



CHAPTER 4
PARKING MANAGEMENT
AND PLANNING

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SPACE DESIGNATIONS AND LIMITS

Overall, the designation of spaces (time limits, meters, etc.) is good in the downtown. The City is already following the best practices of parking management, which are to place employee parking at the periphery of the area and to use meters in the core areas to keep spaces turning over more frequently. The transition from 2-hour meters to 4-hour time-limited spaces to unrestricted spaces at the edge of the area is appropriate.

Though the system is well planned, the popularity of the downtown has led to a situation where many blocks are operating above their effective capacities. This is true on the commercial streets, as well as on some primarily residential streets that allow four hour parking. These include Lovell Ave from Corte Madera to Olive, Throckmorton Ave from Madrona to Olive, Parkwood Street and Laurelwood Avenue. Because they are free and have a longer time limit than metered spaces, these streets become full before closer-in, metered streets and employee parking areas. As discussed in the previous section, some of this impact is from employees, but there is an impact from visitors as well, and it is this impact that pushes the occupancy rates to 100 percent at peak hours. It is recommended, therefore, that these streets be converted to meter zones with four-hour time limits, with an exemption for residents. Meters may not bring demand down to the ideal 85 percent occupancy level, but will mitigate the overflow somewhat. Underutilized, unrestricted parking at the periphery of the study area will likely become more utilized. If this is the case, Sunnyside and Buena Vista east of Blithedale, Forrest from Presidio to Blithedale and Bayview from Corte Madera to Madrona, should be considered for metering as well (with employee zones remaining intact).

We suggest using electronic multispace meters on these streets and whenever older meters are replaced. One electronic meter can serve many spaces (technically they can serve a whole block, though on long blocks the walking distance from the car to the meter may be long), which means there is not a meter at every space creating an unsightly effect. There are other advantages to multispace meters as well, including the ability to use debit or credit cards or make change, the ability to be reset after each transaction, the ability to be programmed for different rates at different times, and resistance to tampering. They also have better reporting functions, including revenue reporting and the ability to notify a central office when they experience technical difficulties. Solar-powered meters are available.

Concomitant with the switch to meters on these streets, the City should extend employee parking opportunities. One way of doing this is to work with owners of downtown properties that have underutilized private lots, with the goal of arranging with them to provide downtown employee permit spaces. Owners of private lots will generally be reluctant to allow all public parking on their lots, as they are concerned that their supply will be filled and spaces will not be available for their own patrons.⁴ However, they may be more willing to allow a limited number of permit parkers to use their facilities. Mt. Carmel Church and Mill Valley Market already have such an agreement. During all of our surveys, the peak occupancy in the private lots was 50 percent overall, which translates to a pool of nearly 200 unused spaces at the busiest hour. A public/private arrangement such as this would make better use of existing parking resources, and would benefit the owners of the space financially since they would get the permit fees or some other form of compensation. The City

⁴ In addition, concerns about liability often discourage owners. In Mill Valley, where there are many small private lots but no large, visible supplies, it would be difficult in any case to make efficient public use of this resource.

should retain a consultant with experience in real estate to work with property owners and City staff to create a workable plan.

A second option is to encourage use of an extended supply. Staff noted that there are several areas outside our study area that can be used for employee and/or four-hour parking. These may need to be “advertised” to the downtown population, and should be a free alternative to permits or downtown meters. They include:

- Oakdale east of Blithedale
- Presidio from Forrest to Millwood
- Lovell from Olive to Elma
- Gardner Street

Combined, these streets have upwards of 100 spaces in inventory, though obviously some of those are already in use on any given day. (Since they are outside our study area, we do not have this information.) It should be noted that these areas are farther from the core of the commercial areas where most downtown parkers are headed, but they are mostly within 1,600 feet (depending on the destination), which is slightly over a five-minute walk at an average speed. It is an acceptable walking distances in urban environments, though in smaller towns employees are generally not used to walking as far. The distance might be a concern to evening restaurant workers, but since the employee parking area along Miller Avenue is not heavily utilized in the evenings, this population should have access to closer resources.

