# Table of Contents

Introduction ....................................................................................................................... 1

Chapter 1, Sec. 8108 0 - Purpose .......................................................................................... 3

Chapter 2, Sec. 8108 1 - Applicability ............................................................................... 4

Chapter 3, Sec. 8108-2 - Authority of Planning Director to Modify or Waive Requirements .................................................................................................................. 8

Chapter 4, Sec. 8108 3 - General Requirements .................................................................... 9

Chapter 5, Sec. 8108 4 - Number of Parking Spaces Required ............................................. 13

Chapter 6, Sec. 8108-5 - Motor Vehicle Parking Design Standards .................................. 29

Chapter 7, Sec. 8108-6 - Bicycle Parking Design Standards .............................................. 46

Chapter 8, Sec. 8108-7 - Drive-Through Facilities ............................................................... 54

Chapter 9, Sec. 8108-8 - Loading Areas ............................................................................. 55

Chapter 10, Overlay and Special Purpose Zones ................................................................. 57

# Tables

Table 1: Thresholds for Bringing the Entire Parking Area Up to Current Requirements .......................................................... 6

Table 2: Parking Area Layout Dimensions ............................................................................ 39

Table 3: Required Materials Loading Area Spaces ............................................................... 56

# Figures

Figure 1: Parking Requirements Applicability Flow Chart .................................................. 6

Figure 2: Pedestrian- and Bicyclist-Oriented Design Elements ........................................... 31

Figure 3: Sample Parking Area Layout (Small) .................................................................. 34

Figure 4: Sample Parking Area Layout (Large) ................................................................... 36

Figure 5: Parking Area Layout Dimensions ....................................................................... 39

Figure 10: Bicycle Parking Area Layout ............................................................................ 52

Figure 11: Bicycle Parking Aisle Width ............................................................................... 53

# Appendices

Appendix A: Definitions ..................................................................................................... 58

Appendix B: Shared Parking Methodology, Step-by-Step ....................................................... 60
INTRODUCTION

About This Document
Article 8 of the Ventura County Non-Coastal Zoning Ordinance (NCZO) regulates off-street parking and loading spaces for motor vehicles and bicycles. It specifies the amount of parking required for each land use and describes how adjustments to the required amount of parking may be made. Article 8 also includes parking area design, as well as regulations related to Ventura County’s Transportation Demand and Trip Reduction program. Landscaping requirements previously included in this document are now covered in the Ventura County Landscape and Irrigation Plan Application Guidelines.

This document, Ventura County Parking and Loading Design Guidelines is intended to help planners, project proponents, and decision-makers as they apply the requirements in Article 8 to specific projects in the non-coastal areas of the unincorporated county. The guidelines explain the intent of the regulations included in Article 8, and provide additional information regarding the meaning of particular words and phrases as they are used in Article 8. The guidelines are also intended to provide a “design vision” for parking areas in the County.

Ventura County Parking and Loading Guidelines is organized into chapters that correspond to each section of Article 8 of the NCZO.

Article 8 Overview
Article 8 of the NCZO defines the parking and loading requirements for land uses in the non-coastal portion of Ventura County. Some of the key goals of these requirements include:

- Providing adequate parking and loading spaces to meet the needs of individual sites
- Encouraging the use of alternative transportation modes, such as carpooling, transit, bicycling and walking
- Conserving resources by reducing impervious paving, increasing shading of parking areas and making parking areas compact
- Encouraging human-scaled designs that de-emphasize the car

To understand how parking can help to meet these goals, it is necessary to recognize some of the key costs and benefits of parking spaces.

Parking Benefits and Costs

Benefits
Vehicular travel provides important mobility and access throughout and within the region. Without parking spaces to store vehicles
Building too much parking is like buying an extra refrigerator just for Thanksgiving: useful for one day, but a waste of space and energy for the rest of the year.

Flexibility

The demand for parking spaces can vary dramatically between projects, even for projects with the same kind of use. For instance, an office building located adjacent to a bus stop might need fewer parking spaces than one in a suburban shopping center far from transit services. Sometimes specific actions may be taken to reduce parking demand, such as providing employees transit passes or operating a shuttle for residents. Although there is a general understanding of the amount of parking required for particular uses, many projects have unique characteristics that impact the number of parking spaces required. Ventura County parking requirements have been developed with flexible standards for the provision of parking.

Parking for new uses should be considered on a case-by-case basis, and adjusted as appropriate to meet the needs of the particular project. Section 8108-4.8 of Article 8 outlines the method for adjusting the amount of required parking when justified for individual uses. Further discussion of this methodology is included in Chapter 5.

Costs

However, there are also a number of costs associated with providing on-site parking. The first of these is the cost of constructing and maintaining parking spaces. Construction costs for new parking range from as little as $5,000 per space for surface parking to $25,000 or more for structured or underground parking (2022 dollars). Annual maintenance costs can be as much as $1,000 per space. This does not include the cost of the land beneath the space, which varies tremendously depending on location. These costs are ultimately passed on to consumers in the form of higher prices for goods and services and higher housing prices.

There are also external costs related to the provision of on-site parking. On-site parking takes up space that could be used for buildings or other productive land uses. In some cases, project sizes must be reduced in order to make room for on-site parking spaces. This can affect the supply of important resources such as commercial office space and housing units. The costs for structured or underground parking in urbanized areas is a deciding factor on whether a project is built. On-site parking standards affect the financial feasibility of new development projects, and new development is important to the County’s economy.

On-site parking also increases the land area occupied by a project, defeating compact development goals and making walking less appealing as a means of transport. Creating walkable communities is an important objective for Ventura County.

Parking spaces are visually unappealing. Combined into large lots, particularly lots without adequate landscaping or screening, parking spaces create a streetscape that is dull and uninviting. Placing parking prominently in the front of buildings can make access difficult for non-drivers, thus discouraging walking and other forms of alternative transportation. This in turn contributes to greenhouse gas emissions, air pollution, and traffic congestion problems throughout the region.

Parking areas also represent a significant amount of impervious surface area. These impervious surfaces create a number of environmental problems. For example, parking areas contribute to the urban "heat island" effect—a phenomenon where urban centers experience greater temperatures due to the concentration of heat-producing, heat-retaining buildings, pavement, and traffic. Parking areas also exacerbate many problems associated with stormwater runoff because they prevent the normal absorption and filtration of stormwater. This can cause flooding and increase water pollution.

Because of the many costs associated with on-site parking, providing an excessive number of parking spaces is discouraged. Staff and project proponents should strive to keep new parking to a minimum while still meeting the needs of proposed uses.

SECTION 8108-0 - PURPOSE

A strong purpose statement is the foundation of a regulatory approach that acknowledges the need to balance multiple goals and seeks to allow flexibility in implementation.

The purpose statement in Article 8 clarifies the intent of the requirements and should be used to guide the application of the code to projects with unusual or unanticipated circumstances.

The purpose statement is organized around four themes: mobility, flexibility, resource conservation, and human-scaled urban form.

Parking is a key part of Ventura County’s transportation system, and an appropriate and available parking supply allows travel by motor vehicle or bicycle to be completed easily and at a relatively low cost. However, parking should also be considered in light of the goals for other modes of transportation in Ventura County, as well as County goals related to air quality, water resources and quality of life.

For instance, parking areas that lack adequate screening or landscaping can create an unpleasant pedestrian environment and harm pedestrian mobility. Similarly, constructing large parking areas without adequate landscaping or drainage can create water quality problems due to polluted stormwater runoff.

It is important to understand that the purpose statement specifically does not suggest that the purpose is to provide for peak parking needs, such as commercial parking needed during the holidays. Instead, the purpose of the parking ordinance is to balance the parking needs of development with other land use and environmental concerns.

Key Parking-related Goals in the Ventura County General Plan:

Goal CTM-2: To facilitate the safe, efficient, and cost-effective movement of all users, including bicyclists, pedestrians, public transportation riders, children, older people, and disabled people, as well as motorists through the provision of an integrated multimodal system.

Goal CTM-4: The County shall work with Caltrans and Ventura County Transportation Commission (VCTC) to reduce VMT by: facilitating the efficient use of existing transportation facilities; striving to provide viable modal choices that make driving alone an option rather than a necessity; supporting variable work schedules to reduce peak period VMT; and providing more direct routes for pedestrians and bicyclists.

Goal CTM-2.23: The County shall continue to work with Ventura County Transportation Commission (VCTC), Naval Base Ventura County, and local public transportation regional bus service providers to promote the expansion of a safe, efficient, convenient, integrated, and cost-effective intercommunity and countywide public transportation and bus service that provides county residents with access to employment, commercial services, health and medical facilities, social services, educational facilities and institutions, and personal business destinations.

Goal CTM-4.2: Encourage the use of bicycling and ridesharing (e.g., carpooling, vanpooling, and bus pooling) as a percentage of total employee commute trips throughout the County in order to reduce vehicular trips and miles traveled.

Parking area design should promote mobility for all transportation modes, particularly alternative modes such as walking or biking. Locating parking areas behind buildings makes streets more pedestrian friendly than placing parking between the sidewalk and the main building entrance. Section 8108-5.3.1
**SECTION 8108-1 - APPLICABILITY**

The current parking requirements apply to:
- All new land uses
- Some changes to land uses
- Some expansions of land uses

**Section 8108-1.1 New Uses**
All of the applicable parking and loading requirements apply to new land uses.

**Section 8108-1.2 Changes to or Expansions of Existing Land Uses**
The first question to ask in determining the extent to which the parking requirements apply to existing land uses that are changing or expanding is: Are more parking spaces required?

**TO DETERMINE IF NEW SPACES ARE REQUIRED**
To determine if a land use expansion/change requires additional parking, look at the *current* requirements for the existing use and compare that to the current requirements for the changed/expanded use. The comparison should be based on the parking required for the entire site, not simply the portion of the project that is expanding or changing.

For the purposes of Section 8108-1.2, the number of existing physical parking spaces does not matter! Some land uses were built before parking regulations existed, or were compliant with previous requirements. We don’t answer the question “Are more spaces required?” using existing physical spaces because this would penalize previously conforming land uses.

**Sec. 8108.1.2.1 Changes to or Expansions of Existing Land Uses That Do Not Require Additional Motor Vehicle Parking Spaces**
When a land use change/expansion does not require additional motor vehicle parking spaces as discussed above, modifications to the existing parking spaces or parking area are not required, except that any required short-term bicycle parking must be installed.

**WHEN NEW SPACES ARE REQUIRED**

**Sec. 8108.1.2.2 Changes to or Expansions of Existing Land Uses That Require Additional Motor Vehicle Parking Spaces**

If a land use change/expansion does require additional motor vehicle parking spaces as discussed above, then the next question is: Does the land use meet current requirements for number of spaces? The requirements are different depending on the answer, as discussed below.

**8108-1.2.2(a) - Land Uses that Meet Current Motor Vehicle Parking Space Requirements**

In the case of land uses that do meet current parking space requirements, the extent to which existing parking must be brought into compliance with current parking requirements as part of a change/expansion depends upon the number of spaces in the existing lot and the number of new spaces required, as outlined below.

**LAND USES WITH 52 OR FEWER EXISTING SPACES**

Adding 4 or fewer new spaces:
- Provide additional required spaces
- Provide any required short-term bicycle spaces

Adding 5 or more new spaces:
- New and existing parking must comply with all current requirements

**LAND USES WITH 53 OR MORE EXISTING SPACES**

Adding 9 percent or less new spaces:
- Provide additional required spaces
- Provide any required short-term bicycle spaces

Adding more than 10 percent new spaces:
- New and existing parking must comply with all current requirements

**8108-1.2.2(b) - Land Uses that Do Not Meet Current Motor Vehicle Parking Space Requirements**
In the case of land uses that do not meet current parking space requirements, all new and existing parking must be brought into compliance with current parking requirements as part of a change/expansion.

**EXAMPLE**

**Expansion of a Retail Plant Nursery**

Do current requirements apply only to new spaces or to new and existing parking spaces/areas?

**Existing Nursery**

Square feet of sales/display area: 30,000

Physical parking spaces: 55

**Expansion of Nursery**

Square feet of sales/display area: 46,000

Parking spaces required: (1 per 550 sq. ft.): 84

**Percentage of New Required Spaces:**

84 - 55 = 29

29/55 = 53%

Since the land use has 53 or more existing spaces and will be adding more than 10% new spaces, current requirements, including provision of bicycle parking spaces, apply to both the new and existing spaces.

**EXAMPLE**

**Change from a bakery to a nail salon.**

Are new spaces required?

**Existing Bakery**

Square feet: 1,500

Physical parking spaces: 4

Spaces required based on current requirements (1 per 250 sq. ft.): 6

**Change to Nail Salon**

Square feet: 1,500

Spaces required based on current requirements (1 per 250 sq. ft.): 6

**Number of New Required Spaces:**

6 - 6 = 0

Since the new land use has the same parking requirement as the old use and the change does not involve an expansion, no new spaces are required.

Even though the use has fewer physical parking spaces (4) than are currently required, no new spaces are required because the existing and proposed uses need the same amount of parking according to the current requirements.

**EXAMPLE**

**Change from a bank to a medical office.**

Do current requirements apply only to new spaces or to new and existing parking spaces/areas?

