

Chapter 3

Demand Analysis

This chapter documents and summarizes the demand-based parking model created by CDM Smith for the downtown parking district located within the City of Los Altos, the primary commercial district of the City. The following are discussed in the remainder of the report as independent sections:

- The current land uses and the calculated demand-based parking rates based on existing on-street space and off-street plaza lot occupancies;
- The anticipated future short-term, mid-term, and long-term future scenarios for land uses located in the downtown parking district of Los Altos;
- A summary of the customized shared parking model, based on the Urban Land Institute's Shared Parking Manual, and how the model was calibrated to reflect demand-based conditions in the Los Altos downtown parking district;
- The projected peak parking demand in each future scenario; and
- The impacts of and strategies to address a potential increase in future parking demand within the downtown parking district.

Supplemental discussion of the effect of the proposed expanded Safeway's shared parking supply to the parking district is also discussed within the future demand analysis section.

3.1 Existing Land Uses and Parking Occupancies

This section summarizes the current land uses within the downtown parking district as well as parking occupancies based on data collection from September and December 2012.

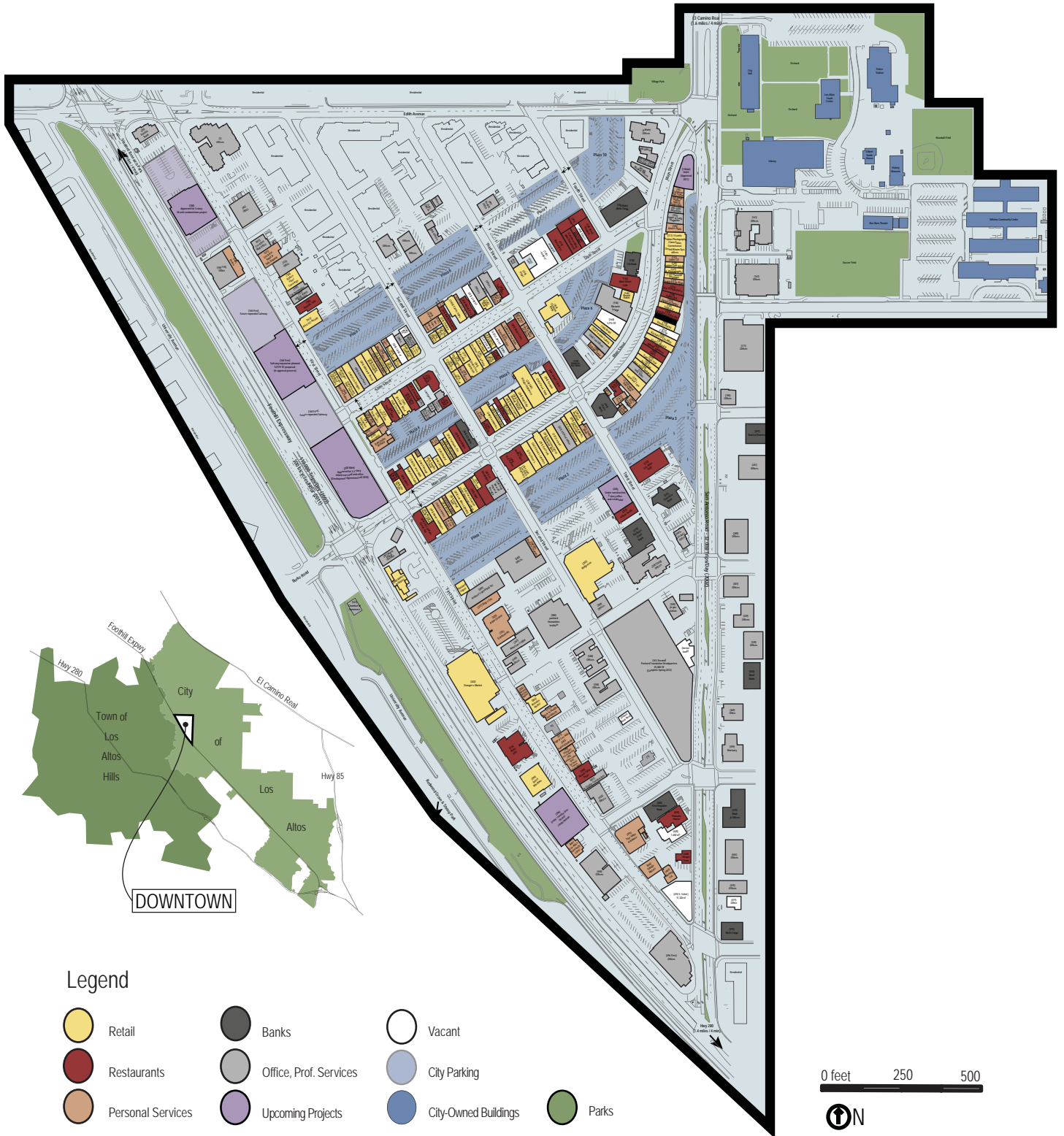
3.1.1 Land Uses

Figure 3-1 shows the existing land uses as well as the overall square footage estimates corresponding to each respective land use type within the Los Altos downtown parking district. This information was provided by the City of Los Altos based on prior land use analysis in the downtown and was updated to reflect the current mix of tenants.

Table 3-1 Existing Downtown Los Altos Land Use Information

Land Use	Existing Square Footage (sq. ft.)
Boutique Retail	158,000
High Demand Retail	-
Personal Services/Salons	35,000
Banks	27,000
Office	140,000
Take-out Restaurants and Cafes	25,000
Fine/Casual Dining	45,000
Bar/Pub	5,000
Total	435,000

DOWNTOWN LOS ALTOS PARKING MANAGEMENT PLAN



Source: City of Los Altos

Figure 3-1: Existing Downtown Los Altos Parking District Land Uses

As Table 3-1 above shows, the City of Los Altos currently has approximately 435,000 square feet of retail and office space within the bounds of the downtown parking district. The City has estimated that approximately 27,000 square feet of available retail and office space was available or vacant during the study time period, or around a 5.8 percent vacancy rate.

3.1.2 Parking Inventory and Occupancy

