

The Springs Specific Plan  
**LAND USE AND CIRCULATION  
ALTERNATIVES REPORT**

**APPENDIX A**

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**Circulation and Parking Analysis**



February 28, 2017

Ms. Beth Thompson  
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## The Springs Specific Plan Alternatives - Circulation and Parking

Dear Ms. Thompson;

Following is a comparative review of the circulation and parking characteristics associated with each of the three alternatives developed for the Springs Specific Plan. Our analysis is based on the land use and circulation alternatives developed by the De Novo team in response to input received from the Springs community, combined with current data and application of standard transportation engineering and planning methods. The intent of the comparative analysis is to help community members and decision makers discern the relative differences among alternatives, rather than to complete an extensive analysis of each, reserving a more detailed analysis for assessment of the forthcoming Preferred Plan.

### Traffic Operations

#### Highway 12 Traffic Operation without Specific Plan

Before considering the potential traffic effects of the Plan alternatives, it is helpful to establish a baseline understanding of how the highway is anticipated to operate in the future even if no growth occurs within the Specific Plan boundaries. Because Highway 12 is a major regional route, it will encounter increased traffic demands into the future, regardless of the amount of development occurring within the Springs Specific Plan area itself. Future increases in traffic volumes along the corridor were obtained through use of the Sonoma County Transportation Authority's (SCTA) travel demand model, which includes a horizon year of 2040. A special "run" of the model was conducted in which the existing land uses within the Specific Plan area were assumed to remain unchanged, while regional growth continues to occur. The resulting traffic volumes were input in the model developed for the Specific Plan to determine the potential changes in travel time that may occur in the future on the Highway 12 corridor between Agua Caliente Road and Verano Avenue.

As summarized in Table 1, during the p.m. peak hour, it may take an additional two to three minutes to travel each direction along the corridor in the year 2040 compared to current conditions, even without any added development in the Specific Plan area. The corridor's existing operation of LOS D would be expected to drop to LOS E.

**Table 1 – Future PM Peak Hour Traffic Conditions on Highway 12 (without Specific Plan)**

| Direction  | Existing Conditions |                            |     | Future Conditions<br>(No Growth within Specific Plan Area) |                            |     |
|------------|---------------------|----------------------------|-----|--|----------------------------|-----|
|            | Travel Time         | Average Speed <sup>1</sup> | LOS | Travel Time  | Average Speed <sup>1</sup> | LOS |
| Northbound | 6.2 min             | 17 mph                     | D   | 8.0 min  | 13 mph                     | E   |
| Southbound | 6.6 min             | 16 mph                     | D   | 9.6 min  | 11 mph                     | E   |

Note: <sup>1</sup> Average speed includes both the time that drivers are moving as well as the time spent stopped at intersections

## Land Use Alternatives Trip Generation Comparison

When determining the amount of vehicle traffic generated by potential future development, transportation planners and engineers typically refer to the publication *Trip Generation Manual*, 9<sup>th</sup> Edition, by the Institute of Transportation Engineers (ITE). This publication is a standard reference used by jurisdictions throughout the country, and is based on actual trip generation studies performed at numerous locations in areas of various populations. There are several shortcomings with using unadjusted Trip Generation rates in mixed-use environments with an emphasis on non-auto modes, such as those envisioned for portions of the Specific Plan area. Because much of the data used to develop trip generation rates has historically been collected in auto-oriented suburban locations where individual land uses are segregated, direct application of these rates could significantly overstate traffic levels. The effects of higher residential densities, diverse land uses, jobs-housing balance, transit accessibility, and supportive pedestrian and bicycle networks would not be considered. It was therefore determined that additional trip estimation resources would be appropriate for analysis of Specific Plan trip generation. The applied methodology relies upon standard ITE rates as well as one by the San Diego Association of Governments, but with adjustments based on methodologies developed by the National Cooperative Highway Research Program (NCHRP) to determine appropriate reductions to account for the Plan's context.

The following trip generation land use categories were used in the analysis.

- Single family housing – “Single Family Detached Housing” ITE Land Use # 210
- Multi-family housing – “Apartment” ITE Land Use # 220
- Retail – “Specialty Retail” ITE Land Use # 814
- Restaurant – “High-Turnover Sit-Down Restaurant” ITE Land Use #932
- Office – “General Office Building” ITE Land Use # 710
- Park – “City Park” land use from the San Diego Association of Governments (SANDAG) *Brief Guide of Vehicular Traffic Generation Rates*, 2002

The development projections for each of the three alternatives include commercial land uses, within which a variety of retail, restaurant, and office uses would be allowed. Each of these land use sub-types have different trip generation characteristics. For the purposes of this comparative analysis, commercial square footages (including that within the “Springs Mixed Use” category) were assumed to be comprised of 50 percent retail, 40 percent office, and 10 percent restaurant.