**Existing Bank**

Square feet: 5,000

Physical parking spaces: 21

**Change to Medical Office**

Square feet: 5,000

Parking spaces required: (1 per 200 sq. ft.): 25

**Number of New Required Spaces:**

25 - 21 = 4

Since the land use has 52 or fewer existing spaces and will be adding 4 or fewer new spaces, current requirements apply only to the new spaces. In addition, any required short-term bicycle parking spaces—for the entire site—must be provided.
The threshold for bringing the entire parking area up to current requirements is an increase to the number of parking spaces of at least 5 spaces and at least 10%.

Table 1: Thresholds for Bringing the Entire Parking Area Up to Current Requirements

<table>
<thead>
<tr>
<th># of existing spaces</th>
<th># of new spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10% 20% 30% 40% 50% 60% 70% 100% 140% 210% 530%</td>
</tr>
<tr>
<td>15</td>
<td>7% 13% 20% 27% 33% 40% 47% 67% 93% 140% 363%</td>
</tr>
<tr>
<td>25</td>
<td>4% 8% 12% 16% 20% 24% 28% 40% 56% 84% 212%</td>
</tr>
<tr>
<td>35</td>
<td>3% 6% 9% 11% 14% 17% 20% 29% 40% 69% 151%</td>
</tr>
<tr>
<td>45</td>
<td>2% 4% 7% 9% 11% 13% 16% 22% 31% 47% 118%</td>
</tr>
<tr>
<td>50</td>
<td>2% 4% 6% 8% 10% 12% 14% 20% 28% 42% 106%</td>
</tr>
<tr>
<td>51</td>
<td>2% 4% 6% 8% 10% 12% 14% 20% 27% 44% 104%</td>
</tr>
<tr>
<td>52</td>
<td>2% 4% 6% 8% 10% 12% 14% 20% 28% 42% 106%</td>
</tr>
<tr>
<td>53</td>
<td>2% 4% 6% 8% 10% 12% 14% 20% 28% 42% 106%</td>
</tr>
<tr>
<td>57</td>
<td>2% 4% 5% 7% 9% 11% 12% 18% 25% 37% 93%</td>
</tr>
<tr>
<td>60</td>
<td>2% 3% 5% 7% 8% 9% 10% 12% 17% 23% 35% 86%</td>
</tr>
<tr>
<td>63</td>
<td>2% 3% 5% 6% 8% 9% 10% 11% 16% 22% 33% 84%</td>
</tr>
<tr>
<td>64</td>
<td>2% 3% 5% 5% 6% 8% 9% 11% 16% 22% 33% 83%</td>
</tr>
<tr>
<td>65</td>
<td>2% 3% 5% 6% 8% 9% 11% 16% 22% 33% 83%</td>
</tr>
<tr>
<td>50</td>
<td>1% 3% 5% 6% 8% 9% 11% 16% 22% 33% 83%</td>
</tr>
<tr>
<td>51</td>
<td>1% 3% 5% 6% 8% 9% 11% 16% 22% 33% 83%</td>
</tr>
<tr>
<td>52</td>
<td>1% 3% 5% 6% 8% 9% 11% 16% 22% 33% 83%</td>
</tr>
<tr>
<td>53</td>
<td>1% 3% 5% 6% 8% 9% 11% 16% 22% 33% 83%</td>
</tr>
<tr>
<td>57</td>
<td>1% 3% 5% 6% 8% 9% 11% 16% 22% 33% 83%</td>
</tr>
<tr>
<td>60</td>
<td>1% 3% 5% 6% 8% 9% 11% 16% 22% 33% 83%</td>
</tr>
<tr>
<td>64</td>
<td>1% 3% 5% 6% 8% 9% 11% 16% 22% 33% 83%</td>
</tr>
<tr>
<td>65</td>
<td>1% 3% 5% 6% 8% 9% 11% 16% 22% 33% 83%</td>
</tr>
<tr>
<td>100</td>
<td>1% 2% 3% 4% 5% 6% 7% 10% 14% 21% 53%</td>
</tr>
<tr>
<td>200</td>
<td>1% 1% 2% 2% 3% 3% 4% 5% 7% 11% 27%</td>
</tr>
<tr>
<td>300</td>
<td>0% 0% 1% 1% 1% 1% 1% 2% 3% 4% 11%</td>
</tr>
</tbody>
</table>

An exception to this is allowed in the case of single- or two-family dwellings under certain conditions.

**The Code**

“Exception. A single-family or two-family dwelling that does not meet current parking requirements for number of motor vehicle spaces may be expanded if all of the following conditions exist:

1. The dwelling has at least 1 motor vehicle parking space; and
2. The existing lot configuration does not allow for a second space or does not allow for access to a second space; and
3. The driveway provides a minimum of 20 feet from the property line to the existing covered space that can be utilized as a parking space; and
4. The proposed addition otherwise conforms to the provisions of this Chapter.”

Note that #3 above effectively allows the front setback to be used as a parking space, which is not allowed elsewhere in Article 8 outside of this exception.

**Example**

Expansion of professional office

**How many new spaces must be provided?**

**Existing Professional Office**

Square feet: ................................. 6,000

Physical parking spaces: .............. 15

Parking spaces required (1 per 300 sq. ft.): .......................... 20

**Expansion of Professional Office**

Square feet: ................................. 8,000

Parking spaces required (1 per 300 sq. ft.): .......................... 27

**Number of new required spaces:**

27 - 15 = 12

Since the land use does not meet current requirements for parking spaces, current requirements apply to both the new and existing spaces. A total of 12 new parking spaces must be provided at the site.
Projects often have unique characteristics that make the standard parking requirements infeasible or inappropriate. This section outlines the conditions under which the Planning Director may administratively modify parking requirements.

In general, the requirements that may be modified include:

- location of off-site parking
- number of required motor vehicle spaces
- contained maneuvering
- short parking rows
- parking space and area dimensions
- slope
- interior landscaping
- queuing lane dimensions
- loading area requirements

When waivers or modifications are permitted, they are identified within the appropriate section or sub-section of Article 8.

An example of modifications that could be approved by the Director: “The Director may approve an increase to the width or length of parking spaces for land uses that cater to larger vehicles such as trucks, shuttles, or vans.” Sec. 8108-5.6.3(d)

Providing too many parking spaces wastes land that could be used for more valuable purposes.

Use of Parking Spaces

This section clarifies that parking spaces and parking areas are to be used only for parking purposes, and not for other purposes. Unless otherwise permitted, parking spaces should NOT be used only for:

- Display of merchandise (including vehicles for sale)
- Trash bins
- Storage
- Vehicle servicing (including vehicles awaiting repair)

However, multiple uses of parking areas are encouraged and may be approved if the primary purpose of the parking area is not compromised. Examples include:

- Temporary outdoor sales facilities, such as Christmas tree sales.
- Use of a church parking area as a playground for a weekday preschool.
- Use of an office parking area as a farmer’s market.

These additional uses may require their own permits.

Maintenance

Parking areas should be maintained in good, usable condition throughout the life of the project. This requirement applies to all elements of the parking area, including landscaping, lighting and signage.

Proximity to Land Use

In most cases parking areas should be located on to the property they serve. However under some circumstances providing on-site parking may be infeasible or unnecessary. Off-site parking provisions are addressed in the subsections below.

Use of Parking Areas for Rideshare Parking

Ventura County does not regulate rideshare parking that occurs on an informal, occasional basis. However, when a permanent park and ride area is established, the County must ensure that there is an adequate number of spaces in the parking area to accommodate the parking demand generated by both the principal use and the park and ride facility.

The parking of cars for ridesharing purposes generally has no relationship to the land use associated with the parking spaces used. Thus this demand was not factored into the original parking space requirement. Therefore, any official use of a parking area for rideshare parking would need to be evaluated to ensure that the existing parking is adequate for the additional demand generated by the park and ride use.

A designated park and ride facility that is not associated with another land use would need its own land use entitlement.
Section 8108-3.3.1
Off-site Parking
Off-site parking is parking that is not located on the same site as the land use it serves. Off-site parking is allowed for non-residential land uses when certain provisions can be met in order to offer land use flexibility for space-constrained sites.

8108-3.3.1(a) - Within 500 Feet of Principal Use
Unless the Planning Director approves a greater distance, off-site parking must be located within 500 feet of the property to be served. This measurement is taken along a sidewalk or other pedestrian pathway from the nearest off-site parking space to the nearest public building entrance on the land use being served. This means that some portions of the off-site parking area will be more than 500 feet from the land use being served.

8108-3.3.1(b) - Shared Parking
Off-site parking areas may be dedicated entirely to one land use or they may be shared between multiple land uses. When used for multiple land uses, project proponents must provide documentation demonstrating that the off-site parking area is capable of meeting parking demand for all uses. Follow the procedures for calculating mixed-use parking demand outlined in Section 8108-4.6.

8108-3.3.1(c) - Design Standards
Off-site parking areas must meet the design standards of Section 8108-5.

8108-3.3.1(d) - Safe Pedestrian Access
Pedestrian access between the off-site parking area and the land use being served should be safe and easy. Pedestrians should not be unnecessarily exposed to safety hazards when traveling to and from the off-site parking area. In some cases, additional safety measures such as marked crosswalks or lighting may be required. Pathways should be easily navigable and meet applicable ADA requirements.

8108-3.3.1(e) - Number of Spaces
The number of off-site parking spaces assigned to the property to be served, in combination with any on-site spaces, must not exceed the allowed number of parking spaces for the land use.

Section 8108-3.3.2
Off-site Parking Agreements
Off-site parking requires certain legal assurances that the parking will remain available to the land use. These are outlined in the following subsections.

8108-3.3.2(a) - Restrictive Covenant
A restrictive covenant must be recorded with the Ventura County Recorder so that it appears on the title of the lot on which the parking is provided. The restrictive covenant must include the provisions outlined in this section (8108-3.3.2).

8108-3.3.2(b) - Contract if Different Ownership
A legal contract between the property owners is required for all off-site parking that is not under the same ownership as the subject property.

8108-3.3.2(c) - Signs
Signs that clearly direct visitors and employees to off-site parking must be placed and maintained by the property owner at the principal land use. Signs at the off-site location(s) should specify which uses the parking area serves. If parking for some land uses is restricted to certain hours, signs should designate when parking is allowed for these uses.

Section 8108-3.4
Accessory Parking and Storage of Large Commercial Vehicles
Large commercial vehicles are commercial vehicles that weigh more than 10,000 pounds, including any attached trailers or other equipment. The parking of large commercial vehicles is an allowed accessory use in agricultural, residential and open space zones under certain conditions. Parking of large non-commercial vehicles, such as RVs, is allowed.

Section 8108-3.5
Solar Structures
The installation of solar photovoltaic or hot water systems on canopies or other structures over parking areas/spaces is encouraged and allowable, but only if such structures do not violate any required setback, height, or building coverage restrictions, or obstruct any required fire apparatus access lanes. Solar structures shall be compatible in scale, materials, color, and character with the surrounding building(s) and background.

Canopies or similar structures that provide coverage like a roof should be included in building coverage calculations. Freestanding solar structures, such as solar panel “trees” that do not provide
Section 8108-3.6  
**Green Roofs**  
The installation of “green roofs” planted with vegetation on structures over parking areas/spaces is encouraged and allowable, but only if such structures do not violate any required setback, height, or building coverage restrictions, or obstruct any required fire apparatus access lanes. Green roofs shall be compatible in scale, materials, color, and character with the surrounding building(s) and background. The use of any invasive or watch list species as inventoried by the California Invasive Plant Council is prohibited. Green roof plant material and irrigation systems shall be installed pursuant to the MWELO where applicable (see Section 8106-8.2.1(b).)

---

Section 8108-4 - Number of Parking Spaces Required

**Section 8108-4.1 Calculation of Required Parking**

**8108-4.1(a) - Rounding**  
Parking calculations should always be rounded to the nearest whole number, as parking spaces cannot be fractional. When adjusting the number of required parking spaces up or down (such as applying the +/- 10% range), parking calculations should first be performed based on the original parking requirement for the use, and then adjustments should be calculated based on the rounded value (in other words, First round, then adjust). Any adjustments that result in fractional spaces should also be rounded to nearest whole number.

**8108-4.1(b) - Parking Areas Not Counted**  
When calculating required parking spaces based on gross floor area or sales and display area, areas used for parking are not included.

**8108-4.1(c) - Plus or Minus 10%**  
The motor vehicle parking requirements in Section 8108-4.7 may be increased or decreased by 10 percent from the basic rates shown, but this adjustment may be used only once in the course of calculating final parking requirements.

**8108-4.1(d) - Order of Calculations**  
Parking calculations involve several steps. Beginning with the basic rate from the table in Sec. 8108-4.7, the number of motor vehicle parking spaces required for a particular use may be adjusted up or down using the process described in Section 8108-4.8.

Requirements for bicycle and carpool parking are based on the total number of required vehicle parking spaces, after any approved adjustments have been made. Since required motorcycle spaces count toward the overall number of required parking spaces, the number of required motor vehicle spaces must be adjusted by subtracting the number of required motorcycle spaces.

