illustrates the location and type of the on-street parking supply.

Table 3: On-Street Parking by Type

Parking Type	Number of Spaces
On-Street Parking - Downtown Planning Study Area	**1,627**
Metered	782
Two-Hour Time Limit	487
20-Minute Time Limit	5
Unrestricted	335
Loading Zone	18
On-Street Parking – Edge of Downtown	**1,490**
Two-Hour Time Limit	192
Four-Hour Time Limit	106
10-Hour Time Limit	20
Unrestricted	1,158
Loading Zone	14
Total	**3,117**

On-street parking restrictions are enforced Monday through Saturday, excluding holidays. Paid spaces are enforced from 8:00 AM to 6:00 PM, while time limited spaces are enforced from 9:00 AM to 6:00 PM, with the following major exceptions:

- Yellow curb (active loading) spaces are limited to loading only from 7:00 AM to 6:00 PM.
- White curb (passenger loading) spaces are limited to loading only from 8:00 AM to 4:00 PM.
- Green curb spaces are limited to 20-minute parking from 7:00 AM to 6:00 PM.
- Parking is prohibited from 4:00 PM to 6:00 PM, Monday through Friday, at the following locations:
  - Lincoln Avenue, north of 2nd Street
  - Irwin Street, from 3rd Street to Mission Avenue
  - Mission Avenue, from Nye Street to Lincoln Avenue

DOWNTOWN PARKING/
WAYFINDING STUDY
FINAL REPORT

CITY OF SAN RAFAEL
Mission City
of Marin
CALIFORNIA

Figure 4: On-Street Parking Supply by Type

LEGEND

······· Downtown Planning Study Area Boundary

– – – Half-Mile Radius from SMART Station

On-Street Parking:

— Metered
— Free with Time Limits
— Unrestricted
— Loading Zone
— No Parking
(XX) Block Number

*Parking prohibited along Lincoln Ave north of 2nd Street during PM commute period (4PM-6PM)
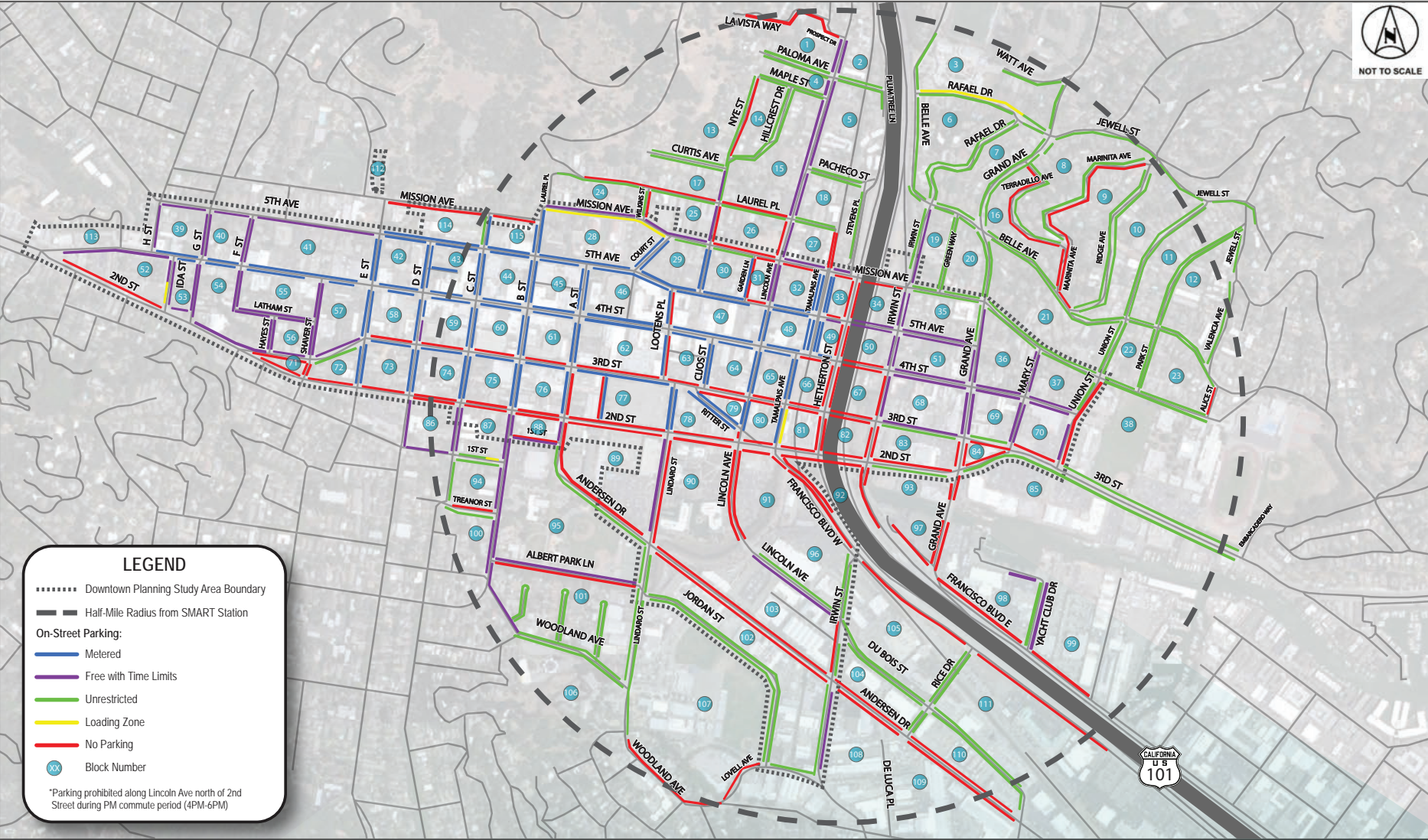
Off-Street Parking Supply

The inventory of off-street parking within the Downtown Planning Study Area boundary included both public (City-owned) and private lots and garages, including the Caltrans Park & Ride lots under Highway 101. No public off-street parking facilities were identified within the Edge of Downtown and private parking facilities were not studied within this area. **Table 4** provides a breakdown of the off-street parking supply by type, including public lots and garages. There are approximately 5,082 off-street parking spaces within the Downtown Planning Study Area, including 1,297 public parking spaces located within 13 City-owned (or leased) lots and garages. Approximately 60 percent of the total public off-street parking supply is located within the two large parking garages at 3rd Street & C Street and 3rd Street & A Street. The public parking supply is predominantly paid. Most private lots in the study area have no access restrictions, but have signage indicating that parking is restricted to tenants or customers only.

Table 4 , provides a breakdown of the public off-street parking inventory by facility, while detailed information for each public and private off-street parking facility can be found in the **Appendix**.

Figure 5, illustrates the public off-street parking facilities. **Figure 6,** illustrates the private parking facilities identified within the Downtown Planning Study Area boundary, including the Caltrans Park & Ride lots under Highway 101 and lots that could not be studied due to access restrictions or ongoing construction.

Table 4: Off-Street Parking by Type

Type	Number of Spaces
Public Lots & Garages	**1,297**
Paid: Five-Minute Limit	4
Paid: 30-Minute Limit	6
Paid: Two-Hour Limit	252
Paid: Four-Hour Limit	14
Paid: All-Day	892
Paid: Electric Vehicle Parking	8
Reserved/Permit Only	50
Free: 30-Minute Limit	3
Free: Two-Hour Limit	20
Free: Specific Commercial Use Only	8
Handicap Spaces	40
Private Lots	**3,785**
Caltrans Park & Ride Lots (Free)	196
Other Private Lots	3,589
Total	**5,082**

Figure 5: Off-Street Parking Supply by Type (Public)

NOT TO SCALE

179*** Menzies Lot (Permit Required)
153 Menzies Lot (Time-Restricted)

PACHECO ST
LAUREL PL
MISSION AVE
5TH AVE

28 1550 4th St Lot
38 5th Ave & D St Lot
40 5th Ave & C St Lot
(upper level = all-day parking)
154 5th Ave & Lootens Pl Lot
50 5th Ave & Garden Ln Lot

87 C St Garage
89 A St Garage
(2 hr lot at entry)
92 218**** 3rd St & Lootens Pl Structure
(upper level = all-day parking)
94 Walgreens Lot
95 3rd St & Cijos St Lot

124** 1412 2nd St Lot

LEGEND

.... Downtown Planning Study Area Boundary
Off-Street Parking:
▮ Public Parking Lot (Short-Term Parking)
▮ Public Parking Lot (Long/Short-Term Parking)
▮ Public Parking Garage (Long/Short-Term)
☆ Electric Vehicle Charging Stations
Off-Street Facility ID Number

Notes:
*1550 4th Street lot is a public/private lot rented by the City. See **Appendix** for detailed parking inventory by type.
**1412 2nd Street lot includes 17 total spaces: 3 public metered spaces and 14 spaces rented monthly by a taxi company.
***The northern half of the Menzies lot (31 of 58 spaces) is reserved for City employee parking.
****The first floor of the 3rd Street & Lootens lot (ID #92) is 2-hour paid parking. The second floor (ID#218) is all-day paid parking.

Figure 6: Off-Street Parking Supply by Type (Private)

LEGEND

············ Downtown Planning Study Area Boundary

Off-Street Parking:
- Caltrans-Owned Park and Ride Lot
- Private Lot
- Private Lot (Not Included in Occupancy Study)*

*Indicates lots were included in inventory, but not included in occupancy surveys due to construction or access restrictions.
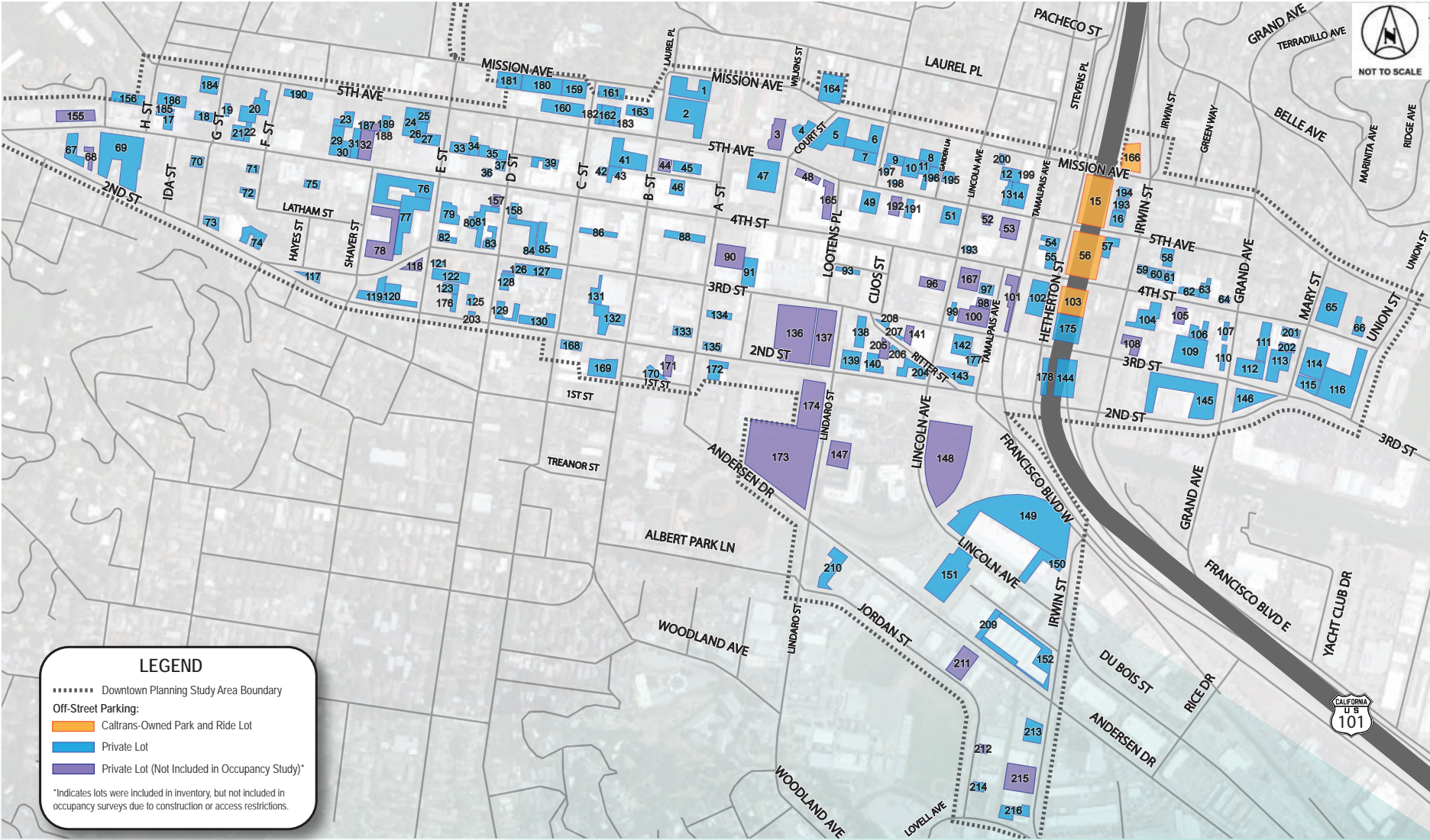
Parking Rates and Restrictions

Paid parking at public off-street and on-street locations is priced at the following rates:

- **$1.50 per hour** for on-street metered parking.
- **$1.00 per hour** at the A Street and C Street garages.
- **$0.75 per hour** at all other hourly paid lots.

The City sells 1-hour parking validations (for $0.10 each) to businesses who wish to provide their customers with parking validation. Validations can be used only at the A Street and C Street garages.

In addition to hourly parking, there are a number of discounted parking options available for frequent parkers:

- **$73.00 per month** for monthly parking permits at the A Street and C Street garages. A business group discount of $5.00 per card is given to accounts with four or more cards.
- **$63.00 per month** for monthly parking permits at five public lots (Fifth & D Street, Fifth & C Street, 3rd & B Street, 3rd & Lootens, and 1550 4th Street).
- **$25.00** for a Frequent Parker Card – gives a 50 percent off parking rate for 12 months or 250 uses (for A Street and C Street garages only).
- **City Parking Permits** are required in sections of some public lots and are available to City employees only.

As of September 2015, the City noted that there were approximately 348 monthly parking permit holders in the C Street Garage, 335 monthly permit holders in the A Street Garage, and 161 Frequent Parker Card holders.

Parkmobile Parking App

San Rafael provides Downtown parking customers with the option of paying for parking at on-street meters and off-street paid lots using the Parkmobile payment service. Parkmobile enables customers to pay for parking using the Parkmobile smart phone app or by calling a toll-free number. The Parkmobile system allows users to pay when initially parking, and/or extend their parking time remotely by up to two hours. Within Marin County, Parkmobile is also used by the City of Sausalito and the Larkspur Ferry Terminal. Other Bay Area cities that utilize the Parkmobile system include Oakland, Vallejo, and Santa Cruz.

Restrictions/Enforcement

In public lots, parking is enforced from 8:00 AM to 6:00 PM Monday through Saturday, with the following exceptions:

- Parking in the A Street and C Street garages is enforced Monday through Saturday from 6:00 AM to 11:00 PM.
- Parking in the lot at 830 3rd Street (Walgreens) is enforced Monday through Saturday from m 8:00 AM to 8:00 PM.

All public lots and garages are free on Sundays.

Electric Vehicle Charging

Two electric vehicle (EV) charging spaces are available for parking customers at each of the following locations:

- A Street Garage
- C Street Garage
- 3rd Street & Cijos Street Lot
- Fifth Avenue & Lootens Place lot

While EV charging is free, customers still pay standard parking rates for these spots. Charging stations are managed by ChargePoint, Inc. Customers can initiate charging by registering and activating a ChargePoint card, or by calling a toll-free number.

Total Parking Supply

Table 5 summarizes the total Downtown parking supply. There are 8,199 total parking spaces identified within the Downtown Planning Study area and the Edge of Downtown. Approximately 2,924 public parking spaces are provided within the Downtown Planning Study Area boundary.

Table 5: Total Parking Supply by Type

Parking Type	Number of Spaces	Percent of Total
On-Street: Downtown Planning Study Area	**1,627**	**20%**
On-Street: Edge of Downtown	**1,490**	**18%**
Off-Street: Public Lots & Garages	**1,297**	**16%**
Off-Street Private Lots	**3,785**	**46%**
Caltrans Park & Ride Lots (Free)	*196*	
Other Private Lots	*3,589*	
Total	**8,199**	**100%**
Total	**9,317**	**100%**

2.4 Existing Parking Demand

Downtown Planning Study Area Parking Demand

Parking demand within the Downtown Planning Study Area was estimated by recording the percentage of parking spaces (public and private) that are occupied at a given time of day. Parking demand is independent of the parking supply. Typically, there is a single peak period in the day in which the highest percentage of parking spaces are occupied. The peak parking demand period within the Downtown Planning Study Area for both the weekday (Wednesday) and weekend (Saturday) surveys was found to occur between 1:00 PM and 3:00 PM. Although the 1:00 PM to 3:00 PM time frame was the period with the highest parking demand. Similar levels of demand were also observed between 11:00 AM and 1:00 PM, indicating that parking demand is generally highest between 11:00 AM to 3:00 PM on both weekdays and weekends. While off-street parking saw demand fall off after the peak period, demand for on-street parking stayed relatively constant throughout the afternoon and evening. This is indicative of the evening demand for Downtown retail and dining uses, whose patrons would be most likely to use on-street parking. **Figure 7** through **Figure 14,** illustrate the trends in parking demand by time of day for the weekday and weekend surveys. Detailed parking occupancy data is included in the Appendix.

During peak conditions, the total parking occupancy in the Downtown Planning Study Area was approximately 66 percent for the weekday survey and 46 percent for the weekend survey. **Table 6** summarizes the peak occupancy levels for on-street and off-street parking within the Downtown Planning Study Area. **Figure 15** through **Figure 20**, illustrate the parking occupancy levels for peak weekday and weekend parking conditions in the Downtown Planning Study Area.

Figure 7: Weekday Downtown Parking Occupancy (%)
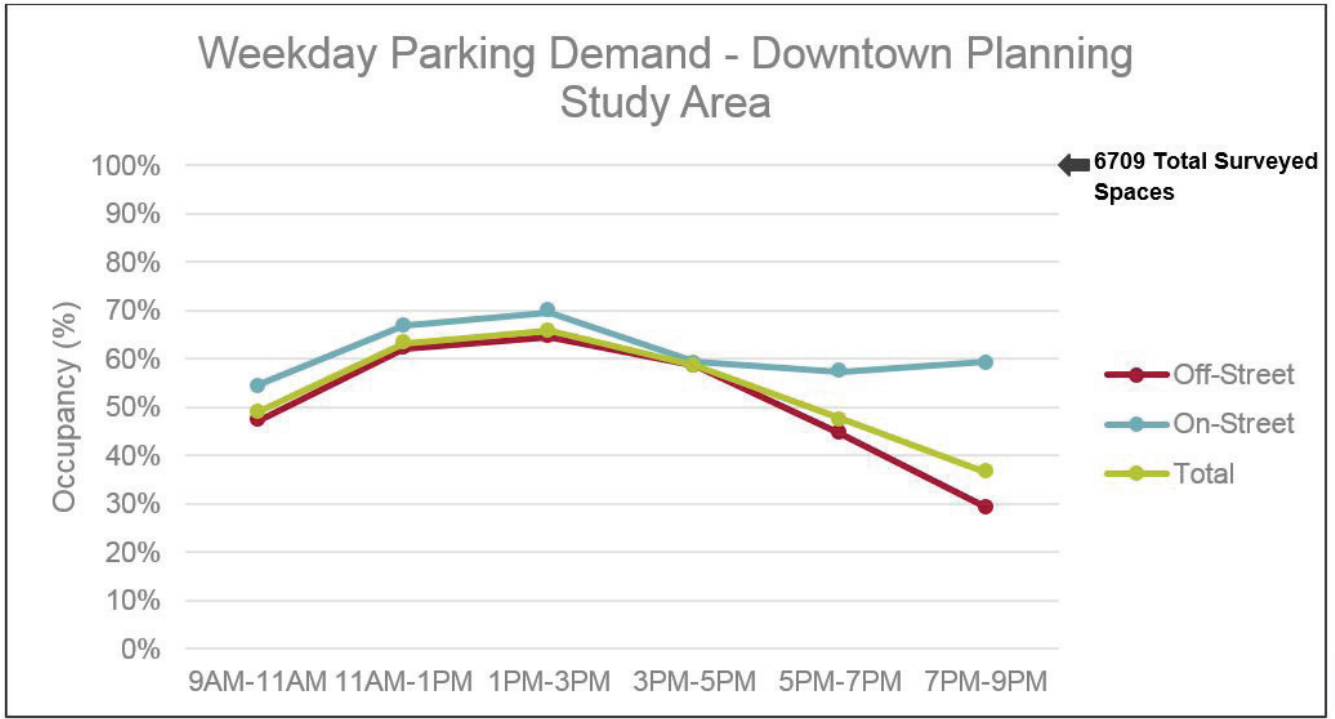
Figure 8: Weekend Downtown Parking Occupancy (%)
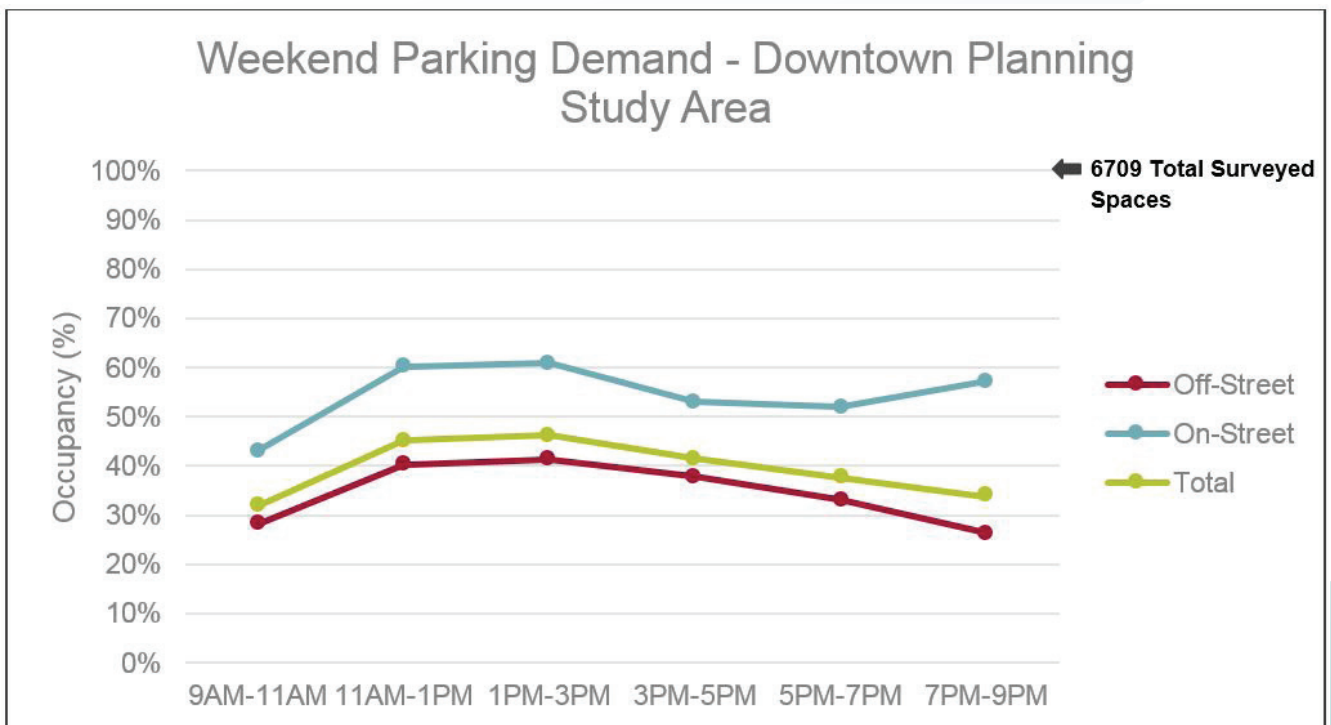
Figure 9: Weekday Downtown Parking Occupancy (Spaces)

Weekday Parking Demand - Downtown Planning Study Area
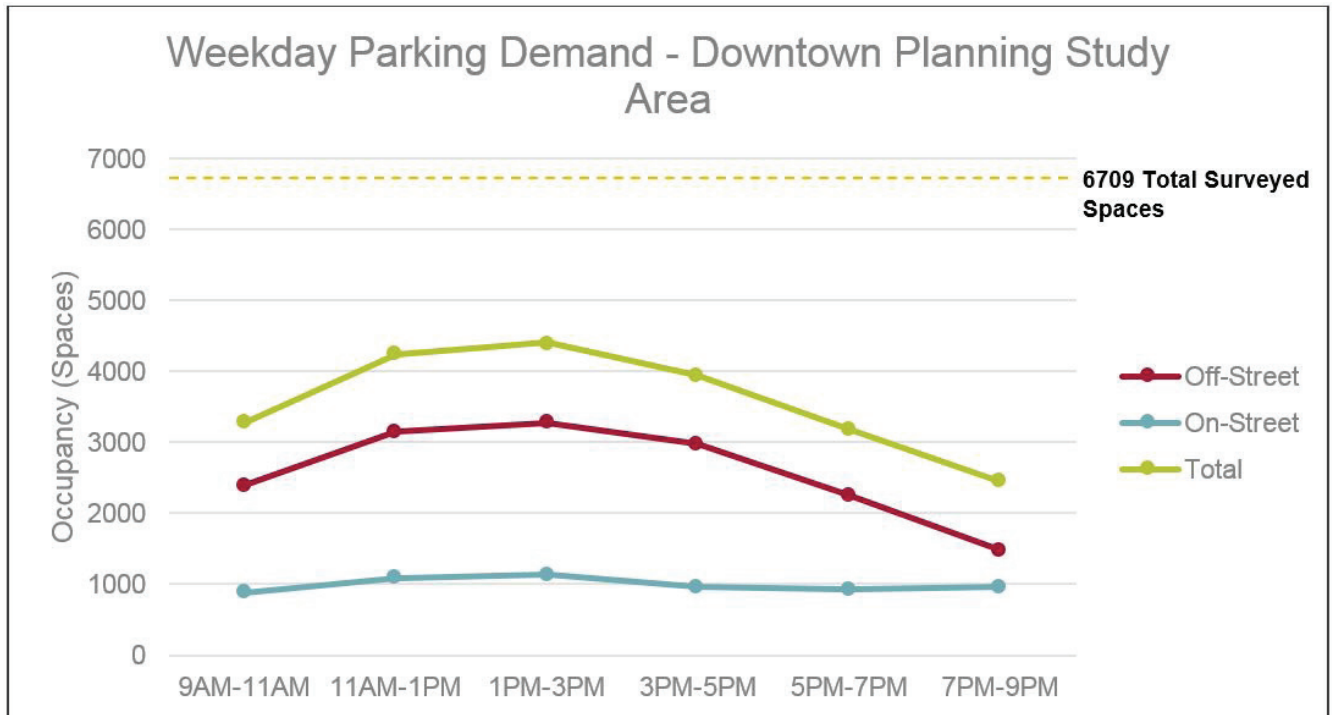
Figure 10: Weekend Downtown Parking Occupancy (Spaces)