As part of the existing conditions analysis, parking district inventory and hourly occupancy counts were collected during the months of September (Wednesday, September 12th and Saturday, September 15th, 2012) and December (Wednesday, December 12th, 2012). Table 3-2 provides the existing Downtown Parking District inventory as well as occupancy during the parking peak hour, in addition to parking spaces at the 400 Main development directly adjacent to the downtown parking district. This parking lot was included in existing conditions for the demand model because it serves as an additional parking facility for patrons and employees going to the downtown parking district, due to its proximity.

For the purpose of calculating future demand in downtown Los Altos, the current parking facility available at 400 Main, which includes 96 parking spaces, was added to the Downtown Parking District parking supply, which is comprised of 1,449 total parking spaces, based on Chapter 1.4.1.1. This total was considered to encompass the baseline parking supply for the demand-based parking model. Blended parking occupancy rates were calculated based on this combination of parking facilities. Overall, the existing Downtown Parking District, along with the 400 Main parking lot, provide a total of 1,545 available parking spaces. This includes all types of spaces, including permit, short-term, and handicap spaces.

Table 3-2 On-Street and Off-Street Parking Inventory and Occupancy

Land Use	Time Period	Day of Week	Inventory	Peak Hour Occupancy
On-Street	September 2012	Wednesday	245	223 (91%)
		Saturday		226 (92%)
	December 2012	Wednesday		211 (86%)
Off-Street	September 2012	Wednesday	1,204	964 (80%)
		Saturday		779 (65%)
	December 2012	Wednesday		1,051 (87%)
400 Main	September 2012	Wednesday	96	77 (80%)
		Saturday		43 (45%)
	December 2012	Wednesday		46 (48%)
Total	September 2012	Wednesday	1,545	1,264 (82%)
		Saturday		1,048 (68%)
	December 2012	Wednesday		1,308 (85%)

The total combined on-street and off-street occupancies at the peak hour ranged from 82 percent occupied in September to 85 percent in December, with a peak hour of 12PM for September and 1PM in December. September weekend occupancy peaked at 68 percent.

3.2 Future Scenarios

This section discusses the assumptions and expected changes in land uses in the Downtown Parking District of Los Altos. These changes were evaluated on a short-term, medium-term, and long-term basis, resulting in changes in land use intensities and types as a result of changing assumptions regarding future developments within downtown Los Altos.

3.2.1 Short-Term Future Scenario

The short-term scenario forecasts parking demand in the immediate future, approximately two years from now.

3.2.1.1 Anticipated Land Uses

The City anticipates that no changes in land use type or intensity will occur under this scenario. Land use types and square footages within the downtown parking district under this scenario are shown in Table 3-3.