Internal trip reduction rates were determined using *NCHRP Report 684, Enhancing Internal Capture Estimation for Mixed-Use Developments*, Transportation Research Board, 2011. Internal capture trip reduction rates were calculated only for the portion of the Specific Plan between Agua Caliente Road and Agua Caliente Creek, which is characterized by a mix of residential and commercial uses including the central business district. Trip adjustments were not applied to the portion of the Specific Plan area to the south of Agua Caliente Creek, including the Donald Street area, which has a more suburban context with diversity in land uses. The trip reduction was calculated for each alternative based upon the net potential development increase of various land uses as well as their proximity. Because the NCHRP research does not include trip reduction guidance for daily trip generation, the average of the calculated a.m. and p.m. peak hour reductions was applied.

Table 2 summarizes the incremental increase in trip generation associated with buildout of each Specific Plan alternative. As would be expected in consideration of the net development potential of the alternatives, the Community Housing and Mixed Use alternative would generate the greatest number of new trips while the Existing Zoning alternative would generate the least.

**Table 2 – Trip Generation Summary**

| Land Use Alternative                             | Daily Trips  | AM Peak Hour Trips | PM Peak Hour Trips |
|--|--------------|--------------------|--------------------|
| <b>Community Housing and Mixed Use</b>           |              |                    |                    |
| Plan Area north of Agua Caliente Creek           | 11,152       | 721                | 926                |
| <i>Deduction for Internal and Non-Auto Trips</i> | -3,394 (30%) | -150 (21%)         | -371 (40%)         |
| Plan Area South of Agua Caliente Creek           | 1,902        | 123                | 157                |
| <b>Total</b>                                     | <b>9,660</b> | <b>694</b>         | <b>712</b>         |
| <b>Moderate Growth</b>                           |              |                    |                    |
| Plan Area north of Agua Caliente Creek           | 5,967        | 408                | 512                |
| <i>Deduction for Internal and Non-Auto Trips</i> | -1,853 (31%) | -102 (25%)         | -190 (37%)         |
| Plan Area South of Agua Caliente Creek           | 830          | 53                 | 71                 |
| <b>Total</b>                                     | <b>4,944</b> | <b>359</b>         | <b>393</b>         |
| <b>Existing Zoning</b>                           |              |                    |                    |
| Plan Area north of Agua Caliente Creek           | 3,102        | 195                | 250                |
| <i>Deduction for Internal and Non-Auto Trips</i> | -910 (29%)   | -45 (23%)          | -89 (36%)          |
| Plan Area South of Agua Caliente Creek           | 785          | 48                 | 62                 |
| <b>Total</b>                                     | <b>2,977</b> | <b>198</b>         | <b>223</b>         |

Note: Trip reductions determined using methodology in NCHRP Report 684: *Enhancing Internal Capture Estimation for Mixed-Use Development*; daily deduction percentage is based on the average of the AM and PM peak hour percentages

## Comparison of Future PM Peak Hour Volumes on Highway 12

Despite the efficiencies associated with development that supports travel by non-auto modes, buildout of the Specific Plan would increase vehicular traffic on Highway 12. From a percentage increase perspective, the Community Housing and Mixed Use alternative would be expected to have the largest effect on traffic within the Plan area, resulting in an approximately 25 percent increase in traffic on the southern end of the Highway 12 corridor and a 14 percent increase on the northern end. The Moderate Growth and Existing Zoning alternatives would be expected to have comparably smaller increases in traffic, with the Existing Zoning alternative creating the least increase on the northern and central portions of the Highway 12 corridor, and the Moderate Growth alternative creating the lowest increase on the southern portion of the corridor.

A comparison of the estimated future p.m. peak hour traffic volumes on various segments of Highway 12 within the Plan area is shown in Table 3.