Weekend Parking Demand - Downtown Planning Study Area
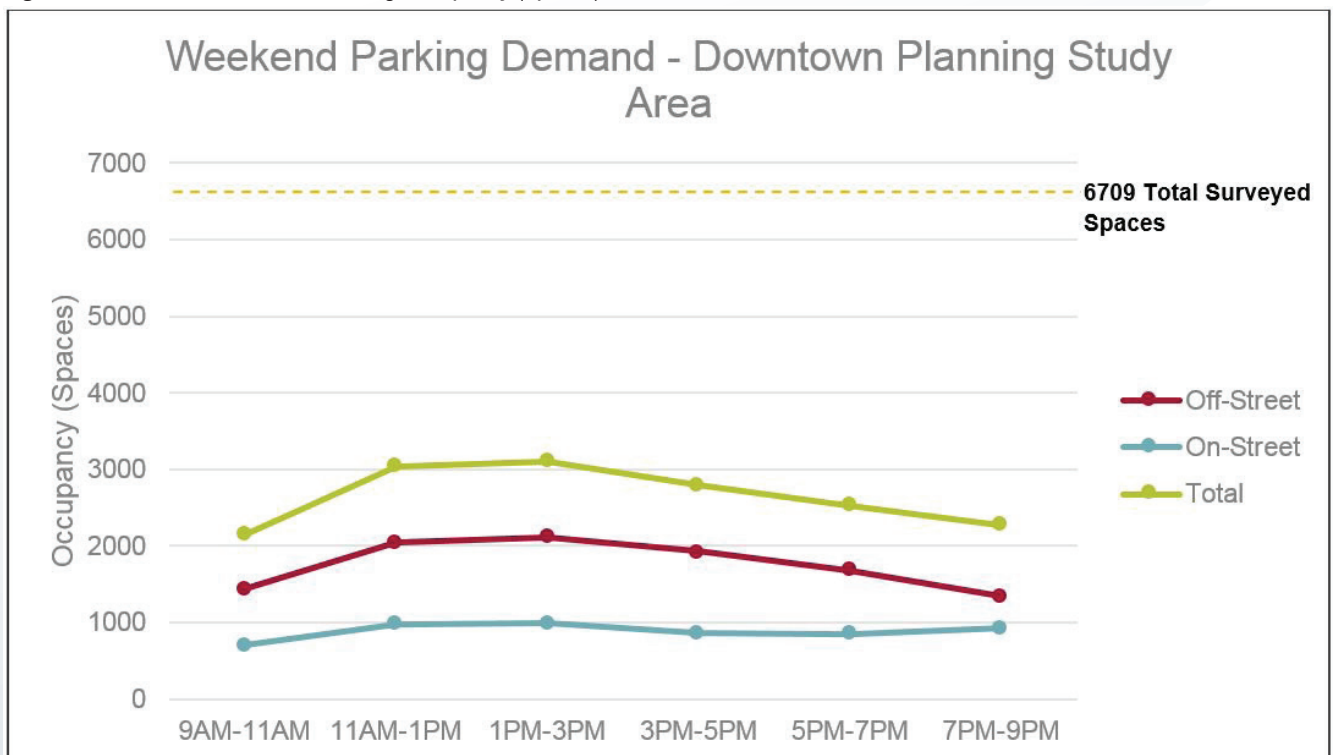
Figure 11: Weekday Public vs. Private Parking Occupancy (%)
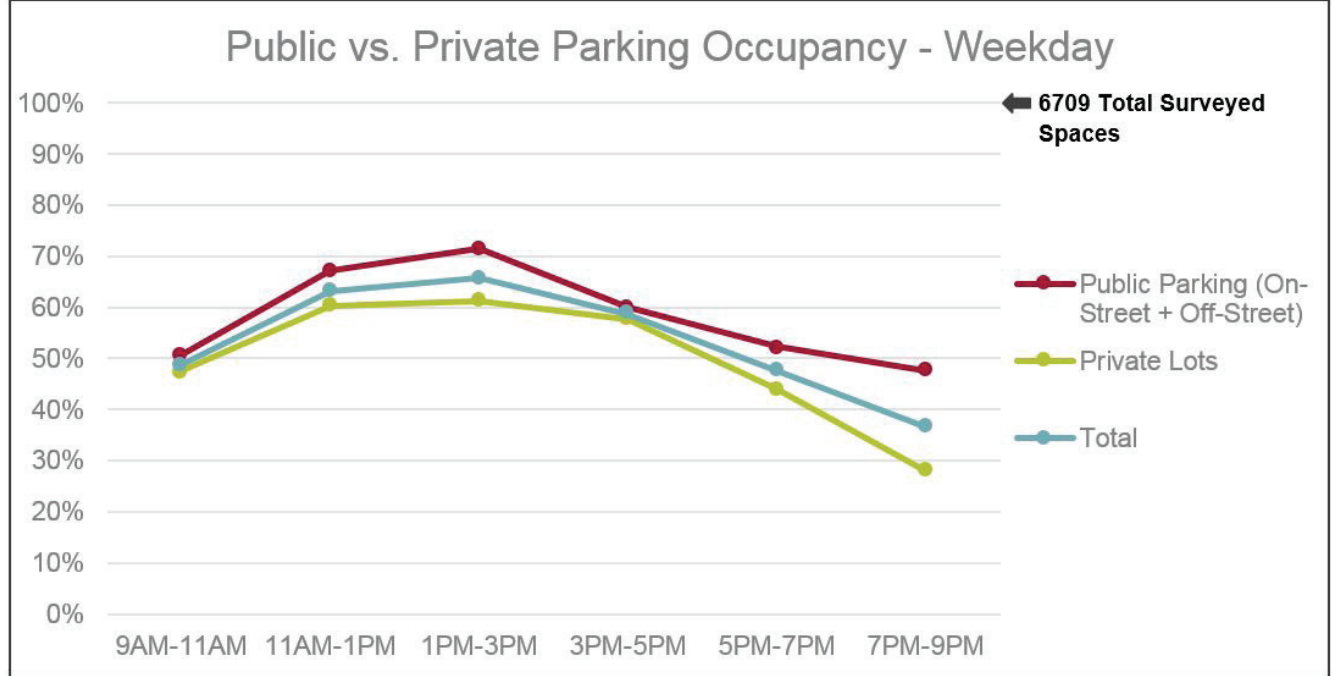
Figure 12: Weekend Public vs. Private Parking Occupancy (%)
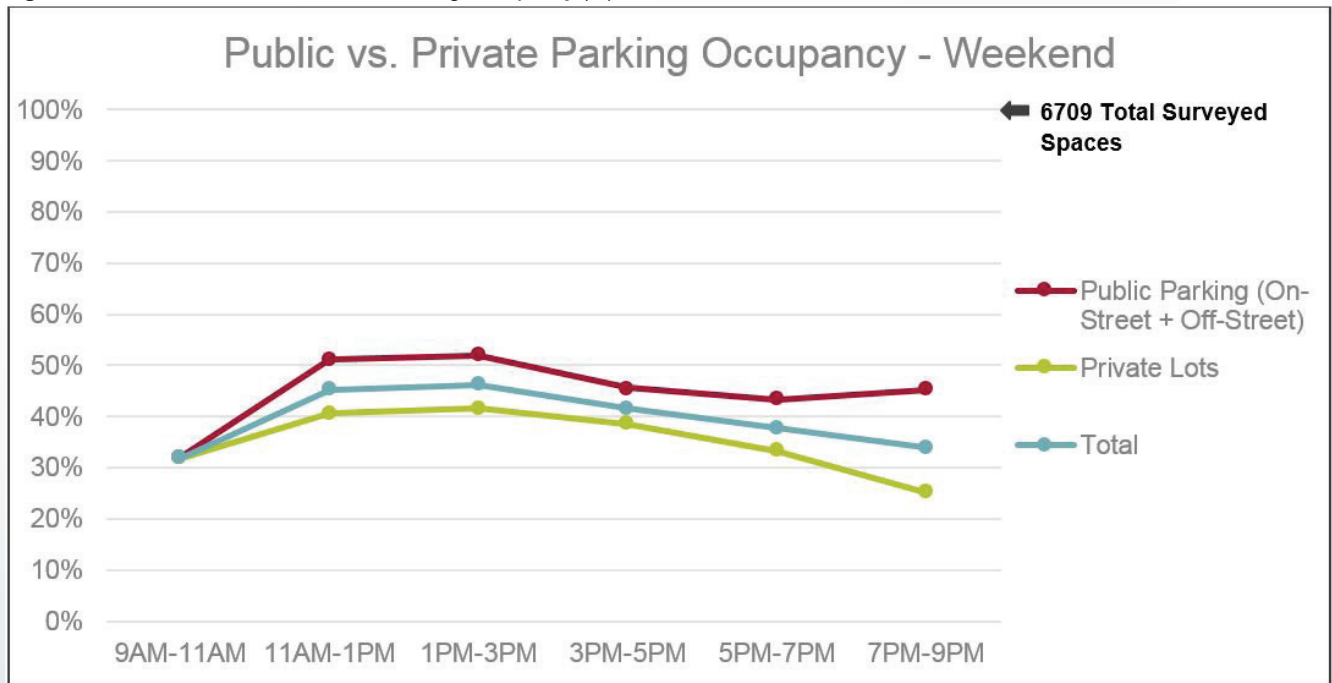
Figure 13: Weekday Public vs. Private Parking Occupancy (Spaces)
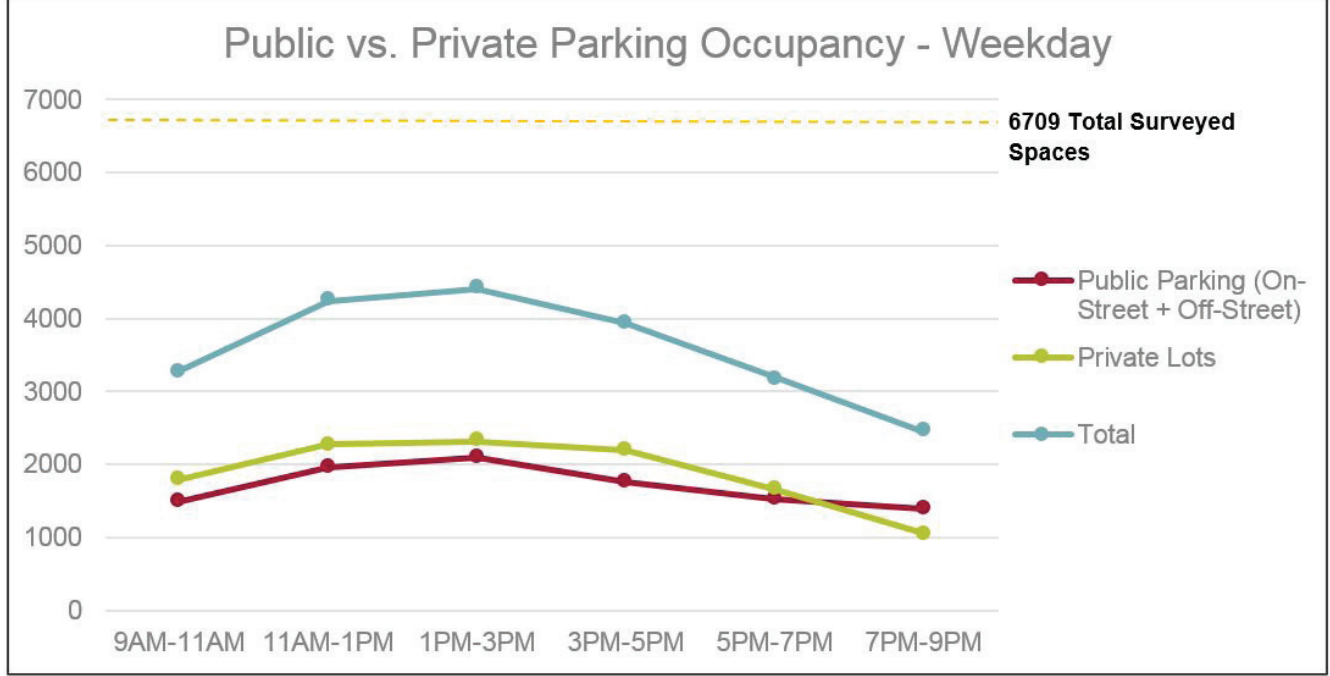
Figure 14: Weekend Public vs. Private Parking Occupancy (Spaces)
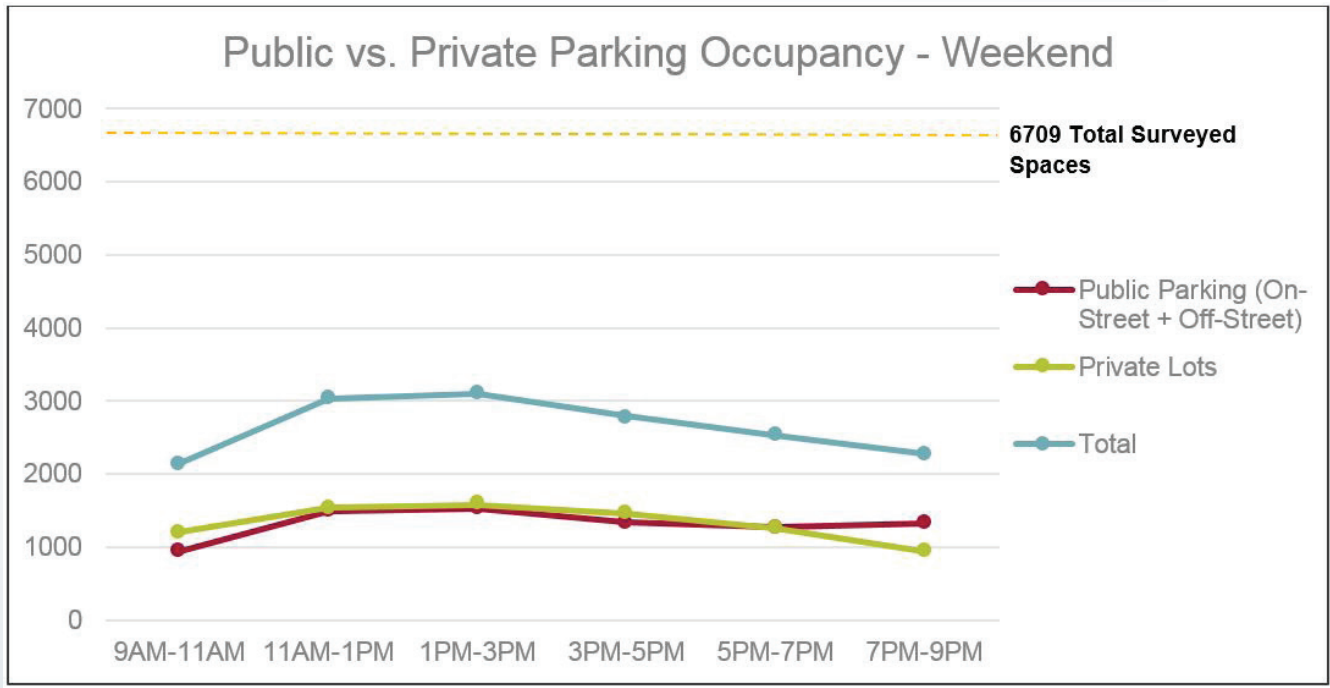
Table 6: Downtown Peak Period Occupancy Levels

Type	Supply	Weekday Peak Period (1PM-3PM)			Saturday Peak Period (1PM-3PM)		
		Occupancy (Spaces)	Occupancy (%)	Surplus	Occupancy (Spaces)	Occupancy (%)	Surplus
C St. Garage; 900 C St.	390	260	67%	130	100	26%	290
A St. Garage; 1116 3rd St.	388	285	73%	103	99	26%	289
Fifth & C St.	95	69	73%	26	55	58%	40
3rd & Lootens - 2nd Floor	89	68	76%	21	68	76%	21
3rd & Lootens - 1st Floor	82	79	96%	3	71	87%	11
3rd & Cijos	47	41	87%	6	46	98%	1
830 3rd St. - Walgreens	32	31	97%	1	24	75%	8
Fifth & D St.	31	22	71%	9	11	35%	20
Menzies – Permitted Spaces	31	21	68%	10	9	29%	22
Menzies - Time Limit Spaces	26	13	50%	13	13	50%	13
Fifth & Lootens	26	23	88%	3	17	65%	9
Fifth & Garden	23	20	87%	3	14	61%	9
1550 4th St. Lot	19	14	74%	5	11	58%	8
1412 2nd St. Lot	18	9	50%	9	7	39%	11
Public Garages/Lots	**1,297**	**955**	**74%**	**342**	**526**	**41%**	**771**
Private Lots	**3,785**	**2,320**	**61%**	**1,465**	**1,536**	**41%**	**2,249**
On-Street - Within Planning Study Boundary	**1,627**	**1,134**	**70%**	**493**	**994**	**61%**	**633**
Total (Downtown Planning Study Area)	**6,709**	**4,409**	**66%**	**2,300**	**3,056**	**46%**	**3,653**

Notes:
- Locations where parking demand exceeds a practical capacity of 85 percent are highlighted.
- The practical capacity for parking is defined as 85 percent to 90 percent utilization of parking spaces. Keeping about 10 percent to 15 percent of the spaces vacant provides a cushion in excess of necessary parking spaces to allow for the dynamics of parking (i.e., people circulating in search of a space, and moving in and out of parking spaces). When occupancy exceeds the practical capacity, drivers will experience delays and frustration while searching for a parking space, as well as contribute to area traffic congestion while circling the block looking for parking.
- Private lots that were inaccessible, abandoned, or blocked due to construction were omitted from inventory and occupancy totals.

Figure 15: Weekday Peak (1PM-3PM) Off-Street Public Parking Occupancy - Downtown Planning Study Area
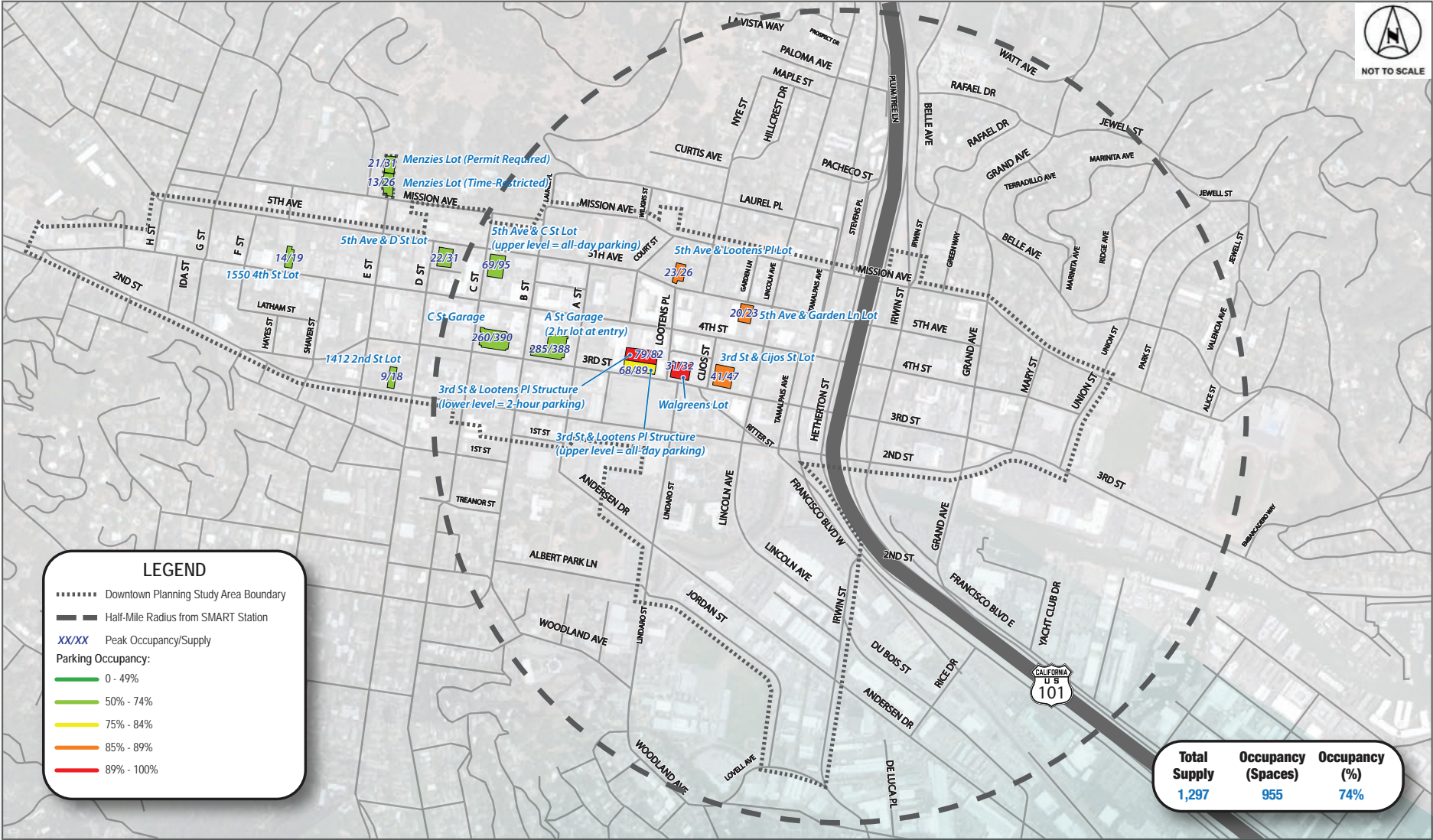
Figure 16: Weekday Peak (1PM-3PM) Off-Street Private Parking Occupancy - Downtown Planning Study Area

LEGEND

.... Downtown Planning Study Area Boundary

– – – Half-Mile Radius from SMART Station

Parking Occupancy:

— 0 - 49%
— 50% - 74%
— 75% - 84%
— 85% - 89%
— 89% - 100%

Total Supply	Occupancy (Spaces)	Occupancy (%)
3,785	2,320	61%

Figure 17: Weekday Peak (1PM-3PM) On-Street Parking Occupancy - Downtown Planning Study Area

Figure 18: Weekend Peak (1PM-3PM) Off-Street Public Parking Occupancy - Downtown Planning Study Area

Figure 19: Weekend Peak (1PM-3PM) Off-Street Private Parking Occupancy - Downtown Planning Study Area

Figure 20: Weekend Peak (1PM-3PM) On-Street Parking Occupancy - Downtown Planning Study Area

Edge of Downtown Parking Conditions

On-street parking demand in the Edge of Downtown remained relatively constant throughout the survey periods. This is demonstrated in **Figure 21**. The demand for parking ranged between 61 percent and 62 percent for the weekday survey, and between 59 percent and 62 percent for the weekend survey; because of this low variability in parking demand, there is no single peak period for the Edge of Downtown. **Table 7** shows a breakdown of the parking demand in four different quadrants of the Edge of Downtown area, which are named after the neighborhoods in which they are located. **Figure 22** and **Figure 23**, illustrate peak period and day-long trends in parking demand for the weekday and weekend in the Edge of Downtown area. Due to the lack of a true peak period, demand is shown for the 1:00 PM – 3:00 PM period for the weekday and weekend surveys, which were the peak periods for the Downtown Planning Study Area.. Detailed parking occupancy data for the Edge of Downtown is included in the Appendix. Additionally, Figure 24 and Figure 25, show peak period occupancy data for the entire study area for the weekday and weekend.

Figure 21: Edge of Downtown Parking Occupancy
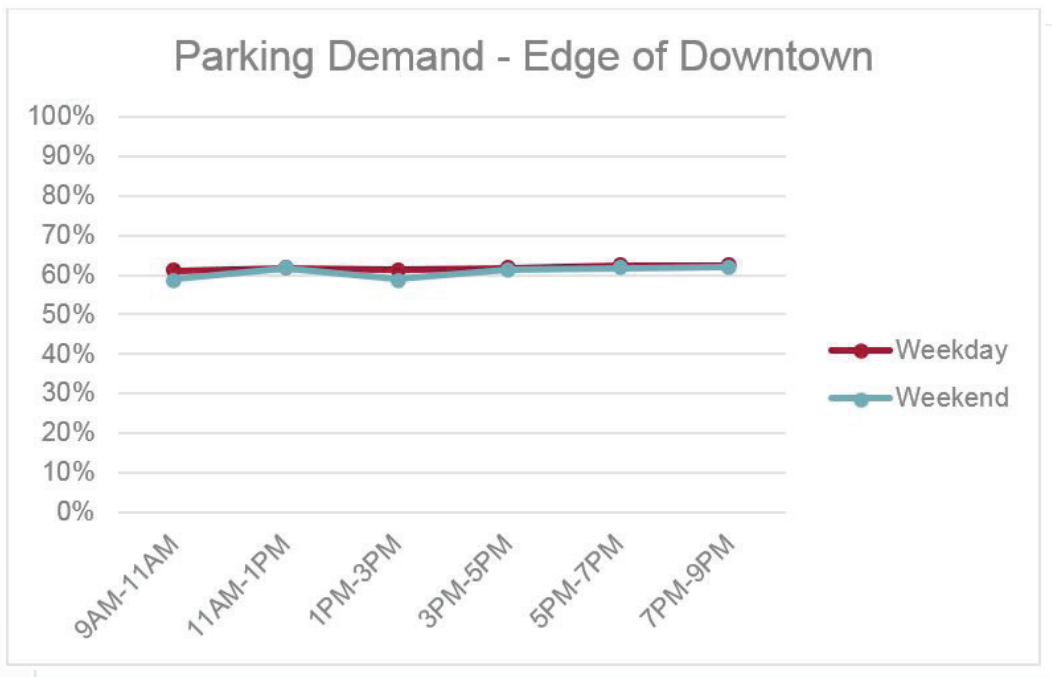
Table 7: Edge of Downtown Peak Period Occupancy Levels

Area	Supply	Weekday Peak Period (1PM-3PM)			Saturday Peak Period (1PM-3PM)		
		Occupancy (Spaces)	Occupancy (%)	Surplus	Occupancy (Spaces)	Occupancy (%)	Surplus
Lincoln/San Rafael Hill	290	172	59%	118	195	67%	95
Dominican/Black Canyon - Montecito/Happy Valley	636	356	56%	280	366	58%	270
Francisco Boulevard West - Canal Waterfront	171	106	64%	62	102	60%	69
Gerstle Park - Picnic Valley	393	279	71.%	114	214	54%	179
Total (Edge of Downtown Area)	**1,490**	**916**	**62%**	**574**	**877**	**59%**	**613**

Figure 22: Weekday Peak (1PM-3PM) Parking Occupancy - Edge of Downtown

Figure 23: Weekend Peak (11AM-1PM) Parking Occupancy - Edge of Downtown

Lincoln/San Rafael Hill Occupancy

Gerstle Park - Picnic Valley

Dominican/Black Canyon - Montecito/Happy Valley

Francisco Boulevard West - Canal Waterfront

NOT TO SCALE

LEGEND

Downtown Planning Study Area Boundary

Half-Mile Radius from SMART Station

Parking Occupancy:
- 0 - 49%
- 50% - 74%
- 75% - 84%
- 85% - 89%
- 89% - 100%

Total Supply	Occupancy (Spaces)	Occupancy (%)
1,554	877	59%

Figure 24: Weekday Peak (1PM-3PM) Parking Occupancy

LEGEND

- Downtown Planning Study Area Boundary
- Half-Mile Radius from SMART Station

Parking Occupancy:
- 0 - 49%
- 50% - 74%
- 75% - 84%
- 85% - 89%
- 89% - 100%

Total Supply	Occupancy (Spaces)	Occupancy (%)
8,199	5,325	65%
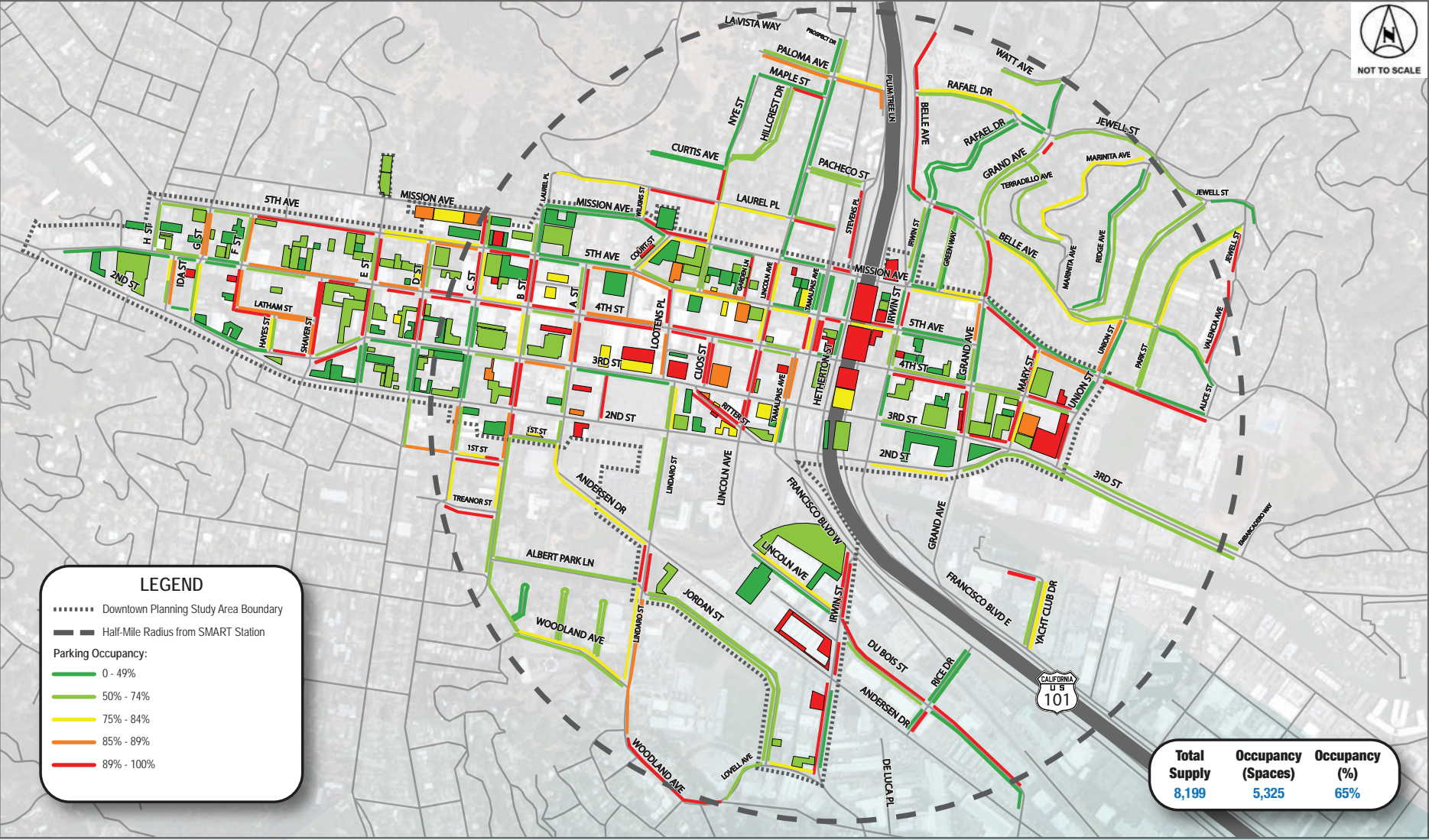
Figure 25: Weekend Peak (1PM-3PM) Parking Occupancy

LEGEND

········· Downtown Planning Study Area Boundary

– – – Half-Mile Radius from SMART Station

Parking Occupancy:

——— 0 - 49%

——— 50% - 74%

——— 75% - 84%

——— 85% - 89%

——— 89% - 100%

Total Supply	Occupancy (Spaces)	Occupancy (%)
8,199	3,933	48%

2.5 Parking Duration/Turnover

Parking duration surveys provide insight into how individual parking spaces are used within a given street segment, lot, or garage, based on how frequently each space turns over for a new vehicle during a given time period. Key locations were selected for parking duration field surveys to observe typical turnover frequency within a variety of Downtown parking areas. The primary focus of this study was on City-owned lots, garages, and high-demand on-street parking segments, such as areas along the 4th Street commercial corridor. The parking duration surveys were performed using a license plate recognition (LPR) camera, which records license plate numbers and then automatically translates them into a unique ID number for privacy purposes. The LPR camera recorded information for each individual space, once every hour between 1:00 PM and 4:00 PM on a typical weekday (Thursday, November 12th, 2015) and weekend day (Saturday, November 14th, 2015). With these records, the number of times an individual vehicle was observed during the survey period was tracked. Vehicles observed only once during the survey period were omitted from the dataset to prevent skewing of the data caused by vehicles observed at the start and end of the survey period. **Table 8** lists the individual facilities that were surveyed, as well the distribution of vehicles that were parked between two to four hours of the survey period. The following are key findings of the parking duration/turnover studies:

- Vehicles were generally compliant with the posted parking time limits.

- Among the facilities surveyed, 4th Street had the shortest parking duration – 96 percent of vehicles observed in the weekday survey were parked for two hours or less. This is consistent with the parking demand of nearby uses and the posted time limit of two hours.

- Among off-street parking facilities, the 3rd & Cijos Lot had the shortest parking duration – 78 percent of vehicles observed in the weekday survey were parked for two hours or less.

- The Caltrans Park & Ride lot had the longest parking duration – 55 percent of vehicles observed remained at the lot throughout the duration of the weekday survey period.

- The A Street Garage and C Street Garage had similar levels of demand for short-term and long-term parking. This is consistent with the mix of short-term uses (such as restaurants) and long-term uses (employee parking) that are located near these facilities.

The parking duration/turnover data collected as part of this task will be supplemented with additional information collected as part of the Downtown Parking User Surveys.

Table 8: Parking Duration/Turnover Summary

Area	Weekday Peak Period (1PM-3PM)			Saturday Peak Period (1PM-3PM)		
	Surveyed Vehicles (%)			Surveyed Vehicles (%)		
	2 Hours	3 Hours	4+ Hours	2 Hours	3 Hours	4+ Hours
4th Street (Hetherton to E Street)	96%	4%	0%	74%	23%	3%
Fifth Avenue (Hetherton to E Street)	60%	27%	13%	65%	27%	8%
B Street (Mission to 2nd)	70%	10%	20%	−1		
3rd & Cijos Lot	78%	4%	17%	50%	29%	21%
3rd & Lootens Lot	38%	31%	31%	51%	16%	33%
Fifth Avenue & C Street Lot	38%	25%	38%	49%	37%	14%
A Street Garage	32%	34%	34%	42%	30%	28%
C Street Garage	23%	32%	45%	36%	17%	47%
Caltrans Park & Ride (Between Fifth & Mission)	9%	36%	55%	13%	0%	88%

Notes:
1. Data from the weekend survey on B Street was omitted due to a small sample size.