Table 3-3 Short-Term Future Scenario – Anticipated Downtown Los Altos Land Use

Land Use	Estimated Square Footage (sq. ft.)
Boutique Retail	158,000
High Demand Retail	-
Personal Services/Salons	35,000
Banks	27,000
Office	140,000
Take-out Restaurants and Cafes	25,000
Fine/Casual Dining	45,000
Bar/Pub	5,000
Total	435,000

In addition to the existing land uses that are expected to be maintained under the short-term scenario, the existing 400 Main location that is currently used as supplementary public parking for the downtown will be replaced by a proposed development. A remodeled and expanded Safeway grocery store at 160 First Street, located north of the 400 Main development and immediately northwest of the downtown parking district, will also be constructed in the short-term future.

3.2.1.2 Anticipated Parking Facility Changes

Several parking changes are expected to occur for the short-term future scenario. As a result of the 400 Main development, the existing parking lot would be eliminated for public use; however, the City expects the development to be self-parked. As previously mentioned, while it is not physically located within the downtown parking district boundaries, the lot currently provides additional temporary public parking for people working or visiting downtown Los Altos.

Within the downtown parking district, minor changes are expected in the short-term future scenario. The City expects that 12 on-street parking spaces along First Street and nine (9) spaces located in the Plaza 3 lot would be eliminated as part of the City's streetscape improvement work along First Street and San Antonio Road. Eight (8) of the 12 spaces along First Street and all 9 spaces in Plaza 3 are

located within the Downtown Parking District. The removal of these 17 total spaces along with the elimination of the 96 spaces at 400 Main would result in a total of 1,432 remaining parking spaces in the Downtown Parking District.

3.2.1.3 Future Safeway Shared Parking Adjustment

The City of Los Altos entered into a shared parking agreement with Safeway in March 2012. A copy of this agreement is included in this report as Appendix 3A. In addition to the previously mentioned parking changes to the downtown parking district, the adjacent Safeway grocery store, as part of its redevelopment, will double in size from 22,584 square feet to 45,265 square feet. The parking supply serving it would increase from 94 existing spaces, none of which are officially available to the general public, to 154 spaces, 129 of which would be shared Safeway and public parking, in accordance with an agreement with the City.²⁹ As part of the agreement, Safeway would maintain these 129 spaces for Safeway use as well as make available these spaces available to the public for up to 90 minutes.

As a result of the agreement, there is a potential increase of parking spaces in the downtown parking supply. Based on a recent parking study memorandum conducted for the City projecting Safeway parking demand³⁰, an 85th percentile parking demand estimate of 138 spaces was calculated for the store. The report also projects that during three (3) percent of store hours, particularly on weekday (specifically Monday and Tuesday) early evenings and holidays, parking demand would exceed the available 154-space Safeway parking supply (129 spaces of which are shared). This suggests that during the peak demand times at Safeway, limited, if any, amounts of the shared parking supply will be available for public use.

The overall weekday midday parking district occupancy was 82 percent while the overall weekday early evening district occupancy was 67 percent. The Safeway report projected that weekday early evening parking demand would be at peak on Mondays and Tuesdays. Weekday parking counts for downtown Los Altos were collected on a Wednesday and therefore do not correlate directly with the Safeway report. However, based on the Safeway parking analysis and existing occupancy observations for the downtown parking district, it is possible to conclude that peak parking demand for the Safeway development and the downtown parking district would occur at different times, which supports the shared parking concept. Existing parking occupancies at the dedicated Safeway parking lot were 86 percent occupied (or 81 spaces) during the 12PM weekday midday and 76 percent occupied (or 71 spaces) during the 6PM weekday evening, based on counts collected in September 2012. This shows that while weekday peak parking at Safeway occurs in the evening, there is a secondary parking demand peak observed during the weekday midday time period.

Although the remodeled Safeway is anticipated to double in size based on store square footage, parking demand would not be expected to increase in a linear fashion. This is because the Safeway would be maintaining their existing customer base and offering similar food products in a more spacious storefront. Therefore, in order to estimate the effect of the secondary Safeway parking demand peak on the available supply for downtown parking district public use, the following calculation steps were applied:

²⁹ Downtown Shared Parking Agreement between Safeway, a Delaware Corporation, and City of Los Altos, a California Municipal Corporation, March 21, 2012.