**8108-4.1(e) - Calculations Based on Employees or Students**  
Calculations using number of employees or students should be based on the highest allowable number of employees or students approved in the permit for the land use. For uses with multiple working shifts, with the approved reduction, a total of 15 motor vehicle parking spaces are required for this project.
Parking spaces required (1 per 35 employees): .............................3

Carpool spaces required (80 - 4): ...............................76

Motor vehicle spaces required after 5% reduction (80 x 0.05): ..................... 4

Motor vehicle spaces required, no reduction (1 per 300 sq. ft.):.................80

Employees (max. shift): ............................... 110

Motor vehicle spaces required after 5% reduction (80 - 4):.........................76

Parking spaces required for projects that include multiple land uses should be calculated based on the requirements for each individual use, unless shared parking methodology is utilized.

Land uses that typically include multiple components (such as schools, community centers, camps or retreats) should not be considered mixed-use projects except as outlined in Section 8108-4.7; parking requirements for these uses have already been determined based on all components included in the use.

Parking spaces required after motorcycle spaces subtracted (76 - 4): ... 72

Long-term bicycle spaces required (3% of required vehicle spaces):.............2

Short-term bicycle spaces required (9% of required vehicle spaces):.......... 3

Motorcycle parking spaces at a rate of 1 motorcycle space per 20 automobile parking spaces. One motorcycle parking space must be provided for each 20 automobile parking spaces.

Motorcycle Parking

For the purposes of Article 8 “motorcycle” parking includes parking for all two-wheeled motorized vehicles, including scooters, mopeds and similar vehicles. Parking areas with 20 or more automobile parking spaces must provide motorcycle parking. One motorcycle space must be provided for each 20 automobile parking spaces.

8108-4.1(f) - Calculations Based on Number of Seats

Two feet of bench is equivalent to one seat.

8108-4.1(g) - Multiple Uses

Parking for projects that include multiple land uses should be calculated based on the requirements for each individual use, unless shared parking methodology is utilized.

Land uses that typically include multiple components (such as schools, community centers, camps or retreats) should not be considered mixed-use projects except as outlined in Section 8108-4.7; parking requirements for these uses have already been determined based on all components included in the use.

8108-4.1(h) - Mechanical Parking Lifts

Mechanical parking lifts may be used to meet motor vehicle parking requirements. Parking lifts are automated or manual lift systems designed to stack one or more vehicles vertically. Parking lifts may be located indoors or outdoors. Where space to provide parking is limited, parking lifts may be an appropriate method for meeting parking requirements. Parking lifts located outdoors must meet applicable height and screening requirements.

Siting of Mechanical Parking Lifts

Parking lifts shall be sited to provide a safe and convenient means of access for all persons. Lift platforms provided for loading and unloading shall be located so that they are accessible by users of public sidewalks and driveways.

8108-4.3.1 - Waivers or Modifications

Section 8108-4.3

Bicycle Parking

Bicycle parking space requirements are outlined in Section 8108-4.7.

Section 8108-4.3.1

Planning Director Waivers/Modifications

THE CODE

“Land uses that require additional motorcycle parking in excess of this ratio may, with Director approval, convert required automobile parking spaces to motorcycle spaces if the converted automobile spaces are designed and kept available for future conversion back to the automobile spaces.”

EXAMPLE

Order of Calculations

How many motor vehicle, motorcycle, carpool and bicycle spaces are required for a new office that has been granted a 5% reduction in required motor vehicle parking spaces?

Proposed Office

Employees (max. shift): ............................... 110

Motor vehicle spaces required after 5% reduction (80 - 4):.........................76

Parking spaces required (1 per 35 employees): .............................3

Carpool spaces required (80 - 4): ...............................76

Motor vehicle spaces required (1 per 300 sq. ft.):.................80

Motorcycle spaces required (1 per 20 auto spaces):.........................4

Motorcycle spaces required after motorcycle spaces subtracted (76 - 4): ... 72

Long-term bicycle spaces required (3% of required vehicle spaces):.............2

Short-term bicycle spaces required (9% of required vehicle spaces):.......... 3

Motorcycle parking spaces at a rate of 1 motorcycle space per 20 automobile parking spaces. One motorcycle parking space must be provided for each 20 automobile parking spaces.

Motorcycle Parking

For the purposes of Article 8 “motorcycle” parking includes parking for all two-wheeled motorized vehicles, including scooters, mopeds and similar vehicles. Parking areas with 20 or more automobile parking spaces must provide motorcycle parking. One motorcycle space must be provided for each 20 automobile parking spaces.

8108-4.1(f) - Calculations Based on Number of Seats

Two feet of bench is equivalent to one seat.

8108-4.1(g) - Multiple Uses

Parking for projects that include multiple land uses should be calculated based on the requirements for each individual use, unless shared parking methodology is utilized.

Land uses that typically include multiple components (such as schools, community centers, camps or retreats) should not be considered mixed-use projects except as outlined in Section 8108-4.7; parking requirements for these uses have already been determined based on all components included in the use.

8108-4.1(h) - Mechanical Parking Lifts

Mechanical parking lifts may be used to meet motor vehicle parking requirements. Parking lifts are automated or manual lift systems designed to stack one or more vehicles vertically. Parking lifts may be located indoors or outdoors. Where space to provide parking is limited, parking lifts may be an appropriate method for meeting parking requirements. Parking lifts located outdoors must meet applicable height and screening requirements.
Section 8108-4.4 Accessible Parking for Disabled Persons
Accessible parking standards for disabled persons are established at the federal level under the Americans with Disabilities Act (ADA) and included in Chapters 10 and 11 of the California Building Code. Additional information about ADA requirements is available at www.ada.gov. Accessible parking spaces are counted as part of the required number of vehicle parking spaces for a land use.

The Ventura County Building and Safety Division regulates accessible parking and access standards for disabled persons, including: dimensions of parking spaces and access drive aisles; the minimum number of parking spaces required; location of parking spaces and circulation routes, curb cuts and ramps including slope, width and location; signage; and pavement markings.

Section 8108-4.5 Carpool Parking
Providing priority carpool and vanpool parking spaces near building entrances is intended to promote ridesharing for employees and students. Either carpool or vanpool spaces may be provided to meet carpool parking requirements.

A minimum of 1 carpool or vanpool parking space must be provided for every 35 persons employed at the site. If parking is shared among different uses, the number of employees is the total for the different uses. The total number of employees means the number that would need to use parking spaces at any one time, such as on the largest shift. Employee carpool/vanpool spaces must be designated as carpool-only at the start of the work shift, but may be opened to all vehicles 1 hour after the work shift begins.

In addition, schools with driving-age students must provide at least 1 carpool or vanpool parking space for every 25 student parking spaces. These student spaces must be reserved for carpool or vanpool parking at all times.

The Director may modify or waive carpool parking requirements if the nature of the land use precludes ridesharing.

Section 8108-4.6 Shared Parking
When Shared Parking Applies
Some projects contain a mix of different uses at one site. A project might be constructed with offices on the first floor and residential units on the second floor, or a single commercial project might include medical offices, a restaurant and retail space.

Sometimes parking demand for the different uses within mixed-use projects occurs at different times of day. Residential uses for example experience peak parking demand in the evening, while offices experience peak parking demand in the mid-morning.

Projects that include such complementary uses may be able to make more efficient use of parking areas by sharing spaces between multiple uses. The Planning Director may approve parking space reductions for shared parking based on documentation provided by the project proponent.

Calculating Shared Parking Requirements
The number of vehicle parking spaces required for shared parking, sometimes known as mixed-use parking or joint-use parking, should be calculated using the Urban Land Institute Shared Parking or similar methodology.

Shared Parking identifies the percentage of parking demand for various use categories at different times of day. These percentages should be applied to the parking requirements in Section 8108-4.7. Excerpts from Shared Parking and an example of a mixed-use reduction calculation are included in Appendix B.

When shared parking is provided at an off-site location, an off-site parking agreement is required.

Section 8108-4.7 Table of Parking Requirements by Land Use
This section includes a table listing parking space requirements for common land uses. Note that occasionally the use categories included in this table may not correspond exactly with the categories in the use matrices of Article 5. For instance bowling alleys and indoor movie theaters are both defined as “Amusement and Recreational Facilities” in the use matrices, but each have different parking requirements.

Required parking spaces are intended to serve as temporary parking for employees, visitors, residents,
Determining parking for land uses not listed in the Table of Parking Space Requirements by Land Use

Note: Not all of these steps are required for all projects. In many cases, step 1 will be enough.

Step 1
Decide if a parking requirement for a similar land use listed in the table is appropriate. For agricultural, commercial/institutional or industrial uses, the generic parking requirement for “land uses not otherwise listed” within that category may be applied.

Step 2
Consult other available resources that provide information on parking demand for the proposed use or similar uses, such as parking handbooks that document research on parking demand (e.g. the Institute of Transportation Engineers’ Parking Generation), parking studies of similar uses in the region, or other technical parking guidelines.

Step 3
Obtain any other available information related to anticipated parking demand at the proposed use itself. This could include the expected number of employees at the project site, the amount of parking demand at similar projects or the planned activities at the project site. This information can help determine how much parking the proposed project will require.

Step 4
Complete a parking study to help identify the peak parking demand for the proposed use. Parking studies are particularly helpful for expansions of existing uses. The study may include surveys of the peak hour parking demand at the existing use (when possible), surveys of the peak hour parking demand at similar uses in Ventura County or elsewhere and projected parking demand based on these surveys or other factors. Project proponents should be responsible for commissioning the parking study. (See the note on parking studies and Effective Supply on the page 25.)

Step 5
Based on the information gathered in steps 1 through 4, identify the amount of parking required for the proposed land use.

and other regular users. The number of parking spaces required is not intended to meet the need for storage, inventory display, loading, queuing and other non-parking uses unless explicitly allowed elsewhere in Article 8.

It is important to understand that parking demand varies greatly from project to project, and therefore the listed parking space requirements may not be appropriate for all projects. Planners and project proponents should carefully consider the proposed project and its parking needs when applying these parking requirements.

Basis for Parking Calculations
The amount of required parking for each use is based on gross floor area, number of employees, size of display and sales area, or number of other specific units such as washing stalls or campsites.

THE CODE
Gross floor area includes the area, “...within the surrounding exterior walls of all floors or levels of a building or portion thereof, exclusive of vent shafts and courtyards, or, if the structure lacks walls, the area of all floors or levels included under the roofed/covered area of a structure.”

Areas Not Included in Parking Calculations
Outdoor areas, covered or uncovered, should not be included as part of gross floor area parking calculations, except for the outdoor customer dining area of restaurants. For example, the amount of required parking for an office development that includes an outdoor eating area for employees would be calculated based on the gross floor area of the office only. The outdoor eating area would not be included as part of the parking calculation. However, parking requirements based on the size of display and sales areas should include outdoor display areas.

Unlisted Land Uses
Many land uses do not appear in the parking table in Section 8108-4.7. For these uses the Planning Director may determine the amount of parking required for the use. The sidebar on the left outlines the general procedure for identifying an appropriate parking requirement for land uses that do not appear in the table of parking requirements.

Same Facility, Multiple Uses
In some cases the same building or facility may be used for multiple purposes at different times. For example, a school might allow its athletic fields to be used by other groups during non-school hours. In these cases, the number of parking spaces should be calculated for both uses and the greater number of parking spaces should be provided.

The following section provides further clarification on some of the parking requirements listed in the parking table in Section 8108-4.7.

Agricultural Uses not Otherwise Listed
Agricultural uses not listed may include animal husbandry operations, agricultural promotional uses or other agricultural uses. Due to the unique nature of these uses a uniform parking requirement is not considered appropriate for them. Instead, parking requirements should be determined on a case-by-case basis using the procedure outlined in the sidebar on the previous page.

Automobile Repairing
Parking requirements for automobile repairing uses are intended to provide parking spaces for customers and employees. Spaces for vehicle repair are not considered parking.

Automobile Service Stations, Without Retail
Automobile service stations include gas stations as well as a number of other auto-serving uses. Space at automobile service stations provided to serve vehicles (such as service bays or space adjacent to fuel pumps) is not considered parking.

Automobile Service Stations, With Retail
Automobile service stations with retail uses should be treated in the same way as automobile service stations without retail, except that motor vehicle parking should be provided for retail uses such as markets or fast food restaurants at the designated rate for those uses. Parking for the retail uses should be provided in addition to any required parking for the service station portion of the land use.

Camps and Retreats
The amount of required parking for camps and retreats should be determined on a case-by-case basis. Some factors to consider in developing the appropriate parking requirement for a particular camp or retreat include:

• the maximum number of guests allowed
• the number of full-time and part-time staff
• the age of the guests (e.g. if the camp/retreat primarily serves young people who do not drive, less parking would be required)
• the regular activities that take place
• whether or not overnight guests are allowed
• whether or not group transportation (shuttles, buses, carpools) is provided

Typical parking requirements for camps or retreats might be 1 space per every 2 overnight guests, plus 1 space for every 3 persons attending daytime activity programs, plus 1 space per full-time employee. Given the emphasis

EXAMPLE
Joint Use of a High School Soccer Field
What is the total number of required vehicle parking spaces for a private high school that allows its soccer field to be used by other groups outside of school hours?