2.6 Parking Duration Time Limits

Parking pricing is a very controversial aspect within the San Rafael community, and in general is very common in similar sized communities. A willingness to pay $0.25 more for an hour or so of parking is incomprehensible to most drivers, eluding that such an increase may potentially impact businesses within the community. This is a valid concern because when it comes to parking pricing in communities similar in size to San Rafael, perception governs the decision-making process. The outreach survey results illustrate important perceptions on parking pricing, yet the parking occupancy data shows a high parking demand for on-street parking spots close to destinations in Downtown. Parking demand on the streets is at 70 percent on weekdays and at 61 percent on Saturdays. Typically between 60 percent and 80 percent of supply should be maintained for on street parking. Increases of up to $1 per hour could result in a change in parking behavior, however, an increase of $0.25 per hour is not anticipated to result in a significant change in parking demand (Case study: Chestnut Street and Lombard Street and San Francisco). It is recommended that the City monitor parking demand by month and develop demand curves. This information can be used to price certain locations higher or lower to increase or decrease parking utilization (see **Figure 26** for an example).

Figure 26: Example Parking Pricing Sensitivity Chart
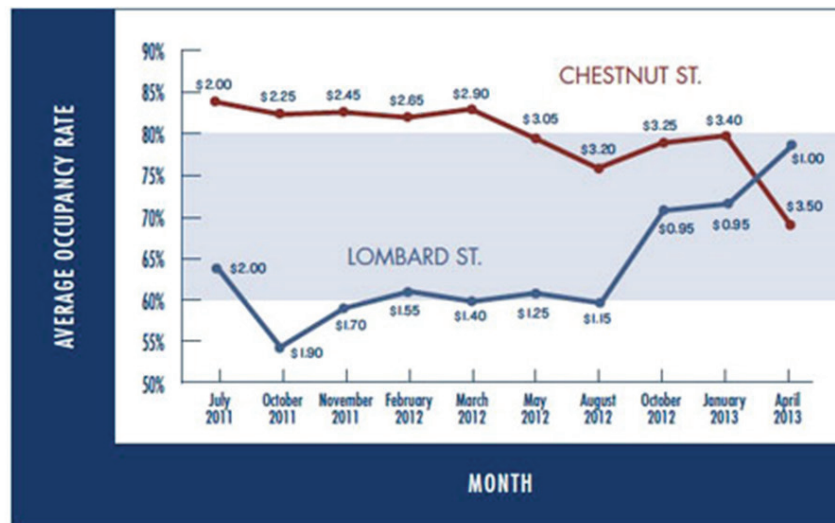
Public outreach efforts found that the bulk of Downtown visitors said that their visits lasted between 30 minutes and three hours. Turnover data indicated that the majority of on-street parkers stayed for two hours or less, while longer durations were observed in off-street lots. However, on-street parkers stayed for longer visits on the weekends. Although the ParkMobile application currently allows for on-street parkers to extend their parking duration up to four hours, the turnover data indicates that this feature is not significantly used on 4th Street, where the demand for parking is highest; its impacts on parking occupancy in critical areas are thus minimal.

It is recommended that the existing two-hour time limit for metered spaces be maintained on weekdays. On weekends, it is recommended that the two-hour limit be maintained, but with parkers allowed to feed the meter up to a maximum of three hours, to allow for more extended weekend visits, when the demand for on-street parking is lower, but parking durations are longer. It is also recommended that the City establish a framework to adjust pricing based on demand to maintain occupancy levels at 85 percent. This is discussed in further detail in Section 5.2.

2.7 Findings

The key parking trends and findings based on review of the detailed parking survey data and in-person field observations are summarized as follows:

- The Downtown Planning Study Area experienced the highest overall parking demand between 1:00 PM to 3:00 PM during both the weekday (Wednesday) and weekend (Saturday) surveys. Both on-street and off-street parking demand peaked within this period.

- The peak parking occupancy for all facilities (public and private, on-street and off-street) observed within the Downtown Planning Study Area was approximately 66 percent during weekday conditions, and roughly 46 percent on Saturday.

- The peak **weekday** parking occupancy observed for public parking facilities (public garages/lots and on-street spaces) within the Downtown Planning Study Area was 74 percent for off-street lots/garages and 70 percent for on-street parking. This provides a surplus of 342 off-street parking spaces and 493 on-street parking spaces (835 total spaces) during the peak parking demand period.

- The peak **weekend** parking occupancy observed for public parking facilities (public garages/lots and on-street spaces) within the Downtown Planning Study Area was 41 percent for off-street lots/garages and 61 percent for on-street parking. This provides a surplus of 771 off-street spaces and 633 on-street spaces (1,404 total spaces) during the peak parking demand period.

- The Edge of Downtown saw a constant level of demand for on-street parking; total occupancy stayed between 59 percent and 62 percent for the weekday and weekend survey. The following trends were observed within particular areas of the Edge of Downtown:
  - On-street parking near commercial uses in the Francisco Boulevard West & Canal Waterfront neighborhoods saw parking demand decrease in the evening.
  - On-street parking demand in residential areas saw few changes in demand throughout the day, indicative of residents using on-street parking as additional vehicle storage.

- On-street parking on 4th Street between E Street and Lincoln Avenue experienced high utilization (>90 percent) throughout much of the weekday and weekend periods.

- The following public off-street parking facilities were observed to have a peak parking demand that exceeds the practical capacity of the facility (85 percent):
  - 3rd Street & Lootens Lot – 1st Floor (96 percent weekday; 87 percent weekend)
  - 3rd Street & Cijos Lot (87 percent weekday; 98 percent weekend)
  - Walgreens Lot (97 percent weekday)
  - Fifth Avenue & Lootens Lot (88 percent weekday)
  - Fifth Avenue & Garden Lot (87 percent weekday)

- The Caltrans Park & Ride lots experienced high utilization (>90 percent) throughout most of the weekday survey.

- Among public off-street parking facilities, the majority of the parking surplus was located in the A Street and C Street garages. In the weekday peak period, 233 out of 342 (68 percent) of open spaces in public-off street facilities were located in one of these garages. In the weekend peak period, 579 out of 771 (75 percent) of open spaces were located in either facility.

3. PUBLIC OUTREACH

To provide robust public input into the parking/wayfinding study, the City engaged stakeholders through a variety of mechanisms including: online, text-based, and intercept surveys of Downtown users; and pop-up workshops at key events. These methods help to enable businesses and their customers, transit users, residents, advocacy groups, and visitors in building awareness of the project's purpose and need, solicit input on parking issues and priorities, and garner support for recommended improvements and strategies in the Downtown San Rafael area. Input received through the public outreach process provided anecdotal information to accompany the data gathered for the parking and wayfinding study.

The details and results of these outreach activities are outlined below.

3.1 Public Outreach Activities and Summary of Public Survey Results

Significant findings of the public outreach activities and the public survey were:

- Most respondents traveled to San Rafael by private vehicle, and their highest parking priority was the ability to find a spot easily and in close proximity to their destination (within one or two blocks). Many respondents wanted to see more parking along 4th and 3rd streets and believed it was important to have signage that is easy to read and directs people to parking and designated bicycle routes.

- Most respondents paid for parking, and that while cost wasn't the most important factor to them, it could limit the duration of their visits.

- Merchants were concerned about strict parking enforcement discouraging residents from parking in the area and affecting their shopping habits; however, merchants expressed approval of the free holiday parking program.

- Many respondents were aware of parking validation, but were unaware of which businesses offered it for customers; 75 percent of respondents were willing to park in public garages more often if parking validation were offered at more businesses. Most people were unaware of the availability of monthly passes and/or Frequent Parker Cards.

- Most respondents would not visit Downtown more often, even if parking was either easier to find or less expensive.

The following information provides more details of the results of the intercept, online, and text-based surveys, and pop-up workshops. Copies of public input from the public outreach process are in the Appendices.

Intercept Survey

On Saturday, October 17, 2015 and Thursday, December 17, 2015, two Circlepoint staff conducted intercept surveys at key Downtown points of interest, such as the Downtown business corridor and City-owned parking garages and lots. Full reports on both days of surveying, as well as the completed paper surveys are in Appendix A.

On October 17, 2015, 21 people completed the survey; however, an estimated 30 people provided feedback, but were unable to complete the survey. The businesses that provided feedback were Verizon, Goodwill, Lotus Chaat and Spices, Ponsford's Place, and Folk Art Gallery.

A representative sample of the comments and responses provided during the intercept survey outreach indicated:

- The price to park and close proximity to the intended destination are the two most salient factors with respect to Downtown parking. Most participants indicated they paid for parking.

- Strict parking enforcement is a key theme in the input on Downtown street parking. The strict enforcement discouraged residents to park in the area and businesses felt it affected their customers shopping habits. Several people thought meter enforcement was excessive and sometimes overbearing.

- People were aware of parking validation, but they were unaware of which businesses offered parking validation for customers.

- Several businesses would like to offer customers validation. One business noted they would like to purchase the validation in smaller allotments, as they were unable to give all of their validation coupons to customers before they expired.

- The City needs more street parking.
- Most participants traveled to the City by private vehicle.

On December 17, approximately 60 postcards were handed out and 25 posters were hung within the study area. Specific businesses (community spaces, popular restaurants, and retail stores) were targeted to leave project outreach collateral, including T&B Sports, Sol Food Café, Bella, Taqueria San Jose, Mike's Bikes San Rafael, Trips for Kids, Knimble, Aroma Restaurant, Starbucks Coffee, Royal Ground Coffee, Open Secret Bookstore, Cafe del Soul, Wellsfargo Bank, Crepevine Restaurant, Copperfield's Books, Arizmendi Bakery and Café, and Yet Wah Restaurant. Several of the businesses and parking garages already had project collateral provided by City staff. In these instances, postcards were refreshed if the business was running low and posters were repaired if torn. While most people declined to take the full survey on the spot, many people engaged in conversation.

A representative sample of comments and themes provided during the survey outreach indicated:

- Shoppers and merchants are grateful for the City's holiday parking program, which offers three hours of free parking in the City-owned garages. The free holiday parking incentive appeared to have diminished some of the negative sentiment regarding parking restrictions and cost expressed during the first round of intercept surveys in October 2015.
- Merchants are grateful for the free holiday parking because they felt it encouraged shoppers to spend more time in their stores. Businesses were supportive of the City's efforts to engage the public in expressing their opinions about local parking issues and desired improvements.
- Several members of the public and business owners were interested in taking the survey themselves, as well as encouraged others (customers, friends, or family) to do the same. Because of the widespread promotion of the survey, several residents and business owners said they believe the City is taking their concerns about parking seriously and wants to find solutions for long-term improvements.

Online and Text-Based Surveys

Downtown area stakeholders were invited to complete an online survey or text-based survey. The online survey opened on October 9, 2015 and closed on December 31, 2015. With a total of 1,227 completed surveys. 1,218 of the surveys were completed in English while nine surveys were completed in Spanish. The text-based survey opened on October 9, 2015 and closed on December 31, 2015, with 16 text-in participants responding to at least one text question. The full English online survey results are in Appendix B; full Spanish online survey results in Appendix C; and full results of the text-based survey in Appendix D.

A summary of the online and text-based survey issues, priorities, and comments indicated:

- Most respondents visit Downtown because they either live or shop in the area.
- Over 30 percent of participants travel to the Downtown area three or more times per week.
- Approximately 64 percent of online participants stated they rarely or never visit the Downtown area due to parking that is either too expensive or too difficult to find.
- Over 95 percent of online participants travel to the Downtown area by private vehicle; most respondents to the text-based survey also travel to the Downtown vicinity by private car.
- Most participants park most often on-street and in public parking garages.
- Most participants park for one to three hours per visit to the Downtown area.
- Participants overwhelmingly park one to two blocks from their intended destinations and spend one to five minutes searching for a spot.
- Over 70 percent of participants typically pay for parking, but the price of parking limits the duration of their visit.
- Approximately 67 percent of online participants are sometimes or very willing to walk farther for low-cost parking.
- Approximately 38 percent of online participants would not visit the Downtown area more often even if parking was either easier to find or less expensive.
- Participants were split, in half, on their knowledge that several Downtown merchants offer validation for the first hour free in two public garages.

- Over 75 percent of participants were willing to park in public parking garages more often if parking validation were offered at more businesses.
- Most participants were unaware of the availability of monthly parking passes and/or Frequent Parker Cards.
- On a scale of 1-6, the following factors were the most important to online participants:
  1. Ability to find parking space in short amount of time
  2. Proximity to destination
  3. Safety
  4. Cost
  5. Ability to park for extended period (more than two hours at a time)
  6. Ability to park for extended period (more than three hours at a time)

Pop-Up Workshops

Downtown area stakeholders were invited to review project exhibit boards and place colored stickers and post-it notes to indicate their priorities and comments. Three pop-up workshops were held at the Downtown Art Walk (12/11/15), Bio Marin (12/11/15), and Winter Wonderland (11/25/15) events. The full Art Walk and Bio Marin results are in Appendix E, and the full Winter Wonderland results are in Appendix F.

Parking Downtown Display Board

At the pop-up workshops at Downtown Art Walk, BioMarin, and Winter Wonderland, 120 participants provided responses on the parking exhibit boards.

Figure 27: Pop-Up Workshop Response Summary
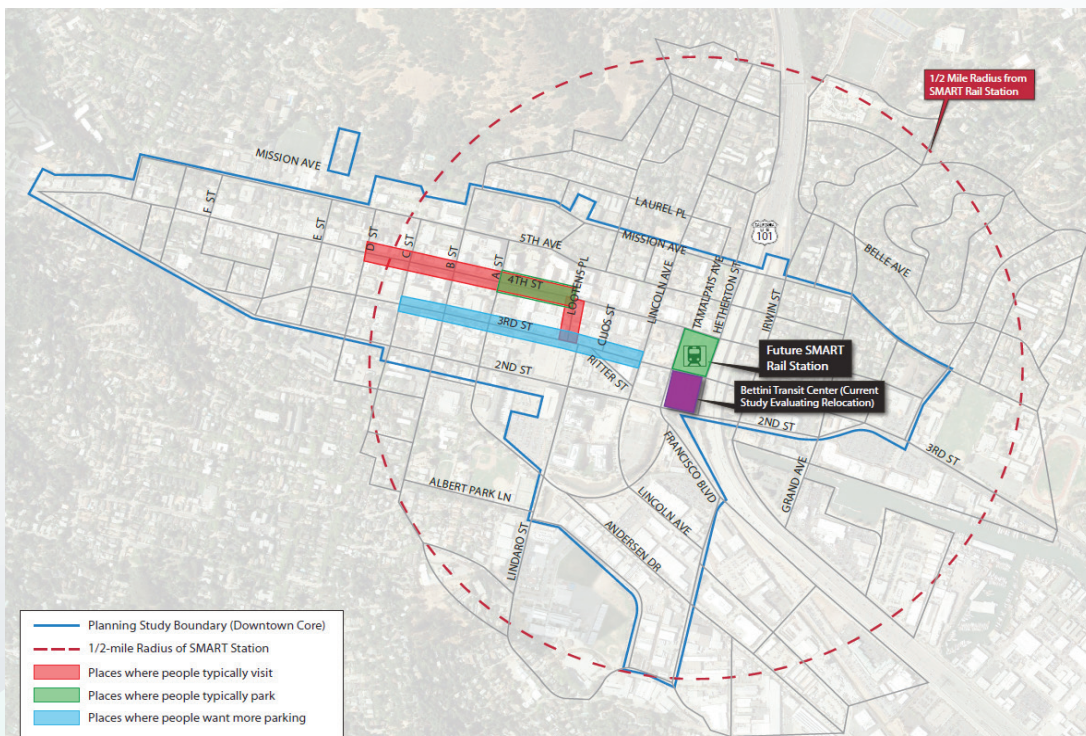
Wayfinding Display Board

At the pop-up workshops at Downtown Art Walk, Bio Marin, and Winter Wonderland, 31 participants provided responses on the wayfinding exhibit boards. Figures 28 through 33 illustrate the responses to different types of signage.

Figure 28: Signage with simple, modest style that is easy to read
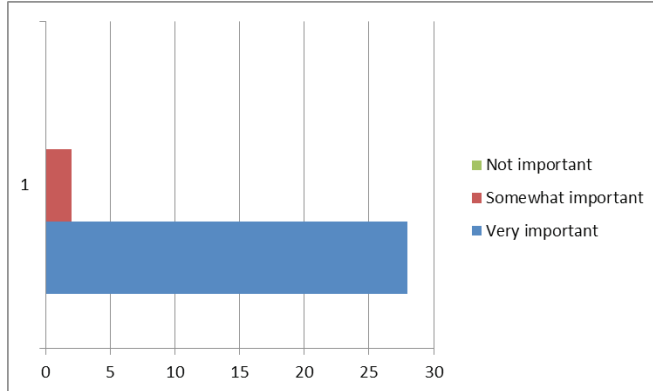
Figure 29: Signage that directs driver to available parking
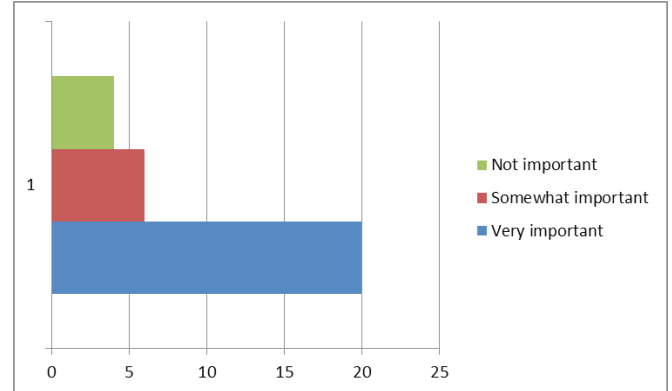
Figure 30: Pedestrian-oriented signage to key Downtown destinations
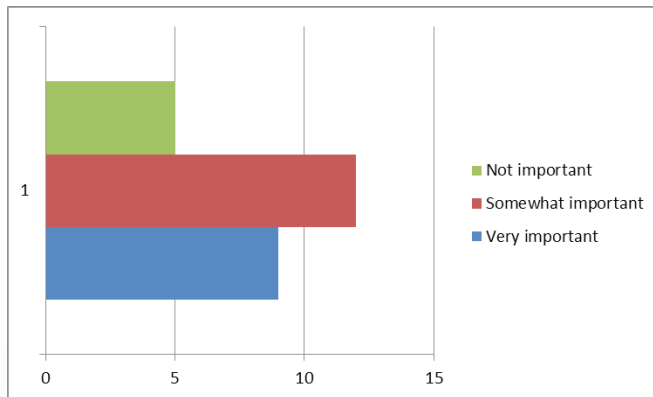
Figure 31: Signage directing bicyclists to key bicycle routes/ connections
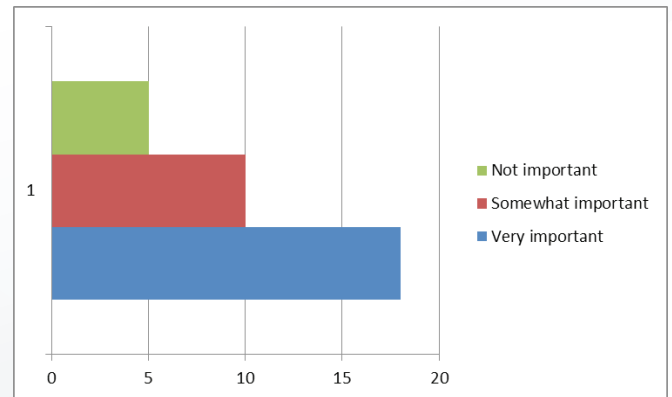
Figure 32: Signage with vibrant, colorful style that attracts the eye
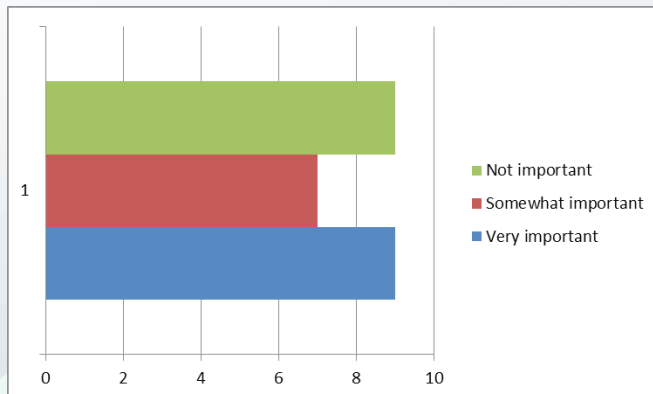
Figure 33: Attractive entry feature that welcomes visitors to Downtown
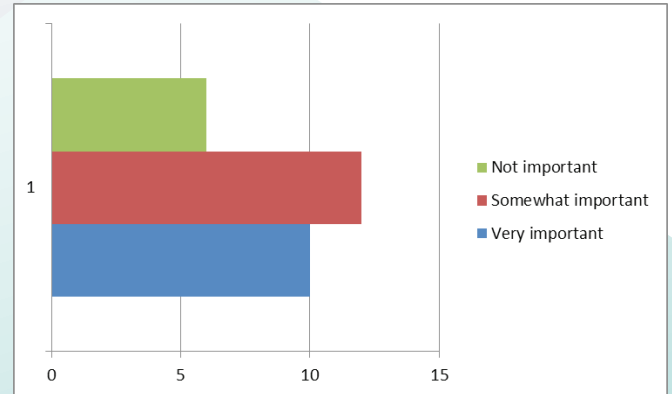
"Tell Us What You Think" Display Board

At all three pop-up workshops, a blank exhibit board was provided with sticky notes for the public to write and post their comments. At the three workshops, 41 participants responded. Below is a summary of their responses:

- Improve wayfinding for vehicles, cyclists, and pedestrians.
- Increase secure bike parking in the Downtown area.
- Increase parking spots and garages for Downtown visitors and residents.
- Parking in the Downtown area is too expensive.
- Focus project efforts on reducing the traffic levels in the Downtown vicinity.
- Parking in the Downtown are meets the community's needs.
- The price to park and close proximity to the intended destination are the two most salient factors with respect to Downtown parking.
- Readjust the price to park in the Downtown parking lots to an on-demand structure.

3.2 Input on Draft Report and Findings

Input from interested parties was provided through the process of completing the parking and wayfinding study. After the completion of the data collection, analysis, and findings, the first drafts of the study were provided to groups by the City. Comments were received in late 2016. Revisions to the first draft of this report were made based on the comments received. Groups providing input included the Citizens Advisory Committee (CAC) and the Chamber of Commerce.

After the report was revised, a stakeholder group was convened to provide review and input on the study findings. A series of meetings were convened by the City beginning in January 2017 to discuss each section of the report and each of the recommendations. City staff documented the meetings, including changes made to the report, initial reactions by City staff to the report recommendations, and the comments provided by the stakeholder group. In the cases of some recommendations, all three (report, City, stakeholder group) aligned. In other cases, the report recommendations are different than the initial reaction by City staff and/or the consensus of the stakeholder group. The meetings, which were typically held at three to four week intervals, resulted in improvements to the draft report and recommendations, which have been incorporated into this final report.

4. PARK+ AND PROJECTION OF FUTURE PARKING DEMAND

After collecting existing parking supply, parking demand, and land use data, a parking model in Park+, Kimley-Horn's proprietary parking modeling software, was developed. Park+ used to model existing conditions and project future parking conditions under three different future scenarios. This section presents a summary of the Park+ scenarios, assumptions, and analysis results for the study area (shown in **Figure 2**), and discusses the development of four Park+ scenarios that represent the existing, near-term, long-term, and maximum development potential of the study area and the associated parking impacts.

The scenarios presented in the following sections were developed based on data provided by the City and developed based on data collected in the field. The data used in this model includes:

1. **Land use information** – provided by the City, representing the type of land use and its intensity (e.g. 5,000 square feet [sf] restaurant or 50-unit condominium).

2. **Parking information** – parking data was collected in the field and consisted of parking capacity, user type, restrictions, price, and occupancy for peak hours and non-peaks conditions. To provide the most accurate representation of parking in the Downtown area, supply and demand information was assumed for lots that were not accessible during data collection.

3. **User information** – assumptions were made based on knowledge of the area, inventory taken during parking data collection, and conversations with the City regarding walking distances, modal split, and user behavior characteristics. These assumptions were used as input values in the model.

4. **Scenario information** – including ongoing and projected developments and associated parking, provided by the City.

Based on this data, a calibrated base model was developed that reflects the existing parking demands and patterns. The primary output of the model calibration was the creation of custom parking generation rates. The custom parking generation rates are shown in **Table 9** below.

Table 9: Park+ Calibrated Generation Ratios at Peak (1PM)

Land Use Type	Park+ Peak Demand Rate	Urban Land Institute (ULI) Parking Demand Rate
Residential	0.71 spaces per dwelling unit	1.65 spaces per dwelling unit
General Retail	0.77 spaces per 1,000 SF	3.60 spaces per 1,000 SF for retail
Restaurant	4.5 spaces per 1,000 SF	16 -18 spaces per 1,000 SF for lounge/restaurant
Office	1.5 spaces per 1,000 SF	2.80 spaces per 1,000 SF

Figure 34: Park+ Study Area

Legend

Land Uses

Parking Facilities

4.1 Scenario Development

Using the assumptions and calibrated data presented in the previous section, the Park+ model was used to evaluate four distinct scenarios:

1. Existing Conditions – represents today's peak conditions within the study area boundaries.
2. Near-Term Development – represents new development that is approved, under construction, or in the review process.
3. Long-Term Development – represents new planned development based on the General Plan 2020.
4. Maximum Capacity Conditions – represents where the population continues to grow in the study area, consuming the available parking supply.

The following sections describe the analysis and outputs from each scenario.

4.2 Existing Conditions Scenario

The existing conditions scenario was built using the land use information provided by the City and parking data that was gathered in the field. This model represents current conditions, as of August 2015. A summation of the land use intensities that were incorporated into the model is shown below.

- Residential – 1,182 units
- General Retail – 830,627 sf
- Restaurant – 172,348 sf
- Office – 1,842,474 sf
- Parking Spaces – 7,827 spaces

Figure 35 illustrates the parking demand in the study area associated with these land use intensities and the parking supply.

The numerical results of the model are presented in **Table 10**, which summarizes parking demands for the Downtown Planning Study Area as a whole and available public parking. Public parking facilities are considered to be on-street parking and off-street facilities that allow for general public parking and are not restricted to specific users (e.g residents) or a particular business or land use.

Table 10: Existing Conditions Parking Occupancy by Type

Location	Parking Demand	Parking Supply	Surplus/Deficit	% Occupied
Study Area	5,032	7,827	2,795	64%
Public Parking	2,242	3,044	802	74%
On-Street	1,082	1,439	357	75%
Off-Street (Public)	1,160	1,605	445	72%

A downtown parking system is typically considered to be at a critical capacity at occupancies between 85 percent and 90 percent. When a large, complex system experiences occupancies greater than 85 percent to 90 percent, users can become frustrated, as it is difficult to find those remaining available spaces.

The public parking within the study area experiences demands that are below the 85 percent to 90 percent threshold, and the study area, as a whole experiences even less parking demand. These results indicate that although there is a surplus of parking, the public parking facilities experience greater demands than the private facilities.

Additionally, there are individual parking facilities throughout the study area that experience occupancies above 90 percent. For individual facilities, such as a parking garage, ideal occupancies can range up to 95 percent. Of the 287 facilities and on-street spaces that are available for public parking, 137 facilities experience occupancies of 90 percent or greater.

Figure 35: Existing Conditions Parking Demand

Legend

- Land Uses
- Land Uses with Latent Demand

Existing Conditions Parking Occupancy

- 0 - 50 %
- 50 - 75 %
- 75 - 90 %
- 90+ %

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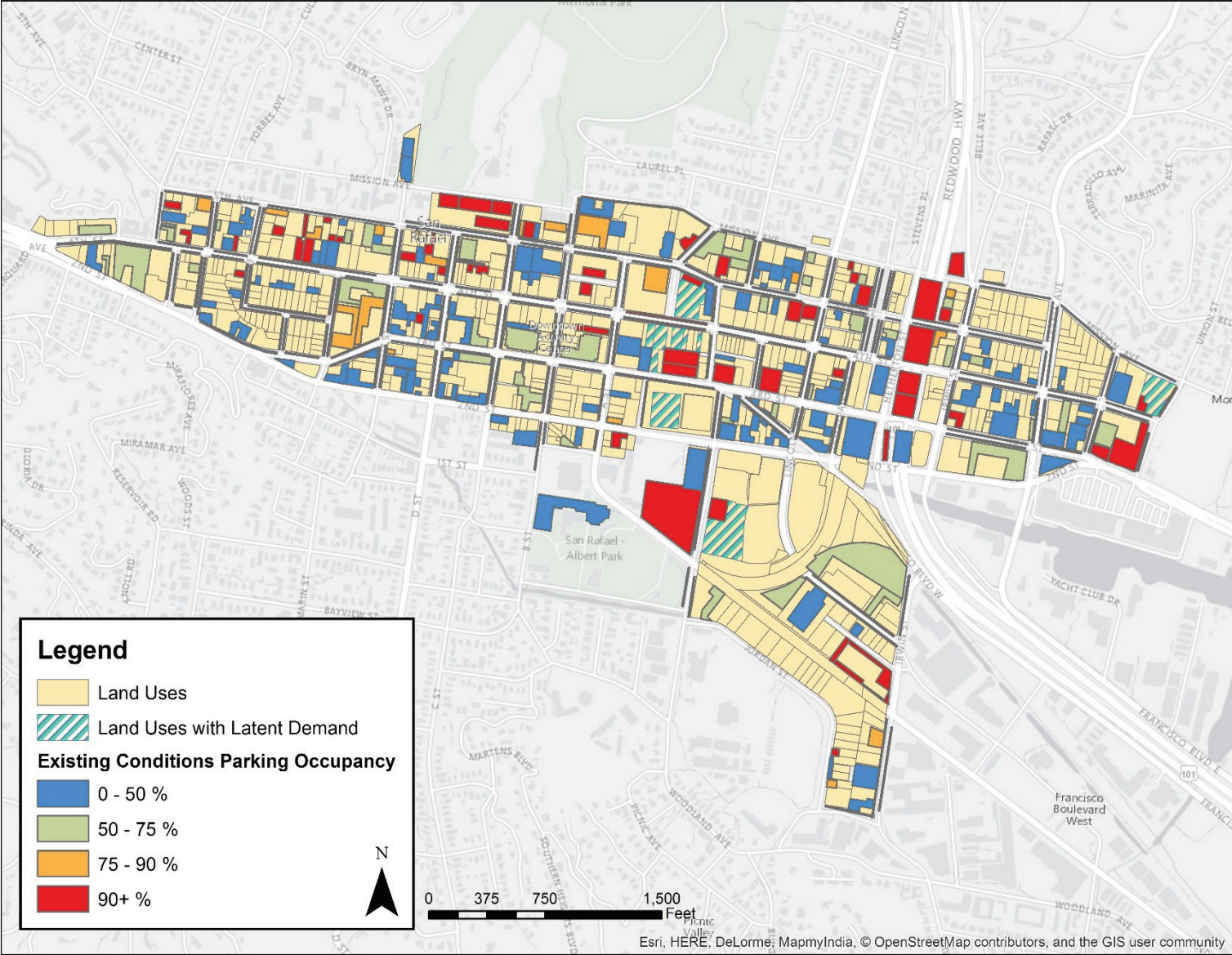
4.3 Near-Term Development Scenario

The development included in the Near-Term scenario was provided by the City. These projects are planned, pending, under construction, or currently under review by the City. **Table 11** presents the project name, number, use, and intensity. **Figure 36** illustrates the location of each of these projects and **Figure 37** illustrates the parking demand in the study area associated with the addition of these developments.

