Ventura County

Parking & Loading

Design Guidelines
Acknowledgements

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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 and landscaping requirements, as well as regulations related to Ventura County’s Transportation Demand and Trip Reduction program.

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. 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 when they are not in use, private vehicle travel would not be possible.

Why not provide more parking?
A common question in parking discussions is, “Why shouldn’t we just construct enough parking spaces to meet the maximum possible demand that at a site?” While it’s tempting to try to build our way out of parking difficulties, that approach has some serious drawbacks.

One simple way to think about this problem uses the holiday dinner metaphor.

Suppose you invite all your friends and relatives over for a big holiday meal, and you are concerned about where you will store all the food you plan to serve them. One solution would be to purchase a second refrigerator to hold the excess items. Some of the costs associated with this solution include:

- Initial purchase costs
- Increased electricity bills to maintain the second refrigerator
- Loss of kitchen space

Given these costs, it’s likely that you will choose a different solution to your food storage problem.

Building too much parking is similar to requiring every household to purchase a second refrigerator just in case they might someday host a big holiday dinner. In many cases the costs associated with the second refrigerator—or the excess parking spaces—do not outweigh the benefits.
Thus, providing on-site parking can be seen as a benefit because it improves mobility for Ventura County drivers.

**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 $3,000 per space for surface parking to $25,000 or more for structured or underground parking (2009 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. As project sizes are reduced throughout the County, the supply of important resources such as commercial office space and housing units decreases region-wide. This shortage of supply leads to increased prices for housing and other land uses. This shortage can harm 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 air pollution and 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.

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**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.

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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.
**CHECKLIST: PARKING AREA REQUIREMENTS**

The following checklist summarizes the more significant parking requirements in Article 8 of the Ventura County Non-Coastal Zoning Ordinance (NCZO). This checklist is only meant to be an aid; project applicants should refer to Article 8 of the NCZO for the complete requirements. The items with a square checkbox ☑ must be provided with a project’s initial application. The items with a round checkbox  may be addressed later in the project approval process.

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**Notes**

Project: ___________________________________________________________

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**Applicability**

☑ The entire parking area (existing and proposed) of existing projects that are changing/expanding must comply with current parking requirements. Required if the proposed change/expansion project meets the following (Section 8101-1.2.2):

______ # of existing parking spaces is 52 or fewer and
______ # of spaces being added is ≥ 5;

or

______ # of existing parking spaces is 53 or more and
______ # of spaces being added is ≥ 10%.

---

**General Requirements**

Off-site Parking. (8108-3.3.1) If off-site parking is used:

☑ Parking area ≤ 500 feet from land use to be served, measured along walkway from the nearest off-site parking space to the nearest public entrance to the building. Planning Director may approve greater distances.

☑ Applicant demonstrates that parking area can meet demand of all uses served.

☑ Parking area meets the design standards of Section 8108-5.

☑ Use of parking area does not expose pedestrians to hazardous traffic conditions or create a traffic hazard.

☑ # of assigned off-site spaces does not exceed allowed # for the land use.

☑ Restrictive covenants and agreements in place pursuant to 8108-3.3.2.

---

**Number of Spaces**

______ Motor vehicle spaces per table. (8108-4.7) Rate: ___________________

__________________________________________________________

______ Potential motor vehicle spaces given +/- 10% range.

______ Motorcycle spaces: 1 per 20 auto. (8108-4.2)
Notes

_______ Motor vehicle spaces minus motorcycle spaces. Required motorcycle spaces count as meeting required auto.

_______ Short-term (ST) bike spaces per table. (8108-4.7) Rate: ____________

_______ Long-term (LT) bike spaces per table. (8108-4.7) Rate: ____________

_______ Accessible spaces per Building Code. (8108-4.4)

_______ Carpool spaces: ______ 1 per 35 employee spaces and ______ 1 per 25 student spaces; posted with signs. (8108-4.5)