³⁰ Los Altos Safeway – Parking Demand Estimates, Fehr & Peers, August 2nd, 2011.

1. The current occupancy rate of the dedicated existing Safeway parking lot was multiplied by the proposed 154-space future Safeway lot to estimate overall parking demand at that time of day.
2. The total number of spaces representing the net increase in demand was reduced by a factor of 25 percent to account for the non-linear relationship between increased store size and increased demand.
3. It was assumed that the 25 dedicated Safeway spaces at the future store would be occupied first by Safeway employees.
4. Calculate the difference between the 129 shared spaces and the overall, minus 25 spaces, calculated parking demand. This is the expected available shared Safeway supply for public use, dependent on time of day.
5. Add the expected available shared Safeway supply to the downtown parking district supply to result in an ultimate time-dependent available parking supply for downtown patrons and employees.

It was assumed, based on the Safeway memorandum, that weekday early evening parking demand would utilize all available Safeway parking supply. Since there are currently several hundred parking spaces in the downtown parking district available during that time period, any parking spillover from Safeway would be adequately managed by the available evening parking supply. As such, only the weekday midday, weekend midday, and weekend evening Safeway supply availability was calculated.

Based on the above calculation steps, the resulting total available supply from the Safeway shared parking supply, dependent on time, ranges from 34 spaces during the weekday midday to 105 spaces on weekend evenings.

Safeway provided an additional memorandum to the City of Los Altos from December 8th, 2011³¹, responding to comments on the store expansion transportation study. This document stated that approximately 44 spaces would be available between 11AM and 3PM on a typical weekday midday time period. However, the Safeway memo did not contain the background information on how the 44 space calculation was determined. As such, in order to remain conservative in the short-term future, the 34 spaces calculated to be available during the weekday midday was used as the available public parking supply at Safeway.

3.2.1.4 Short Term Future Parking Supply

Table 3-4 shows the expected short-term future parking inventory during the weekday and weekend midday peak hour, including the time-adjusted available parking spaces from the shared Safeway lot, as well as the eliminated spaces at the 400 Main development and from streetscape improvements. The estimated 1,466 parking spaces during the weekday midday and 1,432 weekend midday spaces represents a decrease of 79 spaces and 113 spaces, respectively, from existing conditions.

³¹ Responses to Transportation Comments on the Los Altos Safeway Expansion Initial Study/Mitigated Negative Declaration, Fehr & Peers, December 8th, 2011.

Table 3-4 Short-Term Future Scenario – Parking Inventory

Parking Location	Inventory (spaces)			
	Weekday Midday	Weekday Evening	Weekend Midday	Weekend Evening
Existing				
On-Street	245	245	245	245
Off-Street	1,204	1,204	1,204	1,204
400 Main	96	96	96	96
<i>Subtotal</i>	<i>1,545</i>	<i>1,545</i>	<i>1,545</i>	<i>1,545</i>
Added				
Safeway ¹	34	0	59	105
Removed				
400 Main	-96	-96	-96	-96
On-Street ²	-8	-8	-8	-8
Off-Street ³	-9	-9	-9	-9
Total	1,466	1,432	1,491	1,537

¹ The Safeway parking lot includes 25 additional spaces solely for store use. Of the 129 shared Safeway/public spaces, only the spaces shown are estimated to be available during the inventoried time periods.

² Spaces along First Street within the Downtown Parking District to be removed due to streetscape improvements.

³ Spaces within Plaza 3 within the Downtown Parking District to be removed due to streetscape improvements.

3.2.2 Mid-Term Future Scenario

The mid-term scenario forecasts parking demand that is expected to occur over the next 5 to 10 years.

3.2.2.1 Anticipated Land Uses

Since any new developments or redevelopments of existing buildings are required to be self-parked under the zoning code, the City only provided estimates projecting potential changes in the mix of businesses occupying the existing space that could occur under this scenario. Compared to the short-term future scenario, the City does anticipate possible conversion of some existing retail to a higher demand retail store, such as national chains, as well as an increase in the number of restaurants. These uses would replace a portion of the existing boutiques and personal services. Overall, the City of Los Altos expects that total land use would remain at 435,000 square feet. All land use types, including any new land uses, and square footages within the Downtown Parking District under this scenario are shown in Table 3-5. The differences between this scenario and existing conditions are also shown.