Table 11: Near-Term Land Use Intensities

Project No.	Project	Land Use	Intensity
1	1203 Lincoln Ave	Multifamily Residential	36 units
2	524 Mission Ave	Multifamily Residential	15 units
3	Whistlestop - 999 3rd St project	Multifamily Residential	50 units
3a	Whistlestop - 999 3rd St project	Senior Services	16,000 sf
4	700 3rd St	General Retail	6,500 sf
4a	700 3rd St	Multifamily Residential	10 units
5	San Rafael Corporate Center - Parking Garage	Parking Garage	661 spaces
5a	San Rafael Corporate Center - Parking Garage Expansion	Parking Garage	300 spaces
6	San Rafael Corporate Center - Lincoln Ave	Office	80,000 sf
7	San Rafael Corporate Center - Lindaro St	Office	72,000 sf
8	PG&E - 999 3rd St	Office	200,000 sf
9	1001 4th St	Multifamily Residential	100 units
9a	1001 4th St	Parking	100 spaces
10	809 B St /1212 + 124 2nd St	Multifamily Residential	100 units
10a	809 B St /1212 + 124 2nd St	General Retail	2,000 sf
12	703-723 3rd St/898 Lincoln	Multifamily Residential	100 units
13	1313 Fifth Ave	City Public Safety Center	44,000 sf
14	1201 Fifth Ave	Office	5,000 sf
16	910 D Street (Post Office)	Multifamily Residential	61 units
19	G Square (1700 4th St)	Multifamily Residential	10 units
20	21 G St	Multifamily Residential	8 units
20a	21 G St	Parking	16 spaces

Figure 36: Near-Term Development Locations
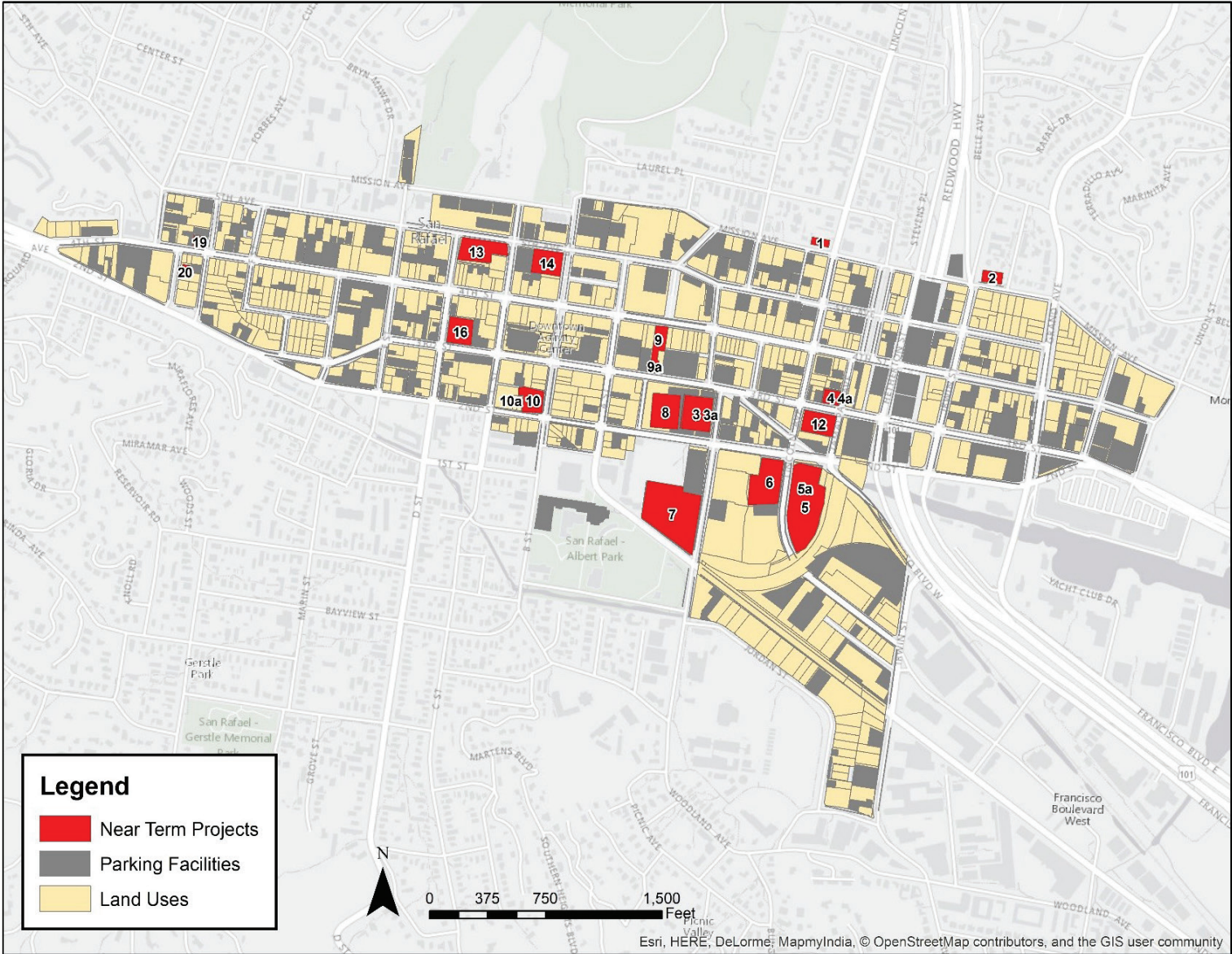
Figure 37: Near-Term Scenario Parking Demand

Legend

Land Uses

Land Uses with Latent Demand

Near Term Scenario Parking Occupancy

0 - 50 %

50 - 75 %

75 - 90 %

90+ %
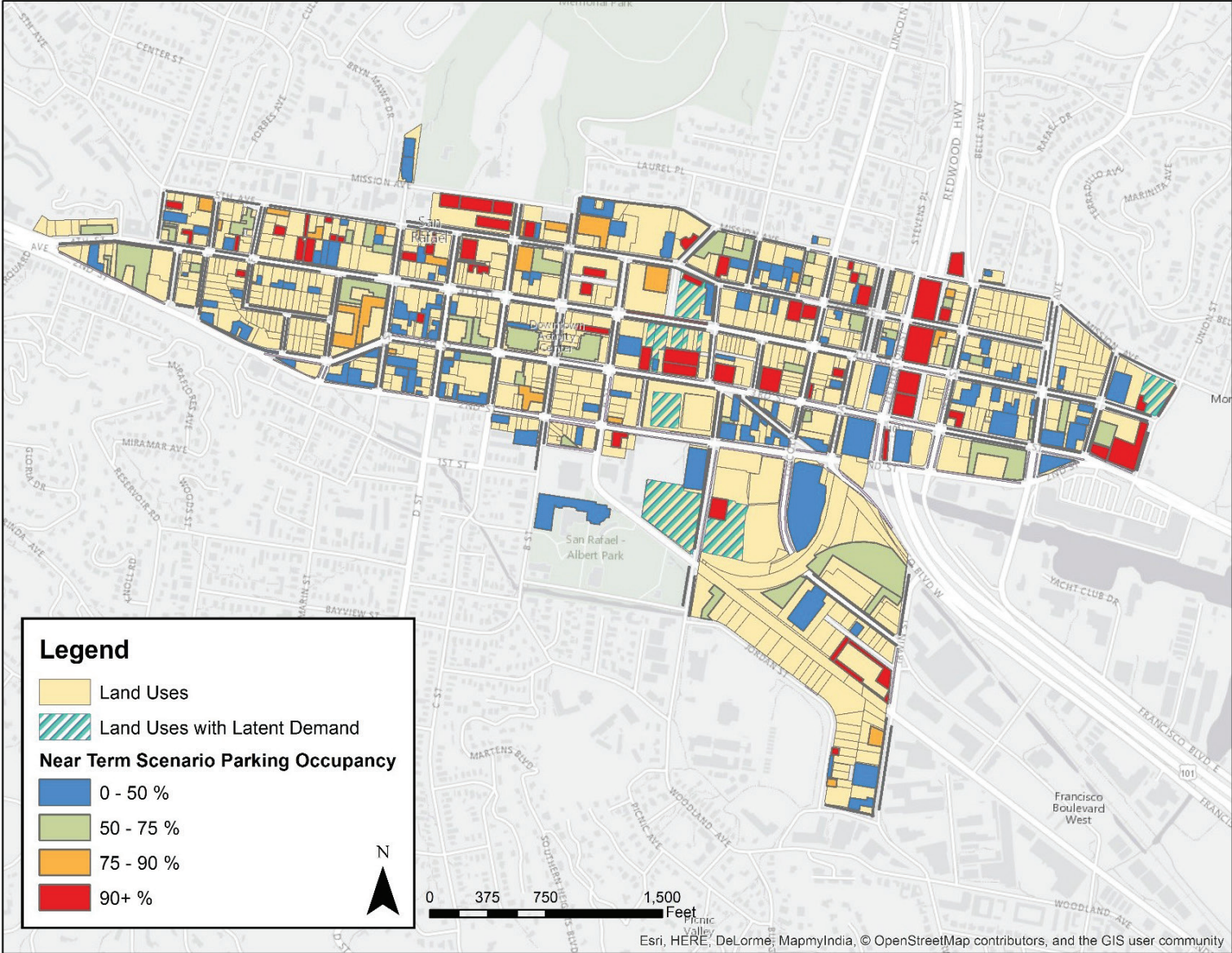
The numerical results of the model are presented in **Table 12**, which summarizes parking demands for the study area as a whole and available public parking.

Table 12: Near-Term Conditions Parking Occupancy by Type

Location	Parking Demand	Parking Supply	Surplus/Deficit	% Occupied	Change[1]
Study Area Total	5,941	8,785	2,844	68%	4%
Public Parking	2,307	3,013	706	76%	2%
On-Street	1,127	1,439	312	78%	3%
Off-Street (Public)	1,180	1,574	394	75%	3%
Notes: 1. Change is reflective of difference in projected occupancy between Existing and Near-Term Scenarios					

In the near-term scenario, parking occupancies increase for both the study area as a whole and for the public parking facilities. However, the occupancies are still below the 85 percent to 90 percent threshold that is used to identify when a parking system becomes stressed, likely continuing the users experience with the similar parking conditions that exist today. With that said, there are individual parking facilities throughout the study area that experience occupancies above 90 percent. Of the 284 facilities and on-street spaces that are available for public parking 143 facilities experience occupancies of 90 percent or greater during the peak hour (1:00 pm). Additionally, **Table 12** indicates that although on-street facilities are not at the threshold, they are more heavily used than other parking facilities. As the study area continues to develop, the on-street parking facilities will be the first to approach that threshold.

4.4 Long-Term Development Scenario

The long-term development projects were identified from the assumed growth as part of the General Plan 2020. **Table 13** identifies the development land use and associated intensities incorporated into the model. **Figure 38** illustrates the location of these developments. **Figure 39** illustrates the parking demand in the study area associated with the addition of these developments. It should be noted that the long-term scenario is built from the near-term scenario, therefore developments that were included in the near-term scenario are also incorporated into the long-term scenario.

Table 13: Long-Term Land Use Intensities

Project No.	Project	Land Use	Intensity
40	637 Mission	Multifamily Residential	7 units
41	7-11/misc. B St	Multifamily Residential	3 units
42	905 D St.	Multifamily Residential	42 units
45	Citibank (former Metro commerce)	Multifamily Residential	25 units
48	Fourth & Lincoln/D&S Auto	Multifamily Residential	14 units
49	Fourth St., used car lots (retail)	General Retail	5,000sf
49a	Fourth St., used car lots (residential)	Multifamily Residential	14 units
50	Goodwill (809 Lincoln Ave)	Multifamily Residential	24 units
51	Library (1100 E St)	Library	27,000sf
52	Lincoln and Third (902 Lincoln Ave)	Multifamily Residential	11 units
53	Marin Color/Video Droid (898 Lincoln Ave)	Multifamily Residential	54 units
55	Pac bell Lot (220 Shaver St)	Multifamily Residential	29 units
58	Parking Lot by Beauty School (3rd & Cijos Lot)	Multifamily Residential	16 units
59	Parking Lot by Beverly's at Lincoln (813 Fifth Ave)	Multifamily Residential	6 units
60	Redwood Typewriter (902 Lincoln Ave)	Multifamily Residential	9 units
62	West America Bank (1523 4th St)	Multifamily Residential	48 units
63	West America Bank, 3rd/A St (1030 3rd St)	Multifamily Residential	42 units
64	Zappetini Iron Works (1112 2nd St)	Multifamily Residential	18 units

The numerical results of the scenario are presented in **Table 14,** which summarizes parking demands for the study area as a whole and available public parking.

Table 14: Long-Term Conditions Parking Occupancy by Type

Location	Parking Demand	Parking Supply	Surplus/Deficit	% Occupied	Change[1]
Study Area	5,991	8,715	2,724	69%	1%
Public Parking	2,290	2,943	653	78%	2%
On-Street	1,152	1,439	287	80%	2%
Off-Street (Public)	1,138	1,504	366	76%	1%

Notes:
1. Change is reflective of difference in projected occupancy between Near-Term and Long-Term Scenarios.

Figure 38: Long-Term Development Scenario Locations
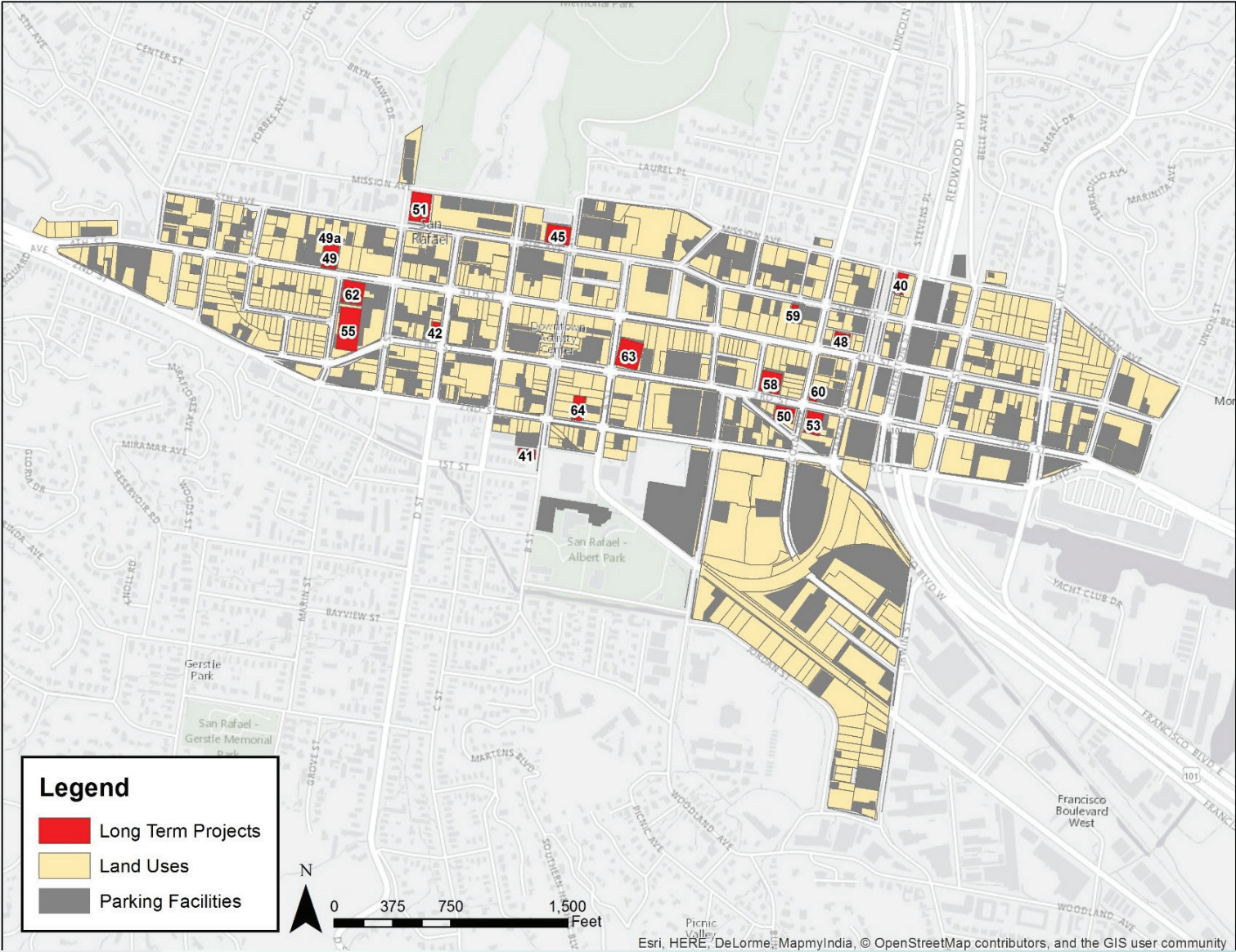
Figure 39: Long-Term Scenario Parking Demand

Legend

- Land Uses
- Land Uses with Latent Demand

Long Term Scenario Parking Occupancy

- 0 - 50 %
- 50 - 75 %
- 75 - 90 %
- 90+ %

N

0   375   750   1,500
Feet

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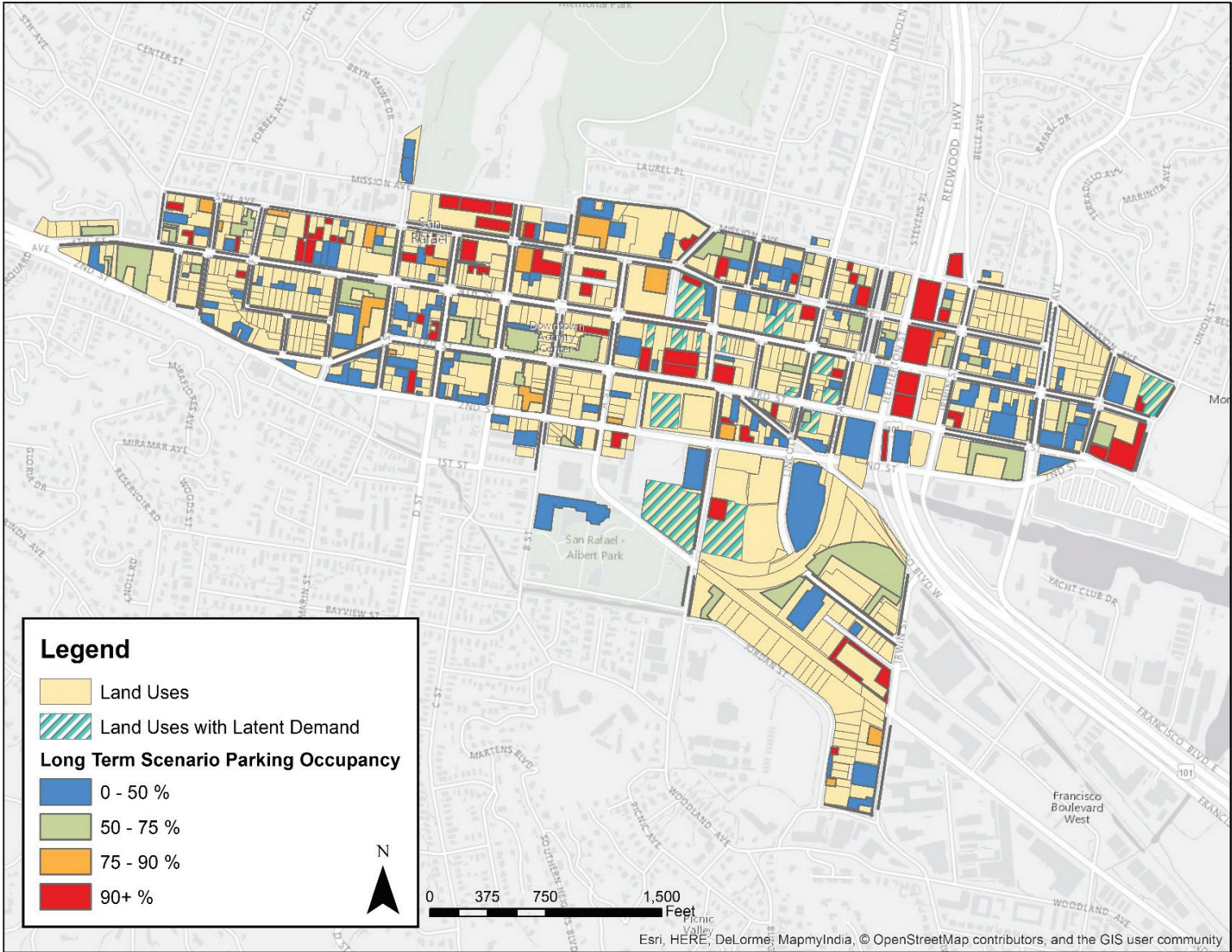
In the long-term scenario, parking occupancies increase for both the study area as a whole and for the public parking facilities. However, the occupancies are still below the 85 percent to 90 percent threshold that is used to identify when a parking system becomes stressed, likely continuing the users experience with the similar parking conditions that exist today. Although on-street facilities are not at the threshold, they are more heavily used than other parking facilities. As the study area continues to develop, the on-street parking facilities will be the first to approach that threshold.

Under this scenario there continue to be individual parking facilities throughout the study area that experience occupancies above 90 percent. Of the 284 facilities and on-street spaces that are available for public parking, 147 facilities experience occupancies of 90 percent or greater. Additionally, Table 12 indicates that although on-street facilities are not at the threshold, they are more heavily utilized than other parking facilities. As the study area continues to develop, the on-street parking facilities will be the first to approach that threshold.

4.5 Maximum Demand Scenario

Under this scenario, it was assumed that undefined growth would continue to occur in the study area, and as such, parking facilities would be consumed by infill development. This scenario is based on the long-term scenario, incorporating the developments identified in both the near-term and long-term scenarios. Specific land uses and intensities were not identified for this scenario, but rather a population growth of 7.5 percent was assumed. In the absence of specific land use assumptions to incorporate into the model, it was assumed that parking facilities that had occupancies of 30 percent or below during the 1:00 pm peak hour would be consumed in some capacity to accommodate the growth. Therefore, those facilities were removed from this scenario, reducing the parking supply to 6,981 spaces. Under this scenario, the parking relationships for privately held parking were maintained. The intent of this scenario is to simulate increased land use intensities to the point of maximizing the capacity of the available parking supply. **Figure 40** illustrates the parking demand in the study area associated with this scenario.

With the reduction of 1,618 spaces, the demand generated by the study area land uses and assumed growth in population is pushed to the remaining facilities. The numerical results of the scenario are presented in **Table 15**, which summarizes parking demands for the study area as a whole and available public parking.

Table 15: Maximum Demand Parking Occupancy by Type

Location	Parking Demand	Parking Supply	Surplus/Deficit	% Occupied	Change[1]
Study Area	7,182	7,097	-85	100%	31%
Public Parking	2,666	2,826	160	94%	16%
On-Street	1,368	1,439	71	95%	15%
Off-Street (Public)	1,298	1,387	89	94%	18%
Notes: 1. Change is reflective of difference in projected occupancy between Long-Term and Maximum Demand Scenarios					

Under this scenario, publicly available parking facilities are operating well above the 85 percent to 90 percent threshold. Additionally, there are facilities that remain below 50 percent occupied during the peak hour. These are primarily private facilities with restricted parking. Additionally, of the 284 facilities and on-street spaces that are available for public parking, 185 facilities experience occupancies of 90 percent or greater.

With regard to land use development, the land use intensities increased to accommodate the population growth. The following is a summation of the additional land use intensities that resulted from this scenario. These values are based on the parking generation rates developed by the model for each land use type, the difference of the respective land use intensities, and the resulting demand generated. These values are hypothetical and represent the increase in land use intensities relative to the long-term scenario that would strain the projected parking supply. They do not indicate the latent capacity for additional development in the Downtown area.

- Residential – 383 additional units
- General Retail – 171,881 additional sf
- Restaurant – 37,283 additional sf
- Office – 731,199 additional sf

Figure 40: Maximum Demand Scenario Parking Demand

Legend

Land Uses

Land Uses with Latent Demand

Max Demand Scenario Parking Occupancy

0 - 50 %

50 - 75 %

75 - 90 %

90+ %
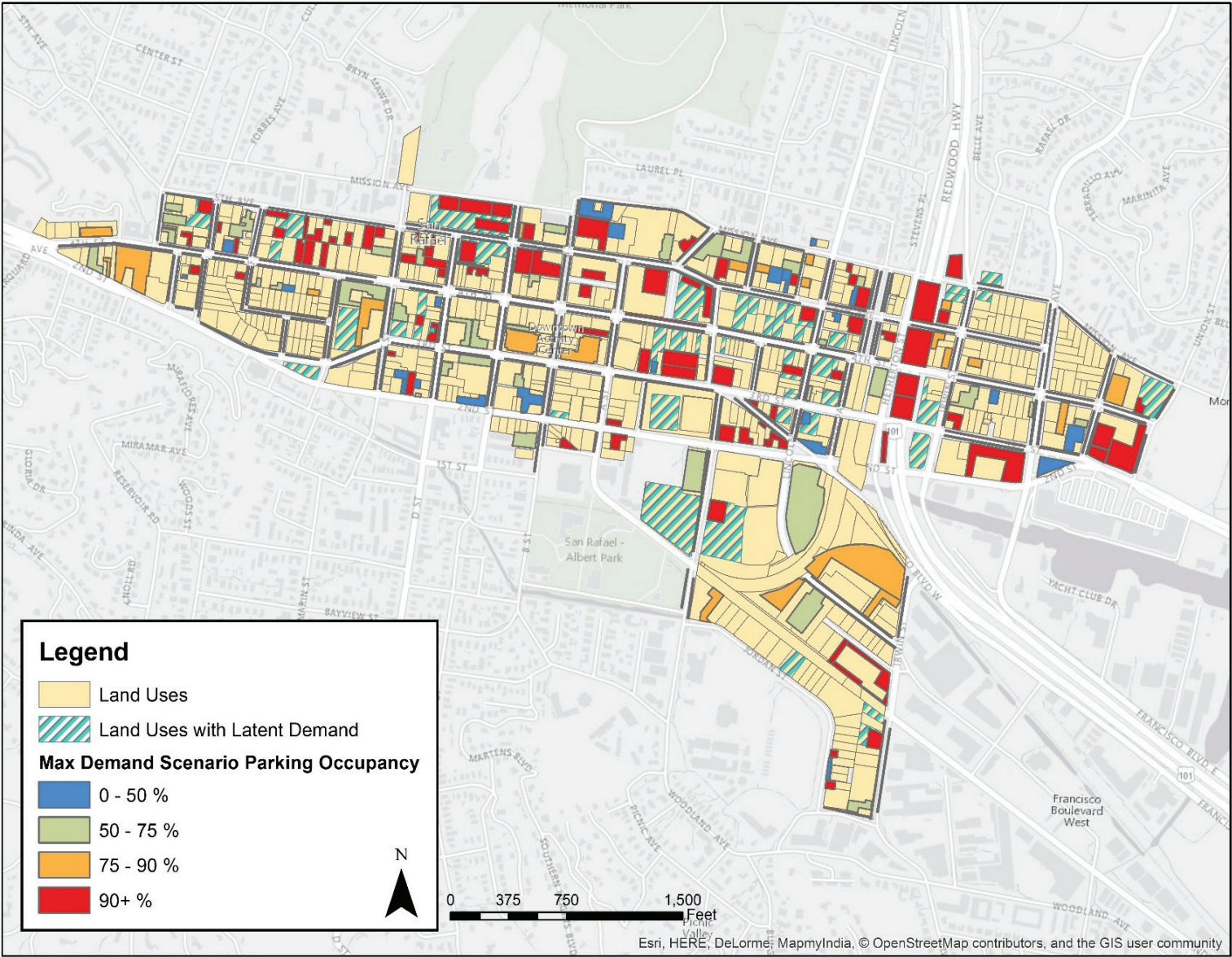
Recommendations

Based on the analysis, the following recommendations were identified:

- **Future Shared Parking Opportunities** - Although the study area as a whole is not experiencing high demands, as the area develops the demands on the public facilities will start to approach that functional capacity threshold. The City has an opportunity at this point to start building relationships with operators and managers of privately held parking facilities in an effort to create future shared parking opportunities.

- **Caltrans Park & Ride** - There are a handful of facilities that are experiencing occupancies greater than 90 percent in particular the Caltrans Park & Ride facilities located under Highway 101. If the Caltrans parking is occupied by the intended users of the facilities, then no action is required. Caltrans Park & Ride facilities are to be used "only by persons using a bicycle or public transit, or engaged in ridesharing…" per the California Vehicle Code. The City could seek enforcement of parking in these lots in order to make sure that they are being used as intended.