For the parking plan to work, augmented employee parking opportunities should be created before meters are put on residential streets, or at the same time. However, if that is not feasible, or if employee parking continues to be a challenge even with an augmented supply, employees will be able to use the meters on residential streets – they will be four-hour meters, so they will not require constant feeding. As an alternative, the City could provide a certain number of employee permits on residential metered streets. These employees would pay the same rate as other employees buying permits, but would be allowed to park all day at a meter. Although not an optimal solution, this would not entirely defeat the purpose of the meters since the City would be able to control the number and location of permits issued, and thus to manage congestion. It should, though, be a secondary option after the other ones. Parking management is not static; it requires monitoring, assessment and flexibility.

LOADING ZONES

The downtown area does not have many short-stay (“green zone”) parking areas that are typically used for passenger pickups or quick errands. These spaces are particularly helpful where there are businesses that need very high turnover, short stay parking. Post offices, take-out restaurants, and dry cleaners are good examples. Given the already-crowded parking conditions in Mill Valley, and the fact that the downtown environment is largely geared towards longer-stay retail and dining, we do not recommend taking regular meter spaces out of circulation to create short-stay spaces.

Commercial loading areas are limited as well. This is common in older downtowns. It is beyond our scope to address the design issues involved in commercial loading for individual properties, but generally speaking a common solution is simply to encourage (or require) stores to schedule deliveries early in the day, when metered spaces are not yet full.

METERS

As a general rule, parking regulations should be as simple as possible; a system that has different rules for different days is needlessly complex. Walker does not see a particular advantage to using time limits instead of meters on Saturdays (and with different rules again on Sundays). Visitors are accustomed to paying meters in Mill Valley; Saturday is not different from a customer perspective. Most cities with paid parking charge on Saturdays as well as weekdays. Finally, it is worth noting that the benefit of meters is that they keep spaces "turning over" (being vacated and reoccupied by a new customer). The need for turnover, and its benefits to both customers and business owners, is as great on Saturdays as on weekdays. Our license plate inventories indicated that turnover was not as great in the municipal lot on a Saturday as on a weekday. We recommend shifting to a consistent policy of meter enforcement. The change should be well advertised, and enforcement personnel should use courtesy notices in place of tickets for the first few weeks.

At 50¢ per hour, on-street meter rates in the core area are low. Meters provide premium parking, and should be priced accordingly. Off-street parking should be cheaper, to encourage longer-stay customers and employees to use lots instead of the high-turnover on-street spaces. Walker recommends a 25¢ increase in on-street meter fees, and a regular, periodic increase thereafter. The goal should be to increase rates enough to discourage long-term use of spaces in the core areas. Core spaces will then open up ("turn") more frequently, making the area easier for visitors. Parking research suggests that rate structures are successful in creating turnover in core areas, and that customers are more put off by not being able to find parking than they are by modest rate increases.

ENFORCEMENT

The recent hiring of additional enforcement staff has helped the Police Department to be able to monitor meters and time limits more thoroughly. According to staff, more tickets are being written and more employees are purchasing permits.

The City policy is that a car can park at a meter for two hours and then must vacate the space. The driver is not prevented from driving around the block and reoccupying the same space. This creates the potential for employees to take up prime customer (i.e., short-term) spaces all day, thus impeding circulation and impacting the parking system. Enforcement staff feel that this occurs to an extent, but less so than in the past. We discussed the option of changing the regulation so that people must park elsewhere after two hours – another block, or another zone. This is done in some cities and is easy for enforcement personnel to do if they have hand-held enforcement computers that scan and store license numbers. The device will automatically alert the enforcement officer when a car is in the wrong area. The drawback is that signage is needed explaining the policy, and this is cumbersome. Since enforcement staff does not feel the problem is significant at this point, it may be premature to change the policy and the enforcement practice. However, the use of two-hour spaces all day by employees should be monitored and addressed if necessary. Increases in the meter rates would also be effective at preventing people from parking all day. Whether the policy forbids re-parking or not, store owners should understand that their own customers are impacted by long-duration stays in metered spaces.