High School
Number of students (planned capacity):..........................1,200
Parking spaces required (1 per 4 students):..........................300
Soccer Field
Square feet of soccer field.............42,000
Length of bleachers..................60 ft.
Parking spaces required (1 per 3,000 sq. ft. field plus 1 per 6 linear ft. seating area):.........................24

The total required parking for both uses is 300 spaces, because the school parking is more than adequate to meet the parking demand of the soccer field if the field is used only after school hours.

Ventura County Parking Design Guidelines

19
on outdoor activities and nature at camps/retreats, paved parking should be minimized where possible.

**Campgrounds**

Some parking at campgrounds may be required for accessory uses such as camp stores. This parking should be provided separately from other required parking spaces. If a campground is located within a portion of a larger park or recreational area, parking should be provided separately for the park and campground uses.

Given the emphasis on outdoor activities and nature at campgrounds, paved parking should be minimized where possible.

**Car Washes**

Car washes may be self-service or automatic. For both types space for cleaning vehicles should be provided in addition to any required parking spaces. In some cases, particularly for self-service car washes, it may be appropriate to provide only a limited number of parking spaces. If the facility is entirely self-service and has no regular employees on site, no motor vehicle parking spaces may be necessary.

If there are additional services offered on the same site as the car wash, such as a market or gas station, parking should be provided separately for those land uses.

**Education and Training**

Parking requirements for education and training facilities apply to the entire facility, including any auditoriums, gymnasiums, athletic fields or other components. Individual components should not be considered separate uses for the purposes of calculating the required number of parking spaces for the education or training facility.

Parking should be provided based on the number of students of planned capacity, which represents the maximum number of students the facility is permitted to accommodate.

Public schools do not fall under the direct jurisdiction of Ventura County, and so the parking requirements in Article 8 only apply to private schools.

**Boarding Schools**

Boarding schools include elementary, middle, or high schools where some or all students and faculty reside on campus. Colleges, universities, and professional/vocational schools are not considered boarding schools, even if they include student housing.

The amount of parking required to serve boarding schools varies depending on school operations (e.g. Do all students live at school? Are students allowed to have vehicles at school?). So parking requirements should be determined on a case-by-case basis.

**Furniture and Appliance Stores Handling Primarily Bulky Merchandise**

Furniture and large appliances take up more space per item than other, smaller merchandise. Thus, these land uses may be quite large but not have an extensive inventory. Because of this, the amount of parking provided for these and similar land uses should be lower than retail uses selling smaller items.

**Golf Courses and Driving Ranges**

When restaurants or commercial uses are provided at a golf course or driving range, parking should be provided according to the sub-category rates listed beneath the golf courses and driving ranges category, and not according to the restaurant or commercial rates listed elsewhere.

**Lumber and Building Materials Sales**

Pricing calculations for lumber and building materials sales use should be based on display and sales areas only. Areas used strictly for storage of materials that are not open to customers should not be included in this calculation.

**Residential Care Facilities**

Parking requirements for residential care facilities, including intermediate care facilities, apply to facilities serving 7 or more persons only (not including staff). According to state law, facilities that serve fewer than 7 persons must be treated as single-family residences and so parking requirements for single-family dwelling units apply.

**Motor Vehicle, Mobilehome, Recreational Vehicle, and Boat Sales and Rental, (includes Trailers)**

Space for inventory display and display is in addition to the parking required to serve customers and employees of motor vehicle, mobilehome, recreational vehicle and boat sales, and rental facilities.

Repair or servicing facilities that are located on the same site as sales or rental facilities are considered a separate use and parking requirements for those repair and servicing facilities should be calculated separately. However, when repair or servicing facilities are located on site, adjustments to the number of required parking spaces based on mixed uses may be appropriate.

**Outdoor Events**

Outdoor events can vary significantly depending on the type of event taking place. For example, a rodeo might require a large amount of space to park trucks or trailers holding animals and equipment, while an outdoor wedding would not.

Similarly, the rate of carpooling to a music festival would probably be higher than the rate of carpooling to a trail race. Based on this, the festival would need fewer parking spaces than the race.

In general, the variables to consider when determining required parking for Temporary Outdoor events are similar to those for Temporary Outdoor Sales and Services.

As a starting point, consider providing at the rate of 1 space per 2 event participants, plus parking needed for employees (at a rate of 1 employee per car).

Bicycle racks should also be provided if the location and time of the event make it possible for people to ride to it on bicycles. A bicycle parking space rate of 10 percent of that required for motor vehicle is reasonable. Other Transportation Demand Management measures, such as shuttles or use of buses, should also be considered.
Sometimes it may be appropriate for the temporary sale or service to share parking with an adjacent use. For example, Christmas tree sales might be acceptable in the parking area of a commercial retail outlet.

If the temporary sale or service is intended to take place in the parking area of an existing use, both the temporary and permanent use should be reviewed to ensure that temporarily reducing the available parking for the existing use does not impact that use or adjacent properties.

**Parking Facilities**

Parking facilities are freestanding parking areas not associated with any other use. They may provide off-site parking for other uses or simply serve the general parking needs of a particular neighborhood.

Bicycle parking spaces should be provided at all parking facilities in addition to motor vehicle parking spaces. The bicycle parking space requirements apply only to freestanding parking facilities. Parking areas associated with specific uses should provide bicycle parking according to the requirements for those uses.

**Plant Nurseries, Wholesale**

Wholesale plant nurseries are generally not open to the public, and thus will likely not require as much parking as retail plant nurseries.

**Rental and Leasing of Durable Goods**

The rental and leasing of durable goods includes indoor and/or outdoor equipment rental, such as machinery, bicycles or other equipment. Indoor or outdoor storage areas that are not accessible to customers should not be included in the calculation of required parking spaces.

**RV Parks**

If an RV park is located within a portion of a larger park or recreational area, parking should be provided separately for the park and RV park uses. Given the emphasis on outdoor activities and nature at RV parks, paved parking should be minimized where possible.

**Shopping Center**

Shopping centers are typically constructed to allow users to park once and access all businesses without moving their vehicle. For this reason, parking demand at shopping centers is often lower than it would be if each use in the shopping center was considered independently and the amount of parking spaces provided can be reduced.

Parking requirements for shopping centers should be determined on a case-by-case basis using information about the size of the center, hours of operation, types of uses included in the center, peak hours for each use, availability of alternative transportation, and other factors. Restaurants in shopping centers increase parking demand.

The Urban Land Institute’s Recommended Time-of-Day Factors for shared parking, included in Appendix B, can be used to help calculate shopping center demand.

**Theaters, Amphitheaters and Similar Spectator-type Establishments**

Theaters include both live performance and motion picture theaters, as well as similar uses. Auditoriums included as part of schools, community centers or religious institutions are generally not considered part of this land use category unless they operate separately from the primary use.

**Transit Stations and Terminals**

Parking is intended to serve transit riders. Because the transit services can vary dramatically, parking requirements for transit stations and terminals should be determined on a case-by-case basis.

Factors to consider in identifying the appropriate amount of parking for transit stations and terminals include:

- type of service provided (commuter or local service)
- frequency of service
- nearby land uses
- destinations served
- proximity of other stations
- current or projected ridership

**Boarding Houses or Single Room Occupancy (SRO) Units**

Parking is intended to serve both rental customers and permanent occupants of the residence. If the boarding house or SRO is part of a residence, such as a single- or two-family unit, parking for the residence portion and the boarding house/SRO portion are calculated separately. When calculating the residence portion of the boarding house/SRO, no boarding house or SRO rooms should be considered as “bedrooms” in the calculation.

**Mobilehome Parks**

Parking for mobilehome parks is intended to serve both mobilehome residents and visitors. Where internal streets are too narrow to provide for on-street parking, visitor parking should be provided. Visitor parking requirements are in addition to parking requirements for residents.

**Two-Family Dwelling**

Parking space requirements for two-family dwelling units are for each individual unit. For example, one two-family dwelling unit with three bedrooms in each unit requires a total of 4 vehicle parking spaces, 2 for each three-bedroom dwelling. At least 2 of the required parking spaces (per unit) for two-family dwelling units must be covered, except on parcels larger than 1 acre located in OS, AE, RA, RE, RO, and TP zones.

The total required parking for the boarded housing includes 2 spaces for the single-family dwelling and 4 spaces for the rented rooms.

EXAMPLE

What is the total number of required motor vehicle parking spaces for a boarding house in a 7-bedroom single-family home? 

**Boarding House**

Single-family (SF) dwelling bedrooms (not used for boarding): .................. 3

Boarding rooms: .................. 4

Parking spaces required, SF dwelling: ... 2

Parking spaces required, boarding house (1 per rented room): .................. 4

Total parking spaces required: .................................. 6
EXAMPLE
What is the number of required motor vehicle spaces for a multi-family residential project with no assigned parking?

Multi-Family Residential Dwelling

One-bedroom units: 15
Two-bedroom units: 25
Three-bedroom units: 10
Parking spaces required, residents

15 x 1.25 = 18.75
25 x 1.5 = 37.5
10 x 1.25 = 12.5

Parking spaces required, visitor

50 units x 0.25 per unit: 13

A total of 89 parking spaces are required for this project, including 76 assigned resident spaces and 13 visitor spaces.

Section 8108-4.7.1

Table of Parking Requirements for Multi-family Dwelling Units

Parking requirements for multi-family dwelling units apply to both owner-occupied and rental units. Parking requirements are based on two variables: the number of bedrooms and whether the parking spaces are assigned or not. Studies have demonstrated that the number of parking spaces required is lower overall in multi-family units when parking is not assigned, largely because parking spaces can be shared among tenants with differing parking needs. When parking is assigned, more spaces are needed because more go unused.

Visitor parking requirements are in addition to parking requirements for residents. Visitor parking should be provided separately from resident parking and clearly marked for “visitors.”

Section 8108-4.8

Adjustments to Number of Motor Vehicle Spaces Required

Ventura County parking regulations have been developed to allow flexibility in matching actual parking demand with supply. Parking demand can vary dramatically from project to project, so adjusting parking supply on a case-by-case basis is often appropriate.

The Planning Director has the discretion to approve adjustments to the number of motor vehicle parking spaces required by Section 8108-4.7 by up to 20 percent. Other adjustments not explicitly mentioned in this section may be considered as appropriate. Adjustments that exceed 20 percent are handled through the variance process (Sec. 8111-1.1.2).

Parking adjustments apply to the entire project, even when the project is completed in phases. If a project is completed in multiple phases, adjustments are applied only once to each phase.

Section 8108-4.8.1

Reductions in Number of Motor Vehicle Spaces Required

An applicant may use one or more of the following studies or design features to request a reduction in the number of required motor vehicle parking spaces. Other justifications for reductions in the number of required spaces may be considered by the Director or designee.

8108-4.8.1(a) - Parking Study

Applicant funds and provides a parking study to assess the land use’s parking needs. Parking studies shall be prepared by a person/firm qualified to prepare such studies, as determined by the Director.

Parking studies may include existing parking counts, predictions of future demand, evaluation of parking occupancy in the vicinity of the project, or other analysis that could be useful in determining the amount of the proposed parking reduction.

Parking study recommendations should not aim for a full supply of parking spaces, but an “effective supply” (see sidebar). A standard effective supply of 85 to 90 percent should be the target parking space occupancy unless a different rate can be justified based on circumstances.

8108-4.8.1(b) - Transportation Demand Management

Transportation Demand Management (TDM) involves using incentives and disincentives to encourage people to reduce vehicular travel, particularly during peak travel times. TDM programs promote traveling during off-peak times, using alternative modes of transportation such as public transit, biking, carpooling, or walking, or meeting access needs through methods that do not require travel, such as telecommuting or video-conferencing.

Project proponents are encouraged to consider additional measures beyond those included in this section. Some of these additional measures could include providing valet parking services or “unbundling” parking (selling or renting parking spaces separately from other residential or commercial building space). Depending on the needs of the project, multiple TDM measures may be appropriate.

Determining TDM Reductions

Strong TDM programs can reduce the number of single occupancy vehicle drivers that travel to projects, thus reducing the need for vehicle parking spaces at the project site.

The Planning Director determines the reduction in vehicle parking spaces for projects with TDM programs on a case-by-case basis. This determination is based on documentation provided by the project proponent, and should take into account basic project information (such as the land use, size and location of the project), travel characteristics of the project, and the details of the proposed TDM program. The amount of the reduction may be proposed by the project proponent or the Planning Director.

The typical parking reductions for TDM measures vary depending on the type of measure, the characteristics of the project area, and

Effective Supply

Even during the peak hours of occupancy, parking areas should still have several vacant spaces. The standard for an effective supply of parking is to have 10-15% of the available spaces empty; i.e., no more than 85-90% of the spaces occupied.

An effective supply cushion of vacant spaces helps maintain proper circulation; provides a “buffer” for special circumstances or events; allows for vacancies created by reserving spaces for certain users; and allows for variations in hourly, daily, and weekly activity levels.

Parking studies are intended to assess typical parking demand, on a typical day. These studies are therefore not conducted at unusually busy times (such as holidays) or unusually slow times.
Parking requirements may be reduced in some cases when alternative transportation is readily available near the site.  Sec. 8108-4.8.1(b)

EXAMPLE

10% Parking Reduction - Medical Office

What is the total number of required motor vehicle parking spaces with a 10 percent reduction?