**Table 3 – Future PM Peak Hour Traffic Volume Comparison on Highway 12**

| Highway 12 Segment             | Future (No Project) | Future plus Community Housing and Mixed Use | Future plus Moderate Growth | Future plus Existing Zoning |
|--------------------------------|---------------------|---|-----------------------------|-----------------------------|
| Agua Caliente Rd to Boyes Blvd | 1,760               | 2,000 +14%                                  | 1,880 +7%                   | 1,840 +5%                   |
| Boyes Blvd to Siesta Ave       | 1,890               | 2,270 +20%                                  | 2,100 +11%                  | 2,000 +6%                   |
| Siesta Ave to Verano Ave       | 2,060               | 2,580 +25%                                  | 2,350 +14%                  | 2,420 +17%                  |

Note: Volumes are the sum of northbound and southbound traffic during the year 2040 p.m. peak hour

## Potential Effects on Future Traffic Operation

As shown in Table 1, Highway 12 is projected to operate at LOS E in the future without any additional development in the Specific Plan area. Each of the Specific Plan land use alternatives would further increase future traffic volumes by 5 to 25 percent, as shown in Table 3. Considering the resulting estimated bidirectional volumes on Highway 12, most of which exceed 2,000 vehicles per hour, it is likely that future traffic operation would drop to LOS F during peak hours upon buildout of the Specific Plan and surrounding region. As a result, if smooth traffic operation during peak hours is deemed a high priority by community members and decision makers, a more regional approach to accommodating traffic may be required. One option that has been preliminarily suggested by Caltrans in the *Transportation Concept Report: State Route 12 (West)*, 2014, is to re-designate portions of Highway 12, including the Springs area, to a more appropriate route such as Arnold Drive. The City of Sonoma's recently-adopted Circulation Element supports further regional study of re-designating Highway 12 to Arnold Drive in order to combat many of the same congestion issues that face the Springs communities.

## Multimodal Circulation Comparison

### Pedestrian

In all three alternatives, new crosswalks would be established at the following locations along the Highway 12 corridor:

- Marin Avenue
- Vailetti Drive
- Fetters Avenue
- Balsam Avenue
- Arroyo Road
- Hawthorne Avenue
- Mulford Lane
- Encinas Lane
- Donald Street

As funding becomes available, crossing amenities such as bulb-outs, median refuges, and warning beacons could be added to these crossings where feasible and warranted by the level of crossing activity. All three alternatives also include installation of a rapid rectangular flashing beacon (RRFB) at the existing crosswalk in the central business district at Central Avenue.

The "Community Housing and Mixed Use" and "Moderate Growth" alternatives include establishing a new midblock crosswalk with bulb-outs and RRFBs just south of the Grange Hall, on a segment of Highway 12 that is over 1,000 feet long with no public intersections where crosswalks could otherwise be established.

All three alternatives would substantially improve pedestrian circulation in the Springs, building upon the improvements made by the recent Highway 12 widening project while also improving convenience and safety for people crossing the highway and traversing the corridor by foot.

### Bicycle

All three alternatives incorporate new bike facilities consistent with the County's bicycle plan, including the following segments:

- Bike path on West Thomson Avenue between Happy Lane and Melody Drive
- Bike path on the west side of Highway 12 between Encinas Lane and Donald Street, including a new bridge over the creek
- Signed bike route on the local streets comprising the Central Sonoma Valley Bikeway alignment

The "Community Housing and Mixed Use" and "Moderate Growth" alternatives would convert the existing 8-foot wide bike lanes on Highway 12 to "buffered bike lanes," comprised of 5-foot bike lanes with a 3-foot wide striped buffer between bike and auto lanes, and including green bike lane markings near intersections and major driveways. These enhancements would help make bicyclists more comfortable using the Highway 12 bicycle lanes

by increasing the effective distance between moving vehicles and bicyclists, and would also convey to drivers that bicyclists are likely to be present.

## **Transit**

All three alternatives would improve the attractiveness and viability of using transit through provision of additional bus shelters with benches, route information, bike racks, and lighting. The Specific Plan will include policies calling for coordination with Sonoma County Transit to increase bus frequencies and consider establishing a local Springs-area shuttle. Policies will also indicate that pedestrian crossing amenities (such as new crosswalks, bulb-outs, and pedestrian warning lights) should be prioritized near transit stops.

## **Local Roadways**

The "Community Housing and Mixed Use" and "Existing Zoning" alternatives indicate that where sufficient space exists or future redevelopment occurs, local streets should include a minimum 30-foot paved width with on-street parking and five-foot wide sidewalks on both sides of the street (an exception is that current configurations may be maintained fronting the rural- and low-density residential areas identified in the Existing Zoning alternative). The Moderate Growth alternative calls for a minimum 22-foot paved width, with a five-foot wide asphalt path on one side of the street, and gravel shoulders used for parking on the other side of the street where space exists.

The Community Housing and Mixed Use alternative would convert three local roads to one-way operation in order to increase the supply of on-street parking. These include Bernhard Avenue (one-way eastbound), Monterey Avenue (one-way westbound), and Arroyo Road (one-way eastbound). These streets were chosen for one-way conversion because they are located in areas with a "grid" street network, minimizing the amount of re-routing required by drivers.