TRANSPORTATION DEMAND MANAGEMENT

One method of limiting the impact of parked cars is to promote transportation demand management (TDM) measures. TDM can encourage drivers to look for alternates to solo driving. There are many TDM approaches; three of the most common alternatives are:

- Transit, which is promoted most effectively when employers pay for monthly passes or offer cash incentives for employees not to drive. “Cash out” is a cash incentive program where employers give their employees the money the employer would have spent on employee monthly parking, and let the employee choose whether to use the cash on parking or keep some of the money by finding cheaper alternatives like transit, carpooling, etc.
- Carpooling, which is promoted mainly through discounted parking rates and/or reserved premium parking spaces.
- Biking, which is encouraged by offering bike racks and, in some cases, showers and changing areas (most often in office complexes).

TDM measures such as these are most effective when parking rates are high enough to make alternative modes of travel attractive despite their inconvenience (real or perceived) relative to a single-passenger automobile. For example, studies have shown that where office leases are “unbundled” (the cost of parking is separated from the lease cost, such that the cost of parking becomes visible as an extra charge rather than buried in the cost per square foot) and the tenant passes the cost of parking along to its employees, employees will begin using alternate modes. The extent to which they will do this is proportional to the cost of a monthly permit.

In Mill Valley, it will be difficult to substantially increase the number of transit users and carpoolers, because the paid parking areas are not too expensive and, for those looking to avoid even those modest rates, free parking is available at the fringe of the downtown. Providing good alternates (a bus system with frequent headways, premium carpool spaces in situations where passenger counts can be verified, etc.) is a first step in getting people to make choices other than the single-passenger auto, but financial disincentives tend to be the biggest factors in encouraging use of alternate modes. Ultimately, if the City wants to commit to reducing auto traffic it will need to increase meter and monthly permit rates substantially while simultaneously protecting residential neighborhoods from overflow.

Bicycle use can be increased by ensuring a good network of safe bike lanes and providing sufficient bike racks in areas like the Depot. People who live in the area may then be inclined to use their bikes more than they have been. For those who live farther away or are not intrinsically interested in biking, however, adding bike facilities will not promote a change in behavior unless parking downtown becomes more expensive and difficult.

PARKING LAYOUTS AND ORGANIZATION OF RESOURCES

SIGNAGE

Some resources in town seem to be less heavily utilized than they might be with better signage and advertising. Advertise the Mill Creek Plaza, City Hall and privately-owned public lot better. Two approaches are recommended:

First, better signage will direct people to the lots. The Municipal lot on Throckmorton, the City Hall lot, and the Mill Creek lot have poor signage. The Municipal and City Hall lots are well utilized anyway, but Mill Creek Plaza might be better utilized if signage made it clear that this was a public facility; it looks private. The privately-owned lot near the Depot could also benefit from improved signage within the lot. Signs in the lot mention towing even though the public can park in the lot for a fee. The lot is underutilized.⁵ Photos of the areas are included in Appendix C.



Second, a webpage on the City’s website can provide a parking map that shows the location of lots. A sample from City of Burbank’s page is included in Appendix C. This may help remind the public about the City Hall Lot, which was not heavily utilized on the weekend. It could also remind drivers that the Mill Creek Plaza lot is a public lot despite its location next to a private development, and it could also “advertise” the pay lot near the Depot as a resource.

Additionally, the City should work with the owner of the privately-owned lot near the Depot to see if better use can be made of that lot. It is typically underutilized but is in a prime location. Confusing signage and relatively high rates seem to keep people away.

GEOMETRICS AND PARKING LAYOUTS

Stall Width Requirements

Walker has developed a “Level of Service” (LOS) approach to address various aspects of parking geometrics, including stall widths. The LOS approach evaluates various aspects of parking design according to quantitative and qualitative measures of user experience. In this way it is similar to the level of service approach developed by traffic engineers to evaluate and rate intersections according to the delay experienced by drivers.

Table 4-1 below shows recommended stall width measurements using the Level-of-Service system. LOS A represents the most comfortable stall width – an easy turn with less likelihood of “K turns” to get into the stall. It

⁵ This is likely a function of rates as well as confusing signage.

is recommended in places where a very good user experience is important and/or where high turnover rates suggest a need for good maneuverability, such as shopping centers and hospitals. Areas that are used primarily for low turnover employee parking can make do with the lower levels of service, though LOS D is acceptable only in dense urban areas accustomed to tight parking.