Phase 1

Square Feet........................................10,000

Parking spaces required, no reduction

(1 per 200 sq. ft.)………………..50

10% reduction (50 x 0.1)………………5

Total parking spaces required (50 - 5): .45

Phase 2

Square Feet......................................15,000

Parking spaces required, no reduction

(1 per 200 sq. ft.)………………..75

10% reduction (75 x 0.1)………………8

Total Reduction (8 + 5)………………13

Total parking spaces required…………67

The proposed medical office project requires 45 spaces for Phase 1 and 67 spaces for Phase 2, for a total of 112 spaces for the entire project with a 10 percent reduction in required parking spaces.

Multiple TDM Measures

Combining multiple TDM measures in a proposed program will likely result in greater reductions in the number of required vehicle spaces, but the reduced requirement cannot be calculated by simply totaling the prescribed reductions for each TDM element.

For example, a TDM program that includes locating a project near public transit (5 to 15 percent), providing residents or employees with transit passes (5 to 15 percent), and enhancing transit stops (5 to 10 percent) would not usually receive a 50 (15 + 15 + 10) percent reduction in vehicle parking spaces.

8108-4.8.1 (b)(5) - Parking Cash Out

Parking cash out is an incentive program that allows employers to opt out of having a parking space at their place of employment, and instead receive cash compensation. The employer who leases (or owns) the parking space pays the employee not to park. Parking cash out is required by California law under certain circumstances (when employers lease or rent their parking spaces, and can reduce their parking expenses on a space-by-space basis to compensate for the cost of paying the parking cash out). See the California Air Resources Board’s website for more information.

8108-4.8.1(b)(13 & 14) - Bicycle Facilities

For projects that anticipate or would like to encourage high levels of bicycle travel, providing additional bicycle facilities beyond minimum requirements or showers and lockers may be suitable. With Planning Director approval, vehicle parking requirements may be reduced with the provision of additional bicycle facilities. Such facilities must meet all standard requirements for bicycle facilities.

8108-4.8.1(c) - Affordable or Senior Housing

The total number of spaces required may be reduced for affordable (low income, very low income, extremely low income) or senior housing units, commensurate with the reduced parking demand created by the housing facility, including for visitors and accessory facilities. The reduction shall consider proximity to transit and support services and the Director may require traffic demand management measures in conjunction with any approval.

8108-4.8.1(d) - Drive-through Land Uses

A reduction in the required number of parking spaces may be approved if documentation is provided which demonstrates to the satisfaction of the Director or their designee that the required number of parking spaces will not be needed due to the drive-through nature of the land use.

8108-4.8.1(e) - On-street Parking

The availability of on-street parking spaces contiguous with the proposed land use’s parcel(s) may be considered by the Director or their designee in approving a request to reduce the required number of off-street parking spaces.

8108-4.8.1(f) - Parking Reserve

When parking spaces required by NCZO are not needed by the current land use occupants or are not needed in the current phase of development, the land for those spaces may be held in reserve. For nonresidential land uses this parking reserve shall be limited to 1 parking space or up to 10 percent of the total number of required parking spaces, whichever is greater. The parking reserve area shall be included in the determination of lot coverage as though the spaces were in use. See Section 8108-4.8.1(f) for additional parking reserve requirements.

Section 8108-4.8.2

Parking Space Reduction Documentation

The project proponent is responsible for providing appropriate documentation to support any adjustments to required parking. One key purpose of this documentation is to demonstrate to the Planning Director that allowing an adjustment to the required number of motor vehicle parking spaces will not negatively impact surrounding uses.

Another important purpose of this documentation is to show how parking adjustments are in keeping with the purposes of parking as outlined in Section 8108-0. Although documentation is not required to be prepared by a licensed engineer, professional assistance may be necessary for complicated or unusual projects. The Planning Director may ask for additional documentation if necessary to make a decision about the requested adjustment. Documentation should include adequate information to allow the Planning Director to determine if the requested adjustment is appropriate for the use. At a minimum the documentation should identify the amount of motor vehicle spaces proposed with the

Typical Parking Reductions for TDM Measures

- Locating a project near public transit: 5-15%
- Installing or enhancing transit stops: 5-10%
- Locating the project adjacent to a designated bicycle route or path: 5-10%
- Improving existing bicycle routes and paths in the vicinity of the project: 5-10%
- Parking cash out: 10-25%
- Providing residents or employees with transit passes: 5-15%
- Providing shuttle services for the use of employees, visitors, or residents: 10-25%
- Creating ridesharing programs: 5-10%
- Charging for parking: 10-25%
- Improving the pedestrian environment surrounding the project by the provision of sidewalks, marked crosswalks, landscaping, street furniture, lighting, and/or safety features: 5-15%
- Allowing flexible work schedules or telecommuting: 5-10%
- Providing on-site amenities, which could include daycare, restaurants, and/or personal services such as banking or dry cleaning: 10-25%
adjustment, and show how this amount of spaces will provide an effective supply for the land use without impacting adjacent uses.

Existing parking counts, parking counts at similar uses, and projections of future parking demand based on industry standards may also be included. All calculations should be thoroughly documented so that they can be reproduced if necessary.

8108-4.8.2(a) - Monitoring Reports
Regular monitoring is necessary to ensure that parking reduction measures remain effective. If performance targets are not being met, modifications may be required.

Decisions about appropriate modifications should be determined in consultation with the project owner/operator and County staff. Modifications identified as part of this monitoring process are ultimately approved by the Planning Director.

Monitoring is intended to take place in accordance with the County’s regularly scheduled code compliance project review.

8108-4.8.2(b) - Recordation
Agreements or restrictive covenants on the subject property may be required prior to issuance of a land use permit to ensure that appropriate measures are implemented to justify the parking reduction.

Section 8108-4.8.3
Increases to the Number of Parking Spaces Required
Increasing the number of vehicle parking spaces provided at a site is strongly discouraged. However, under special circumstances parking increases may be required.

Requests for increases to the number of vehicle parking spaces provided must be accompanied by documentation demonstrating that project proponents have considered all other available options for meeting parking demand without increasing the number of parking spaces required and found them infeasible.

Section 8108-5 - MOTOR VEHICLE PARKING DESIGN STANDARDS

The design standards section of the code largely addresses the “where” and “how” of motor vehicle parking construction. Some design elements may not be appropriate for all parking areas. For instance, paint striping would not be practical in unpaved lots. In such cases the Planning Director or designee may modify or waive the standards for these elements.

Example parking area layouts showing various design elements, both required and preferred, are provided in Figure 2 (small-scale) and Figure 3 (large-scale).

Section 8108-5.1
Parking Plans
Applications for land use permits that will add or modify a parking area (defined, in part, as having at least 5 spaces) must include professionally prepared parking area plans along with preliminary drainage and grading plans. These plans must be submitted to and approved by the Planning Division as well as the Public Works Agency and the Building and Safety Division.

Section 8108-5.2
Stormwater Management
Because of clean water goals and mandates, the County has high expectations for the management of stormwater runoff in parking areas. Project-specific conditions for stormwater management will likely be put on most parking area projects. These could include such things as use of pervious pavements, bioretention areas, vegetated swales and other means. The Public Works Agency may require a hydrology and hydraulics report of larger parking areas.

Parking area design shall be in compliance with Division 7 of the California Water Code, and in accordance with conditions and requirements established by the federally-mandated stormwater management program that is administered by the Public Works Agency.

Section 8108-5.3
Location
The sections below address requirements and preferences for parking area location.

Terminology
(See Glossary for complete definitions.)

Parking Space: The area designed to provide standing area for a motor vehicle.

Parking Area: An area with 5 or more parking spaces. Does not include individual residential garages or parking for single-family (including caretaker and farmworker) or two-family dwelling units.

Drive Aisle: A driving area within a parking area used by cars to maneuver, turn around and/or access parking spaces. Generally the driving area between or next to parking spaces.

Driveway: An area that provides vehicular access to a site, for example by connecting the parking area with a street. In a parking area, the driveway becomes a drive aisle once its function changes from that of providing site access to that of allowing maneuvering within the parking area or access to parking spaces.

Parking Area: An area that provides vehicular access to a site, for example by connecting the parking area with a street. In a parking area, the driveway becomes a drive aisle once its function changes from that of providing site access to that of allowing maneuvering within the parking area or access to parking spaces.
Section 8108-5.3.1

Behind or Beside Buildings

Locating parking areas underground, to the side or behind buildings decreases the visual impact of parking and creates a more "pedestrian friendly" environment, encouraging walking and the use of other alternative transportation modes. Where possible for new uses, surface and structured parking should be placed behind buildings. If locating parking areas behind buildings is not possible, locating parking to the side of buildings is the next best choice. Only when it has been demonstrated that neither of these locations is feasible may parking areas be located in front of buildings or uses. Underground parking is also encouraged.

In approving parking area location relative to the street, the Planning Director or designee will consider existing site constraints, such as the location of existing buildings, or sites with multiple street frontages where it is impractical to locate parking behind or beside buildings relative to all street frontages.

Sections 8108-5.3.2

Parking in Setbacks

Parking in setbacks is limited by Sections 8106-5.3, 8107-1.7(f), and 8108-1.2.2(b). Except as provided for in these sections, required single or two-family residential parking spaces may not be located within the front setback.

Sections 8108-5.3.3 & 8108-5.3.4

Motorcycle & Carpool Parking

To encourage use of motorcycles and similar low-impact vehicles, as well as carpools, motorcycle and carpool parking spaces must be located as close as possible to building entrances, but not closer than the spaces for disabled persons.

Section 8108-5.3.5

Bicycle Parking

Bicycle parking is addressed in Section 8108-6.3.

Section 8108-5.3.6

Floodways and Floodplains

Floodways: Parking areas are prohibited in Federal Emergency Management Agency (FEMA) designated regulatory floodways.

Floodplains: Parking areas located in a FEMA designated 1 percent annual chance floodplain (100-year floodplain) are subject to special design requirements, such as flood warning signage, design measures to contain motor vehicles in the parking area in the event of a flood, special lighting, mechanical and electrical system

Section 8108-5.4.1

Cross access between sites improves circulation efficiency and safety by allowing people and vehicles to move between properties more easily and directly. Section 8108-5.4.1

Sections 8108-5.4.2

a. Preferred: Parking located behind building away from street corner. (Sec. 8108-5.3.1)

b. Parking area access from lowest volume street. (Sec. 8108-5.4.2(c))

c. Preferred: Parking rows perpendicular to the main building entrance to assist safe pedestrian movement toward the building. (Sec. 8108-5.4.2(b))

d. Safe, designated pedestrian pathways from street/sidewalk to main building entrance. (Sec. 8108-5.4.2(e))

e. Pedestrian routes that cross street access driveways clearly marked. (Sec. 8108-5.4.3)

f. Interior intersection landscaping does not obstruct visibility. (Sec. 8108-5.11(b))

g. Min. 1 shade tree per 4 adjacent spaces creates cooler, more attractive pedestrian environment. (Sec. 8108-5.14.5(b))

h. Loading spaces located away from pedestrian pathways. (Sec. 8108-8.2.3)

i. Short-term bicycle parking (bike racks) located within 100’ of main entrance and with safe and convenient access to the street. (Sec. 8108-6.3)

j. Bike racks located on sidewalks provide minimum of 4’ of unobstructed pedestrian pathway. (Sec. 8108-6.3.2)

k. Long-term bicycle parking for employees located within 400’ of the building entrance. (Sec. 8108-6.3.1)

l. Passenger loading turn-out located so that waiting vehicles do not impede bicycle or pedestrian circulation. (Sec. 8108-8.1)
Cross-access between sites improves circulation efficiency and safety by allowing people and vehicles to move between properties more easily and directly. Sec. 8108-5.4.1

**Section 8108-5.4.1**

**Cross Access**

Cross access is access between two or more properties for pedestrians, bicycles, or vehicles provided by internal drive aisles, bike paths or sidewalks. Cross access improves circulation efficiency and safety by allowing people and vehicles to move between properties more easily and directly.

Cross access reduces the need for cars to exit onto and enter from public streets and to drive across sidewalks, all of which can pose dangers. By reducing the amount of maneuvering and driving necessary to get from site to site, cross access also reduces unnecessary driving (or walking or biking). Because of these benefits, projects are encouraged to take advantage of opportunities for cross access whenever possible.

Because the long-term maintenance of cross access must be ensured, a joint cross access agreement between the property owners must be executed and recorded.

**Section 8108-5.4.2**

**Pedestrian Safe Access**

8108-5.4.2(a & b)

The parking requirements emphasize designs that protect and encourage walking. A safe and direct pedestrian pathway must be provided from the street or sidewalk to the primary building entrance in commercial, institutional and residential land uses.

This means that if the parking area is located in front of the building relative to the street, a safe pedestrian pathway must be provided through the parking area. These pathways must be ADA compliant, and either be completely separated from vehicular traffic or clearly designated, such as through a raised surface or distinctive paving.

8108-5.4.2(c)

Whenever possible, parking rows should be aligned perpendicular to the main building, as this provides for a safer and more direct pedestrian route.

8108-5.4.2(d)

If cross access is provided between two sites, the safety of pedestrians must be integrated into the design.