- **Variable Pricing to Manage Parking Demands** - When a parking system is shown to consistently experience 85 percent to 90 percent occupancies, there may be cause to implement changes to the parking system to improve effectiveness and efficiency. Although the parking system within the study area as a whole is not operating at this level, there are locations throughout the study area that are. Therefore, it is recommended that the City consider dynamic pricing options to manage parking demands in areas that experience high demands. The intent of dynamic pricing is to establish prices that are appropriate for the demand in specific areas. In locations with high demand, the intent is to encourage users to either park for shorter periods of time, creating more turnover, or parking in facilities that are underutilized, distributing the demands and creating more availability in areas with high demand. The City should set the target occupancy range between 75 percent and 85 percent. The following considerations should apply:
  - When occupancies are below 75 percent, downward rate adjustments should be considered.
  - When occupancies are above 85 percent, upward rate adjustments should be considered.
  - Rate adjustments should be adjusted based on how far they range from the target occupancy.
    - ✳ Occupancies between 60 percent and 75 percent and 85 percent and 90 percent should see smaller adjustments
    - ✳ Occupancies less than 60 percent and higher than 90 percent should see higher adjustments

- **Limiting Restricted On-Street Parking in Select Areas** – Consider monitoring time limited on-street parking east of Highway 101 and on Lincoln Avenue north of Fifth Avenue; allowing for stricter enforcement of time limits if it is observed that vehicles use those spaces for SMART parking.

- **Limiting Unrestricted On-Street Parking in Select Areas** – Consider monitoring free, unrestricted on-street parking in the Montecito, Lincoln/San Rafael Hill, and Dominican/Black Canyon neighborhoods; if it is observed that vehicles use those spaces for SMART parking, initiate dialogue with these neighborhoods about the City's permit parking program.

The City is currently undertaking a study related to the SRTC/SMART station relocation. When that study is adopted by the City Council, it will include recommendations for station-specific needs. In its draft form, the study includes recommendations that will eliminate the Tamalpais Avenue on-street parking between 3rd and 4th Street. **Figure 42** was taken from the draft SRTC station study and illustrates proposed changes in the area. Pending the final approval of the SRTC/SMART station report, it is recommended that time limits for on-street parking spaces near SRTC and the SMART station be increased to 10 hours to meet some of the anticipated SMART parking demand.

These locations are shown in **Figure 41,** on the previous page, and were selected based on their close proximity to transit facilities and abutting land uses. There are currently 22 on-street spaces for which the exiting 10-hour time limit should be maintained; eight of those spaces are on Tamalpais Avenue between 3rd and 4th Street and may be eliminated as part of the SRTC/ SMART station improvements. An additional eight spaces that are recommended to be converted from two-hour time limits to 10-hour time limits. It should be noted that the spaces may not necessarily be used by only SMART riders. Based on observed occupancy data, it is estimated that of the 30 spaces supplied, 50 percent may be available for SMART users. It is also recommended that signs or information boards be placed at the transit center and SMART station to indicate that additional long-term parking is available at the 3rd & Lootens parking structure.

Recommendations

Based on the analysis, the following recommendations were identified:

- Although the study area as a whole is not experiencing high demands, as the area develops, the demands on the public facilities start to approach that functional capacity threshold. The City has an opportunity at this point to start building relationships with operators and managers of privately held parking facilities in an effort to create shared parking opportunities in the future.

- When a parking system is shown to experience 85-90% occupancies consistently, there may be cause to implement changes to the parking system to improve effectiveness and efficiency. Although the parking system within the study area as a whole is not operating at this level, there are locations throughout the study area that are. Therefore, it is recommended that the City consider dynamic pricing options to manage parking demands in areas that experience high demands. The intent of dynamic pricing is to establish prices that are appropriate for the demand in specific areas. In locations with high demand, the intent is to encourage users to either park for shorter periods of time, creating more turnover, or parking in facilities that are underutilized, distributing the demands and creating more availability in areas with high demand. The City should set the target occupancy range between 75 and 85 percent. The following considerations should apply:

  - When occupancies are below 75 percent, downward rate adjustments should be considered.

  - When occupancies are above 85 percent, upward rate adjustments should be considered.

  - Rate adjustments should be adjusted based on how far they range from the target occupancy.

  - Occupancies between 60 and 75 percent and 85 and 90 percent should see smaller adjustments

  - Occupancies less than 60 percent and higher than 90 percent should see higher adjustments

- Monitor time limited on-street parking east of Highway 101 and on Lincoln Avenue north of Fifth Avenue; consider stricter enforcement of time limits if it is observed that vehicles use those spaces for SMART parking.

- Monitor free, unrestricted on-street parking in the Montecito, Lincoln/San Rafael Hill, and Dominican/Black Canyon neighborhoods; if it is observed that vehicles use those spaces for SMART parking, initiate dialogue with these neighborhoods about the City's permit parking program.

Figure 42 – SRTC/SMART Station Study Recommendations for Tamalpais Avenue
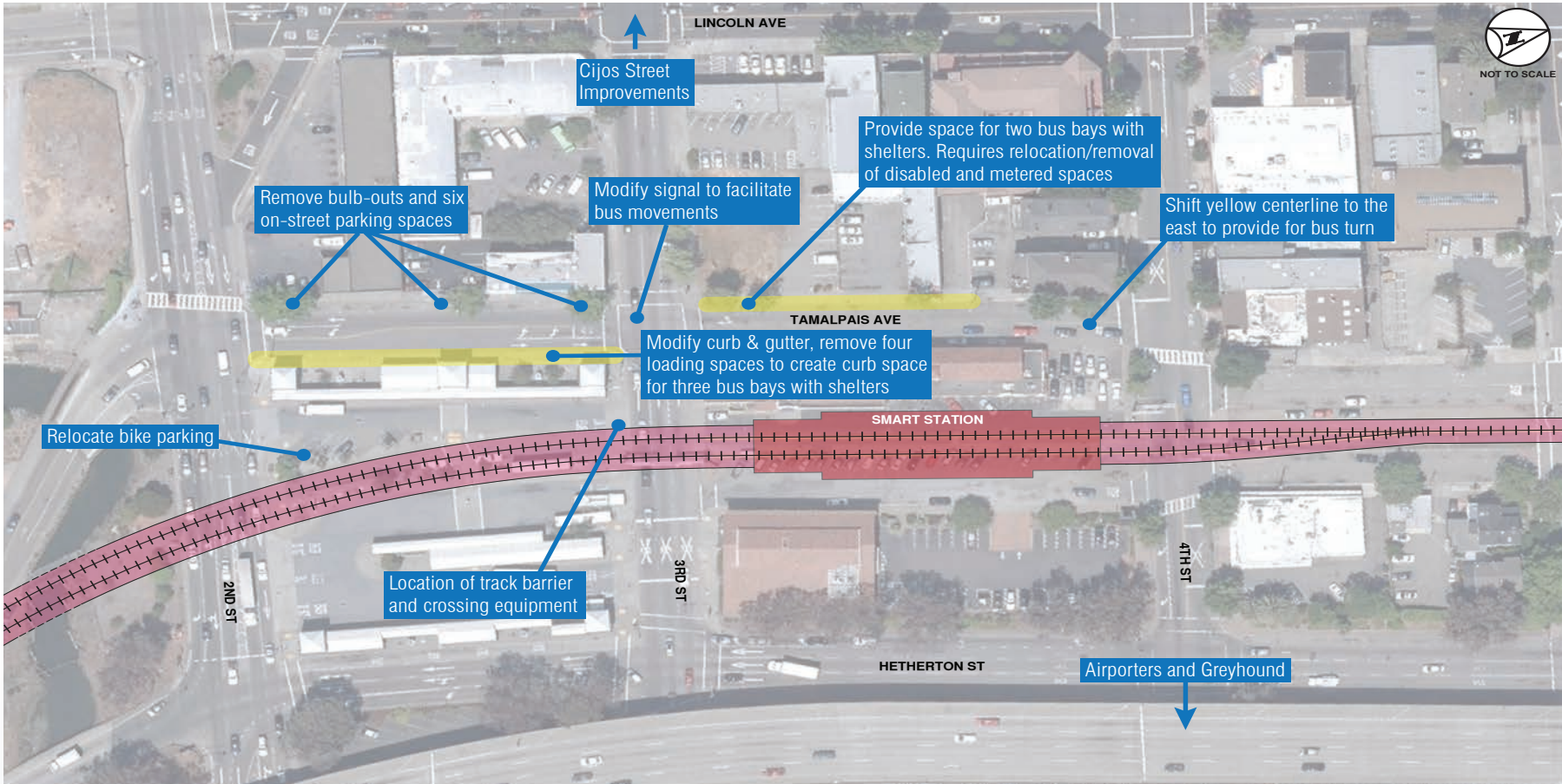
4.7 Establish a Rate Policy for Adjusting Rates in the Public Supply (On- and Off-Street)

The purpose of the recommendation in this section is to provide City staff with the discretion and flexibility to manage the downtown parking system consistent with the guiding principles for the district.

Understandably, adjusting parking rates is a controversial topic among downtown stakeholders. However, if rates are not routinely reviewed and adjusted within the context of a clear, fair, and objective policy framework, fiscal challenges or occupancy patterns may necessitate substantial increases that may be seen as reactive rather, than strategic.

Best practices parking management would suggest that parking rates are adjusted periodically to assure the following:

• Cover normal annual increases in operating costs of the system for which a fee is assessed (e.g., on-street meter system, off-street lot and/or garage).

• Reflect space demand patterns, (e.g., using an occupancy standard as a decision-making trigger for adjusting rates, upward or downward).

• Secure efficient use of parking supply. Using rate structures to encourage efficient use of all existing supply, by therefore minimizing surpluses in public off-street supply.

• Provide for future need, as part of a comprehensive funding strategy. This includes normal capital planning and projected growth in the system.

The City should establish formal systems within the municipal code that provide a basis for rate setting in both the on- and off-street systems. What is lacking in most jurisdictions is a routine commitment to rate evaluation at all levels (potentially including enforcement fines and fees) that objectively calibrates rates against a set standard of performance metrics.

It is recommended that the City:

Adopt performance metrics for rate review and adjustments into a formal operations policy. Best practices indicate two levels of analysis for determining adjustments.

First: The true cost of normal operations, including supplies, operating fees, maintenance, and support, as well as the reasonable cost of financing debt. Cost recovery would be the base hourly rate plus annual/bi-annual adjustments to cover the costs of inflation within operating cost expenses.

Second: Substantiate decisions to adjust rates including:

• Sustained *occupancies* more than 85 percent.

• Consistency with *comparable cities*.

• Annually review and adjust rates for publicly owned off-street parking in accordance with established performance metrics, with emphasis on adhering to consistency with documented variations in normal operating costs. Rates could vary upward or downward based on occupancy/demand differences.

• Biannually review and adjust rates for publicly owned on-street parking in accordance with adopted performance metrics.

• Develop a set of comparable cities and routinely track their rate performance over time for on-street, off-street, and enforcement.

• Integrate routine assessments of occupancy performance into both annual and bi-annual rate evaluations.

• Adjust off-street rates annually.

• Adjust on-street rates no less than every two years.

Overall, it is essential that rate adjustment be viewed as a standard operating procedure within the overall parking management system; one that is data-base designed to support the fiscal health of the parking system, and not politicized. In addition, parking occupancy should be monitored with increases in fees to address concerns about shoppers going elsewhere because parking rates are perceived as being too high or that parking is cheaper or free elsewhere.

5. ZONING AND DEVELOPMENT STANDARDS

Zoning Standards implement the City's broad goals, objectives and policies through regulation that is applied at a site-specific level. It regulates parking, land use, density and the size and placement of buildings. Zoning and regulations are often grandfathered in over many years and a desire to integrate land use and parking demand more efficiently, is typically overlooked. San Rafael is no exception.

To provide a framework for "right-size" parking for the Downtown area, regulations and zoning must support the goals. Some of the goals and objectives include the promotion of alternative transportation modes, including walking and cycling.

This project makes recommendations for policy reforms to correct conflicts and identify opportunities that encourage more efficient use of parking resources, through more efficient pricing, shared parking, in lieu parking options, parking resource brokerage, and other parking management techniques. The recommendations are specific to changes and/or revisions in current zoning and development standards related to parking in the City.

5.1 Approach

The recommendations presented in this section are based on an understanding of key background City provided documents for the evaluation of current parking standards. Information provided included:

- City's Municipal Code, particularly Chapters 10.09 Downtown San Rafael Business Improvement District and 14.18 Parking Standards;

- Parking Services website;

- 2015 Downtown Parking/Wayfinding Study Existing Conditions Report, prepared by Kimley-Horn;

- Existing Off-Street Parking Fees & Charges (provided by City staff);

- Resolution No. 13643 Meter Fee Increase (provided by City staff); and

- San Rafael Downtown Station Area Plan (June 4, 2012).

The recommendations are to better synchronize current parking standards with current parking needs and/or future development patterns. The overall goal of good parking management is to balance the appropriate level of parking necessary to meet demand, supporting existing and new development, while enhancing and augmenting the attractiveness of non-auto options in a growing urban area.

5.2 Assessment and Recommendations – Zoning and Development Standards

Recommendations for revisions and/or clarification of the City's existing zoning and development standards related to parking in the Downtown area are outlined below. In some cases, the recommendations suggest further information gathering or discussion at the City's leadership level. Additional consensus may be required in order to determine whether some of the recommended changes have the desired level of support.

A. Adopt Clear and Strategic Guiding Principles as Formal Policies for the Operation and Management of Public Parking (14.18.010)

The statement of purpose in the City's existing code (i.e., Chapter 14.18.010) is directed at the regulation of private parking, which is a common approach in most cities. The Parking Division webpage provides a "parking perspective." Currently, there is not a policy framework that is intended to guide and/or trigger decision-making. As such, the City's intended role in managing existing public parking and planning for new supply in the future is unclear. Without a defined policy framework, it may be difficult to assess and approve some of the changes in other elements of the parking code recommended below.

Principles should be developed in the following topic areas and adopted as policy elements within 14.18.010. Alternately, the principles may be developed as a separate approved policy and referenced within 14.18.010.

1. City's Primary Role and Coordination of Public Supply
   - Organization
   - Role of community – stakeholder input (on-going)
   - Management of existing public supply
   - Responsibility for new supply

2. Defining Priority Customer for On and Off-Street Systems (Public Supply)

3. Capacity Management
   - Triggers for decision-making
   - Shared parking
   - Pricing
   - New supply based on demand-driven parking rates

4. Information Systems
   - Performance metrics, monitoring, and reporting
   - User information

5. Integration with other modes

6. Financial viability

To improve the likelihood that the intent and purpose for parking management will be carried out over time, a consensus set of principles should be incorporated into the City Code and Policy.

B. Simplify Minimum Parking Requirements for the Downtown Area, as now Provided in Chapter 14.18.040

The City's Chapter 14.18.040 is structured with over 50 different use designations for which parking is required as a condition of development. These standards may not recognize or provide for the elastic nature of parking demand in a mixed-use downtown development environment.

It is recommended that parking requirements for the Downtown area be reduced from the current 50 designations to five use types for the Downtown area. This would include minimum parking standards for categories such as:

1. Residential (ownership)
2. Residential (rental)
3. Commercial/retail
4. Institutional
5. Free-standing (single use)

Each of these use types would have a single minimum parking standard that would be calibrated to actual demand. In order to implement this idea, data collection and a future analysis specific to the effort would be required. In the event that the data collection and analysis shows that there is not significant differentiation between a pair of categories, such as residential, or that another category is needed, the list above will be modified.

C. Encourage All Parking Approved Under Chapter 14.18.040 (Sections A – F) be Made Available to the Public

The primary idea explained in this section is to encourage new privately owned parking be made available to the public. It is not advocating that private parking be required to be made available to the public. The form of encouragement may reside in various incentives the city may provide to private owners, including the example described.

Many cities do not allow parking approved within a minimum requirement to be provided to other "non-accessory" uses, thereby limiting the sharing of parking that may be underutilized or available during evenings, weekends or events. Based on existing City policy and vision documents, encouraging shared parking within existing and new developments is a key goal to maximize parking resources to the highest degree. However, the City's code is not clear on operating allowances and requirements that encourage existing and new parking to be shared in a manner that maximizes the use of parking that is built.

A model, such as the Dana Point, California model, allows developers to choose a lower minimum requirement for commercial parking (2.0 stalls per 1,000 square feet) if they are made available to the public. If the developer will not provide parking to the public then the citywide zoning requirements for parking continue to apply (which are higher, would cost the developer significantly more, and could result in oversupply and continued vacant parking spaces). Another model, the Portland, Oregon model, simply indicates that new parking approved in the downtown area is "commercial" parking, meaning it allows it to be used/shared with any other use in the downtown area. This is at the parking owners' discretion and does not require any further approvals from the City.

It is recommended that an additional Section (G) be added to Chapter 14.18.040 that would state:

> "G. Operation. Parking approved under this section may be operated to serve the uses for which the parking was approved, shared with other uses within the Downtown Parking Assessment District, and/or be made available to the public."

The suggested language above includes the effect of the recommendation of this section as well as section 5.3 of this report.

D. Clarify Chapter14.18.060 Section A – Downtown Parking Assessment District

Currently, the code language related to the Downtown Parking Assessment District may not be clearly understood by all who read it. As outlined, Chapter14.18.060 Section A allows parking for non-residential uses in the Downtown Parking Assessment District to be "provided by the Parking Assessment District." This is applicable for the first 1.0 floor area ratio (FAR) of the total SF of the building. This provision thereby waives minimum parking requirements for the first 1.0 FAR of new development.

It is not clear whether the language "provided by the Parking Assessment District" confers an entitlement to parking for the new user (up to 1.0 FAR) within existing public (City owned) supply or that the minimum requirement for that portion of the FAR is simply waived with no further responsibility by the City.

A recommendation is for the City to continue discussions in regards to the original intent of this code provision, particularly if there is interest in expanding the Downtown Parking Assessment District to other areas. An example of language could state:

> A. "*Minimum required* parking for up to 1.0 FAR of the total square footage of the building is ~~provided by the parking assessment district~~ is waived. "

As potential new development occurs, it is key that the City is clear with entitlement or no entitlement (waiver only).

Associated with this is the idea that the boundaries of the Downtown Parking District could be expanded to adjacent blocks that have similar land use and parking characteristics as the existing district. The City could desire to move the boundaries east toward US 101 and west toward or past E Street, if there is a desire to pull those blocks into the benefits provided by the district.

E. Clarify Chapter 14.18.080 – Parking Requirement for Reciprocal Uses With Shared Parking Facilities

Chapter 14.18.080 states that when "two or more uses share a common parking area and when a significant and complementing variation in period of daily demands occurs (i.e., exclusive day and night uses), the zoning administrator may grant reductions in the total parking required through a use permit; provided, that in no instance shall the total parking required be less than would be required for any one (1) of the independent uses." This is a good provision to have in the code as it supports and encourages shared uses in mixed use environments. However, it lacks a reference to how the shared use reduction request would be presented to the zoning administrator. For instance, through a shared use study conducted by a parking professional or transportation engineer. It is often good to leave these types of requirements open ended (therefore flexible), but there are also issues related to equity between developments where one request is approved and another denied. If a standard format is specified it can eliminate issues in the future and more shared use applications will be pursued by developers (leading to less parking built).

It is recommended that current language in this provision be revised as follows:

"When two (2) or more uses share a common parking area and when a significant and complementing variation in period of daily demands occurs (i.e., exclusive day and night uses), the zoning administrator may grant reductions in the total parking required through a use permit; provided, that in no instance shall the total parking required be less than would be required for whichever of any one (1) of the independent uses is greatest. *The zoning administrator will base the grant of reduction on a shared parking demand study provided by the applicant and compiled by a transportation engineer or parking professional.*"

F. Chapter 14.18.130 – Parking Facility Dimensions

Many cities size their minimum parking dimensions to standards that are more applicable to suburban surface lots where land area is not always a significant constraint on development. For instance, the City's aisle width standards range from a minimum of 20 feet (ft.) (one-way, non-parallel) up to 26 ft. (two-way) depending on the angle of the built stall. These are very generous standards for downtown areas, particularly downtown areas where geometries and cost to build for parking garages are extremely challenging. In short, the larger the aisle width, the bigger the cost, as more concrete will be required during building.

The City does also provide an allowance for reduced parking dimensions within the Downtown Parking District. Further reduction of the dimensions within the district could be considered by the Public Works Department.

Many cities are moving to more urban standards for garages (in general) and downtowns (in particular). Table 14 is an example from Portland, Oregon which demonstrates a more compact urban form approach. Portland has a single minimum stall width (8 ft., 6 inches [in].), which has eliminated compact stalls. These standards have been applied since 1996 and have successfully resulted in efficient parking developments.

The City could revise its dimension standards in Chapter 14.18.130 to distinguish requirements for surface lots and for parking garages, particularly for the Downtown area. A more urban standard for garage development can support more cost feasible parking. An example set of standards are provided in **Table 16**, is based on standards from Portland, Oregon.

Table 16: Recommended Design Dimensions (Garage Parking Space) Example: Portland, Oregon

Minimum Parking Space and Aisel Dimensions					
Angle (A)	Width (B)	Curb Length (C)	One-Way Aisle Width (D)	Two-Way Aisle Width (D)	Stall Depth (E)
0° (Parallel)	8 feet	22 feet, 6 inches	12 feet	20 feet	8 feet
30°	8 feet, 6 inches	17 feet	12 feet	20 feet	15 feet
45°	8 feet, 6 inches	12 feet	12 feet	20 feet	17 feet
60°	8 feet, 6 inches	9 feet, 9 inches	16 feet	20 feet	17 feet, 6 inches
90°	8 feet, 6 inches	8 feet, 6 inches	20 feet	20 feet	16 feet

G. Design Standards (Exterior and Ground Floor) for Parking Garages

Currently, there are no clear design standards for parking structures in the code (other than 14.18.160 I - Parking lot screening and landscaping).

The impact of above grade parking structures can have a significant impact on the Downtown area; from circulation, pedestrian scale, architectural compatibility, and activation of the ground level. It is recommended that a code section be added in Chapter 14.18 to clearly delineate standards for the design and development of parking structures such that, where appropriate, a new structure:

1. Complements the architectural integrity of the surrounding area
2. Provides ground floor active uses on the street frontage
3. Aligns elevator/pedestrian plazas toward transit and retail
4. Provides opportunities for the parking to be used by people parking at different land uses
5. Encourages public access

Garages, particularly those that leave vehicles on the ground floor can, like surface lots, deaden activity at the street level. Appropriate locations to require active ground floor uses in new parking garages are locations where there are high pedestrian volumes and/or adjacent uses have a high amount of ground floor active uses already, such as adjacent retail space.

H. Amend Chapter 14.18.220 B - On-site and Remote Parking

Section B of Chapter 14.18.220 limits remote parking areas to within 500 feet of the specified use. It also states that remote areas may serve more than one use, provided that the gross number of spaces available shall not be less than the combined requirements for all uses served. This language could have negative implications if the City were to pursue future shared "district" parking facilities and downplay the importance of transit, bike, and walk linkages that could extend beyond 500 feet. In Chapter 14.18.230 - Parking spaces—In lieu payments, there is no distance requirement for parking provided because of in-lieu payments which will be "located as to serve primarily the general area and class of zoning district from which the respective in-lieu payments are derived."

Also, if the idea is that shared parking can result in demand that is less than the combined requirements of all uses served (by accounting for varied peak hours); the standard as currently written encourages more parking than might be necessary.

It is recommended that current language in Chapter 14.18.230 Section B be revised as follows:

"B. Remote parking areas shall be located within five hundred feet (500 ft.) of the specified use and shall possess direct and convenient pedestrian access. *In the Downtown area, remote parking areas shall be located within the Downtown Parking District or within 1300 feet of the specified use.* Remote areas may serve more than one use, provided that the gross number of spaces available shall not be less than the combined requirements for all uses served, *unless the zoning administrator grants a reduction of stalls based on a shared parking demand study provided by the applicant and compiled by a transportation engineer or parking professio*nal."

I. Innovative Parking Solutions

In discussions with the 2017 stakeholder group, there was significant interest in allowing for innovative parking solutions. There are several automated parking systems commercially available that can reduce the cost and building area needed to supply structured parking. While it does not appear that City code specifically prohibits the use of automated parking, there is a section of code that may pertain and should be modified.

It is recommended that Chapter 14.18.120 (Tandem Parking Prohibition) be amended to add a further exemption to the prohibition. Additional language could take the form of:

E. As a part of an automated parking system or similar mechanical parking devices

5.3 Off-street Parking Requirements

The City currently uses a variety of methods to manage parking in the Downtown area including requirements for off-street parking to support land uses and new development. Parking regulations in the City are currently based on regional or national standards and are not calibrated to the existing inventory or the current use. The recent data collection effort in Downtown showed peak hour occupancies demonstrating underutilized off-street facilities. Parking regulations should also support the City's goals for growth, development, and a thriving Downtown. As the City considers alternative options for parking management, the options outlined below will help San Rafael achieve goals for the future of its Downtown, including:

- Continued growth in commercial and residential activity Downtown
- Optimized use of existing capacity, managing for 85 percent occupancy
- A safe, attractive, and well-signed Downtown parking system
- A system that integrates other modes of transport
- A right sized parking system, support financially feasible development
- Financially sustainable parking operations

Off-street parking in the City is generally underutilized, especially for private parking facilities, which may indicate that the current requirements are higher than the actual parking demand. Data from this study suggest that weekday peak hour parking demand represents just 61 percent of supply weekdays in private off-street facilities. When public lots and on-street supply are added to the demand equation; peak weekday demand raises to 66 percent of total supply. Weekend parking demand totals just 41 percent in private lots, rising to just 46 percent when public on- and off-street assets are combined. Overall, the data suggest that parking is overbuilt in the Downtown Planning Study Area.

Data observations are unable to specifically link demand to the specific land uses (and their occupied building area) delineated in the City's code section 14.18.040 - Parking requirements. Chart 14.18.040 of the code segregates nearly 90 separate land uses for which specific and unique parking minimums are stated. This is done on purpose to indicate that on an areawide basis, parking is underutilized. While some individual lots are parked at or above 85 percent occupancy, the aggregate parking supply is underparked. Given that the entire parking system is 34 percent to 39 percent overbuilt based upon aggregate assessments for demand for all uses in the Downtown Planning Study Area; it is safe to assume the existing minimum requirements for parking may be too high. This can create barriers to new commercial and residential production given the high cost of parking construction and the current market feasibilities.

The City's current system has some identified deficiencies. The following provides a description of parking management strategies and regulations, including options, based on national standards, context-sensitive standards, and market-driven standards.

Parking Requirements - Options

Option 1: National Standards (Status Quo)

This option involves maintaining current parking standards and requirements based on national standards versus using local conditions to inform parking management. To a degree this is where the current City code is, with no policy or data links (that the consultant could find) that justify or demonstrate that the parking minimums required have any correlation to actual demand for such uses.

Challenges with this option include the following:

- Current standards have resulted in an over-supply of parking based on recent data collection.
- Does not acknowledge actual parking demands, capacities, land use availability, and cost of parking provision in the Downtown area.

Option 2: Context-Sensitive

Considering the aggregate nature of parking demand and supply in the study area, the City would undertake a pilot program for five or more years to reduce all current minimum parking by the current demonstrated overbuild in the system during the weekday peak hour

(i.e., reduce requirements by up to 20 percent). This option would require the City to routinely monitor parking utilization to track and measure (a) the impact of new reduced minimum standards (by land use type delineated in 14.18.040) as new developments (with the lower requirement) come on-line; and (b) refine regulations using the same peak hour demand methodology to recalibrate to changing conditions and evolving behaviors.

Benefits of this option include the following:

- A better understanding of existing resources and how they are being used since more data is available.
- Maximized efficiency of the existing parking system with a better understanding of existing demand and occupancy (though not to specific land uses).
- Parking requirements that are based on actual aggregate peak hour parking demand for all uses in the Downtown area.
- Understanding of future resource needs through continual monitoring.

Option 3: Market-Driven

The market-based approach involves allowing the market to drive parking provision. This management option allows developers to determine the amount of parking that will be provided in their development based on the demand for parking they expect, depending on the land use type. Market-driven parking management may include maximums so that the City can set a ceiling for parking built, but setting no minimum requirements for parking.

Benefits of this option include:

- Economic efficiency for developers since parking supply is generally built at a level of demand that considers multiple feasibility factors rather than a static pre-established minimum.
- An efficient use of space/land within a building (or site) since it is less likely that unused parking spaces will be built.
- Reduced barriers to development, which could result in new and more compact commercial and residential development in the Downtown area.
- A parking supply that is consistent with the urban character and density of the City.
- Increased parking efficiency, whereby existing underutilized supplies become more attractive as share use opportunities.

It is important to note that eliminating minimum parking requirements does not mean that parking will not built (as evidenced regarding "pipeline projects"), only that the developer and the market for a specific land use can determine the most feasible, marketable, and right sized approach. Such an approach would consider requirements from financiers, the availability of supply in the existing market, marketability of the product, and market competitiveness with similar uses (internal and external competitors). A market-driven approach relies on the property owner, the developer, and the market to determine the appropriate amount of parking.

Recommendation

Recent data collection results that show the existing parking system is underutilized, which is an indicator of a parking code that may require more parking than is needed to feasibly support a development.

It is recommended the City initiate a pilot program based on Option #2, above, in which the parking requirements for new development in the Downtown parking district are reduced by a further 20 percent from the current requirements. The pilot program should last for a sufficient period of time, such as five years, to allow for new development to be approved and built with the reduced parking requirements. If there is sufficient development activity during the pilot program, the effect of the reduction should be monitored. Based on the findings, the reductions could be discontinued, continued, or enhanced. Parking standards could then be periodically refined and incrementally adjusted through data updates to facilitate a right sized code.

5.4 Shared Parking

The documented surplus of off-street parking in the Downtown area indicates that a shared use parking program should be actively pursued by the City and the Downtown Business Association.

Recommendation

Identify off-street shared-use opportunities based on data from the 2016 parking study and pursue share use agreements.

- Establish a Business-to-Business and Business-to City outreach and communications partnership on parking issues, education and planning; a Customer First Partnership with the City's BID.

- Establish a program for narrowing surplus sites to "opportunity sites," begin outreach to opportunity sites, negotiate agreements, and initiate program to direct targeted users (visitors/employees/residents) to shared use facilities.

- Ensure that there are no code limitations to sharing existing parking for non-accessory uses.

Observed data demonstrate that there are significant surpluses of parking in the existing off-street parking system, in both the public and the private parking supplies. **Table 17** provides a summary of this finding. As the table indicates, there are 5,082 parking stalls located in off-street facilities in the Downtown vicinity. Of this total, 3,785 stalls (75 percent) are located in privately owned parking facilities; publicly owned facilities total 1,297 stalls (25 percent).

At the weekday peak hour, there are approximately 1,807 stalls that are empty and unused.[1] Of this total 1,465 stalls (81 percent) are located in private facilities. This pattern repeats itself on Saturday, when the surplus of unused off-street parking grows to 3,020 stalls of which 2,249 (75 percent) are in private control. The ability to capture these stalls, to direct new and future parking demand into existing supply versus building additional supply, will create efficiencies in current operations of parking and development costs associated with new land uses. The large parking surplus in private control indicates that the solution requires private participation and partnership. In other words, all partners in parking should be investing in solving Downtown's parking issues. The solution to parking demand cannot be solved only in the public supply or by the City alone.