From a local streets traffic circulation perspective the provision of sidewalks, paths, and/or parking on local streets would not affect access, though it could help to regulate or somewhat reduce vehicle speeds by maintaining a narrow roadway cross-section, which is generally considered to have a positive effect in residential neighborhoods. The creation of one-way streets in the Community Housing and Mixed Use alternative would alter local traffic patterns on affected streets, though relatively few drivers would be affected and adjacent low-volume streets can easily accommodate the diverted traffic.

## **Parking**

### **Existing Parking Conditions**

Currently, parking within the plan area consists of a mix of on-street parking and off-street private parking lots. On-street parking is prohibited along the length of SR 12 within the Plan area. Street parking is allowed on most local and residential streets, with some occurring either partially or fully on dirt shoulders. On many side streets, parking is fully-utilized during evenings and weekends. Off-street parking is provided solely in the form of private parking lots. Where available, on-street parking generally has no time restrictions.

Most existing retail and office land uses provide their own on-site parking. There are no specific businesses in the study area that appear to be encountering a significant parking shortage on their own, though on-street parking in business areas is visibly well-utilized. The elimination of on-street parking spaces along Highway 12 has increased parking pressures on adjacent streets and in private lots. The Springs community has also indicated that on-street parking is limited within the neighborhoods, with the existing demand already at or exceeding capacity.

### **Specific Plan Parking Scenarios**

In order to present a range of potential parking strategies that could be implemented in the Specific Plan area, each of the three Specific Plan land use alternatives was evaluated using a distinct approach in determining how much additional parking should be provided. The scenarios include:

- **Community Housing and Mixed Use Alternative** – This alternative includes the greatest amount of net new development, and also would include approximately 200 to 420 new public parking spaces. New parking would include a public parking structure with approximately 130 to 350 spaces in the vicinity of the Highway 12/Boyes Avenue intersection and one 35-space public parking lot in the north Specific Plan area, both accessible to the Highway 12 corridor, in addition to the existing public lot on the northwest corner of Highway 12/ Thomson Avenue. Approximately 35 additional on-street parking spaces would be created. Parking demand for this alternative was assessed using “shared parking” principles, which recognize that shared spaces serving land uses with different parking demand patterns can achieve efficiencies.
- **Moderate Growth Alternative** – The land use mix associated with this alternative results in a net development increase that falls in between those of the other two alternatives. The Moderate Growth alternative would include two new surface parking lots serving the Highway 12 corridor, one located in the vicinity of Boyes Avenue (100 to 215 spaces) and another located in the north area (35 spaces). An additional 70 spaces of on-street parking would be created. Parking demand was assessed using rates recommended by the Metropolitan Planning Commission (MTC) for a “Rural/Small Town” place type.
- **Existing Zoning Alternative** – This alternative would provide new on-street parking (70 spaces) and one surface lot in the north area (35 spaces). Buildout of this alternative essentially represents buildout of the Specific Plan assuming that the existing land use designations remain unchanged. Correspondingly, parking was assessed using the County’s existing parking requirements as contained in the zoning code.

### ***Evaluation Area and Development Assumptions***

The parking scenarios focus on the net new development within the Plan area along Highway 12 between Agua Caliente Road and Agua Caliente Creek, excluding the Donald Street area. This was done because the Community Housing and Mixed Use alternative considers shared parking efficiencies in mixed-use areas within walking distance of one another, which is not the expected development pattern in the residential Donald Street area in any of the alternatives. The same area was evaluated in all three scenarios in order to maintain an apples-to-apples comparison.

Land use types that encounter different types of parking demand can be accommodated within commercial zones including C2 (Retail Business and Service), NC (Neighborhood Commercial), and MU (Mixed Use). For the purposes of the parking evaluation, commercial uses in these zones were assumed to be comprised of 50 percent local-serving retail, 40 percent office/service, and 10 percent restaurant.

A summary of the net new development and mix of uses associated with each alternative (again, excluding the Donald Street area), is shown in Table 4.

| <b>Land Use</b>           | <b>Community Housing and Mixed Use</b> | <b>Moderate Growth</b> | <b>Existing Zoning</b> |
|---------------------------|--|------------------------|------------------------|
| Single family residential | 94 du                                  | 77 du                  | 34 du                  |
| Multifamily residential   | 439 du                                 | 163 du                 | 0 du                   |
| Office                    | 88.62 ksf                              | 73.29 ksf              | 37.46 ksf              |
| Retail                    | 90.68 ksf                              | 47.23 ksf              | 33.16 ksf              |
| Restaurant                | 18.14 ksf                              | 9.45 ksf               | 6.63 ksf               |

Notes: du = dwelling unit; ksf = 1,000 square feet

Further discussion of each parking scenario is provided in the evaluation below.