**8108-5.4.2(e)**

Pedestrian pathways that cross driveways must be clearly marked. This requirement is not intended to apply to drive aisles within parking areas (unless needed to fulfill “b” above), but to driveways (see definition in Appendix A).

**8108-5.4.2(f)**

Pedestrian pathways between parking areas and buildings must be ADA compliant and the pathway must be wide to account for any bumper overhang.

**Section 8108-5.4.3**

**Fire Apparatus Access**

Roads that are required to provide access by fire apparatus must be approved by the Ventura County Fire Protection District. Generally this requirement is triggered when any portion of the exterior walls of the first story of a building is located more than 150 feet from an existing public street or approved fire apparatus access driveway. The Ventura County Fire Protection District Ordinances, as subsequently amended, includes Fire Apparatus Access Code Standards that sets the minimum requirements for fire apparatus access roads, gates, fire lanes, turnarounds, and turnouts.

**Section 8108-5.4.4**

**Adequate Turning Radii**

Circulation and queuing areas must have turning radii that are adequate for the type of vehicles that will be using the site. Refer to the design criteria of the American Association for State Highway and Transportation Officials (AASHTO) or the Institute of Transportation Engineers (ITE) for the specific dimensions.

**Section 8108-5.4.5**

**Contained Maneuvering**

Parking areas must be designed so that vehicles exit the driveway in a forward direction. Sometimes, especially in older neighborhoods, this is not feasible, so exceptions may be allowed with Public Works Agency Transportation Director approval. It is also expected that circulation of vehicles in parking areas will be accomplished entirely within the parking area.

**Section 8108-5.4.6**

**Short Parking Rows**

Parking rows are single or double sets of adjacent parking spaces within a parking area. To break up the design of parking areas and facilitate efficient circulation, parking rows should be limited in...
Section 8108-5.4.7
Dead Ends Minimized
Dead-end drive aisles make it difficult to maneuver within parking areas and out of parking spaces. If possible, parking areas should be designed to avoid dead ends altogether. If not possible, at least 6 feet should be provided between the end of the parking row and the end of the drive aisle to allow adequate space for vehicles to exit spaces.

Section 8108-5.4.8
Directional Signs
Directional signs or painted arrows must be used to mark maneuvering areas and clarify the flow of vehicles, bicycles and pedestrians.

Section 8108-5.5
Driveways
This section contains four subsections, outlined below:

Section 8108-5.5.1
Driveway Width
Driveways provide access to sites, including access by fire-fighting apparatus. Yet driveways impact pedestrians when they intersect sidewalks, and they impact stormwater management by increasing the amount of impervious surface. Because of this, driveway widths should be minimized to the extent possible.

Driveway widths within the public right-of-way are regulated by the Ventura County Road Standards, administered by the Public Works Agency Transportation Department. These standards should be consulted to determine the appropriate width for the portion of the driveway within the public right-of-way.

Outside of the public right-of-way, driveway widths must be minimized. Fire Protection District requirements apply to all portions of driveways when the driveway serves as a Fire Apparatus Access (see Sec. 8108-5.4.3).

This driveway is also an example of a shared driveway, which are encouraged to reduce impervious surfaces. Sec. 8108-5.5.3

Section 8108-5.5.2
a. Only 1 access driveway to minimize disruption to streetscape. (Sec. 8108-5.5.2)
b. Parking area access from lowest volume street. (Sec. 8108-5.5.2)
c. Dead end turnout provided where drive aisles dead end. (Sec. 8108-5.5.2)
d. 6’ tall masonry wall adjacent to residential property. Wall reduced to 3’ within front setback of the residential property. (Sec. 8108-5.15.4(b))
e. Pedestrian routes that cross street access driveways clearly marked. (Sec. 8108-5.4.3)
Figure 4: Sample Parking Area Layout (Large)

a. Parking located behind or beside building away from street corner. (Sec. 8108-5.3.1)
b. Cross access provided between adjacent sites. (Sec. 8108-5.4.1)
c. Short interior parking rows (less than 270’ long, ~30 spaces). (Sec. 8108-5.4.6)
d. Shared driveway. (Sec. 8108-5.5.3)
e. 90° parking space angle minimizes pavement. (Sec. 8108-5.6.2)
f. Parking rows perpendicular to the main building entrance(s) to assist safe pedestrian movement toward the building. (Sec. 8108-5.4.2(c))
g. Motorcycle parking spaces located as close as practical to the building entrance. (Sec. 8108-5.3.3)
h. Carpool parking spaces located as close as practical to the building entrance. (Sec. 8108-5.3.4)

Section 8108-5.5.2
Number of Driveways
Each site is limited to 1 driveway unless the Public Works Agency Transportation Director determines that more than 1 driveway is required to handle traffic volumes or specific designs, such as residential circular driveways. Additional driveways will not be allowed if they will be detrimental to traffic flow or safety on adjacent public streets.

If a property has access to more than 1 road, the lowest traffic-volume road must be used for the driveway whenever possible.

Section 8108-5.5.3
Shared Driveways
Shared driveways are encouraged where feasible. A joint access agreement is required for all shared driveways.

Section 8108-5.5.4
Driveways Clearly Designated
Entrance and exit signs must be provided within parking areas, as well as barriers if needed to prevent entrance or exit in locations other than designated driveways.

Section 8108-5.6
Parking Area and Space Dimensions
Parking area layouts for standard spaces should be based on the dimensions included in this section.

Section 8108-5.6.1
Planning Director Waivers/Modifications

THE CODE

“The Director may waive or modify motor vehicle parking design standards when the applicant can demonstrate that the required motor vehicle parking design standard is not appropriate to the land use or location.”

Section 8108-5.6.2
Space Angle

Ninety-degree parking spaces are preferred because this layout uses the least amount of pavement per parking space.
Section 8108-5.6.3
Standard Spaces
Standard parking spaces, which are meant to accommodate passenger vehicles of all sizes, must measure 9 feet by 18 feet, except for spaces next to objects (Section 8108-5.6.3(e) below). This is not a minimum measurement; use of larger-sized standard parking spaces requires Planning Director or designee approval. Standard parking spaces may be designed using 45-, 60- or 90-degree angles. Table 2 and Figure 5 show the dimensions of parking spaces, drive aisles and modules for 90 degree and angled space layouts.

8108-5.6.3(a) - Bumper Overhangs
The length of parking spaces may be decreased by 2 feet where parking spaces allow cars to overhang landscape planters. Use of such bumper overhangs reduces impervious surfaces and is encouraged. Section 8108-5.12.4, Interior landscaping also includes standards for landscape planters that could affect the design of bumper overhangs.

8108-5.6.3(b) - Mechanical Lifts
Parking space dimensions do not apply to mechanical parking lifts.

8108-5.6.3(c) - Lots Less Than 26' Wide
The width of parking spaces may be reduced to 8 feet on legal lots that are less than 26 feet wide and where 2 or more parking spaces are required.

8108-5.6.3(d) - Large Vehicle Land Uses
Some land uses cater to larger vehicles such as trucks, shuttles or vans. In these cases the Director may approve an increase to the width or length of parking spaces.

8108-5.6.3(e) - Spaces Next to Objects
Parking spaces that are next to objects require additional width for maneuvering. Spaces that have a wall, fence, hedge or structure on one side must measure 9.5 feet. Spaces that have these objects on both sides must measure 10.5 feet.

Section 8108-5.6.4
Motorcycle Spaces
Motorcycle spaces must be a minimum of 4 feet by 8 feet.

Section 8108-5.6.5
Compact Spaces
Compact parking spaces must measure at least 8.5 feet by 16 feet. These spaces are meant to accommodate smaller passenger vehicles measuring roughly 6 feet in width and 15 feet in length. Compact parking spaces may be designed using 45-, 60- or 90-degree angles.

Table 2: Parking Area Layout Dimensions (Section 8108-5.6.11)

<table>
<thead>
<tr>
<th>Angle</th>
<th>Stall Width (A)</th>
<th>Stall Width parallel to aisle (B)</th>
<th>Stall Length, perpendicular to aisle (C)</th>
<th>Module Width (D)</th>
<th>Aisle Width (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>9.0</td>
<td>5.0</td>
<td>16.0</td>
<td>60.0</td>
<td>60.0</td>
</tr>
<tr>
<td>75</td>
<td>9.0</td>
<td>5.3</td>
<td>19.7</td>
<td>60.0</td>
<td>55.9</td>
</tr>
<tr>
<td>60</td>
<td>9.0</td>
<td>10.4</td>
<td>20.1</td>
<td>55.5</td>
<td>53.3</td>
</tr>
<tr>
<td>45</td>
<td>9.0</td>
<td>12.7</td>
<td>19.1</td>
<td>48.5</td>
<td>45.3</td>
</tr>
</tbody>
</table>

*Parking area design for full rows of compact spaces shall be reviewed on a case-by-case basis.*

Parallel compact spaces are not permitted. Compact parking spaces must be clearly designated for compact cars only.

Compact parking spaces are allowed for up to 30 percent of the total spaces in low-turnover parking areas (where the majority of vehicles remain parked for at least 4 to 6 hours at a time) serving primarily employees, residents or students. Parking areas for other uses such as retail generally have higher turnover and are not appropriate for compact parking spaces.

Parking area layouts for compact spaces should generally use the same dimensions as parking area layouts for standard spaces, as in most cases parking rows will include both compact and standard spaces. In cases where parking rows include compact spaces only, parking area layouts will be approved on a case-by-case basis.

Figure 5: Parking Area Layout Dimensions

Section 8108-5.6.6
Parallel Spaces
Parallel parking spaces must measure at least 8.5 feet by 22 feet.

Section 8108-5.6.7
Bicycle Spaces
Bicycle parking dimension requirements are in the Section 8108-6.

Section 8108-5.6.8
Clear Height in Parking Structures
Parking structures must include a floor that measures at least 8 feet 3 inches in height to allow for vanpool vehicles and accessible parking for disabled persons.
Section 8108-5.6.9  
Dead End Turnout  
Dead end drive aisles must allow adequate space for vehicles to turn around. A 6-foot dead end turnout satisfies this requirement, though other means may be appropriate depending on the layout.

Section 8108-5.6.10  
Drive Aisles and Modules  
The standard dimensions for parking area drive aisles and modules are provided in Table 2 and Figure 5. The Director may approve wider aisles when appropriate for truck maneuvering. Two-way aisles are only allowed with 90-degree and parallel spaces.

Section 8108-5.6.11  
Table of Parking Area Layout Dimensions  
See Table 2: Parking Area Layout Dimensions.

Section 8108-5.6.12  
Figure 1: Parking Area Layout Dimensions  
See Figure 5: Parking Area Layout Dimensions.

Section 8108-5.7  
Tandem Parking  
On some sites, particularly those with limited buildable area, tandem parking may be appropriate. In tandem parking it is necessary to pass through one space to gain vehicular access to the other space. The spaces may be arranged with one space directly behind the other, or with one space adjacent to and partially blocking the other.

Parking requirements for residential uses may be met using tandem parking. For single-family dwelling units, all required parking spaces may be provided in tandem. For multi-family dwelling units up to 50 percent of required parking for dwelling units may be provided in tandem. However, visitor parking spaces may not be tandem.

Section 8108-5.8  
Slope  
Parking space slope: no more than 5 percent in any direction and no less than 0.5 percent in the direction of drainage.

Drive aisle and turnaround area slope: no more than 10 percent.

Accessible parking space slope: per state and federal ADA requirements.

Section 8108-5.9  
Surfaces  
8108-5.9(a)  
The surface of any driveway that is required to be a fire apparatus access driveway must meet the requirements of the Ventura County Fire Protection District Ordinance Number 31, Fire Apparatus Standards.

8108-5.9(c)  
The surface of the portion of driveways in the right-of-way must meet the requirements of the Ventura County Road Standards or the latest edition of Caltrans’ Standard Plans, as appropriate.

Section 8108-5.9.1  
Surfacing Plans  
The parking area plans of parking areas using pervious surfaces (excluding those for single- or two-family dwellings, or others with Light-colored/high-albedo Surfaces  
Dark-colored pavements, such as asphalt, can get up to 40° F. hotter than the surrounding air. Light-colored concrete, pavers or top coats offer a cooler alternative. To lighten the color of asphalt, a white aggregate can be applied as a chip seal layer, or a light-colored surface coating can be used. Albedo, or solar reflectance, is the ratio of reflected solar radiation to the total amount that falls on that surface, known as incident solar radiation. Albedo values range from 0 for perfect absorbers to 1 for perfect reflectors (e.g. snow). An albedo of 0.30 means that 30% of all the energy striking a reflecting surface is reflected back into the atmosphere and 70% of the energy is absorbed by the surface. White cement concrete pavements have albedos in the range of 0.70 to 0.80 when new, and 0.40 to 0.60 when aged. New asphalt is very dark, so it has an albedo of 0.05 to 0.10.  

Light-colored, High-albedo Surfaces  

Residential parking requirements may be met using tandem parking spaces. Sec. 8108-5.7  

Section 8108-5.8.1 – Planning Director Waivers/Modifications  
Site constraints may warrant modifications to slope requirements, except that requirements for accessible parking spaces may not be modified.