Table 3-5 Mid-Term Future Scenario – Anticipated Downtown Los Altos Land Use

Land Use	Existing Square Footage (sq. ft.)	Mid-Term Estimated Square Footage (sq. ft.)	Net Change
Boutique Retail	158,000	145,000	(13,000)
High Demand Retail	-	8,000	8,000
Personal Services	35,000	30,000	(5,000)
Banks	27,000	27,000	0
Office	140,000	140,000	0
Take-out Restaurants and Cafes	25,000	28,000	3,000
Fine/Casual Dining	45,000	52,000	7,000
Bar/Pub	5,000	5,000	0
Total	435,000	435,000	0

3.2.3.2 Anticipated Parking Facility Changes

No major changes in terms of the parking supply are expected to occur between the short-term and mid-term scenarios. It was assumed that any new developments that would occur within or adjacent to the Downtown Parking District would be accommodated by self-provided parking.

3.2.3 Long-Term Future Scenario

The long-term scenario would occur over the next 20 or so years.

3.2.3.1 Anticipated Land Uses

As with the mid-term scenario, the City only provided estimates projecting potential changes in mix of businesses occupying the existing space that could occur under this scenario. Any new developments or redevelopments of existing buildings would be required to be self-parked under the zoning code. Compared to the mid-term future scenario, the City anticipates further conversion of existing retail to high demand retail, such as national chain retailers, and further increases in restaurants in the long-term scenario. In addition, the City foresees some decrease in bank locations, office space, and personal service land uses. As with the mid-term scenario, the City of Los Altos expects that total land use would remain at 435,000 square feet. Land use types and square footages within the Downtown Parking District under this scenario are shown in Table 3-6, including any new land uses and the differences between this scenario and existing conditions are also shown.

Table 3-6 Long-Term Future Scenario – Anticipated Downtown Los Altos Land Use

Land Use	Existing Square Footage (sq. ft.)	Long-Term Estimated Square Footage (sq. ft.)	Net Change
Boutique Retail	158,000	138,000	(20,000)
High Demand Retail	-	15,000	15,000
Personal Services	35,000	25,000	(10,000)
Banks	27,000	22,000	(5,000)
Office	140,000	135,000	(5,000)
Take-out Restaurants and Cafes	25,000	30,000	5,000
Fine/Casual Dining	45,000	60,000	15,000
Bar/Pub	5,000	10,000	5,000
Total	435,000	435,000	0

3.2.3.2 Anticipated Parking Facility Changes

No major changes in parking supply are expected to occur between the mid-term and long-term scenarios. It was assumed that any new developments that would occur within or adjacent to the downtown parking district would be accommodated by self-provided parking.

3.3 Parking Model Development

This section reviews the methodology and assumptions associated with created of the demand-based parking model for forecasting parking demand for future scenarios.

3.3.1 Shared Parking Model

A shared parking model was developed for the Los Altos Parking District based upon the Urban Land Institute (ULI) spreadsheet model which includes case studies, data collection, and other observations regarding multi-land use developments and shared parking alternatives to segregated parking requirements³². Shared parking is used in order to improve efficiencies for parking facilities, particularly due to time of day differences for differing land uses' parking demand. The spreadsheet model uses principles identified in the Shared Parking manual to find the time of day where the cumulative parking demand would be at its peak in order to define the maximum parking demand and thus the proposed parking supply, rather than totaling each land use's parking demand individually, which results in an oversupply of parking and additional costs if parking is built but not needed.

3.3.2 Demand-Based Model Development

The ULI shared parking model was used as the starting point for the parking demand estimation analysis. However, as the City of Los Altos is forecasting potential future scenarios within the downtown parking district and not creating a new development, existing data including current downtown land uses and parking occupancies instead can be used to develop a parking demand-based model. A demand-based model bases estimated parking demand from existing conditions data, which can be used in lieu of ULI default values, which are mainly derived from suburban mixed-use developments and may not suit all types of shared parking developments such as an existing downtown like Los Altos. In addition, existing data from the site itself is accurate and unique to that site alone, resulting in demand forecasts that take local conditions into account. As a result, a customized demand-based parking spreadsheet model was tailored particularly for the City of Los Altos and its unique split of land uses.

As the model is demand-based, the actual parking supply is not a key input in the model, since demand is assumed to occur independently from supply. Instead, the demand is used to predict the need for increased supply in the future. The Shared Parking manual reports that the "effective parking supply" of a facility is usually in the range of 85 to 95 percent of the total parking supply, since it becomes increasingly more difficult to find parking spaces quickly beyond the effective parking supply. Therefore, the resultant supply needed to meet the effective demand was increased by a factor of 15 percent to account for the effective parking supply needed to meet the demand.