Shared Parking

Traditionally, parking management allocates the use of a given parking space to a specific land use on a single site. However, this single use parking system does not allow for use of these spaces when they are not occupied. Shared parking is a parking management tool that attempts to allow for more efficient use of parking spaces, by allowing them to serve two or more land uses.

By taking advantage of underused parking spaces already built, shared parking can reduce the number of spaces necessary to meet demand for a given land use, parcel, or area; reducing the amount of land and accompanying cost necessary to supply parking. This reduction can create a variety of benefits for development, business interests, and urban design and communities, including:

- Allows existing development to redeploy underutilized parking spaces to serve/benefit a larger community of users within a neighborhood/business district.

- Allows new developments the flexibility to reach parking demand in the most cost-effective way without adding new, extraneous parking stalls to their community in excess of needed capacity.

- Provide more opportunities for parking groups to meet their needs.

- Allows for the flexible management of a parking supply, which leads to greater efficiency in the supply and reduces overall demand for parking in new development.

- Can provide economic incentives to owners of underused supply (i.e., monthly, daily, weekend, evening, and event pricing).

Example Programs

Shared parking programs in various cities have had success in capturing unused supply in private facilities. For instance, the City of Seattle, Washington initiated e-park in partnership with the Downtown Seattle Association (DSA). e-park directs visitor parking into 12 privately owned parking garages in Seattle's downtown, that were identified (through data collection efforts) as having significant

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1 If this supply had to be replaced with structured parking, assumed at a cost of $32,000 per stall, the value of these unused spaces is approximately $57.8 million.

Table 17: Summary of Off-Street Occupancy (San Rafael, CA)

Off-Street Supply	Supply	Weekday Peak Period (1PM - 3PM)			Saturday Peak Period (1PM - 3PM)		
		Occupancy (Spaces)	Occupancy (%)	Surplus	Occupancy (Spaces)	Occupancy (%)	Surplus
Public Garages/Lots	1,297	955	74%	342	526	41%	771
Private Lots	3,785	2,320	61%	1,465	1,536	41%	2,249
Total Off-Street Supply (Study Area)	**5,082**	**3,275**	**64%**	**1,807**	**2,062**	**41%**	**3,020**

surpluses of parking. For the most part, these 12 garages were originally sites serving single site office towers focused on tenant employee parking. The City of Seattle, in concert with the DSA:

a.   Catalogued opportunity sites (facilities with surpluses).

b.   Conducted peer-to-peer outreach to building/parking owners.[2]

c.   Negotiated shared use agreements with willing partners.

d.   Developed protocols for tracking, reporting, and marketing the program.

A key foundation piece of the e-park program is its branding and marketing component. The e-park logo is incorporated into entry/ exit plazas at all participating sites and is supported with a marketing and communications program support by both the City of Seattle and the DSA.

The cities of Ashland, Gresham, Salem, and Oregon City, Oregon initiated shared use parking programs using a Customer First approach. The focus of these programs was to transition downtown employees (who were monopolizing on-street parking) into off-street facilities. Each of these cities:

a.   Conducted extensive data collection efforts to identify potential surpluses of parking in the off-street supply (generally public sector/city led).

b.   Engaged the downtown business associations to lead in outreach, communications, and education of potential private sector partners.[3]

c.   Based on data efforts, developed a short list of opportunity sites and identified target owners.

d.   Established a target goal for the number of downtown employees to transition into opportunity sites.

e.   Initiated outreach to owners of private lots.

f.   Negotiated shared use agreements.

g.   Obtained agreements from downtown businesses to participate in employee assignment program.

h.   Created and sustained marketing and communications programs to support on-going awareness of the program.[4]

A key to each of the Oregon examples is the cataloguing of sites and a filtering process to determine which sites are actually "opportunity sites." A recent example is Ashland, Oregon, whose parking plan was just adopted in 2016, launching in 2017.

In advance of their 2017 plan launch, Ashland and its Chamber of Commerce identified 51 downtown parking sites with parking surpluses. They have begun a "filtering" process that examines each of the 51 parking sites; intending to narrow the number of sites to a manageable list of sites with a high probability of success.

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2 Peer-to-peer outreach involves joint efforts between the City of Seattle and the DSA to make contact with private parking supply owners and negotiate shared use agreements. Having the DSA in a "lead" role in this process has proven highly beneficial as the outreach is based in the downtown business association's vision for downtown, emphasizing a business based partnership for parking in the downtown. The program began with seven facilities and has now grown to 12.
3 Gresham and Oregon City both have active Main Street Associations. Salem partnered with the downtown Business Improvement District. Ashland has engaged with its downtown Chamber of Commerce and is launching its program in 2017.
4 See Attachment A

The filter looks at each site for:

• Reasonable availability of supply – only sites with 25 or more stalls of surplus are considered an opportunity.

• Proximity – only sites that are within 750 feet of key visitor and employment uses are considered (focused on a reasonable walk to a user's intended destination).[5]

• Condition of site – all filtered opportunity sites are then evaluated for quality of lighting, pedestrian connectivity, pavement condition, striping, and potential for signage. Sites that are lacking in these areas would have plans for improving conditions created, if the property owner becomes a willing participant in the shared use program.[6]

Applicability to San Rafael (Opportunities and Challenges)

The documented availability of off-street parking creates a compelling case for initiating a shared use program in the City. Key elements of such a program will require:

Opportunities:

1. Data: The City has a very current database of information regarding surpluses of parking and its location.

2. The Downtown San Rafael Business Improvement District: As inferred earlier in this discussion, the most successful shared use programs are tied to broader downtown visions embraced by the business community through their business associations. Cities are a necessary partner to the vision, but the outcome of the vision is greater economic growth and vitality within a district, a private sector benefit. This relationship places parking as a community resource that should not only benefit the owner of the parking (and his/her tenants and customers), but the entire downtown, as well. As such, a foundation piece for a successful shared use program is a peer-to-peer communication of the purpose, value, and desired outcome of shared parking; something best led by the business community. The willingness of the City's BID to initiate a public private partnership (P3) with the City to structure and implement a shared parking program project in the Downtown area presents itself as a key opportunity for capturing this supply.

3. Potential system efficiencies: Cities that have been successful in capturing unused parking supplies have seen that success correlated into financial benefits to parking owners and reductions in parking need for new development.

Challenges

4. Code: Many cities do not allow parking approved within a minimum requirement to be provided to other "non-accessory" uses, thereby limiting sharing of parking that may be underutilized. Based on existing City policy and vision documents, encouraging shared parking within existing and new developments is a key goal, intended to maximize parking resources to the highest degree. However, the code is not clear on operating allowances and requirements that encourage existing and new parking to be shared in a manner that maximizes the use of parking that is built.

Customer First Example (Salem, Oregon)

5 Sites outside this "walk corridor" are not necessarily eliminated from the list if they are currently, or planned to be, linked to transit/shuttle connections.
6 A shared use program in Kirkland, Washington created an incentive fund that was offered to private sector participants to fund lot improvements (lighting, signage, etc.). Ashland is considering such incentives. The Seattle e-park program provides all signage to the parking owners at no cost, as well as other incentives (software upgrades, façade improvements) in return for program participation.

It is recommended that an additional sub-section (G) be added to 14.18.040 that would state:

"G. Operation. Parking approved under this section may be operated to serve the uses for which the parking was approved, shared with other uses within the Downtown Parking Assessment District, and/or be made available to the public."

Code and policy should be very clear that shared use arrangements are both encouraged and allowed. The recommended language above includes the effect of the recommendation described in this section as well as section 5.2.C of this report.

5. Time: A shared use program, intended to match those needing parking to parking that is underutilized, requires on-going outreach and management. Many cities establish shared use policies and code provisions that support those policies and code. But the approach is a "set it and forget it" format; lacking communications, outreach, on-going data collection, management, and marketing. To be successful, the City will need a program framework that is not in place at this time. Examples from other cities described herein provide a template for success and the partnership with the business community that will be necessary. All examples involve the investment of time and resources by project partners.

6. Education: Convincing potential partners to share parking requires outreach and education. Reluctance to share parking can hinge on questions related to reliability, safety, maintenance, and cleanliness, and not seeing the overall benefit of shared parking for an owner and the broader downtown. A shared use program in the City will need to have outreach materials prepared that answer these questions, sell the program, and encourage owners of surplus supply to participate. Again, this highlights the important role of a P3 with the Downtown BID.

7. On-going marketing and communications: Once implemented, shared use programs are generally tied into broader marketing and communications programs that support public on- and off-street parking systems. Marketing and communications need to be sustained, managed and funded. Key components of such programs include:

   ▪ Property owner outreach and education.

   ▪ Employee education program(s).

   ▪ Maps and other visitor communications materials to identify parking availability and "rules of use."

   ▪ Parking/visitor information kiosks.

   ▪ Co-marketing opportunities with retail shops, hotels, restaurants, event venues.

   ▪ Alternative mode education and incentives.

   ▪ Interactive website(s).

   ▪ Tying all information to new brand/logo for public and shared use facilities.

8. Routine data collection/performance measurement: On-going data collection will be necessary to update system performance and document impacts of a shared use program (and other elements of a larger parking management plan).

The Downtown area has a significant amount of unused parking located in off-street parking facilities. The combined weekday total of unused parking at the peak hour is 1,807 stalls. If considered in the context of replacement value, these stalls represent nearly $58 million of parking. Given this, it is incumbent upon the City to work with the business community to identify how much of this parking could be captured to provide parking for both existing and new businesses/developments in the Downtown area. Utilizing these spaces can result in a more efficient parking system (getting the right car to the right stall); provide revenue value to parking owners and lower long-term parking development costs.

Capturing the benefit of these stalls will not be a simple task. Shared use programs in other cities are time consuming, organized, strategic, and involve near-term and on-going investment of resources. Initiating a shared use program in the City is highly recommended because the long-term benefit potential is high.

5.5 SUMMARY

The list of recommendations provided in this section were developed within the context of a thorough policy, strategy, and code review. These revisions will result in policy and code that is more in line with industry best practices and supportive of existing planning that calls for compact urban development, more efficient parking, shared uses, and encouragement of alternative modes.

6. BICYCLE PARKING

This section focuses on the assessment of the existing bicycle infrastructure related to parking and describes:

- Existing bicycle parking facilities;
- Planned bicycle parking facilities;
- Current bicycle parking requirements; and
- Recommendations to improve bicycle connectivity and parking facilities.

A well-connected bicycle network will reduce the distance bicyclists must travel to reach their destinations. Such a network has many connections, direct and convenient routing, few dead-ends, and minimal physical barriers. Gaps in bicycle infrastructure (paths, lanes, access, and bicycle parking) can be a psychological or literal barrier to biking and walking. Connecting bicycle facilities to transit is very important to making transit as attractive as possible.

Strategies to improve bicycle connectivity include:

- Making sure bicycle facilities are constructed as a matter of course through a Complete Streets Policy.
- Prioritizing access to transit.
- Providing safe and secure bicycle parking and storage, on-site in private developments and in public spaces.
- Improving the proximity of bicycle and pedestrian facilities to the Downtown area.

It is important to identify visible and safe routes to housing centers, job centers, and transit hubs, while addressing gaps and obstacles to form a unified system.

Wayfinding for bicycles is presented in Section 8 in this document.

6.1 Existing Bicycle Facilities

An inventory of bicycle parking facilities was taken on January 6th, 2016. Bicycle parking was observed within the Downtown Planning Study Area and at Dominican University. The following data was collected as part of the survey:

- Location;
- Classification;
- Class I: long-term, secure parking facilities such as lockers, cages, and bicycle stations;
- Class II: short-term parking facilities such as racks;
- Capacity; and
- Condition (good/fair/poor)

A total of 278 bicycle parking spaces were observed at 76 different facilities within the study area.

Figure 44, on page 74, illustrates the location of these parking facilities with a 200-foot ft. buffer to approximate a one-minute walking distance. The majority of these facilities are single inverted U-shaped racks located along 4th Street. Most facilities were Class II, with the exception of bike lockers located in the Caltrans Park & Ride Lot. Full bicycle parking inventory data is provided in the Appendix.

When judging facilities' conditions, a rating of "good" (no visible damage or problems), "fair" (some damage, but still usable and secure), or "poor" (unusable/insecure) was provided. All facilities were rated "good" except for one rack located on 4th Street, which was rated "fair."

Cyclists prefer to park as close to their destination as possible, and will often choose to lock their bike to nearby objects (such as trees, signs, or parking meters) if a rack is not immediately available. This was confirmed in the field, where it was observed that cyclists often chose to lock their bikes to a tree or street sign directly in front of their destination instead of a bike rack across the street (see **Figure 43**).

Figure 43: Bike Parking Utilization on 4th Street

Figure 44: Existing Bicycle Parking Facilities

LEGEND
- Downtown Planning Study Area Boundary
- Bicycle Parking Facility (Racks)
- Bicycle Parking Facility (Lockers)
- 200-Foot Buffer
- Class 1 Bike Path
- Class 2 Bike Lane
- Class 3 Bike Route

6.2 Planned and Proposed Bicycle Facilities

The San Rafael Bicycle/Pedestrian Master Plan (2011) makes the following recommendations related to bicycle parking:

• Encourage Marin County Transit to improve SRTC to include increased bicycle parking and weather-protected storage.

• The addition of bicycle parking, including covered bicycle parking, according to national best practices, where feasible.

• Install additional bike parking on commercial roads such as 4th Street. Explore constructing a "bicycle parking lot" near the intersection of 4th and A Streets. Add additional bike parking near the Rafael Theater.

The SMART Downtown San Rafael Station Area Plan makes the following recommendations related to bicycle parking:

• If the Bettini Transit Center is relocated to the site east of the SMART station, consider building a bicycle parking facility shared with the SMART station.

• Locate a "bike station"—an indoor facility for longer-term bike storage—in a ground floor space near the transit complex.

• Consider allowing bicycle parking in lieu of some portion of required automobile parking.

In addition to proposed facilities in the above planning documents, the Transportation Authority of Marin (TAM) conducted a feasibility study for a bike share system in January 2013. Within Downtown San Rafael, stations were proposed at SRTC Downtown, and 4th Street (west end). The study did not propose specific sites for these stations.

6.3 Current Bicycle Parking Requirements

The City's zoning code has the following requirements for bicycle parking:

• Bicycle parking shall be required for all new nonresidential developments with 30 or more parking spaces, and for all public/quasi-public uses.

• Number of short-term spaces required: Five percent of the requirement for automobile parking spaces, with a minimum of one two-bike capacity rack.

• Number of long-term spaces required: For nonresidential buildings with over (10) tenant-occupants, five percent of the requirement for automobile parking spaces, with a minimum of one space.

• The number of short-term spaces required for public/quasi-public uses: To be determined by a parking study, or specified by a use permit.

6.4 Recommendations

Based on a review of planned bicycle parking facilities and field observations, the following improvements are recommended. **Figure 47** illustrates the locations of these recommended improvements.

Parking Facilities

Along 4th Street, install single inverted U-shaped bike racks in locations where they are currently not immediately accessible. The most suitable location for this is along the north side of 4th Street between Court Street and E Street. Currently, there are no facilities along this stretch of 4th Street. Although there are racks available on the south side of 4th Street, the added inconvenience of having to walk farther and cross a major street to reach one's destination leads cyclists to instead use other objects (trees, street signs) to park their bikes. Other suitable locations include the north side of the Cijos Street/4th Street intersection, and near short-term uses on 4th Street east of Highway 101.

Installation of a bicycle corral (**Figure 45**) on 4th Street, adjacent to City Plaza. An on-street corral will replace one on-street vehicle parking space with eight to 12 bicycle parking spaces.

Figure 45: On-Street Bicycle Corral

Install bicycle rooms/cages **(Figure 46)** near SMART/SRTC and major employment centers. Bicycle cages are fenced cages or rooms that have bike racks inside and are access-controlled. They can be sized based on the allowed space, can be located inside an existing building or as a standalone structure, and are typically accessed with a cardkey or keypad. Ideal locations for this kind of facility in the City would be in the relocated transit center and in the Downtown garages (A Street or C Street) to encourage bicycle commuting to and from Downtown employers. Within the Downtown garages, existing vehicle parking spaces can be converted to a bicycle cage space by using simple fencing and an access-controlled gate. If a bicycle cage is infeasible at the relocated transit center due to space constraints, instead consider using bicycle lockers for their smaller footprint.

Figure 46: Bicycle Cage

Zoning Regulations

Allowing for reductions in parking requirements for developers who provide bicycle parking should be considered. Many cities allow for bicycle parking to substitute motor vehicle parking up to a certain maximum. For example, the City of Portland, Oregon allows every five non-required bicycle parking spaces to reduce the motor vehicle parking requirement by one space, up to a maximum of 25 percent of required parking. **Table 18** lists local and national examples of bicycle parking reductions.

Table 18: Bicycle Parking Reduction Examples

Location	Allowed Parking Reduction	Maximum Allowed Reduction
Portland, OR	Every five bicycle parking spaces above requirement = one vehicle space	25 percent of vehicle parking requirement
Denver, CO	Every six bicycle parking spaces above requirement = one vehicle space	5 percent of vehicle parking requirement
San Jose, CA	Every 10 Class 2 or every five Class 1 spaces above requirement = one vehicle space	10 percent of vehicle parking requirement or two vehicle spaces, whichever is less
Santa Monica, CA	Every five bicycle parking spaces above requirement = one vehicle space	15 percent of vehicle parking requirement
Oakland, CA	Every six bicycle parking spaces above requirement = one vehicle space. The additional bicycle parking provided must preserve the same proportion of long-term and short-term spaces as was required by code	5 percent of vehicle parking requirement

Requirements or incentives for showers and clothes lockers in new commercial developments to encourage bicycle commuting should be considered. **Table 19** lists local and national examples of shower requirements and incentives written into local municipal codes.

Table 19: Residential Bicycle Parking Requirement Examples

Location	Allowed Parking Reduction	Maximum Allowed Reduction
San Francisco, CA	One Class 1 space for every two dwelling units up to 50 One Class 1 space for every four dwelling units over 50	No bicycle parking required for senior citizen or disabled housing. Group housing requires one Class 1 space for every three bedrooms
Oakland, CA	One Class 1 space for every four dwelling units, one Class 2 space for each 20 dwelling units	Developments with private garages for each unit. Two-family dwellings or smaller
Santa Monica, CA	One Class 1 space per bedroom. Class 2 space requirement is 10 percent of the Class 1 requirement, with a minimum of two Class 2 spaces per project	Senior citizen housing requires 0.5 Class 1 spaces per bedroom and 25 percent of Class 1 requirement for Class 2 spaces
Portland, OR	One and a half Class 1 spaces per dwelling unit in Central City; 1.1 spaces per unit elsewhere. One Class 2 space for every 20 dwelling units, with a minimum of two spaces per project	Group living facilities require one Class 1 space per 20 residents. Dormitories require one Class 1 space per eight residents
Santa Cruz, CA	One Class 1 space for every dwelling unit	Duplexes exempt from bicycle parking requirements

Requirements or incentives for showers and clothes lockers in new commercial developments to encourage bicycle commuting should be considered. Table 16 lists local and national examples of shower requirements and incentives written into local municipal codes.

Table 20: Workplace Shower Requirement Examples

Location	Criteria		Shower Requirement	Locker Requirement
San Francisco, CA	Medical, professional, general business offices, financial services, business and trade schools, and general business services	0-9,999 SF	None	None
		10,000-19,999 SF	1	2
		20,000-49,999 SF.	2	4
		50,000+ SF.	4	8
	Retail, personal, eating and drinking services	0-24,999SF.	None	None
		25,000-49,999 SF.	1	2
		50,000-99,999 SF	2	4
		100,000+ SF	4	8
Oakland, CA	Commercial uses with 150,000 SF of floor area or greater. All other uses exempted		Minimum of two showers per gender, plus one shower per gender for each 150,000 SF above 150,000 SF	Four lockers required per shower
Santa Monica, CA	Non-residential development	0-10,000 SF	None	One clothes locker for 75 percent of Class 1 parking spaces
		10,000-24,999 SF	1	
		25,000-124,999 SF	2	
		125,000+ SF	4	
San Jose, CA	Warehouse	0-84,999 SF	0	None
		85,000-425,000 SF	1	
		425,001-635,000 SF	2	
		635,000+ SF	Two showers, plus one shower for every 425,000 SF above 635,000 SF	
	General Industrial	0-39,999 SF	0	
		40,000-200,000 SF	2	
		200,001-300,000 SF	3	
		300,000+ SF	Three showers, plus one shower for each additional 200,000 SF above 300,000 SF	
	Office, research, and development	0-29,999 SF	0	
		30,000-150,000 SF	2	
		150,001-225,000 SF	3	
		225,000+ SF	Three showers, plus one additional shower per 150,000 SF above 225,000 SF	
Sunnyvale, CA	Sunnyvale, CA No bicycle parking requirement; instead, parking reductions granted for showers and lockers: "The installation of employee showers and locker rooms may reduce required parking up to 3 percent of the total spaces."			

Figure 47: Recommended Bicycle Parking Locations
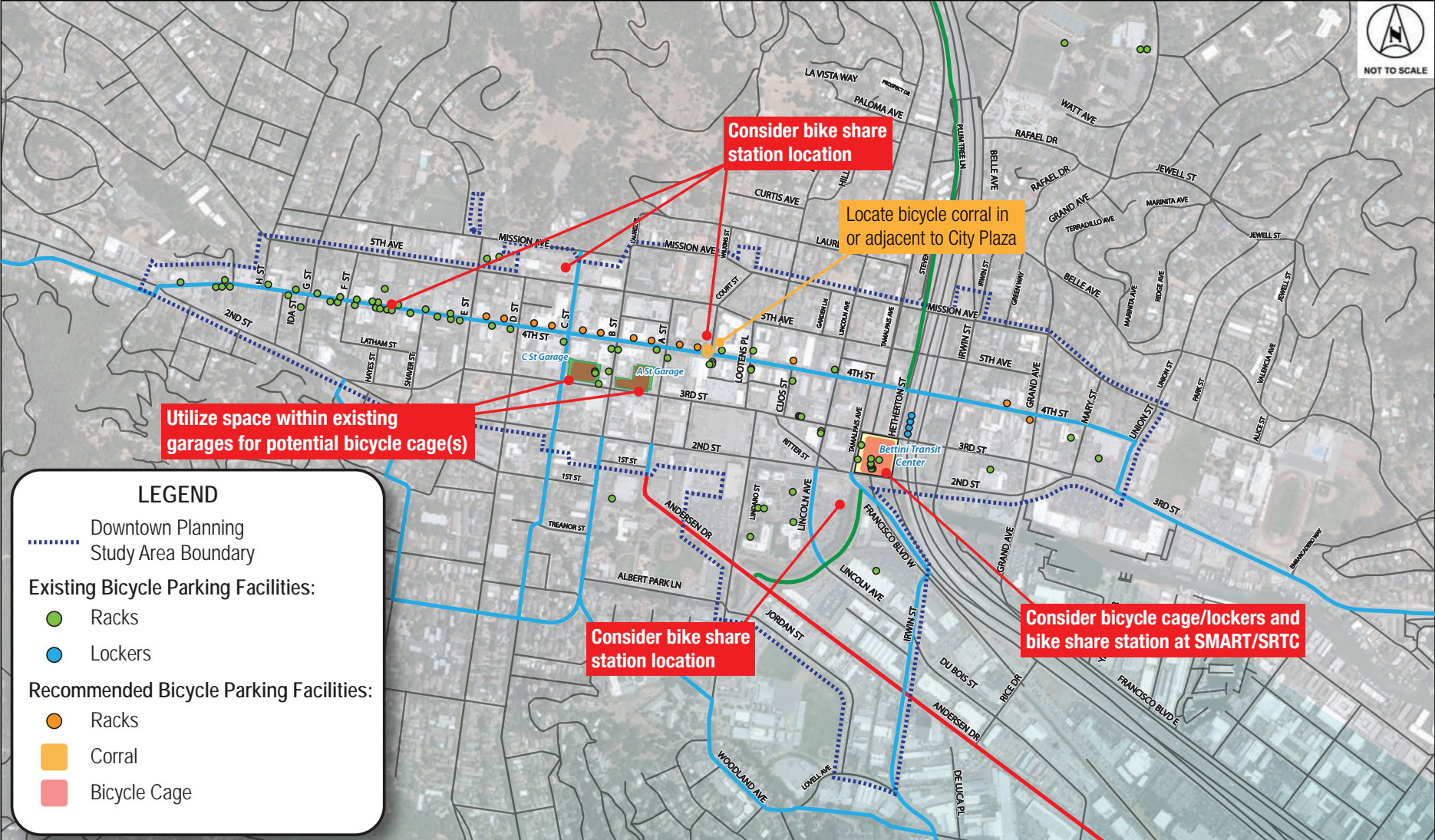
Marin County Bike Share

The TAM completed a bike share feasibility study in 2013 and is considering various options to implement a bike share program in Marin County, either as part of the Bay Area Bike Share (BABS) program or as a separate system. Since that study was conducted, the BABS system has begun operations. It is operated by Motivate, in partnership with the Metropolitan Transportation Commission(MTC) and the Bay Area Air Quality Management District. BABS initially started out as a 700-bike pilot program, and is now planned to expand to a 7,000-bike system by 2017, with stations located in San Francisco, San Jose, and the East Bay.

If the City were to participate in the BABS program, per MTC contract terms with Motivate (the private operator of the system), after the deployment of the 7,000-bike system, other cities in the MTC region that want to participate in the regional bike share system can develop a service agreement with Motivate using their own sources of funds. For a typical configuration, capital costs for bike share equipment are approximately $5,600/bike, plus $4,000 per new station for installation activities. MTC has allocated $4.5 million in funding for capital costs associated with expanding the bike share system to new communities. This funding would be distributed through MTC calls for projects.

The 2013 bike share feasibility study proposed stations at the following locations:

- **San Rafael Transit Center:** There is limited space within the existing SRTC site to accommodate bike share stations of the same size as those used in San Francisco; where sidewalk space is not available, bike share stations can be installed on-street by removing parallel parking (see **Figure 48**). Alternatively, smaller, more flexible bike share pods could be implemented to reduce the footprint of the station, or bicycles with wireless technology could be used. Wireless technology enables bicycles to be parked at any public rack, instead of specific bike share stations. Ideally, the bike share station would be located at or near SRTC and the Downtown SMART station, which will be located between 3rd and 4th Streets. The station should be in a location that does not require cyclists to cross automobile-oriented 3rd Street to access the Downtown area. Potential on-street locations include 4th Street between Lincoln Avenue and Hetherton Street.

Figure 48: On-street Bay Area Bike Share station

- **Downtown San Rafael:** The area around City Plaza is an ideal location for a bike share station. It is centrally located, has adequate off-street space available, and is located adjacent to a bike route on 4th Street. The station could be located either on-street or within City Plaza itself. Potential on-street locations include 4th Street adjacent to City Plaza or Court Street on the north side of City Plaza.

- **San Rafael 4th Street (West End):** An on-street bike share station could be located on 4th Street between E and H Street.

TAM is currently in discussions to implement a bike share pilot program in San Rafael, which would use smaller docking stations than those used in the BABS program. The bicycles under consideration could also be parked at any public bike rack, since they have wireless tracking technology located on the bicycle. TAM is considering installing seven to eight racks within the City. Currently, the rack locations are yet to be determined, but may include the three above locations, as discussed in the 2013 feasibility study. Additional recommended locations for bike share stations include City Hall and the BioMarin campus, to provide bike access to major employment centers.

7. PEDESTRIAN NETWORK

All trips start and end with a pedestrian mode; whether it is from the car, bus, bike, or train to home, office, store, or movie theater. Good connectivity provides easy access to key destinations for pedestrians. Excellent connectivity actively seeks to discourage car use by making local trips easier and more pleasant by foot than by car. Connectivity affects the degree to which transportation networks such as streets, walking, and cycling paths connect people to their destinations (including intermediate destinations, such as public transport services). The good grid street system in the City allows for the ability to promote pedestrian activity.

This section provides an overview of existing pedestrian infrastructure in the study area. The area was assessed through field surveys. Recommendations are made to improve the pedestrian experience and connectivity between Downtown origins and destinations, including working, shopping, dining and leisure locations, parking garages and lots, the SRTC, and the SMART station. Planned improvements have also been identified to enhance and promote pedestrian travel. The City study area includes sidewalks, crossings, and walkways which vary significantly in condition, width, and ability to establish a seamless and first-rate pedestrian experience. Wayfinding, which is integral to pedestrian mobility and connectivity, is addressed separately in Section 8.

This section discusses three key areas including:

- Existing pedestrian facilities assessment
- Planned improvements in the study area
- Recommendations for improving pedestrian connectivity

7.1 Existing Pedestrian Facilities

- Based on a review of the San Rafael Bicycle/Pedestrian Master Plan (2011), the SMART Downtown San Rafael Station Area Plan (2012), and multiple field visits to the Downtown area , the following issues with the Downtown pedestrian network have been identified. These issues focus on connectivity between major destinations (**Figure 55** illustrates the routes between these locations):

- **SRTC to Downtown**
    - The sidewalks on West Tamalpais Avenue between 3rd and 4th Streets are narrow, particularly on the east side of the street. Parking meters and signs also obstruct the pathway (**Figure 49**). Some pedestrians were observed walking in the street due to the lack of space for them to walk in both directions on the sidewalk. In addition, pavement on the west side of the street is damaged (**Figure 50**).

Figure 49: Sidewalk on east side of Tamalpais Avenue

Figure 50: Sidewalk on west side of Tamalpais Avenue
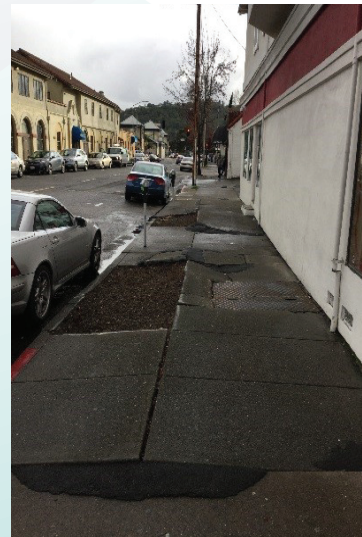
- The intersection of Lincoln Avenue and 4th Street does not have pedestrian signal heads (**Figure 51**). It is anticipated that this improvement will be made as part of the RTSE project in Fall 2016.

- **San Rafael Corporate Center (SRCC) to SRTC**
  - The pedestrian route on the north side of 2nd Street between Tamalpais and Lincoln Avenue requires pedestrians to detour around the triangular landscape island at Ritter Street. The existing sidewalk on this route is narrow.

  - North-south pedestrian crossings on 2nd Street at Lincoln Avenue and Tamalpais Avenue require crossing in front of five lanes of traffic.