## Community Housing and Mixed Use Alternative

This alternative includes 94 new single family homes, 439 new multi-family units, 88,620 square feet of new office space, 90,680 square feet of new commercial development, 18,040 square feet of new restaurant space, and 0.70 acres of new parks and recreation areas. This development alternative includes the most new development and highest density of the three potential buildout scenarios. With the potential mix of uses, a shared parking analysis was conducted in order to determine the amount of parking that would be required to accommodate this level of development.

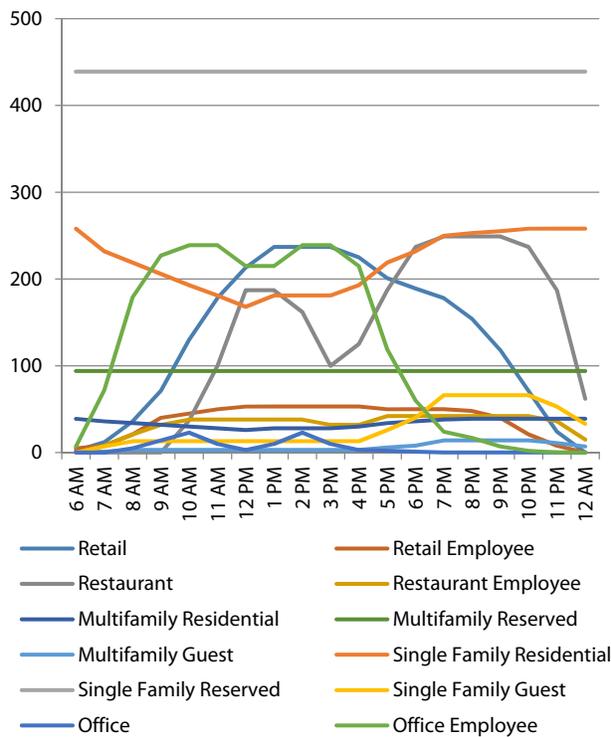
The concept of shared parking is based on the fact that different land uses often experience peak parking demand at different times, be it by time of day or even month of the year. A classic example is that of office and residential uses. The office uses create the highest parking demand during the daytime on weekdays, which also happens to be the time when residential parking demand is at its lowest. If these two land uses were able to share a common parking facility, or exist within a proximate area such as a mixed-use commercial district, the actual number of parking spaces needed to accommodate the combined demand at any given time would be considerably lower than the individual sums of the projected residential and office demand.

A parking demand methodology that considers “shared parking” principles can significantly improve the efficiency of providing parking in a mixed-use environment, and help to avoid an unnecessary oversupply of parking. The Urban Land Institute (ULI) publication *Shared Parking*, 2nd Edition, 2006, includes state-of-the-practice methodologies for determining parking demand in mixed-use areas. The ULI methodology focuses on temporal data, determining when the overall peak demand for various land uses occurs, including what time of day, whether it is a weekday or weekend, and what month of the year. The recommended parking supply is then tied to that maximum demand period.

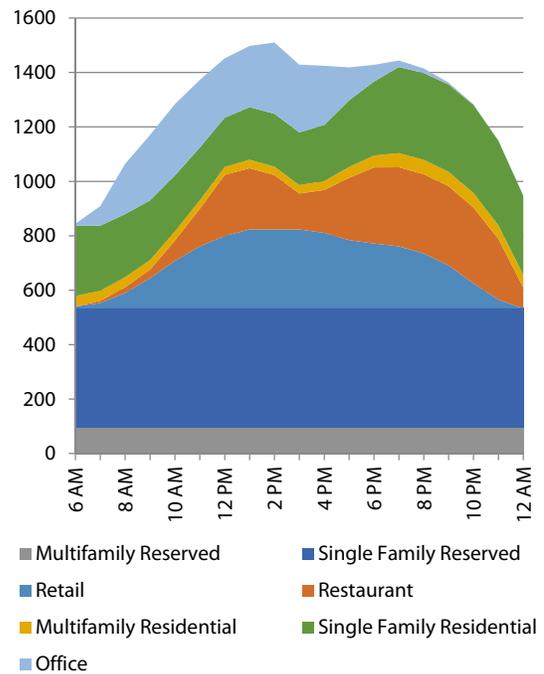
The cumulative parking demand profile for combined uses was assessed by summing the hourly demands of individual land uses described above. From this cumulative parking demand profile, it is possible to determine the hour or hours of the day when the area as a whole would experience peak parking demand. It should be noted that the shared parking analysis assumes that residential uses would include one reserved (non-shared) space per unit, with any additional residential parking demand accommodated in unreserved parking spaces shared with other uses.