3.3.2.1 Existing Data Input

The City of Los Altos provided existing land use square footage estimates to CDM Smith as inputs into the customized shared parking model, in order to derive the baseline expected parking demand from 12PM to 2PM for the peak midday time period.

³² Shared Parking, 2nd Edition, Urban Land Institute, 2005.

The estimated square footage associated with each land use was incorporated and modified into the custom CDM Smith demand model using assumptions regarding land use intensity, customer/employee turnover, and other factors.

It is important to note that land uses outside of the defined downtown parking district, particularly the newly remodeled Safeway and the 400 Main development, were excluded as inputs into the model. No parking demand associated from these land uses were included because they would typically have sufficient parking self-contained at its own parking facilities based on City code, and would not be anticipated to substantially affect parking demand at plaza lots and on-street parking primarily serving the downtown parking district, given the relative distance that the land uses are from the downtown parking district parking facilities. Peak operating scenarios when overflow parking at Safeway would potentially occur was not included in the demand model since the scenarios are expected to occur outside of the peak midday time period modeled in this analysis. The parking supply availability assumptions for the Safeway Shared Parking Agreement during different times of the day are addressed in Section 3.2.1.3.

After applying these land uses into the spreadsheet model, the shared parking maximum using default recommended parking ratios (i.e., parking spaces required per unit land use) was then calculated.

3.3.2.2 Temporal Adjustments and Calibration

The baseline demand determined by the default parking ratio values did not match what was counted under existing conditions within the downtown parking district. This is due to the type of recommended rates for the particular assigned land uses, which do not take into account the unique local conditions associated with downtown Los Altos. The downtown parking district of the City is an older, denser, and more stable type of district than a suburban shopping center or newer development. Since CDM Smith had already collected parking occupancy counts for the months of September and December 2012, adjustments were made to the spreadsheet model to better fit the projected parking occupancy with actual counts. These adjustments included:

1. Applying and converting the City's existing and anticipated future land use scenarios to model land uses. These land uses were adjusted to correspond and match closely with Los Altos' particular land use mix.
2. Modifying and customizing base land use parking rates, in order to match all modeled land uses with the existing data, to create customized parking demand profiles corresponding to Los Altos-specific land uses. These modifications were made so that the model's peak hour shared parking demand would be similar to what was collected for existing conditions. Rates were modified using the month of September in the model, with further calibration for counts collected in December.
3. Using the reparking analysis completed in September 2012, the employee/customer split was identified and applied to the model. Employee and customer parking rates were evaluated for their cumulative effect on shared parking during the peak hour.
4. Calibrating time-of-day factors to adjust for the unique nature of the downtown parking district in Los Altos. Adjustments were made based on the types of businesses open during different times of day. Most of the adjustments to the model were made with this step, in order to fine tune the model to match the hour-by-hour parking data received in existing conditions. Assumptions such as low mid-afternoon restaurant occupancy and

low office visitor demand were largely maintained, while the unique nature of the downtown was accounted for using professional judgment, such as the fact that downtown parking occupancy in the evening in both September and December was calculated to be lower than midday for Los Altos.

5. Following receiving counts for the month of December, monthly adjustments for individual land use demand, such as retail and restaurants, were modified to have the model more closely match existing counts, accommodating for differences due to holiday shopping.

Land use rates and parking demand profiles were compared with the nearby City of Burlingame, which is anticipated to have a similar future land use profile to downtown Los Altos (with respect to high demand retail and restaurants), to determine the similarities and differences between their expected parking profiles and rates versus the calibrated Los Altos model. CDM Smith determined that several land uses from the Burlingame parking study had parking demand characteristics similar to the Los Altos demand model (future scenarios). These parking profiles were confirmed to be accurately reflected within the Los Altos demand model.

Following final calibration of the existing conditions model, the same model and underlying assumptions were applied to all three future scenarios to determine expected parking demand. These results are reported in Section 3.5.