- **SRCC to Downtown**
  - At the intersection of Lindaro Street and 3rd Street, there is no pedestrian crossing on the western leg of the intersection. Pedestrians were observed jaywalking at this location to avoid the time delay of making a legal crossing (**Figure 52**).

- **Caltrans Park & Ride Lots to SRTC**
  - On the east curb of Hetherton between Mission and 3rd Street, and the west curb between 3rd and 4th Street, non-standard sidewalk widths (less than 4 feet) and vegetation force pedestrians to walk uncomfortably close to vehicle traffic. There is no sidewalk on the east side of Hetherton between 2nd and 3rd Street.

- **Curb Ramps**
  - Generally, curb ramps in the Downtown area are Americans with Disabilities Act (ADA) non-compliant, except within the vicinity of SRTC (**Figure 53**).

  - Standing water was observed at multiple curb ramps after rainfall (**Figure 54**). Some curb ramps will be replaced as part of the Regional Transportation System Enhancements (RTSE) project. These locations are located in Appendix I.

Figure 51: Lincoln Avenue and 4th Street

Figure 52: Jaywalking at 3rd Street and Lindaro Street

Figure 53: ADA non-compliant curb ramp

Figure 54: Standing water at curb ramp.

Figure 55: Pedestrian Routes Between Major Destinations
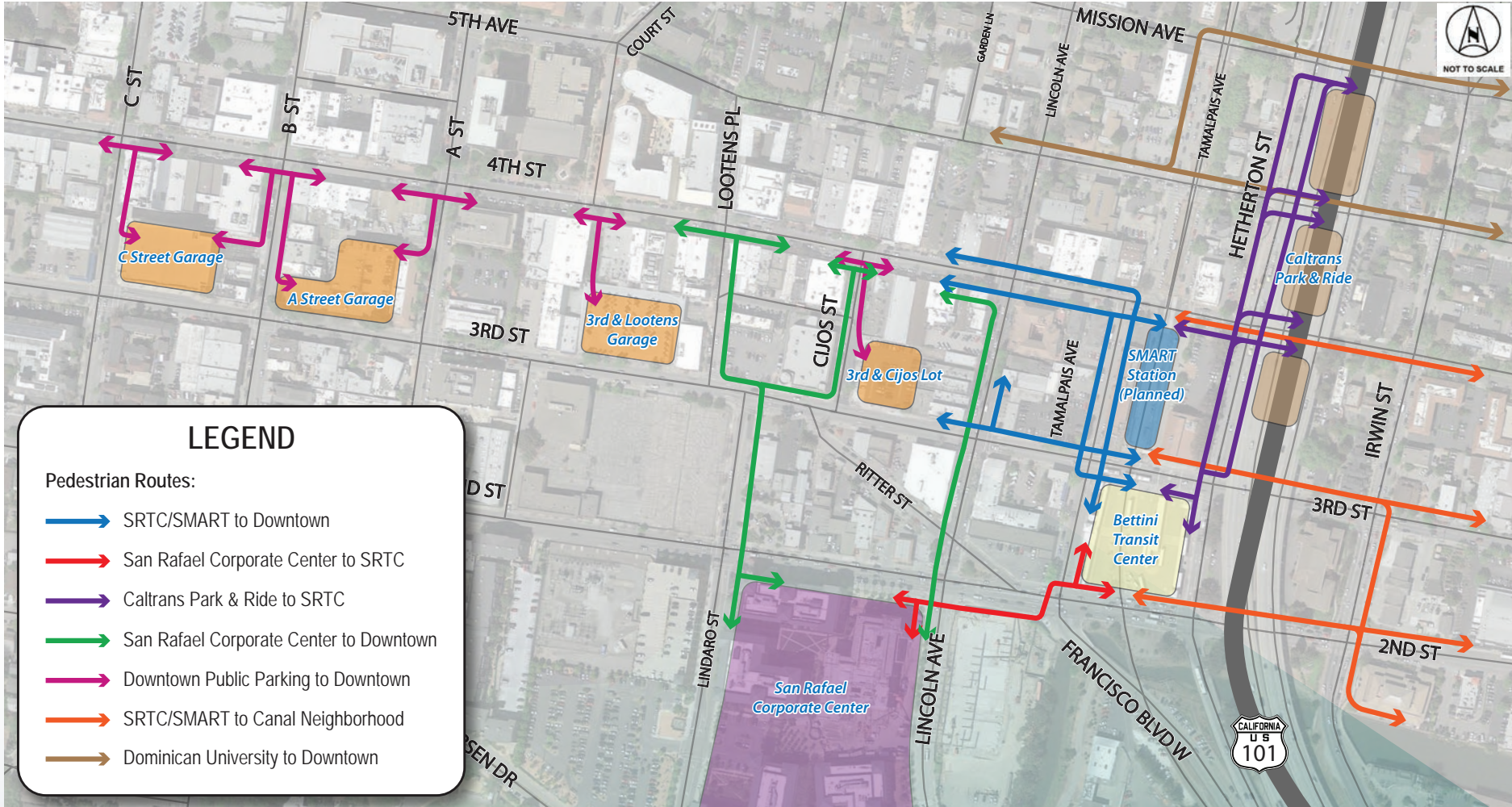
7.2 Planned Pedestrian Improvements
San Rafael Bicycle/Pedestrian Master Plan

Table 21 lists the pedestrian improvements proposed in the San Rafael Bicycle/Pedestrian Master Plan (2011).

Table 21: San Rafael Bicycle/Pedestrian Master Plan - Proposed Pedestrian Improvements

Location	Issue	Project
Francisco Boulevard West	Sidewalks are missing from SRTC to Rice Drive.	Construct a sidewalk or pathway along Francisco Boulevard West, connecting the SRTC to the Mahon Creek Pathway trailhead and to Rice Drive.
Grand Avenue and 2nd Street intersection	On the southwest island, the traffic signal pole is directly in the accessible pedestrian path.	Relocate traffic signal pole.
Tamalpais Avenue at Mission Avenue	Missing curb cuts at crosswalk across the southern leg of the intersection (including large median island on Tamalpais Avenue).	Add curb cuts to enable better pedestrian movement, as well as ADA accessibility.
Mahon Creek Path at Andersen Drive	Curb cut missing at end of pathway onto Andersen Drive.	Add curb cut to provide better pedestrian movement, as well as ADA accessibility.
Access on Mission Avenue from the Library/City Hall to Boyd Park	The sidewalk ends abruptly with steep drop-off and there is no sidewalk for the remainder of this section of the corridor.	Conduct a study to find the best solution in this area. A standard concrete sidewalk may not fit in well at this location.
West End and 2nd Street	Long crossing distance for pedestrians from west end to 4th street with multiple crossings.	On lower volume legs and crosswalks at end of West End, consider curb extensions and raised crosswalks. Also, consider pedestrian push-button actuated advance warning signs and beacons to alert motorists where visibility is limited. Reconfiguring traffic islands to shorten crossing distances should also be considered.
Hetherton Street and 2nd Street	Sidewalk and curb cuts are report to flood in heavy rains. This intersection is near SRTC.	Improve drainage for easier mobility and safer conditions.
Crossings of signalized intersections in the downtown vicinity	Many intersections do not have pedestrian signal heads and others do not have "count-down" heads.	Install "count-down" pedestrian signal heads at all signalized intersections.
D Street (Wolfe Grade)	No sidewalk on west side of the street.	Work with property owners to widen, upgrade, maintain, and install sidewalks or shoulders, as feasible, on the east side of the street.

SMART Downtown San Rafael Station Area Plan

The SMART Downtown San Rafael Station Area Plan (2012) recommends the following pedestrian improvements:

- Enhance the prominence, visibility, and safety of the 3rd Street crosswalks at Tamalpais Avenue and Hetherton Street through such avenues as widening the crosswalks to mitigate the strong desire for people to cross between the bus and rail stations.

- Sidewalk widening on Tamalpais and at the intersection of 4th Street and Tamalpais, associated with the Tamalpais Avenue Complete Street concept.

- Widen sidewalks along the frontages of redeveloped parcels (the redevelopment parcels included as examples in the Plan are shown).

- Install additional barriers and fencing along 3rd Street between Tamalpais Avenue and Hetherton Street to prohibit jaywalking and direct pedestrians to use proper crosswalks.

- Explore additional options for making West Tamalpais Avenue and Tamalpais Avenue between Mission Avenue and 2nd Street more inviting for pedestrians and transit riders. One possibility is to explore the feasibility of creating a multi-use path along the street that integrates with the proposed landscape treatment of the SMART right-of-way and East Tamalpais. Feasibility of this concept requires resolution of safety concerns for bicyclists, due to the closely spaced intersections and frequent curb cuts, as well as right-of-way and property access considerations.

- Explore the potential for constructing a new sidewalk between 2nd and 3rd along the east curb of Hetherton Street and widening the existing sidewalks from 3rd Street to Mission Avenue. This will require coordination with Caltrans and the Marin Municipal Water District because the right-of-way is located within their jurisdiction. Also, a small parking lot located between 2nd Street and 3rd Street would need to be reconfigured to accommodate the new sidewalk segment.

- If the Bettini Transit Center is relocated to the site east of the SMART station, make sure that improvements include safe and direct connections along the sidewalks between the SMART station platforms and the relocated bus platforms (on the 3rd Street and 4th Street frontages).

- Install pedestrian wayfinding signage to highlight recommended pedestrian routes from the transit center to other destinations in the plan area and study area, including landmarks such as the Mission San Rafael Arcángel, City Hall, the 4th Street commercial corridor, the SRCC, the San Rafael Canal, and the surrounding neighborhoods. Wayfinding signage should be in accordance with the City's Bicycle/Pedestrian Master Plan.

- Explore the potential for improving the pedestrian experience at the five east-west crossings under Highway 101. Improvements may include lighting, public art, wayfinding signage, and improved landscaping. There is also the potential for widening the sidewalks into the existing Caltrans Park-and-Ride lots along a portion of these streets. However, this would require coordination with Caltrans as these parking lots are under their jurisdiction.

A refined plan for the SRTC/SMART station is currently being developed by the City and will be subject to separate action by the City Council. New recommendations are expected to result from this 2017 study. Once adopted, any additional recommendations for the pedestrian network should be implemented.

7.3 Recommendations

Based on the review of planned pedestrian projects and in-person field observations, the following recommendations for pedestrian connections between major Downtown destinations should be considered:

SRTC to Downtown

- Explore options to widen and repair sidewalks along West Tamalpais Avenue between 3rd and 4th Street.

- Stripe limit lines separately from crosswalk striping at 3rd/Hetherton and 3rd/Tamalpais (see **Figure 56**). Striping vehicle limit lines in advance of crosswalks provides a buffer between vehicles and pedestrians and improves sight lines for drivers.

SRCC to Downtown

- Restripe crosswalks at 2nd/Lincoln, 2nd/Lindaro, 3rd/Lincoln, and 3rd/Lindaro to ladder-style crosswalks (**Figure 57**) where they are not already implemented to increase pedestrian visibility; priority should be given to the crossings in front of 3rd Street and 2nd Street traffic.

- Stripe limit lines separately from crosswalk striping at 2nd/Lincoln, 2nd/Lindaro, 3rd/Lincoln, and 3rd/Lindaro (see **Figure 56**). Striping vehicle limit lines in advance of crosswalks provides a buffer between vehicles and pedestrians and improves sight lines for drivers.

- Use warning signs or barriers to encourage crossing of 3rd Street at the intersection of 3rd Street and Lindaro Street only within the marked crosswalk.

- Install curb bulb-outs where feasible to reduce pedestrian crossing distances. Bulb-outs utilize space in parking lanes to extend the sidewalk further into the street. The southern leg of the 3rd/Tamalpais is an example of a location where a bulb-out has already been provided. Potential locations for this improvement include the northern leg of the 3rd/Tamalpais intersection and the southern leg of the 4th/Tamalpais intersection.

Caltrans Park & Ride Lots to SRTC

- Where feasible, widen sidewalks on the east side of Hetherton between Mission and 3rd Street. If this is not feasible, use signage or barriers to direct pedestrians to cross Hetherton Street and use the Puerto Suello multi-use path as a north-south connection between SRTC and Caltrans Park & Ride lots.

SRCC to SRTC

- Provide a pedestrian path east of the Lincoln Avenue SRCC parking garage that connects Lincoln Avenue to 2nd Street along the western bank of Mahon Creek.

Figure 56: Limit Line Striped Separately from Crosswalk

Figure 57: Ladder-style Crosswalk

Pedestrian Scrambles

In studying potential pedestrian network improvements, the City was interested in more information about the provision of pedestrian scramble crossings in the Downtown area. Pedestrian scrambles are intersections that stop vehicle traffic in all directions to allow for pedestrians to cross in every direction, including diagonally, across the intersection. To accommodate these movements, a separate pedestrian phase is provided for in the signal timing of the intersection. This "scramble phase" is typically introduced once or twice during a traffic signal cycle. Pedestrian scrambles are best introduced in locations where high pedestrian volumes conflict frequently with turning vehicles. They can provide safety benefits by reducing the number of conflicting movements between vehicles and pedestrians.

To determine the feasibility of introducing pedestrian scrambles in the Downtown area, the City would need to perform a traffic analysis in which a pedestrian-only phase is introduced into the traffic signal cycle. The amount of time that is needed for this phase is dependent on the size of the intersection; pedestrians will need more time to cross a larger intersection, and thus more time would need to be allocated to the pedestrian phase. The addition of a pedestrian phase at an intersection would also require the signal cycle length to be increased, which may put it out of sync with the other signals if it was coordinated with them. The required changes to area traffic signals would need to be modeled to determine what the traffic impacts of installing a pedestrian crossing. The City would then need to consider the pedestrian demand at an intersection alongside the impacts of the crossing on pedestrian delay, pedestrian safety, and vehicle delay to determine if it considers a pedestrian scramble a feasible option.

8. WAYFINDING

8.1 INTRODUCTION

Wayfinding is integral to the success of any public space. Anticipating the circulation needs of the public, providing clear direction, and dispelling confusion is a sign's primary concern. However, through thoughtful design, signage also plays a part in shaping identity, creating neighborhood character, and expressing the values of the community. Through both the ease of access and charm, a good wayfinding program will keep visitors coming back time and again. With its rich history, unique natural features, and beautiful views, San Rafael is one of the most distinct cities in the San Francisco Bay Area. San Rafael has a diverse population of residents within its unique Downtown. Navigation into and around Downtown San Rafael is the goal of this study, which focuses on creating an identity for the Downtown area, and improving the legibility and quality of vehicular and pedestrian circulation systems.

Project Context

The parking and wayfinding study project site is located within the Downtown District of San Rafael, in Marin County, CA. Extending from D Street on the West to Lincoln Ave on the East, and from Fifth Avenue at the North to 2nd Street at the South, the Downtown District houses many landmarks and destinations. The Downtown District contains a vibrant mix of historic and modern buildings, parks, civic buildings, dining and retail establishments, and transit hubs. Additionally, the Downtown San Rafael Sonoma-Marin Area Rail Transit (SMART) station, anticipated to begin operations in Downtown San Rafael in late 2016, will provide a regional transportation node that will increase the numbers of commuters and visitors.

Wayfinding Analysis

- Outline potential wayfinding tools (signage, technology, transportation enhancements, tourism tools, etc.).
- Analyze existing physical conditions (city gateways, circulation, parking, pedestrian connections, etc.).
- Prioritize recommendations.

Objectives:

- Create and implement a user-friendly and visible navigational system that will guide visitors and residents to and from Downtown San Rafael destinations.
- Market Downtown San Rafael assets, including entertainment, cultural, historical, outdoor and other venues and activities.
- Support unified messaging for Downtown San Rafael that can be reflected in the Wayfinding signage and carried throughout other aspects of the City's marketing efforts.
- Enhance the success and market potential for arts, entertainment, outdoor recreation, and other tourist sectors that build on core San Rafael assets.
- Direct visitors to Downtown and other destinations from San Rafael's major arteries as well as ease their wayfinding within the Downtown core.
- Anticipate the continued evolution of Downtown and other districts, including traffic pattern changes, the addition of new attractions, and increased pedestrian traffic.

Philosophy:

- Provide visitors and residents with a sense of place and enhanced environment.
- Create a great first impression; a City that is well planned, organized, friendly, safe and caring.
- Cast an image consistent with the diversity that makes the City of San Rafael a welcoming and unique destination.

8.2 WAYFINDING STRATEGY

The study considers the variety of tools that users may encounter as they navigate through Downtown San Rafael. It recommends developing an overall wayfinding scheme supported on multiple platforms, including technology, signage, print materials, online maps and smart phones. The study also addresses current signage clutter, visibility and compliance issues. The following primary issues have been identified:

- Help visitors navigate to their destinations as easily as possible.
- Increase the functionality of wayfinding in and around Downtown San Rafael
- Develop wayfinding solutions that assist in identifying neighborhoods, business districts, key regions, and destinations.
- Create a wayfinding scheme that reinforces the community's brand and commitment to tourism, ecological living, creativity and innovation.
- Coordinate all wayfinding and tourism tools, including signage, identity, and technology.
- Coordinate and build consensus with the stakeholders, approving agencies and community.

Information Hierarchy

The development of an organized information hierarchy is an important wayfinding issue to establish prior to beginning design work. This hierarchy establishes the information a visitor receives and the sequence and priority that it will be presented in. The hierarchy is communicated when receiving directions either verbally, printed or electronically (email, website, etc.). The use of consistent and simple terminology will help support the navigational process.

Gateways

Gateways for this project will vary in scale and complexity based on their location, environment and purpose. Gateways can make a statement and welcome a visitor or they can simply mark the city limit. For a city like San Rafael the excitement and anticipation a visitor has when arriving can be heightened by the gateway that lets them know they have arrived at a special place. Gateways may include more than just signage. Lighting, landscaping, architectural elements, and public art can also be incorporated.

Parking

Parking in any urban environment is always difficult. The issue of parking within this wayfinding study is not meant to be a study in parking capacities or utilization, but it does look at the parking situation from its placement in the wayfinding hierarchy and the image the City is presenting to visitors upon their arrival. If parking is easier to find and presented in an organized manner, the city will be perceived as a friendly and caring environment that is trying to assist its visitors and residents alike. The premise of parking in a downtown environment is to direct to the front door of a destination and allow the visitor to "circle" around the adjacent streets keeping their orientation until they can find a space or parking lot.

Wayfinding Tools

Creating a sense of place is at the core of this program and a successful wayfinding system will help unify the visual context of San Rafael. The elements will reflect the San Rafael brand and attitude as an active, energetic and exciting place to be.

The integration of technology into the wayfinding program will reinforce the message of innovation as a core value of the City of San Rafael brand. The incorporation of these devices and applications is now expected, especially by tourists and students. No longer considered a special enhancement, these wayfinding tools are a part of everyone's daily routine. Consideration should be given to a variety of technological wayfinding approaches suitable to be accessed by all interested visitors.

End-user Technology

This is the utilization of technology where information is communicated to users through the visitor's device (smartphone, tablet or laptop). This concept does not require the City to invest in hardware or infrastructure and eliminates issues of vandalism, theft, etc. The only investment is in development and ongoing maintenance. End-user technologies include:

Text Message Maps

Static orientation maps (at bus shelters, kiosks or on signs) that include a "text message number". When keyed in, the user receives a return text message with information about the destination. This can be a short message about events, hours of operation, or the best place to park.

Mobile-responsive Website

A mobile-responsive website provides map-based location service for a variety of categories, including things to do, events, hotels, attractions, shopping, restaurants, college campuses, hiking trails, bicycle paths, parking lots, services, emergency points and any other point of interest (POI) on or near the City of San Rafael. It also allows visitors to view and use other information about a POI like phone numbers, customer reviews, and hours of operation.

Features:

Mobile-responsive website services.

- Allows users to find attractions, restaurants, parking lots and other services within the City of San Rafael.
- Local businesses share the best deals in town in real time to make sure visitors get the best prices during their stay.
- Locals and visitors alike utilize the events calendar and live entertainment schedules.
- Multiple languages.

8.3 EXISTING SIGNAGE EVALUATION

The existing signage in Downtown San Rafael is simple and consistent. The main theme is drawn from the architecture of Mission San Rafael Arcangel, located at Fifth Avenue, with an arch and bell form in a neutral color scheme of black, white, and beige. With plans to revamp San Rafael's city logo, there's an opportunity to unify inconsistent signage, modernize existing signage, incorporate more vibrant and eye-catching color, and create a stronger hierarchy of signage ranging from grand gateways to pedestrian-scaled wayfinding maps.

• City Entrance Sign: A place-making signifier for both pedestrians and vehicles.

• Approach from Highway: A small sign directs vehicles from major arteries into one of Downtown's arteries.

• Parking Sign on Traffic Signal: A simple easy to read sign directs vehicles towards parking.

• Sidewalk Attractions Sign: Legible by vehicles and pedestrians, directs visitors to public spaces.

• Sidewalk Parking Sign: A smaller sidewalk sign directs vehicles towards parking.

• Hourly Parking Sign: A brightly colored parking sign with directional arrows leads drivers to public parking.

• Lightpole Parking Sign: A brightly colored public parking sign with the universal symbol for parking tells drivers they have reached a parking lot.

• Business District Sign: A signifier for a subsection of San Rafael.

A   CITY ENTRANCE SIGN (ARROWS INDICATE DIRECTION THAT SIGN FACES)

B   APPROACH FROM HIGHWAY

C   DIRECTIONAL PARKING SIGN ON TRAFFIC SIGNAL

D   SIDEWALK ATTRACTIONS SIGN

E   SIDEWALK PARKING SIGN

F   HOURLY PARKING SIGN

G   LIGHTPOLE PARKING SIGN

H   BUSINESS DISTRICT SIGN

Figure 58: Existing Signage Map

PUBLIC PARKING LOT
(SHORT TERM PARKING)

PUBLIC PARKING LOT
(LONG/SHORT TERM PARKING)

PUBLIC PARKING
GARAGE

CALTRANS-OWNED
PARK AND RIDE LOT

PLANNING STUDY
BOUNDARY

SMART STATION

½ MILE RADIUS FROM
SMART STATION

ONE WAY STREET
TRAFFIC DIRECTION

HIGHWAY 101

SAN RAFAEL
BANNER SIGNAGE
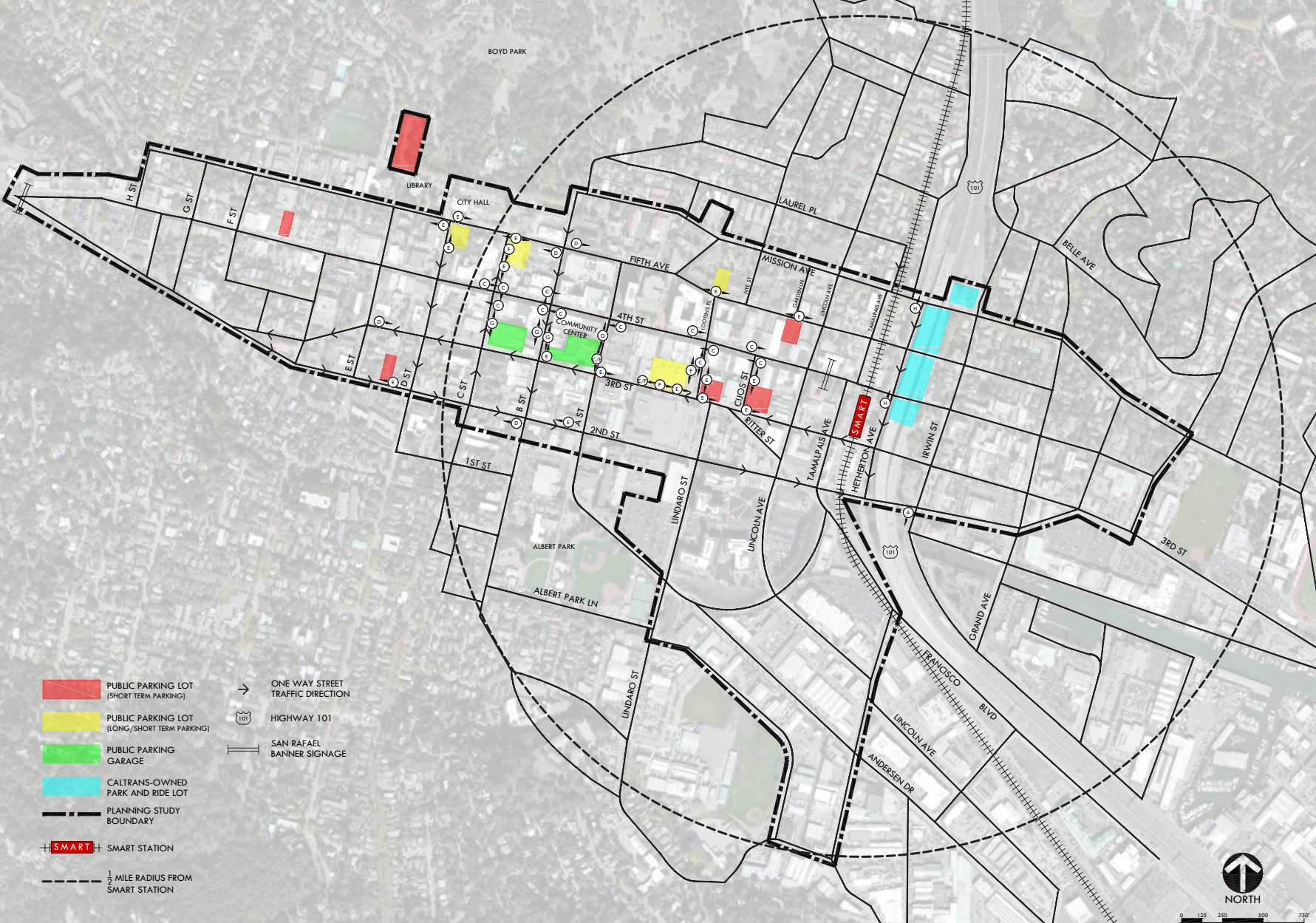
8.4 PROPOSED SIGNAGE PLACEMENT

Proposed signage takes the opportunity to modify the existing scheme with modern forms and crisp, clean lines that are reflective of San Rafael's future. The mission bell form has been updated with a sleeker form and bright colors to provide more visual contrast and aesthetic interest to residents and visitors. The signage hierarchy has been structured in size and proportion to accomplish a variety of targeted tasks. The largest form of gateway/monument signage directs people in vehicles from transportation networks into the general downtown district. Next, signs at the Street Level/Vehicular signage level direct people from highways and the new SMART station within the downtown district to destinations, landmarks, and parking. At the Pedestrian level, smaller signs then lead visitors and residents to their destinations on foot.

- San Rafael Sign: Maintain the existing place-making City sign.

- Downtown Gateway: Creating a sense of arrival, the gateway signs tell visitors they are entering the Downtown area.

- Monument Signage: A large-scale sign directs traffic from larger arteries into Downtown, slowly scaling down the signage.

- Street-Level Vehicular Signage: Updated street directional signage to direct traffic.

- Street Level Parking Signage: Updated street directional signage to direct vehicular traffic to parking.

- Pedestrian Level Signage: Vehicle and pedestrian scale updated directional signage and wayfinding maps.

- Sidewalk Signage: Small-scale signs identify nearby destinations.

- Business District Sign: Maintain the existing place-making District sign.

(E) SAN RAFAEL SIGN TO REMAIN (ARROWS INDICATE DIRECTION SIGN FACES) 1

DOWNTOWN GATEWAY 2

MONUMENT SIGNAGE, APPROACH FROM HIGHWAY 3

STREET LEVEL VEHICULAR DIRECTIONAL SIGNAGE 4

STREET LEVEL PARKING SIGNAGE 5

PEDESTRIAN LEVEL SIGNAGE 6

SIDEWALK SIGNAGE 7

(E) BUSINESS DISTRICT SIGN 8
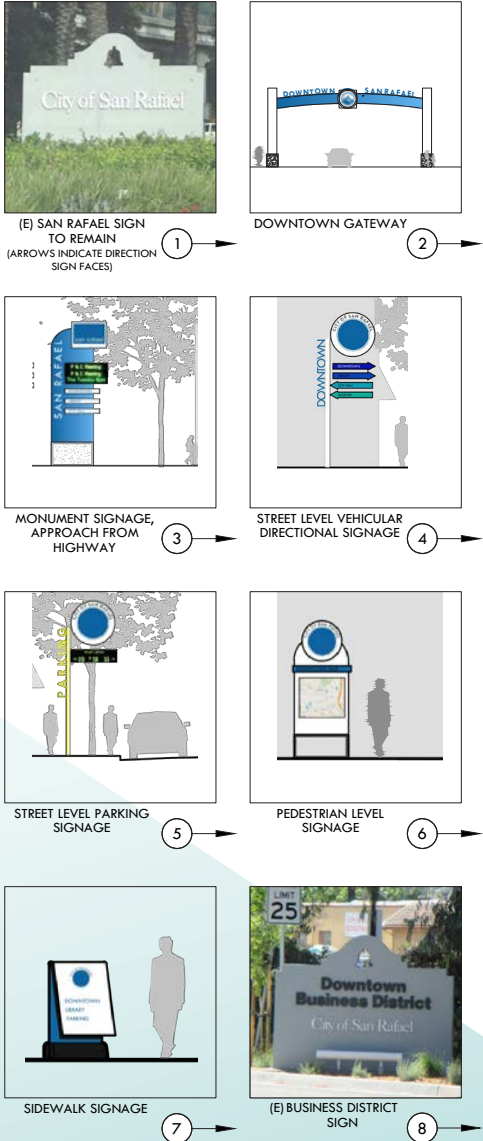
Figure 59: Proposed Signage Map

Legend:

PUBLIC PARKING LOT
(SHORT TERM PARKING)

PUBLIC PARKING LOT
(LONG/SHORT TERM PARKING)

PUBLIC PARKING
GARAGE

CALTRANS-OWNED
PARK AND RIDE LOT

PLANNING STUDY
BOUNDARY

SMART STATION

½ MILE RADIUS FROM
SMART STATION

ONE WAY STREET
TRAFFIC DIRECTION

HIGHWAY 101

SAN RAFAEL
BANNER SIGNAGE

Note: Signage placement is shown conceptually. Actual sign placement to be determined in field, to be clear from obstructing accessible paths and avoid conflicts with overhead/underground utilities and tree roots/canopies.

8.5 PROPOSED SIGNAGE GRAPHICS

The parking & wayfinding study for Downtown San Rafael, CA is a step in creating an identifiable and easily-navigable Downtown district. Signage is a major part of this identity and aides in the orientation of residents and guests within the Downtown district and its surrounding context.

The following is a set of examples of the signage hierarchy described above, with variations of form, color, and identity signage. These utilize several draft versions of potential city emblems provided by the client, and are meant to offer concepts for the variety of colors and shapes they offer.