The area-wide peak parking demand is projected to occur on weekdays at 7:00 p.m. with a total parking usage of 1,510 spaces, of which 977 would be in shared parking spaces (i.e., demand occurring beyond the one reserved space per residential unit). The peak parking demand on weekends is somewhat lower than weekday demand, with a total estimated parking usage of 1,450 spaces at 7:00 p.m., of which 921 would be in shared spaces. The cumulative parking demand profiles for weekdays are shown in Graphs 1 and 2, with the weekend profiles shown in Graphs 3 and 4.

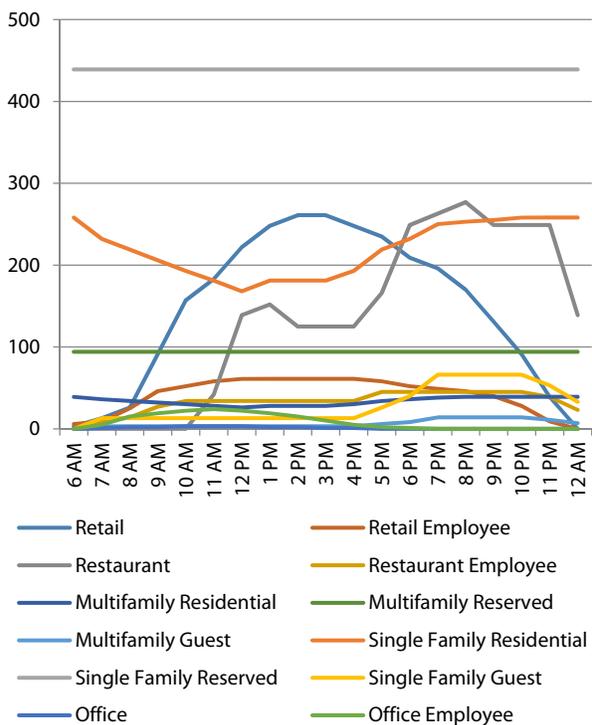
**Graph 1 – Weekday Parking Demand by Land Use**



**Graph 2 – Weekday Cumulative Parking Demand**



**Graph 3 – Weekend Parking Demand by Land Use**



**Graph 4 – Weekend Cumulative Parking Demand**

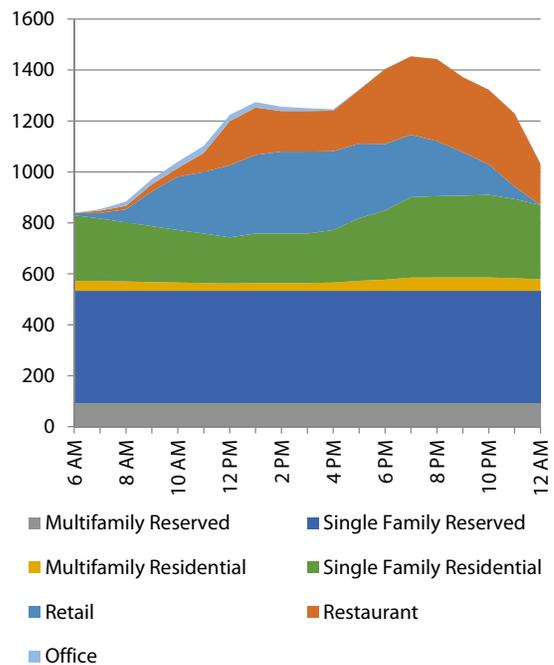


Table 5 summarizes the parking demand experienced for each land use during the peak hour of demand using shared parking principles.

| <b>Table 5 – Peak Parking Demand by Land Use</b> |                                 |                                 |
|--|---------------------------------|---------------------------------|
| <b>Land Use</b>                                  | <b>Weekday Peak Hour Demand</b> | <b>Weekend Peak Hour Demand</b> |
| Single Family Residential                        | 633                             | 755                             |
| Multifamily Residential                          | 125                             | 146                             |
| Office   | 262                             | 0                               |
| Retail   | 290                             | 245                             |
| Restaurant                                       | 200                             | 308                             |
| <b>Total</b>                                     | <b>1,510</b>                    | <b>1,454</b>                    |
| <i>Reserved Residential Parking Spaces</i>       | 533                             | 533                             |
| <i>Parking Demand in Shared Spaces</i>           | 977                             | 921                             |

In summary, the Community Housing and Mixed Use alternative would result in a peak parking demand of 977 shared parking spaces. Between 200 and 420 of these (20 to 43 percent) would be accommodated in new public parking spaces. The remaining parking demand would need to be provided onsite by individual development projects. Since this alternative would accommodate 20 to 43 percent of the shared parking demand in new public parking facilities, it may be reasonable to commensurately reduce the parking requirements contained in the current zoning code. Another approach could be to both slightly reduce and simplify the parking requirements; for example, all non-residential uses could be required to provide one space per 300 square feet of building area. This type of simplified shared parking approach has been implemented in Santa Rosa within the boundaries of the City's two station area plans.