3.5 Parking Model Results

This section reports the results from the demand-based parking model that was developed for the City of Los Altos' Downtown Parking District based on existing land uses and parking occupancy counts. This analysis specifically focuses on peak hour midday parking demand generated by land uses within the District. Table 3-7 exhibits the model's results for the peak midday parking demand for all scenarios. In addition, a calculation of the estimated amount of additional parking supply necessary to reduce projected September weekday parking occupancies to 85 percent was performed, in order to account for the effective parking supply that the Shared Parking manual describes as the perceived parking supply capacity. Additional supply calculations take into account the future expected parking supply, which eliminates the public spaces that will no longer be available when the 400 Main lot is redeveloped as well as the spaces that will be removed when the streetscape projects are completed, but adds in the shared Safeway parking facility.

Table 3-7 Future Scenario Peak Hour Parking Demand Results

	Scenario			
	Existing	Short-Term	Mid-Term	Long-Term
Parking Supply				
Weekday – Midday Peak	1,545	1,466	1,466	1,466
Weekend – Midday Peak	1,545	1,491	1,491	1,491
Peak Parking Demand Scenarios				
September (typical) – Weekday	1,264 (82%)	1,264 (86%)	1,315 (90%)	1,366 (93%)
September (typical) – Weekend	1,048 (68%)	1,048 (70%)	1,132 (76%)	1,256 (84%)
December (peak) – Weekday	1,308 (85%)	1,308 (89%)	1,351 (92%)	1,393 (95%)
Peak Parking Supply at 85% Occupancy				
September Weekday	-	1,488	1,547	1,607
<i>Additional Parking Supply Needed</i>	-	21	81	141
Resultant Peak Parking Occupancies at Other Times				
September Weekend	-	1,048 (70%)	1,132 (73%)	1,256 (78%)
December Weekday	-	1,308 (88%)	1,351 (87%)	1,393 (87%)

Note:

*Existing scenario parking demand results are derived from shared parking model; existing and short-term parking demand is the same, since land use inputs are the same in both scenarios.

3.5.1 Peak Parking Demand Scenarios

Based on Table 3-7, assuming no changes are made to the anticipated parking supply in the future, several scenarios would experience parking demand very close to the available downtown parking supply. These include the mid-term and long-term September and December weekday midday parking demand scenarios, which exceed 90 percent occupancy.

Due to the layout and circulation of the current parking system in downtown Los Altos, existing parking occupancies vary highly between plazas and on-street parking block faces, while the overall system reaches a weekday peak between 82 to 85 percent (September vs. December), including the 400 Main parking facility. Some individual plazas had sustained high occupancies during peak hours, particularly Plazas 5, 7, and 10.

Tables 3-8, 3-9, and 3-10 show each scenario's peak parking demand separated by Los Altos land use dependent on time of day. As mentioned in Section 3.4, the calibrated parking demand rates and factors were derived from existing conditions data collection for the downtown parking district and applied to all three projected scenarios. Refer to Appendix 3B for detailed parking demand outputs by scenario.

Table 3-8 Future Scenario Peak Hour Parking Demand by Land Use – September Weekday

Los Altos Land Uses	Scenario			
	Existing	Short-Term	Mid-Term	Long-Term
Boutique Retail	244	244	224	213
High Demand Retail	0	0	23	42
Personal Services/Salons	79	79	68	56
Banks	63	63	63	51
Office	426	426	426	411
Take-out Restaurants and Cafes	200	200	224	240
Fine/Casual Dining	229	229	265	306
Bar/Pub	24	24	24	47
Total	1,264	1,264	1,315	1,366

Table 3-9 Future Scenario Peak Hour Parking Demand by Land Use – September Weekend

Los Altos Land Uses	Scenario			
	Existing	Short-Term	Mid-Term	Long-Term
Boutique Retail	287	287	263	250
High Demand Retail	0	0	26	49
Personal Services/Salons	35	35	30	25
Banks	28	28	28	23
Office	52	52	52	50
Take-out Restaurants and Cafes	225	225	252	270
Fine/Casual Dining	382	382	442	510
Bar/Pub	40	40	40	79
Total	1,048	1,048	1,132	1,256

Table 3-10 Future Scenario Peak Hour Parking Demand by Land Use – December Weekday

Los Altos Land Uses	Scenario			
	Existing	Short-Term	Mid-Term	Long-Term
Boutique Retail	303	303	278	265
High Demand Retail	0	0	25	47
Personal Services/Salons	92	92	79	66
Banks	63	63	63	51
Office	423	423	423	407
Take-out Restaurants and Cafes	198	198	222	238
Fine/Casual Dining	208	208	240	277
Bar/Pub	22	22	22	43
Total	1,308	1,308	1,351	1,393