☐ Shared parking encouraged where parking analysis supports. Requires restrictive covenant and, if off-site, same agreements as 8108-3.3.2. (8108-4.6)

Motor Vehicle Parking Design

☐ Parking plans, including preliminary grading and drainage plans, approved by Public Works and Building & Safety. Applies only to parking areas. (8108-5.1)

☐ Parking design complies with: Ventura Co. NPDES permit, Division 7 of the CA water code & Ventura Stormwater Quality Mgmt. Ordinance 4142. (8108-5.2)

☐ Parking located behind or beside building (preferred). (8108-5.3.1)

☐ No parking in setbacks except pursuant to 8106-5.3, 8107-1.7 (f), and 8108-1.2.2(b). (8108-5.3.2)

☐ Motorcycle spaces located as close to main building entrance as practical. (8108-5.3.3)

☐ Carpool spaces located as close to main building entrance as practical. (8108-5.3.4)

☐ No parking in floodways; parking areas in floodplains meet special design standards of Public Works Agency and Watershed Protection District. (8108-5.3.6)

☐ Cross access provided between adjacent (commercial, industrial, multi-family) sites (preferred). (8108-5.4.1)

Pedestrian Safe Access. (8108-5.4.2)

☐ At least 1 ADA-compliant pedestrian pathway from sidewalk or street to main building entrance. Pathway separated from vehicular traffic or clearly designated.

☐ Parking rows perpendicular to the main building entrance(s) or main pedestrian pathway(s) where feasible.

☐ If cross access provided, it includes safe pedestrian access.

☐ Pedestrian routes across driveways clearly marked.
If parked cars can overhang pedestrian pathways, pathway width increased 2'.

Fire apparatus access required if any part of building > 150' from street or other fire road. (8108-5.4.3)

Internal circulation designed with appropriate turning radii, pursuant to design criteria of the American Association for State Highway and Transportation Officials and/or Institute of Transportation Engineers. (8108-5.4.4)

Vehicles exit parking area in forward direction unless approved otherwise by Public Works Agency. All circulation contained within parking area (no maneuvering onto sidewalk). (8108-5.4.5)

Internal parking rows < 270' long (~30 spaces). (8108-5.4.6)

Dead ends minimized. (8108-5.4.7)

Directional arrows or signs provided. (8108-5.4.8)

Driveway width minimized outside right-of-way. (8108-5.5.1)

1 driveway only, located on lowest volume road, unless approved otherwise by Public Works Agency. (8108-5.5.2)

Driveways shared where feasible (preferred). (8108-5.5.3)

Driveways clearly designated to prevent entrance/exit at other points. (8108-5.5.4)

90° parking space angle used (preferred). (8108-5.5.2)

Standard Space Dimension. (8108-5.6.3)

9’ x 18’. Length may be decreased by 2’ if bumper overhang. Width may be decreased on narrow legal lots (see 8108-5.6.3(c)). Space size may be increased, with approval, for certain uses.

Spaces adjacent to wall, fence, hedge or structure wider: 9.5’ if adjacent one side; 10.5’ if adjacent both sides.

Motorcycle space dimension: 4’ x 8’ (8108-5.6.4)

Compact space dimension: 8.5’ x 16’; allowed for up to 30% of spaces for low-turnover, non-retail uses only. (8108-5.6.5)

Parallel space dimension: 8.5’ x 22’ (8108-5.6.6)

Clear height in parking structures: min. 8’ 3” (8108-5.6.8)

6’ turnout at dead-end aisles, or other means of vehicle turn around. (8108-5.6.9)

Drive Aisles and Modules. Sized per 8108-5.6.11 and 8108-5.6.12. (8108-5.6.10)
Tandem Parking (8108-5.7)

- No more than 2 cars deep.
- Serves same dwelling.
- No more than 50% of multi-family parking.