### **Moderate Growth Alternative**

This alternative includes 77 new single family dwellings, 163 new multi-family dwellings, 73,290 square feet of new office space, 47,230 square feet of new commercial development, 9,450 square feet of new restaurant space, and 0.93 acres of new park and recreation areas.

MTC released a report titled *Reforming Parking Policies to Support Smart Growth – Toolbox/Handbook: Parking Best Practices & Strategies for Supporting Transit Oriented Development in the San Francisco Bay Area, 2007*, that includes recommended parking strategies for various transit oriented development (TOD) types in the Bay Area. Five TOD types are defined including Regional Center, City Center/Urban Neighborhood, Suburban Center/Town Center, Transit Neighborhood, and Rural/Small Town. The Springs Specific Plan area would be considered a Rural/Small Town place type. Based on Bay Area specific research, MTC provides suggested parking standards for various land use categories. The suggested MTC parking ratios for a Rural/Small Town are evaluated in this analysis.

Using the MTC parking ratios, the Moderate Growth alternative buildout scenario would require 799 parking spaces to accommodate the total parking demand. Table 6 summarizes the projected parking demand based on the MTC ratios.

**Table 6 – MTC Parking Ratios by Land Use**

| <b>Land Use</b>           | <b>Units</b> | <b>Parking Ratio<br/>(spaces per unit)</b> | <b>Number of<br/>Parking Spaces</b> |
|---------------------------|--------------|--|-------------------------------------|
| Single Family Residential | 77 du        | 1.5  | 116                                 |
| Multi-Family Residential  | 163 du       | 1.5  | 245                                 |
| Office                    | 73.29 ksf    | 3.0  | 220                                 |
| Retail                    | 47.23 ksf    | 3.0  | 142                                 |
| Restaurant                | 9.45 ksf     | 8.0  | 76                                  |
| <b>Total</b>              |              |  | <b>799</b>                          |

Note: du = dwelling unit; ksf = 1,000 square feet

The Moderate Growth alternative would include creation of between 205 and 320 new public parking spaces (on-street and in two new parking lots). Applying the MTC parking ratios, these new public spaces would accommodate between 26 and 40 percent of the parking need associated with buildout of the alternative. If only the non-residential uses and their parking demand are considered, the new public spaces would serve between 47 and 73 percent of the non-residential parking need. It could therefore be possible to require less onsite parking for non-residential uses as long as the new public parking spaces included in the alternative are in place to serve the remaining parking demand. Alternatively, the MTC ratios could be applied directly, with the added public parking spaces used to accommodate overflow demand and existing parking shortages.

### Existing Zoning Alternative

The Existing Zoning alternative would allow development of 34 new single family dwellings and no multi-family units, 37,460 square feet of new office space, 33,160 square feet of new commercial development, 6,630 square feet of new restaurant space, and 1.04 acres of new park space. This alternative would include the least amount of development of the three proposed buildout alternatives and is generally consistent with current zoning. In order to determine the parking demand, County parking rates were applied. The County's off-street parking requirements are contained within Chapter 26-86-010 of the County's Code of Ordinances, "Parking Regulation." The following provides a summary of the required off-street parking:

- Single family residential: One covered space
- Office: One space per 250 square feet of floor area with a minimum of four spaces
- General retail: One space per 200 square feet of floor area
- Restaurant: One space per 60 square feet of dining area

Based on the County's parking requirements, the proposed alternative buildout scenario would require 461 new parking spaces. Table 7 summarizes the required parking based on the County's rates.