1A

1B

SCALE: 1/8"=1'-0"

A ST

P & C Meeting
This Tuesday 8pm

CITY OF SAN RAFAEL

P & C Meeting
P & C Meeting
This Tuesday 8pm

CITY OF SAN RAFAEL

DOWNTOWN MAP

CITY OF SAN RAFAEL

DOWNTOWN →
TRANSIT ←
PARKING →

DOWNTOWN →
TRANSIT ←
PARKING →

DOWNTOWN
TRANSIT
PARKING

DOWNTOWN
TRANSIT
PARKING

1c

1d

0   2   4   8   16'

SCALE: 1/4"=1'-0"

1ᴇ

2

A

B

C

D

2A

0   4   8   16   32'

2B

DOWNTOWN

san rafael

DOWNTOWN
TRANSIT
PARKING

DOWNTOWN

san rafael

DOWNTOWN
TRANSIT
PARKING

PARKING

san rafael

Avai Lab Le
←23 ↑58 33→

A ST

0   4   8   16   32'

SCALE: 1/8"=1'-0"

A ST

san rafael

P & C Meeting
This Tuesday 8pm

DOWNTOWN →
TRANSIT ←
PARKING →

san rafael

P & C Meeting
This Tuesday 8pm

DOWNTOWN →
TRANSIT ←
PARKING →

san rafael

DOWNTOWN MAP

SAN RAFAEL
DOWNTOWN
TRANSIT
PARKING

SAN RAFAEL
DOWNTOWN
TRANSIT
PARKING

2c

2d

0 2 4 8 16'

SCALE: 1/4"=1'-0"

2E

3

A   B   C   D

3A

SAN RAFAEL
DOWNTOWN
TRANSIT
PARKING

SAN RAFAEL
DOWNTOWN
DOWNTOWN
TRANSIT
PARKING

SAN RAFAEL
P & C Meeting
P & C Meeting
This Tuesday 8pm
DOWNTOWN
TRANSIT
PARKING

0   4   8   16   32'

SCALE: 1/8"=1'-0"

3ʙ

SCALE: 1/8"=1'-0"

3C

3D

SCALE: 1/4"=1'-0"

3ᴇ

8.6 MATERIAL OPTIONS

Material options were carefully selected to reinforce the wayfinding theme and hierarchy. This array of materials and material combinations, each with their unique qualities and characteristics. In the following pages, several options are explored at different scales to demonstrate their visual impact and feelings they can evoke. All materials are designed for maximum durability for outdoor applications.

MATERIAL PALETTE OPTION 1
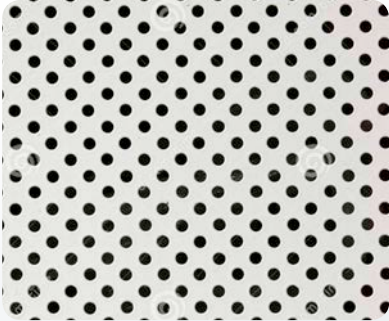
Perforated Mesh is available in wide array of patterns and can reduce some of the visual impact of larger structures by allowing a degree of transparency.

Stainless Steel is highly durable, contemporary, and compliments many types of materials easily and effectively.

Frosted Glass can be customized to be any color and creates unique light effects that change with the positioning of the sun.

MATERIAL PALETTE OPTION 2
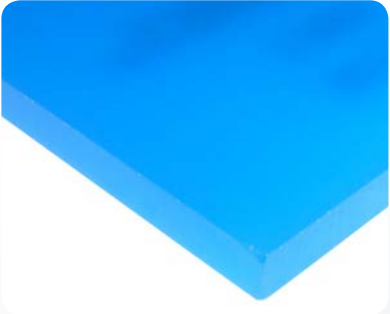
Powder-Coated Steel is a strong and durable material that can be customized to virtually any shape, size, and color.

Board Form Concrete marries the durability of concrete with the natural texture of wood.

Natural Hardwood provides a sense of warmth and brings a natural element to the urban environment.

Corten Steel is a material that looks better and better with age and brings with it a contemporary feeling that also echoes a city's industrial past.

GATEWAY SIGNAGE

Standing at over 20 feet tall, the gateway signage denotes the arrival into the Downtown district. As the initial entry point, the visitors to the Downtown district will know to look for similar colors and materials to help them with their wayfinding needs from here on.

PERFORATED MESH

STAINLESS STEEL

FROSTED GLASS

POWDER COATED STEEL

BOARD FORM CONCRETE

CORTEN STEEL

NATURAL HARDWOOD

MATERIAL OPTIONS

4'-0"

DISTRICT SIGN

CITY LOGO WITH BACKLIGHTING

GATEWAY SUPPORT COLUMNS

PLAN VIEW

DOWNTOWN · CITY OF SAN RAFAEL · SAN RAFAEL

24'-0"

DISTRICT SIGN

CITY LOGO WITH BACKLIGHTING

GATEWAY SUPPORT COLUMNS
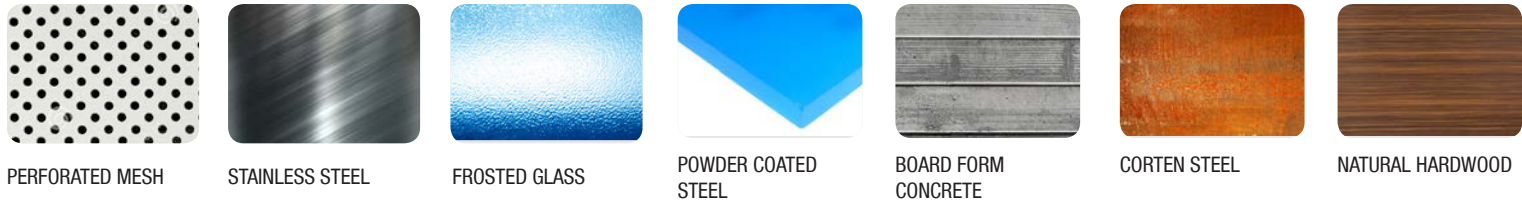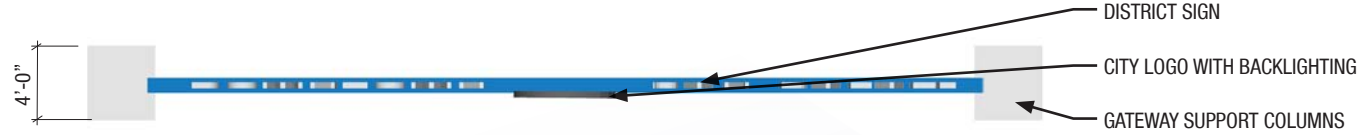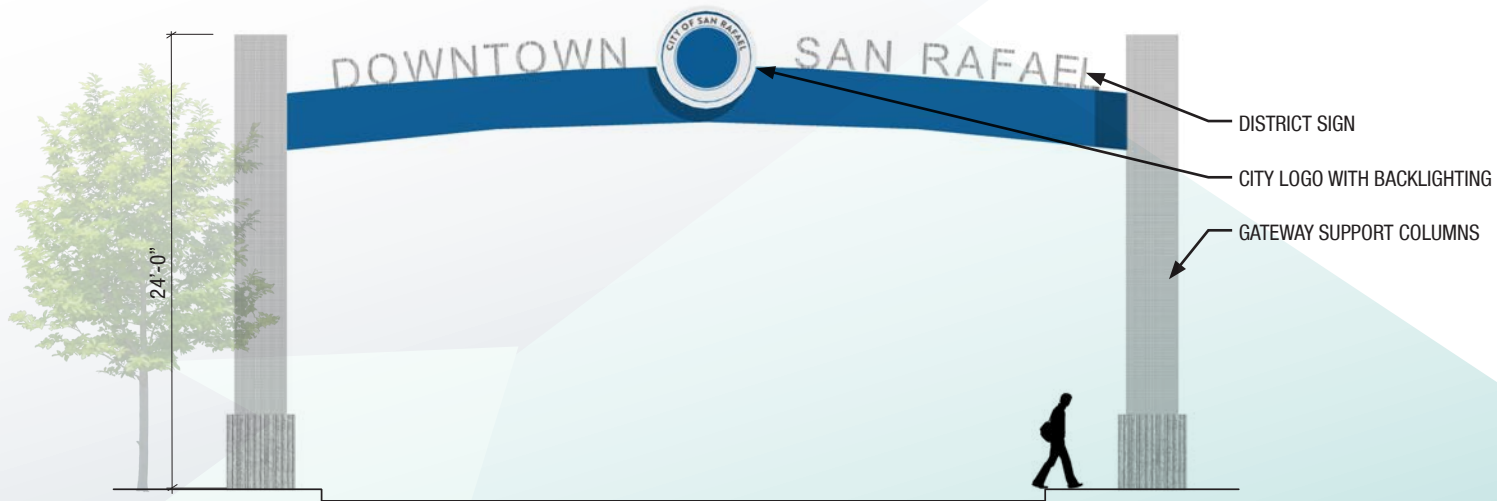
ELEVATION

MONUMENT SIGNAGE

Large directional signs point visitors to the most common destinations and can be seen by both pedestrians and vehicles. Optional electronic signs can inform visitors of any special events or public service announcements that may impact circulation to their desired location.

DOWNTOWN PARKING/
WAYFINDING STUDY
FINAL REPORT
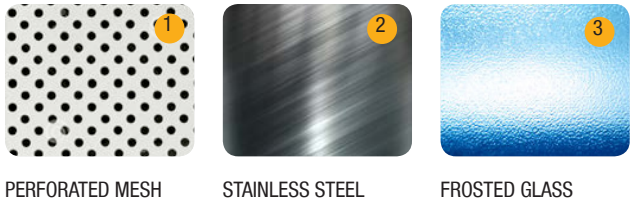
CITY OF SAN RAFAEL
Mission City
of Marin
CALIFORNIA

1 PERFORATED MESH

2 STAINLESS STEEL

3 FROSTED GLASS

MATERIALS

1 POWDER COATED STEEL

2 BOARD FORM CONCRETE

3 NATURAL HARDWOOD

4 CORTEN STEEL

MATERIALS

7'-0"

4'-0"

PLAN VIEW

CITY LOGO WITH BACKLIGHTING

EXTRUDED DISTRICT SIGN

FLOATING DIRECTIONAL SIGNS

PLAN VIEW

3 CITY OF SAN RAFAEL

DOWNTOWN

DOWNTOWN
TRANSIT
PARKING

1

2

25'-0"

8'-0" min.

4'-0"

ELEVATION

3 CITY OF SAN RAFAEL

4

DOWNTOWN

P & C Meeting
This Tuesday 8pm
Available
←23 ↑58 33→

DOWNTOWN
TRANSIT
PARKING

1

2

CITY LOGO WITH BACKLIGHTING

ELECTRONIC SIGN
(NON-BLINKING OR SCROLLING)

FLOATING DIRECTIONAL SIGNS

EXTRUDED DISTRICT SIGN

VOLUMETRIC MONUMENT

EXPANDED SIGN BASE
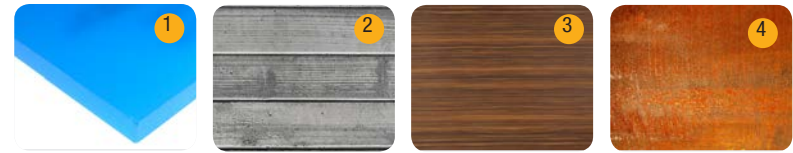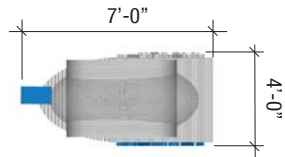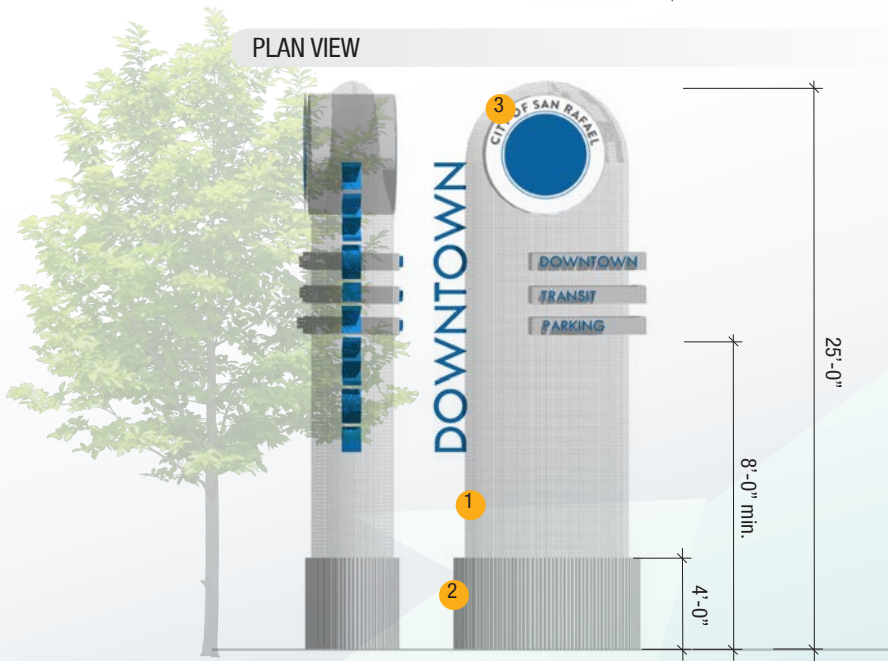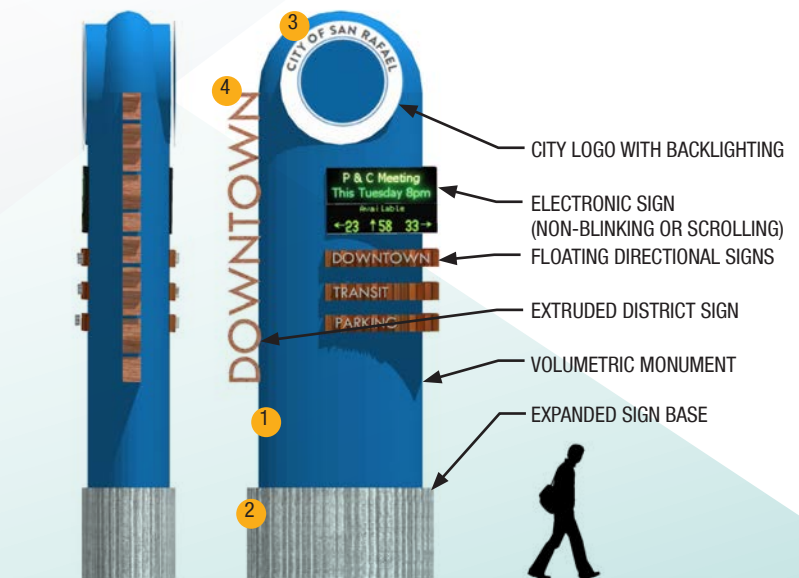
ELEVATION

STREET LEVEL

VEHICULAR SIGNAGE

The bold arrows and strong colors of the street level vehicular signs are designed for maximum legibility. Visitors who may not be familiar with the area will be able to make quick decisions, allowing them to maintain focus on the road. This will result in more efficient circulation and improved safety for vehicles and pedestrians alike.

1
PERFORATED MESH

2
STAINLESS STEEL

3
FROSTED GLASS

MATERIALS

1
POWDER COATED STEEL

2
CORTEN STEEL

MATERIALS

4'-0"

6"

PLAN VIEW

EXTRUDED DISTRICT SIGN

DIRECTIONAL SIGNS OR PARKING AVAILABILITY SIGN

PLAN VIEW

16'-8"

7'-6"

ELEVATION

CITY LOGO OR UNIVERSAL PARKING SYMBOL WITH BACKLIGHTING

DIRECTIONAL SIGNS OR ELECTRONIC PARKING AVAILABILITY SIGN

EXTRUDED DISTRICT SIGN

ANGLED SIGN BASE
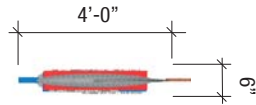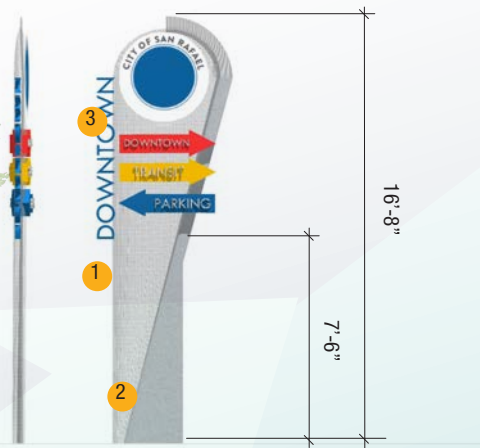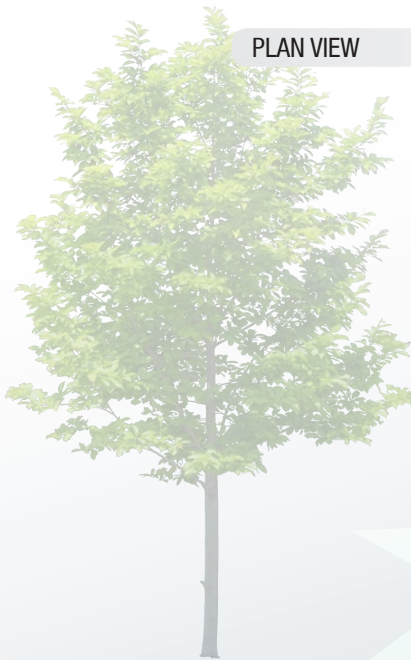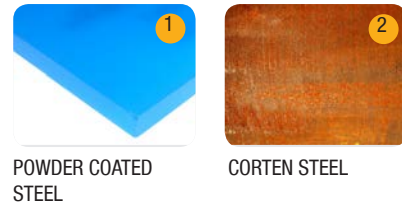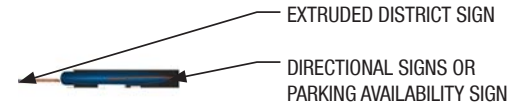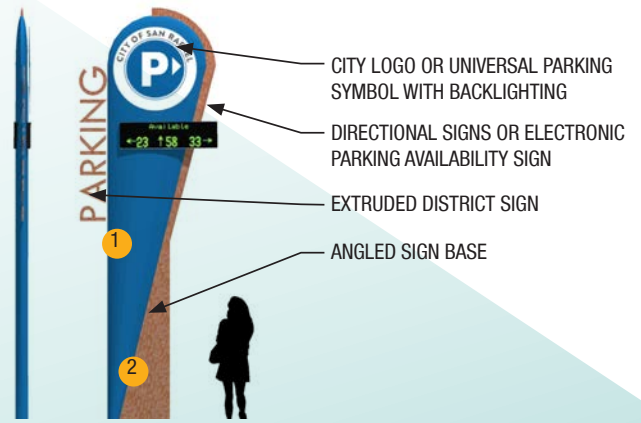
ELEVATION

SIDEWALK SIGNAGE

Echoing the gateway signage, the smaller-scale sidewalk signage provides clear direction while creating a sense of place. The sidewalk signage indicates locations in the immediate vicinity as well as directs vehicles to the nearest available parking. Opportunity exists to include wayfinding maps or electronic signage displaying event or community announcements.

MATERIALS

1. PERFORATED MESH
2. STAINLESS STEEL
3. FROSTED GLASS

MATERIALS

1. POWDER COATED STEEL
2. BOARD FORM CONCRETE
3. NATURAL HARDWOOD

PLAN VIEW

4'-0"

1'-0"

PLAN VIEW

- CITY LOGO WITH BACKLIGHTING
- VOLUMETRIC SIGN BASE
- FLOATING DIRECTIONAL SIGNS

ELEVATION

7'-6"

18"

ELEVATION

- ARCHED SIGN TOP
- CITY LOGO WITH BACKLIGHTING
- ELECTRONIC SIGN (NON-BLINKING OR SCROLLING)
- FLOATING DIRECTIONAL SIGNS OR LOCATION MAP
- EXPANDED SIGN BASE
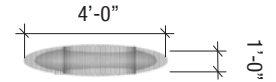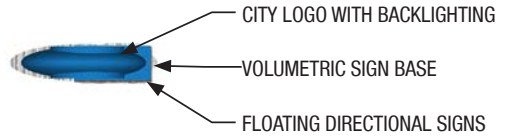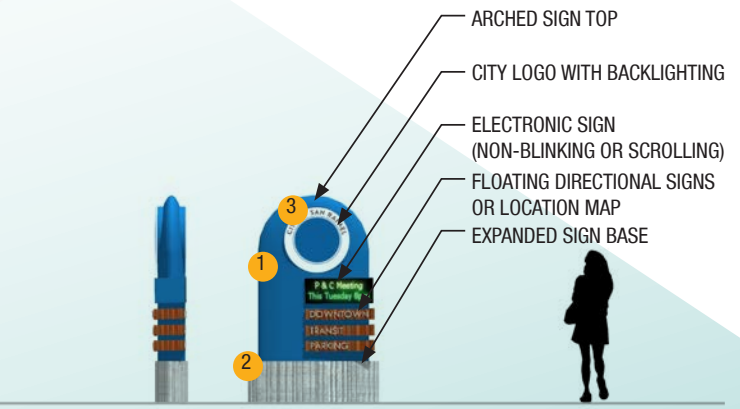
PEDESTRIAN SIDEWALK

SIGNAGE

These smaller sidewalk signs are scaled for pedestrians and can include directions to nearby amenities, retail spaces, and restaurants in addition to City landmarks and parking. With the high level of interaction these signs have with passersby, they are built to be durable and provide separation between pedestrians and vehicles.
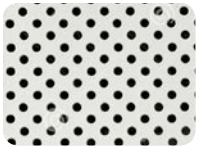
PERFORATED MESH

STAINLESS STEEL
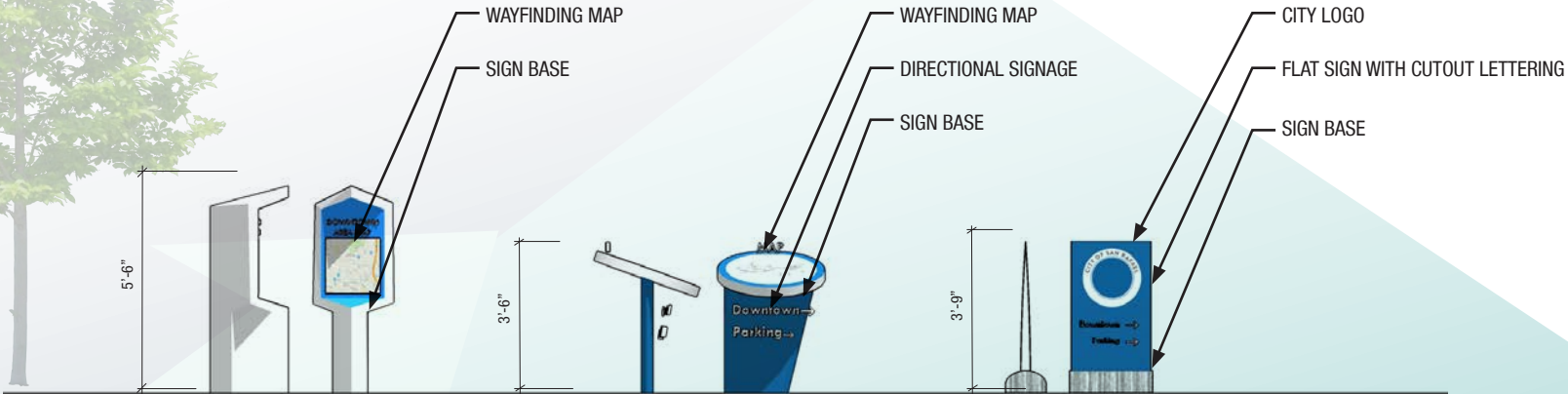
FROSTED GLASS

POWDER COATED STEEL

BOARD FORM CONCRETE

CORTEN STEEL

NATURAL HARDWOOD

MATERIAL OPTIONS

2'-0"
2'-0"

2'-9"
2'-9"

2'-3"
1'-0"

PLAN VIEW

WAYFINDING MAP

SIGN BASE

WAYFINDING MAP

DIRECTIONAL SIGNAGE

SIGN BASE

CITY LOGO

FLAT SIGN WITH CUTOUT LETTERING

SIGN BASE

5'-6"

3'-6"

3'-9"
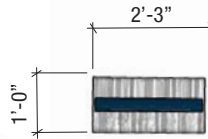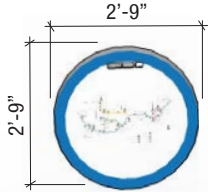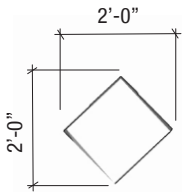
ELEVATION

8B. Variable Message Signs (VMS)

VMS are electronic signs used to provide detailed information to motorists, pedestrians, and bicyclists. Since they are electronic, the messages they display can be changed. VMS can be used to display a variety of messages, such as parking availability and pricing, congestion and incident warnings, variable speed limits, or other special information. The fact that messages on the display are changeable allows VMS to display real-time information. Some signs also have the capability to display other messages such as information regarding upcoming events and details about parking occupancy. For example, if, parking occupancy increases too close to capacity, the VMS signs can play a major role in preventing unnecessary circulation of vehicles on the Downtown street network looking for a parking space. A parking guidance system uses VMS in communication with parking facilities to guide motorists to parking garages with open spaces. As part of the wayfinding portion of this study, the City was interested in exploring the option of implementing VMS in the Downtown area. This section discusses the elements of a VMS system that need to be considered when examining the feasibility of such a system.

In the context of Downtown San Rafael, VMS can provide an opportunity to simultaneously guide visitors to parking facilities, while also providing detailed parking and event information. Changeable messages enable signs to indicate whether a facility is open or full, or indicate the exact number of spaces that are available at a specific facility. VMS can either be full-matrix signs (where the entire sign is changeable), or mix–both static and changeable elements (for example, the static portion of the sign would indicate the name and direction of a specific parking facility, and the variable portion would display the number of available spaces).

VMS signs require supporting infrastructure to function; communication and power lines must be connected to the sign. If access to wired communication lines is not feasible for some signs, wireless communication is an available option. In order to display the number of available parking spaces, there must be a way to count these spaces at the relevant parking garages. This information is then communicated to the VMS via a server housed in a City facility. If the revenue control equipment does not provide accurate occupancy information, detection equipment would need to be installed at garages. Detection can be done using loop detectors or overhead microwave detectors. Loop detectors are more expensive to install, but are more accurate and require less maintenance. Overhead microwave detectors are cheaper to install, but are slightly less accurate than loop detectors and are higher maintenance.

In considering full-matrix VMS vs. partially static VMS, there are various advantages and disadvantages. Full-matrix signs are more expensive, but provide greater flexibility; if desired, they could also display information on special events, accidents, or detours. With full-matrix signs, community concerns may arise over the visual impact of the sign's brightness at night. Partially static signs are cheaper, but the dynamic portions of the sign are constrained to displaying specific information. Additional features on any dynamic signage, such as coloring or scrolling, increase cost.

A signage system is recommended for consideration with five proposed VMS locations: two located at the off-ramps from Highway 101, and three located on 3rd Street in advance of the 3rd & Lootens structure, the A Street Garage, and the C Street Garage. Three of these are proposed to be full-sized, partially dynamic signs (example shown in **Figure 60**) that indicate the number of parking spaces available in the 3rd & Lootens structure, the A Street Garage, and the C Street Garage, and include a panel providing special event information. The remaining two VMS would indicate only the number of parking spaces available in the A and C Street garages without displaying special event information (example shown in **Figure 61**).

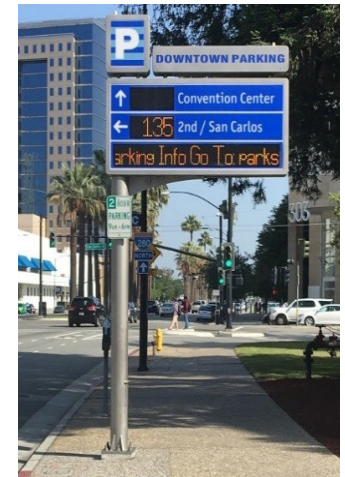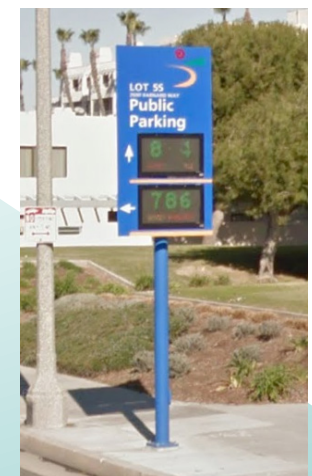**Figure 60:** 8-ft x 4-ft VMS with special event information

Figure 61: 4-ft x 6-ft VMS displaying parking information only

To provide accurate parking count information, loop detectors would be required at all entry and exit points of the parking structures to count vehicles entering and exiting. These detectors would communicate with a centrally located server, which would relay the information to the VMS. It is understood that loop detectors are already provided at the public parking structures. Software and hardware integration may be required for communication between the systems. **Table 22** below indicates a recommended "minimum" design for VMS signs as well as lists the major elements needed for this signage program, potential signage locations, and provides estimated cost ranges for these elements. The system can also be expanded to include the smaller 4-ft x 6-ft VMS for eastbound traffic into Downtown and these signs would be installed on 4th Street and 2nd Street to indicate parking availability. Technology is also available to develop a website and smart phone application for access to real time parking information. However, these highly advanced technological systems are expensive to acquire, and have high annual operation and maintenance costs. The cost to implement a "minimum" system with five VMS (two signs off the freeway and three smaller signs on 3rd Street for westbound traffic only) and vehicle detection at three parking facilities could range from $375,000 to $700,000.

Table 22: Potential VMS Signage System

Item	Description	Proposed Locations	Estimated Cost
8-ft x 4-ft sign with special event informationn	• Single sided roadway sign indicating space availability and special events • Approximate panel dimensions: 8-ft x 4-ft • 10-ft Clearance post	• 2nd Street & Irwin Street • Mission Avenue & Hetherton Street • 3rd Street & Lootens Street	$50,000-$100,000 per sign

Item	Description	Proposed Locations	Estimated Cost
4-ft x 6-ft sign with parking information only	• Single sided roadway sign indicating space availability • Approximate panel dimensions: 6-ft x 4-ft • 8-ft Clearance post	• 3rd Street & A Street • 3rd Street & C Street 	$25,000-$45,000 per sign
Vehicle detection at garage entrances	• Vehicle counts can be collected via loop detectors or overhead microwave detection	• 3rd & Lootens Structure, A Street Garage, C Street Garage	$75,000-$150,000
Other Infrastructure Costs	• Furnishing and installation of server and workstation hardware • Design, remote project management, and system commissioning • Connecting vehicle detection systems to communications lines	• Centrally Located City Facility	$100,000-$150,000
Total			$350,000-$700,000