Light-colored/high-albedo surfaces are encouraged, Sec. 8108-5.9(a)
Pervious Surfaces

Pervious surfaces allow water to pass through their surface. By allowing water to soak in, rather than quickly runoff, pervious surfaces reduce stormwater flows and allow for natural infiltration of water into the soil and associated groundwater recharge. They are also more like natural ground cover in the way they absorb and store heat and allow for evaporative cooling.

There are many types of pervious surfaces available. All pervious surface systems must be designed to maintain a high degree of structural integrity in order to support the weight and forces applied by vehicular traffic.

Typical construction of a pervious surface paving system includes a detention or storage layer underneath the pervious surface consisting of gravel or crushed stone with sufficient voids to allow water to collect. If the soil below is sufficiently permeable, this collected water can infiltrate into the soil below; if the soil is not sufficiently permeable, this water can be diverted to an underdrain—preferably for a beneficial use, such as irrigation.

Ventura County soils are clayey in many areas, thus pervious surface systems will often need to be designed with an underdrain.

Section 8108-5.10
Parking Space Marking

Parking spaces in parking areas must be clearly marked with paint striping or another durable, easily distinguishable marking material. Parking areas surfaced with gravel or other aggregate materials are exempt from this requirement.

Section 8108-5.11
Clear Visibility and Safety

Parking areas should be designed to allow vehicles, pedestrians and bicyclists to circulate safely within the parking area, and to enter and exit the parking area safely. Clear visibility is an essential element of parking area safety. To help protect visibility, landscaping should be installed and maintained so that it does not prevent parking area users from seeing one another while circulating within the parking area. Landscaping adjacent to walkways should be maintained at a height of 36 inches or less. Parking area driveways should be constructed and maintained according to Ventura County Road Standards for sight distance.

Vegetation Maintenance

Tree branches and vegetation must be trimmed to provide a clear view of traffic signals, traffic signs, pedestrians, bicyclists, and other vehicles. Before planting, pruning, or removing a tree in the road right-of-way, a permit must be obtained from the County Public Works Agency to “encroach”. Section 8107-25 of the NCZO details standards for tree permits and “protected trees” such as (Oaks, Sycamores, etc).

Walls and Fences

The NCZO Section 8106-8.1 covers standards for walls, fences, and hedges with general height limitations greater than three feet in height depending on the size of the lot, its zoning and location of the proposed wall, fence or hedge.
Section 8108-5.12

Lighting

Please note that additional lighting requirements may apply if the project is located in an overlay zone. Please refer to Chapter 10 of this guide, “Overlay and Special Purpose Zones” for more details.

8108-5.12(a) - Security Lighting

Parking areas that serve night-time users must be lighted with a minimum 1 foot-candle of light at ground level for security.

8108-5.12(b) - Lights Extinguished at End of Day

Lights in parking areas serving non-residential land uses, except those required for security per subsection (a), must be extinguished at the end of the working day. Lights may be turned on no sooner than 1 hour before the commencement of working hours.

8108-5.12(c) - Light Pole Location

- Must not interfere with motor vehicle door opening, vehicular movement or accessible paths of travel.
- Located away from existing and planned trees to reduce obstruction of light by tree canopies.
- Located outside of landscape finger planters, end row planters and tree wells. May be located in perimeter planters and strip planters between parking rows.

8108-5.12(d) - Light Directed Away from Residential Uses

Light must not directly illuminate adjacent residential land uses or residentially zoned lots. This applies to all light fixtures, including security lighting.

8108-5.12(e) - All New Lights Full Cut-off

New lighting fixtures installed to serve above-ground, uncovered parking areas must be full cut-off fixtures as defined by the Illuminating Engineering Society of North America. New lighting fixtures installed for parking area canopies or similar structures must be recessed or flush-mounted and equipped with flat lenses.

These requirements are aimed at minimizing the amount of light spilled into the dark night sky. Note that it is not expected that existing lights be replaced; the requirement only applies to new lighting fixtures. Title 24 of the building code requires that all lighting fixtures over 175 watts meet this same requirement; the parking requirements however apply to all light fixtures, no matter the wattage.

Section 8108-5.13

Trash and Recyclables Receptacles

At least one trash and one recyclables receptacle shall be provided for parking area users for the first 20 motor vehicle parking spaces, and one trash and one recyclables receptacle for every 80 spaces thereafter. Receptacles shall be enclosed and wildlife proof to prevent access by animals and wind, placed in convenient, high-visibility locations, and serviced and maintained appropriately.
**Sec. 8108-6.1**

**Short-Term Bicycle Parking (Bicycle Racks)**

The County of Ventura requires bicycle parking at certain types of land uses.

Bicycle parking is a key consideration in people’s decision to bicycle because of security concerns for their property. Every bicycle trip includes the route of travel plus parking at the origin and destination. An adequate supply of safe and convenient bicycle parking is thus mutually reinforcing with the development of the County’s bikeway network.

Bicycle parking is designed for two types of uses: short-term (ST) and long-term (LT). Short-term is provided through bicycle racks and long-term through lockers or similar enclosures.

**THE CODE**

“Short-term bicycle parking facilities shall have the following characteristics:

a. Support a bicycle by its frame in 2 places in a stable upright position without damage to the bicycle or its finish.

b. Enable the frame and 1 or both wheels to be secured with a user-provided U-shaped lock (U-lock) or cable.

c. Be anchored to an immovable surface or be heavy enough that the rack cannot be easily moved.

d. Be constructed such that the rack resists being cut, disassembled, or detached with manual tools such as bolt or pipe cutters.

e. Not have sharp edges that can be hazardous to bicyclists or pedestrians.

f. Provide easy access to each parked bicycle without awkward movements or moving other bicycles, even when the rack is fully loaded.

g. The Director may approve other short-term bicycle parking designs that provide adequate safety, security, and convenience, including designs that accommodate the parking of 3-wheeled, recumbent, or other styles of bicycles.”

Acceptable Bicycle Rack Designs

Acceptable rack designs properly support bicycles. They allow for easy access, support the frame in 2 places, enable locking of the frame and 1 or both wheels against a flat panel, and present no sharp edges. Acceptable racks include “inverted U”, “A”, “H”, and “M” racks, post and loop racks, artistic racks and others. Bicycle racks can accommodate two bikes using a single rack.

| Supports bicycle by its frame in 2 places |
| Stable upright position |
| No damage to the bicycle or its finish |

Rack is anchored to an immovable surface or otherwise immovable

Frame and 1 or both wheels can be secured with a U-shaped lock or cable

Rack resists being cut or detached with bolt or pipe cutters

Artistic designs that provide 2 point support and do not have sharp edges are acceptable.
Unacceptable Bicycle Rack Designs

Rack designs that do not provide 2-point support for bicycles are unacceptable. Bicycles can fall over easily and be damaged, and can also fall into pedestrian right-of-way. Single-post designs with sharp edges can be hazardous to pedestrians with visual disabilities.

These rack designs do not properly support bicycles. Bicycles can fall over and be damaged or fall into pedestrian walkways.

These rack designs are made for frames with small diameter steel tubes; they don’t fit modern bicycle designs, large diameter aluminum frame tubes or full suspension bicycles. These racks also have sharp edges and can be hazardous to pedestrians.
Section 8108-6.2
Long-Term Bicycle Parking

THE CODE

“Long-term bicycle parking facilities shall be covered and secured. These facilities shall protect the entire bicycle and accessories from theft and inclement weather by the use of:

a. Bicycle Lockers. A fully enclosed space for 1 bicycle, accessible only to the owner or operator of the bicycle, or

b. Restricted-access Enclosure. A locked room or enclosure containing 1 bicycle rack space for each bicycle to be accommodated and accessible only to the owners or operators of the bicycles parked within it, or

c. Check-in Facility. A location in which the bicycle is delivered to and left with an attendant with provisions for identifying the bicycle’s owner. The stored bicycle is accessible only to the attendant, or

d. Other. Other means that provide the same level of security as deemed acceptable by the Director.”

Section 8108-6.3
Location

Bicycle parking facilities must be located on site, provide safe and convenient bicycle access to the public right-of-way and provide pedestrian access to the main and/or employee entrance(s) of the land use. Curb ramps must be installed where appropriate.

Section 8108-6.3.1
Proximity to Main Entrances

The requirements for location of bicycle parking facilities are intended to make it as convenient to park a bicycle as a motor vehicle. Short-term bicycle parking facilities must be located no more than 100 feet from the main building entrance(s) or no farther than the nearest non-disabled motor vehicle parking space from the main building entrance(s), whichever is farther. If there is more than one building on a site or if a building has more than one main entrance, the short-term bicycle parking must be distributed to serve all buildings or main entrance(s).

Long-term bicycle parking facilities must be located no more than 400 feet from the building entrance.

Section 8108-6.3.2
Outside Pedestrian Pathway

A minimum of 4 feet of unobstructed pedestrian pathway outside the bicycle parking space must be maintained.
If bicycle parking facilities are not clearly visible to approaching bicyclists, conspicuous signs must be posted to direct cyclists to the facilities. Sec. 8108-6.4.2

Section 8108-6.4

Bicycling Parking Facility Signage

If bicycle parking facilities are not clearly visible to approaching bicyclists, conspicuous signs must be posted to direct cyclists to the facilities. Bicycle parking facilities with bicycle lockers must have a sign (at least 1 foot by 1 foot) that lists the name or title and the phone number or electronic contact information of the person in charge of the facility.

Section 8108-6.4.1

Bicycling Parking Facility Delineation

Bicycle parking facilities must be reserved for bicycle parking only and must be delineated by striping, curbing, fencing, or by other equivalent methods—even if just one rack is provided. Boundaries to be delineated include the parking spaces, the adjacent access space and access aisles when there are rows of parking spaces.

If bicycle parking is located near roadways, parking areas or drives, bicycles must be protected from damage by motor vehicles by the use of bollards, curbs, concrete planters, landscape buffers or other suitable barriers.

Section 8108-6.4.3

Bicycle Parking Space Dimensions

Space Length: 6 feet minimum.
Space Between Racks: 2 feet 6 inches minimum.
Space Between Adjacent Walls/Obstructions: 2 feet 6 inches minimum.

THE CODE

“The Director may waive or modify bicycle parking space dimensions if the applicant can demonstrate that they are not appropriate to the land use or location, and to accommodate the parking of 3-wheeled or recumbent bicycles or other non-standard bicycles.”

Section 8108-6.4.4

Aisle Width

A 4 foot (48-inch) wide access aisle, measured from the front or rear of the bicycle parking space, must be provided beside each row or between 2 rows of bicycle parking. In high traffic areas where many users park or retrieve bikes at the same time, such as at schools or colleges, the recommended minimum aisle width is 6 feet.

Where a public sidewalk or pathway serves as an aisle of a bicycle parking facility and the doors of bicycle lockers open toward that sidewalk or pathway, the lockers shall be set back so an open door does not encroach onto the sidewalk or pathway.

Section 8108-6.5

Lighting

Lighting of not less than 1 foot-candle of illumination at ground level shall be provided in both interior and exterior bicycle parking facilities during hours of use. Additional lighting requirements may apply if the project is located in an overlay zone. Reference chapter 10 below, “Overlay and Special Purpose Zones” for more details.
SECTION 8108-7 - DRIVE-THROUGH FACILITIES

Section 8108-7
Drive-Through Facilities
This section establishes requirements for land uses that conduct some or all of their business while customers remain in their vehicles, such as fast food restaurants, car washes and banks.

Section 8108-7.1
Queuing Lane
Queuing lanes are required to accommodate motor vehicle queuing associated with drive-through facilities. Queuing areas must be separated from other traffic and should not interfere with internal circulation of pedestrians, bicycles or motor vehicles.

Queuing lanes must be at least 12 feet wide, with sufficient turning radii to accommodate motor vehicles. The required length is outlined in Sec. 8108-7.4.1. The Planning Director may approve a waiver of these standards.

Section 8108-7.2
Directional Signs
The entrance, exit and one-way path of drive-through lanes must be indicated with signs.

Section 8108-7.3
Location
To prevent pedestrian interference, drive-through lanes must not be located between the street and the main building entrance.

Section 8108-7.4
Queuing Capacity
The required queuing capacity for drive-through facilities varies by the type of use. Section 8108-7.4.1 designates the number of vehicles queuing lanes must accommodate for fast-food restaurants and banks with drive-through windows. All other uses should provide queuing for 6 vehicles for each window or other designated service area. The number of vehicles that queuing lanes must accommodate may be modified by the Planning Director on a case-by-case basis. For example, very small uses (e.g. a drive-through espresso stand) may not need to accommodate as many vehicles at one time as other types of drive-through uses.

SECTION 8108-8 - LOADING AREAS

Section 8108-8.1
Passenger Loading Areas
Land uses with over 100 parking spaces must provide passenger loading areas located at the main entrance, unless another entrance serves as the main point of access from the parking area to the building or use. Passenger loading areas should not interfere with the circulation of vehicles, pedestrians or bicycles within the parking area. For example, a passenger loading area should not block the pedestrian walkway from the street or sidewalk to the building entrance.

Section 8108-8.2
Materials Loading Areas
Materials loading areas are required for all commercial and industrial uses that receive or distribute materials or merchandise, such as grocery stores, furniture or appliance stores, plant nurseries, retail uses, hospitals, educational uses, and manufacturing and processing centers.