**Table 7 – Parking Requirements per County of Sonoma Code of Ordinances**

| <b>Land Use</b>           | <b>Units</b> | <b>Rate Required</b>                      | <b>Spaces Required</b> |
|---------------------------|--------------|---|------------------------|
| Single Family Residential | 34 du        | 1.0 covered space                         | 34                     |
| Office                    | 37.46 ksf    | 1.0 per 250 sf with a minimum of 4 spaces | 150                    |
| Retail                    | 33.16 ksf    | 1.0 per 200 sf                            | 166                    |
| Restaurant                | 6.63 ksf*    | 1.0 per 60 sf of dining area              | 111                    |
| <b>Total</b>              |              |   | <b>461</b>             |

Notes: du = dwelling unit; ksf = 1,000 square feet; \*Parking requirement is based on square footage of dining area, which cannot be determined with the current projections so the entire square footage was used for a more conservative estimate

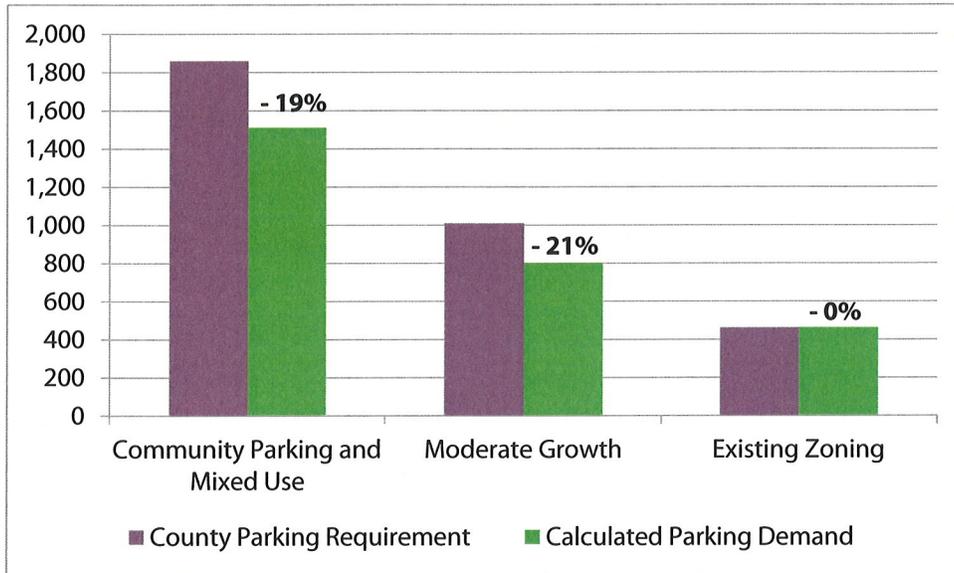
The Existing Zoning alternative would add approximately 105 new public parking spaces within the Plan area. This represents approximately 23 percent of the required parking. Assuming that the County's current parking requirements remain unchanged, the added public parking supply would primarily be used to accommodate overflow demand and to address current parking shortages.

### **Comparison of Parking Approaches**

The three alternatives vary considerably in both their development potential and the approach used to determine the amount of parking needed. The Community Housing and Mixed Use alternative includes the highest density development with potential for a variety of mixed-use projects. The application of shared parking principles works well for mixed-use development in particular where different land uses may share the same parking supply, including existing and future public and private parking lots. Similarly, the parking ratios developed by MTC for rural/small towns in the Bay Area may be useful in more accurately determining the actual parking demand for different land uses in a manner that seeks to avoid developing an oversupply of parking and undermining the potential to create neighborhoods that are oriented to non-auto modes. Representing the status quo, the Existing Zoning alternative maintains the County's current parking requirements and development potential.

Graph 5 illustrates the difference between applying the County's parking requirements and the calculated parking demand using the shared parking methodology and MTC parking ratios for the "Community Housing and Mixed Use" and "Moderate Growth" alternatives, respectively. For the Community Housing and Mixed Use alternative, when shared parking principles are applied, the actual parking demand generated by the new development is expected to be 19 percent less than the amount of parking that the County code would require. When the Bay Area ratios for rural/small towns are applied to the Moderate Growth alternative buildout, the parking required to accommodate the proposed development is 21 percent less than the County's parking requirements. While these two alternatives include the highest development densities, their respective parking demand may be considerably less than what would be required by the County code.

**Graph 5 - Parking Methodology Comparison**



Parking is a justifiably sensitive topic in the Springs area. Participants in outreach efforts conducted to date have expressed interest in reducing parking issues; creating a less auto-focused circulation network in favor of pedestrians, bicyclists, and transit; creating vibrant new gathering spaces in the public realm; and increasing housing options in the community. Achieving these desires will require a careful balance, however, particularly with respect to parking management, since providing too much parking can quickly begin to undermine the other goals.

In order to help strike this balance among goals, the County and community members may want to consider allowing reductions to current parking requirements in the Specific Plan area in consideration of the ultimate vision for the future land use mix along with this report’s findings on how shared parking or use of MTC’s parking ratios compare to current zoning code requirements.

We hope this information is useful in further developing the Preferred Plan. Please let us know if you have any questions.

Sincerely,

Shannon Baker  
Assistant Planner

Zack Matley, AICP  
Associate Principal