Short-term and existing parking demands are expected to remain identical, since modeled land uses within the parking district will remain the same, with the only changes being to developments outside of downtown and some changes to available public parking facilities, resulting in occupancy

differences between the two scenarios. The medium and long-term scenarios estimated by the City would increase parking demand anywhere from 3 to 17 percent based on the scenario forecasted, with several scenarios expected to approach the provided parking. Projected typical weekend midday peak parking demands are expected to reach a maximum of 84 percent occupancy during the long-term scenario. These scenarios have increased parking demand primarily due to the exchange of lower demand land uses with higher intensity land uses that experience higher parking turnover, such as the inclusion of national chain retail and increase in restaurants versus a reduction in office and boutique land uses.

With the Los Altos spreadsheet demand model, mid-term scenarios reach 90 percent and 92 percent in September and December respectively. Long-term scenarios would reach 93 and 95 percent in September and December. While not exceeding the overall supply, this indicates the downtown supply will be very tight and certain areas will likely exceed demand during peak times. This increase in parking volume can be attributed to the intensity of the projected mid-term and long-term land use changes, in addition to the lack of foreseeable changes in downtown Los Altos parking supply.

3.5.1.1 Effective Parking Supply

A parking facility or system is often perceived as full when it has not yet reached its capacity. This is usually in the range of 85 to 95 percent occupancy. Effective parking supply is the number of occupied spaces at optimum operating efficiency.

This range has to do with the familiarity of users with the all of the details of the parking system, (i.e., what spaces are likely to be available at a certain time of day and thus a lower cushion) versus a parking system that serves more unfamiliar users. A small supply cushion would be appropriate during the anticipated system peaks to help reduce search time during the peak. It also provides additional cover for operating and seasonal fluctuations in occupancy.

In order to estimate the effect of effective parking supply on the Los Altos downtown parking district, calculations were made during the peak demand period to determine the amount of additional parking supply needed to reduce parking occupancy for a typical September weekday to 85 percent of the supply during the midday time period. This calculation best estimates, conservatively, how much supply would be needed to account for operational inefficiencies as a result of the effective parking supply principle. These calculations assume that the impact of a dedicated and fixed amount of parking supply does not substantially deter or alter visitor or employee parking behavior (such as switching to a different mode choice or time of day to visit).

Table 3-7 above shows the expected parking supply necessary to reduce occupancies to 85 percent during the September weekday midday peak hour as well as the resulting peak hour parking occupancies for a typical weekend and a peak December weekday. In order to maintain 85 percent parking occupancy for a typical weekday during peak parking demand, parking supply would need to be increased anywhere from 21 to 141 spaces over the anticipated 1,466 space parking supply, resulting in a new supply ranging from 1,488 to 1,607 spaces. Resulting parking occupancies for a typical weekend range from 70 to 78 percent, while a peak December weekday would have occupancies around 87 to 88 percent.

3.6 Parking Demand Conclusions

As discussed in Section 3.5, several scenarios are projected to near or have a parking supply deficit in the Los Altos Downtown Parking District at peak parking demand. In particular, the medium-term and long-term weekday scenarios show that parking demand during the peak hour approaches the available capacity of parking facilities within the parking district. As occupancies edge close to the expected available parking capacity, parking behavior would begin to be affected, including increased vehicle cruising and a perception of a shortage of capacity due to the lack of available spaces. It should be noted that parking demand was developed for the entire district and therefore does not highlight the individual hot spots, which are known to be a management issue.

The application of an effective parking supply buffer to achieve 85 percent occupancy on a typical weekday would require an additional 21 to 141 spaces; this additional supply would also lower the peak weekend and December weekday parking demand to near existing occupancy levels, and provides cover for other operational and seasonal fluctuations. Peak December demand would be managed via various tools and strategies (discussed under Parking Recommendations) aimed at limiting the impact of this higher parking demand on traffic circulation and supply availability.

The City of Los Altos has a thriving downtown, in large part due to its high-end boutiques, retail shops, and restaurants. In addition, patrons and employees currently enjoy free and convenient parking in a well-maintained area in close proximity to nearby attractions. The Downtown Parking District is not isolated from the surrounding portions of downtown; while the shared parking model developed for Los Altos focuses primarily on the available supply within the district as well as the nearby-redeveloped Safeway, additional supply is available on-street immediately outside the district. It is expected that increased spillover into these areas would occur.