Table 4-1: Recommended Stall Width Dimensions

	LOS D	LOS C	LOS B	LOS A
Stall Width	8'-3"	8'-6"	8'-9"	9'-0"
<i>Source: Parking Structures, 3rd ed. 2001</i>				

Title 20.08.158 of the Mill Valley Municipal Code defines a parking space with dimensions of at least 9' x 20', which represents a LOS A dimension. This could be changed to 8'6" for off-street parking. We recommend staying at 9'0" for on-street angled stalls. Walker measured angled parking spaces along Buena Vista and in the City Hall lot and found them to be between 8' and 8'5". An 8'5" stall is tolerable for a downtown environment like Mill Valley (especially off street), but we do not recommend narrowing the stalls beyond that.

Figure 4-1: Buena Vista Avenue (between W. Blithedale Ave. and Hill St.)



Many cities and private clients express interest in increasing the number of compact stalls, which are narrower and shorter than standard stalls, so that more spaces can be provided in a given area. Walker typically recommends against narrow/compact stalls, as they tend to result in inefficient use of space. Whatever gain is made in the number of stalls in a parking area is offset by cars parking over the lines and effectively taking up two stalls. When parking is crowded, drivers are unlikely to respect the “compact only” signs, and will park where they can.

Studies of vehicle sales trends show that mid-sized vehicles have become more popular in the last year. Since 1998, Walker’s design vehicle (85th percentile of cars sold) has been the Ford Expedition, which is 6’7” wide and 17’1” in length. Attached as Appendix D is an article regarding vehicle sales trends with regard to size.

Back –in Diagonal Stalls

Back-in angled parking occurs when a vehicle is reversed into a stall at an angle with the head or front of the vehicle facing traffic. This parking system is used by various cities, especially in areas where bicycle traffic is prevalent. Cities such as Fremont, CA, Chico, CA, Santa Rosa, CA, Tucson, AZ, Vancouver, WA, and Kelowna, BC, Canada currently use or are considering the use of this system.

The main advantage of this type of stall is that the driver has a better view of oncoming traffic when pulling out of a stall. Another advantage is that the back of the vehicle is close to the curb, making it safer for loading/unloading. Possible disadvantages include a potential increase in the number of rear-end collisions and a potential increase in the number of inefficiently or improperly parked vehicles.

The area on Miller Avenue between Throckmorton Avenue and Sunnyside Avenue was examined to consider the possibility of back-in diagonal stalls. Currently, the parking on one side is angled at approximately 60 degrees and the other side is parallel.

Figure 4-2 shows an aerial photo of Miller Avenue with an overlay of 9’ x 18’ stalls angled at 60 degrees.

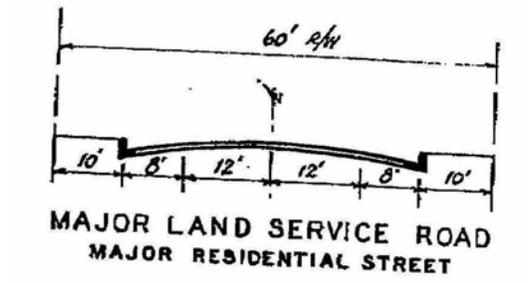
Figure 4-2: Miller Avenue Diagonal Stalls



If a back-in diagonal stall system were to be implemented on Miller Avenue, this would leave a drive aisle or roadway width of approximately 22.9 feet. In the City of Mill Valley, the required roadway width of a major residential street is 24 feet, so the roadway would not meet code. Further examination of this issue would require the input of a traffic engineer.



Figure 4-3: Municipal Code Roadway Width Requirement (Table One)



Source: City of Mill Valley

Currently, there are seven parallel spaces from the corner of Miller Avenue and Throckmorton Avenue to the yellow zone adjacent to the crosswalk at the front of Piazza D'Angelo's. Based on our preliminary analysis, we estimate that a total of 11 to 13 60-degree diagonal stalls could fit in that area. The net gain in spaces would be approximately four to six spaces. Though not a large gain in spaces, this would help offset any loss of spaces due to implementation of on-street ADA guidelines.

This change may have an impact on traffic and circulation of vehicles traveling through the major intersections of Miller / Throckmorton / Bernard and Miller / Sunnyside. A traffic analysis of the area is recommended to determine whether or not a back-in diagonal system should be implemented.