The required number of spaces for materials loading areas depends upon the gross floor area of the use and the type of use. The table in Section 8108-8.2.2 designates the number of loading spaces required. Outdoor storage, sales or display areas are included as part of the calculation of gross floor area if these areas contain materials that are received or distributed via trucks.

Section 8108-8.2.3
Location and Design

8108-8.2.3(a) - Location
To facilitate quick and efficient loading and unloading of materials and merchandise, loading spaces must be located near the service entrance(s). Loading spaces must be located entirely on site. To alleviate unsightly appearances, loading spaces must be located either to the rear or side of the building. Loading spaces must also be located outside of required front or side setback and as far away as possible from residential land uses.

8108-8.2.3(b) - Screening
See Section 8108-5.14.9.
8108-8.2.3(c) - Dimensions
Required loading space dimensions depend upon the size of delivery vehicles serving the site. Minimum sizes are as follows:

- 10' wide, 30' long, 14' high: Spaces serving single-unit trucks and similar delivery vehicles.
- 12' wide, 55' long, 15' high: Spaces serving larger freight vehicles.

8108-8.2.3(d) - Maneuvering
Minimum required maneuvering areas depend upon the size of delivery vehicles serving the site. Minimum sizes are as follows:

- 30': Spaces serving single-unit trucks and similar delivery vehicles.
- 50': Spaces serving larger freight vehicles.

Maneuvering areas for loading spaces must not conflict with parking spaces or with the maneuvering areas for parking spaces. All maneuvering shall be contained on-site.

8108-8.2.3(e) - Driveways
Industrial developments must include at least 1 driveway capable of accommodating a 48-foot wheel track turning radius.

8108-8.2.3(f) - Safe Design
Loading spaces must be designed and located to minimize intermixing of truck traffic with other vehicular, bicycle and pedestrian traffic on site.

Table 3: Required Materials
Loading Area Spaces

<table>
<thead>
<tr>
<th>Gross Floor Area (sq. ft.)</th>
<th>Loading Spaces Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15,000</td>
<td>1</td>
</tr>
<tr>
<td>15,001-40,000</td>
<td>2</td>
</tr>
<tr>
<td>40,001-90,000</td>
<td>3</td>
</tr>
<tr>
<td>90,001-150,000</td>
<td>4</td>
</tr>
<tr>
<td>150,001 and over</td>
<td>5</td>
</tr>
</tbody>
</table>

Hospitals & Educational Land Uses

<table>
<thead>
<tr>
<th>Gross Floor Area (sq. ft.)</th>
<th>Loading Spaces Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-50,000</td>
<td>1</td>
</tr>
<tr>
<td>50,001-100,000</td>
<td>2</td>
</tr>
<tr>
<td>100,001 and over</td>
<td>3</td>
</tr>
</tbody>
</table>

Hotels, motels, and restaurants

<table>
<thead>
<tr>
<th>Gross Floor Area (sq. ft.)</th>
<th>Loading Spaces Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Overlay and Special Purpose Zones

8109-4.1 Scenic Resource Protection Overlay Zone
To protect county viewsheds and scenic resource areas, planned development permits may be required for construction or grading activities to reduce visibility from road rights-of-way, scenic lakes or areas identified by the County General Plan or Area Plans.

Section 8109-4.6- Temporary Rental Unit Regulation Overlay Zone
Parking Requirements for the Temporary Rental Unit Regulation Overlay Zone are established in NCZO Section 8109-4.6.8.2 that detail minimum parking space requirements based upon the number of bedrooms in the rental property.

Section 8109-4.7- Dark Sky Overlay Zone
The Dark Sky Overlay Zone applies to areas found by the county to have a unique character which warrants special requirements and standards necessary to prevent light pollution and preserve the natural darkness of the night sky, reduce sky glow, improve star viewing opportunities, and decrease energy consumption.

Generally, all luminaries including those installed prior to the adoption of the Dark Sky Overlay Zone must be partially or fully shielded, directed downward, and installed and maintained in such a manner to avoid light trespass and be shut off past 10:00 p.m. until sunrise if there is no need for use as well as meet all other conditions as listed in Sec. 8109-4.7.4 – General Standards that also include standards for security lighting, service station and outdoor recreational facility lighting.

Section 8109-4.8- Habitat Connectivity and Wildlife Corridors Overlay Zone
Outdoor lighting requirements for projects within the Habitat Connectivity and Wildlife Corridor overlay zone are designed to reduce lighting impacts to wildlife movement. Standards are associated with pole height, light emissions adjacent to Surface Water Features and Wildlife Crossing Structures. Specific types of lighting shall be phased out or updated as described in the section. Parking area lighting shall comply with the standards set forth in Section 8109-4.8.2.

Section 8109-4.9- Critical Wildlife Passage Areas Overlay Zone
Projects in areas that are critical to wildlife movement and wildlife habitat may require a discretionary permit depending on the use or construction of structures and lot size.

*Refer to Section 8109-4 for additional Overlay and Special Purpose Zones that may be added or amended.*
APPENDIX A - DEFINITIONS

Albedo – A measure of a material’s ability to reflect sunlight on a scale of 0 to 1, with a value of 0.0 indicating that the surface absorbs all solar radiation (e.g., charcoal) and a value of 1.0 representing total reflectivity (e.g., snow).

Bicycle Parking, Long-Term (LT) – A locker or locked enclosure providing bicycle storage and protection from theft, vandalism, and weather when the bicycle and accessories are not in use for extended periods during the day, overnight, or for a longer duration.

Bicycle Parking, Short-Term (ST) – A rack or racks used to park bicycles for up to several hours.

Covered Parking/Space – Parking spaces for motor vehicles or bicycles that have roofs that are permanently attached to the ground and imperforate.

Cross Access - An element of vehicular, bicycle and pedestrian circulation which allows persons and cars to gain access from one land use, usually (but not limited to) commercial, to another without having to use the public road fronting those land uses.

Drive Aisle – A driving area within a parking area or parking structure used by motor vehicles to maneuver, turn around, and/or access parking spaces.

Driveway – An area that provides vehicular access to a site, such as from a roadway or another site, and which may include areas in the right-of-way as well as areas that extend into the site from the property line. In a parking area, the driveway becomes a drive aisle once its function changes from that of providing site access to that of allowing maneuvering within the parking area or access to parking spaces.

Driveway, Ribbon - Driveways made of 2 parallel strips or “ribbons” of pavement with a permeable surface in between the strips

Green Roof – A green space created by adding plants and other growing media on the roof of a structure or building.

Gross Floor Area - The area included within the surrounding exterior walls of all floors or levels of a building or portion thereof, exclusive of vent shafts and courtyards, or, if the structure lacks walls, the area of all floors or levels included under the roofed/covered area of a structure.

Mechanical Parking Lifts – Automated or manual, indoor or outdoor, lift systems designed to stack one or more motor vehicles vertically.

Module - A drive aisle with vehicles parked on one or two sides of the aisle.

Off-Site Parking - Parking provided at a site other than the site on which the use served by such parking is located.

Parking Area - An area outside the public right-of-way containing 5 or more parking spaces and designed and used primarily for the parking of operable motor vehicles and bicycles. Parking areas may be located at grade, above ground, or below ground. Parking areas include parking facilities, lots, structures and underground parking. Elements of parking areas include parking spaces, drive aisles, loading areas and required landscaping and screening. Parking areas do not include: individual residential garages, parking spaces/areas for single-family (including caretaker and farmworker) or two-family dwelling units, or vehicle storage or inventory display areas.

Parking Facility – A type of parking area that is a principal use.

Sales and Display Areas – Indoor or outdoor areas that are accessible to customers and used for the sale, rental, lease, or display of inventory, but does not include indoor or outdoor storage areas that customers cannot access.

Shared Parking - Shared parking is a tool through which adjacent property owners share their parking areas and thereby reduce the number of parking spaces that each would provide on their individual properties. Shared parking is commonly applied when land uses have different parking demand patterns and are able to use the same parking spaces/areas throughout the day.
Shared Parking Methodology, Step-by-Step

Step 1: Determine the number of required motor vehicle parking spaces for each use

Generally the number of required spaces is based on the table of required spaces (Sec. 8108-4), but in some cases parking requirements will be adjusted or a special requirement will be developed for a unique use. Complete all adjustments before performing the shared parking analysis.

Step 2: Decide whether the use has its highest demand on a weekday or weekend

For many uses this will be fairly obvious (e.g. offices and schools have their highest demand on weekdays, churches on weekends), but in some cases you will need to use your best judgment to determine which of the two to use. Matters become even more complicated when the two uses sharing the parking have peak demand on different days (e.g. a nightclub and a bank). In these cases the appropriate thing to do is perform a shared parking analysis for both weekdays and weekends to identify the highest parking demand number.

Step 3: Designate parking spaces for each user group

Different user groups (residents, guests, employees) have different times of peak parking demand. The shared parking analysis differentiates between each of these groups, so you must separate the total required parking spaces for each use accordingly. In some cases this will be straightforward; residential uses require separate parking for residents and guests, so you already know how many spaces each group uses.

Step 4: Determine the hour-by-hour parking demand for each use

Multiply the percentages in the ULI Shared Parking Recommended Time-of-Day Factors table by the total number of required spaces for each user group. Use either the weekend or the weekday table (see the following pages). An Excel spreadsheet is useful here. The numbers should be rounded to the nearest whole space.

Step 5: Calculate the total parking demand for each hour

Add together the hourly parking demand for each use to determine the total demand for each hour.

Step 6: Identify the highest demand value

Look at the total demand for each hour and find the highest number (or have Excel do it for you). That is your peak shared parking demand, and the total spaces that should be required for the shared uses.

In other cases, you will need to use your judgment and any available data about the project. For example, if an office has 20 employees and 30 required parking spaces, you can assume that 20 spaces are used by employees and 10 are used by visitors. Or, for a restaurant you might assume that 60 percent of the spaces are for guests and 40 percent are for employees. Again, the Shared Parking handbook can offer guidance on this.

Step 4: Determine the hour-by-hour parking demand for each use

Multiply the percentages in the ULI Recommended Time-of-Day Factors table by the total number of required spaces for each user group. Use either the weekend or the weekday table (see the following pages). An Excel spreadsheet is useful here. The numbers should be rounded to the nearest whole space.

Step 5: Calculate the total parking demand for each hour

Add together the hourly parking demand for each use to determine the total demand for each hour.

Step 6: Identify the highest demand value

Look at the total demand for each hour and find the highest number (or have Excel do it for you). That is your peak shared parking demand, and the total spaces that should be required for the shared uses.

Shared Parking Example

What is the weekday peak parking demand for a project that includes 5,000 square feet of professional office space, 1,000 square feet of restaurant space, and 15 two-bedroom multi-family dwelling units with unassigned parking?

**Professional Office**

Square feet: ................................................. 5,000
Spaces required (1 per 350 sq. ft.): ...................... 14

**Restaurant**

Square feet: ....................................................... 1,000
Spaces required (1 per 90 sq.ft.) ............................. 11

**Multi-Family Dwelling Units**

15 two-bedroom units with unassigned parking.
Spaces required:
1.5 per unit x 15 units = 23, plus
0.25 per unit for visitors x 15 = 6

**Total Required Parking Spaces Without Sharing**

14 + 11 + 27 = 52

**Total Required Parking Spaces With Sharing**

................................................................. 41
| Land Use          | 6 a.m. | 7 a.m. | 8 a.m. | 9 a.m. | 10 a.m. | 11 a.m. | Noon | 1 p.m. | 2 p.m. | 3 p.m. | 4 p.m. | 5 p.m. | 6 p.m. | 7 p.m. | 8 p.m. | 9 p.m. | 10 p.m. | Midnight |
|-------------------|--------|--------|--------|--------|---------|---------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
| **Residential**   |        |        |        |        |         |         |      |        |        |        |        |        |        |        |        |          |          |
| Guest             | 0%     | 5%     | 10%    | 20%    | 40%     | 50%     | 60%  | 70%    | 80%    | 80%    | 80%    | 80%    | 80%    | 70%    | 60%    | 50%    | 40%      | 30%      |
| Reserved          | 100%   | 100%   | 100%   | 100%   | 100%    | 100%    | 100% | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   | 100%     |
| **Office**        |        |        |        |        |         |         |      |        |        |        |        |        |        |        |        |          |          |
| Visitor           | 1%     | 3%     | 5%     | 10%    | 20%     | 50%     | 100% | 100%   | 95%    | 90%    | 80%    | 50%    | 20%    | 10%    | 5%     | 2%      | 1%       |          |
| **Medical Office**|        |        |        |        |         |         |      |        |        |        |        |        |        |        |        |          |          |
| Visitor           | 1%     | 3%     | 5%     | 10%    | 20%     | 50%     | 100% | 100%   | 95%    | 90%    | 80%    | 50%    | 20%    | 10%    | 5%     | 2%      | 1%       |          |
| **Bank**          |        |        |        |        |         |         |      |        |        |        |        |        |        |        |        |          |          |
| Visitor           | 1%     | 3%     | 5%     | 10%    | 20%     | 50%     | 100% | 100%   | 95%    | 90%    | 80%    | 50%    | 20%    | 10%    | 5%     | 2%      | 1%       |          |