FUTURE GROWTH AND DEVELOPMENT

From discussions with City staff, we understand that the downtown area of Mill Valley is generally built out, and that new development of commercial space within the core is unlikely. It is also unlikely that owners will tear down existing buildings to construct new, larger ones. Residential development is more likely to occur in the downtown, but residential developments will be built with on-site parking and thus will not affect the commercial parking areas.⁶ Given that the City is not projecting new square footage to be added to the commercial core, it is tempting to say that parking demand will not grow over time. However, parking demand can grow from intensification of existing square footage as well as from new square footage. The most common example of this is when retail square footage is converted to restaurant. Restaurants can generate parking demand at a rate of 20 spaces per 1,000 sf, whereas retail typically generates less than 5 per 1,000 sf.



There has been little intensification of existing commercial space in recent years. City staff indicated that this appears to be at least partly due to the fact that many buildings are currently legal non-conforming uses, and that owners do not want to change land uses such that they come under new code requirements. Staff feels that there would likely be interest in developing restaurants if parking requirements were not an issue.

IN-LIEU FEES

Many cities face this issue of non-conforming land uses that have no on-site parking (or space to add on-site parking), or that have limited parking that suffices to meet retail requirements but not restaurant requirements. Many cities have used in-lieu fee programs to enable commercial owners to develop parcels without supplying parking on site. Mill Valley has an in-lieu fee program, but the program is not active.

An in-lieu fee program is designed as a central City-managed fund that building owners can contribute to in-lieu of building code-required spaces on their site. The City collects the money – a certain amount for every stall that the owner is required to build – and uses the money to improve the parking system as necessary over time. In-lieu fees are common in areas with older buildings that cannot accommodate modern parking codes, but are also used in areas where new development is occurring; the benefit in this instance is that centralized, share-able parking resources are built instead of many individual private lots or garages that cannot be used as efficiently. Often, the fees are used in support of construction of additional parking (structured or at grade), but they can also be used for other kinds of parking solutions.

⁶ Unless they are built on existing surface lots, in which case we assume the public parking would be replaced in an on-site structure or elsewhere.

Staff has indicated that Mill Valley's in-lieu fee has not been in active use for several reasons. For the City's part, there is no nexus for the fees that organizes them into an account that is specifically directed towards parking improvements, and this makes it cumbersome to manage the process. Additionally, the fee that is on the books (\$6,000 per stall) is insufficient to cover the cost of parking development, and thus to create a viable fund. For the private sector's part, building owners have not applied to pay in-lieu fees. For some this is probably a function of the desire not to "rock the boat" for non-conforming uses, but there may be some owners who avoid the in-lieu fees because they do not want to pay \$6,000 per stall for every stall they cannot provide on site. According to staff, only one owner has pursued in-lieu fees with the City in the last seven years, but was able to receive a variance instead.

The City will not be able to support any kind of significant growth or intensification of existing land uses without developing parking. We estimate that there are another 30 spaces or so available in off-street lots before they reach their effective supply, and fewer if the restrictions are made more strict on residential streets. One additional 2,000 sf restaurant could generate as many as 40 additional cars at 7:00 p.m. on a Saturday (the current peak hour). Therefore, if the City wants to enable changes in the mix of land uses in the downtown with an eye towards more restaurant development, it will need to consider additional parking options.

Whether additional growth and parking development is the goal or not, we suggest revamping the in-lieu fee program so that the cost of improving the parking system is not squarely on the City's shoulders. An in-lieu fee program can help build up the funds needed for surface or structured parking development, or can be used for shuttle programs, leasing of private spaces for public use, parking equipment and management systems, etc.

In-lieu fees have become increasingly common, particularly in northern California. With garage construction costs currently at approximately \$20,000 per stall (plus another 20 percent of that in "soft costs"), in-lieu fees need to be set at a realistic level. A financial advisor can help the City set an appropriate in-lieu fee. In part the fee will depend on whether the City chooses to contribute to the fund or leave it up to the owners to contribute the necessary resources.

The following should be noted about in-lieu fees:

- Payment of in-lieu fees does not entitle an owner to spaces in a new facility; like all other business owners downtown, he or she will rely on the general pool of parking.
- Payment of in-lieu fees does not guarantee that spaces will be built immediately, or maybe even at all. To the contrary, the point of the fund is to make ensure that private developers are contributing to the solution to the parking problem their business helps to create. The solution may be to build up capital for some years until new facilities are both warranted and affordable or, as suggested above, it may not involve new parking at all.
- Some cities discourage developers from building their own parking, so that the shared parking opportunity is greater. Other cities see additional public parking resources as a last resort, and dictate that developers build their own parking wherever feasible. Given the lack of space available for public parking development in Mill Valley, the latter policy approach is recommended.

PARKING REQUIREMENTS

The City code requirements for commercial parking were outlined in Section 2. Comparing the key commercial codes to industry standards that Walker commonly uses, we find:

- At one space per 225 square feet (over 4 spaces per 1,000 sf), the office ratio is high. Industry standards suggest a range of 2.8 to 3.8, depending on the size and type of office.
- One space per 250 square feet (4 spaces per 1,000 sf) is typical for stand-alone retail.
- One space per 4 theater seats is typical for a stand-alone cinema.
- One space per 100 square feet of restaurant (10 spaces per 1,000 sf) is lower than industry standards for stand-alone restaurants. A popular restaurant can generate upwards of 20 spaces per 1,000 square feet.

It is important to keep in mind that industry standards are deliberately tested on stand-alone buildings in car-dependant areas. The goal is to understand maximum parking generation patterns on an apples-to-apples basis. In a downtown area where there is a mix of uses, significant residential development within walking distance, and access to alternatives modes of transit, the overall peak-hour parking demand for the combined land uses is likely to be lower than the sum of all peak-hour parking demand for stand-alone uses. That is, in a neighborhood where you have a mix of daytime generators like office and retail, plus evening generators like restaurants and cinemas, the parking demand at any one time will be less than the combined peaks (full daytime demand for retail and office plus full nighttime demand for restaurants and cinemas). This is the basis of the "shared parking" concept. With the exception of restaurants, Mill Valley's code is in line with stand-alone building requirements, but in reality the downtown core is likely to generate at lower rates overall.

The Miller Avenue Precise Plan has proposed reducing parking requirements within the Precise Plan area to account for the shared use of parking in a downtown context, as described above. The Plan proposes to use 3 spaces per 1,000 square feet for office and retail, and 5 spaces per 1,000 square feet for restaurants. In our experience, many cities operate at combined ratios within these general parameters; they are likely to be reasonable for Mill Valley as well. However, it is beyond the scope of this study to test the parking generation rates in the downtown area and thus we cannot provide a precise estimate of an appropriate ratio. (Detailed study comparing square footages in the downtown to parking generation at different hours would be needed to quantify the ratio more exactly.) In any case, the office ratio is certainly high, and should be adjusted.

In conversations with Mill Valley stakeholders, the question was raised, "do residential developments create a good shared use opportunity with downtown commercial space like offices?" The development of residences in a downtown area can help reduce parking demand ratios for commercial land uses by increasing the percentage of people who walk to destinations rather than drive. However, residences do not necessarily create good shared use with commercial land uses, as tenants and owners of residences in multi-family developments generally expect at least one reserved space that cannot be shared with other uses whether the resident is home or not. If additional spaces are offered to each unit on an unreserved basis, these can often be shared with commercial land uses as long as tenants are not storing less-used cars in these spaces.

PARKING DEVELOPMENT

The final difficulty in augmenting the parking system is that the downtown is already well built out, and not very many parcels provide a good footprint for structured parking. Three we identified that appeared to have potential were:

- A private lot off of Lovell Avenue (between Bernard and Madrona);
- A private lot at Buena Vista and Blithedale Avenues (Mt. Carmel Church/Greenwood School); and
- The Municipal lot behind the shops on Miller.

The two private lots are currently in use as surface parking. The City would need to partner with the owners, and would need to make arrangements to provide reserved or semi-reserved parking for the groups that currently use the surface lots. Thus the net gain in spaces would be smaller than the full garage capacity.

We evaluated both private facilities for possible structured parking, but the Lovell Lot was not wide enough to support a structure. From our preliminary analysis of the site, the Church Lot is likely a feasible location. It is an irregularly shaped lot and therefore would be an inefficient structure, but it would present the best option for adding 30 to 40 spaces in the downtown without demolishing any existing buildings.

The municipal lot does not provide enough width to create a ramping system, and cannot be the site of a structure.