Parking area slope: ≤ 5%, except drive aisle and turn around areas ≤ 10%; in direction of drainage ≤ 0.5%; accessible spaces meet ADA standards. (8108-5.8)

Identification of paving surface for all spaces and drive aisles. Surfacing is permanent, durable, all-weather. Pervious and high albedo (light-colored) preferred. Ribbon driveways preferred. (8108-5.9)

If pervious surface used (except in single- and two-family dwellings) surfacing plans document that surfaces are designed for anticipated vehicle weight/traffic and to minimize maintenance problems. (8108-5.9.1)

Spaces clearly marked (aggregate surfaces exempted). (8108-5.10)

Sight distance standards met at driveways; intersection landscaping does not obstruct drivers’ vision; landscaping adjacent to walkways no more than 3’ high. (8108-5.11)

Lighting (8108-5.12)

- Lighting is at least 1 foot-candle if parking area to be used at night.
- Lights programmed to go off at end of working day.
- Light poles located so pose no conflict with car doors/movement or accessible paths of travel; away from existing/planned trees; outside planters except perimeter or strip.
- No lighting spillover onto adjacent residential properties.
- New fixtures (regardless of wattage) full cut-off; new lights in canopies recessed or flush-mounted with flat lenses.
- Trash and recyclables receptacles provided at rate of: 1 for first 20 spaces, 1 for each 80 spaces thereafter. Convenient, high visibility location(s). (8108-5.13)

Conceptual landscape plan submitted with application if landscaping or screening required. See Conceptual Landscape & Screening Plan Checklist on pages 55-56 (8108-5.14.3)

Bicycle Parking Design

Short-term (ST) Bicycle Parking (Racks). Planning Director may approve other designs. (8108-6.1)

- Supports bike by frame in 2 places in upright position.
- Frame and 1 or both wheels can be secured with a U-shaped lock or cable.
- Anchored or immovable.
CHECKLIST: PARKING AREA REQUIREMENTS (cont.)

Notes

- Constructed to resist being cut, disassembled, or detached with manual tools.
- No sharp edges.
- Provides easy access to bicycles.

Long-term (LT) Bicycle Parking. Planning Director may approve other designs. (8108-6.2)

- Covered and secured. Provided by lockers, restricted-access enclosures, check-in facilities or other approved means.

Bicycle Parking Location (8108-6.3)

- Located on-site.
- Provides safe/convenient bicycle access to right-of-way and pedestrian access to main and/or employee entrance.
- Curb ramps installed where appropriate.

Proximity to Main Entrances (8108-6.3.1)

- ST bicycle parking ≤ 100' from main entrance(s) or no farther than nearest non-disabled parking space, whichever is greater
- If > 1 building, or if building has > 1 main entrance, ST bicycle parking distributed to serve all entrances.
- LT bicycle parking ≤ 400' from entrance.
- If racks on walkways, > 4' of unobstructed pathway maintained. (8108-6.3.2)

ST Bicycle Parking Facility Delineation (8108-6.4.1)

- Parking boundaries delineated, such as with striping or fencing.
- Protected by barriers if near roadways, parking areas, or drives.

Bicycle Parking Facility Signage (8108-6.4.2)

- If bicycle parking not visible to approaching bicyclists, conspicuous signs posted.
- Bicycle lockers identified by a sign (min. 1' x 1') listing contact info.

Bicycle Parking Space Dimensions (8108-6.4.3)

- Length: Min. 6'
- Space Between Racks: Min. 2.5'
- Space Between Adjacent Walls/Obstructions: Min. 2.5' of clear space in front of/beside bicycle space
- 4'-wide access aisle beside/between rows of bicycle parking. Locker doors do not encroach onto walkway. (8108-6.4.4)
- Lighting is at least 1 foot-candle at ground level. (8108-6.5)
### Drive Through Facilities (8108-7)

- Queuing Lane (8108-7.1)
  - 12’ wide or as appropriate for turns.
  - Designated with paint, curbs or other appropriate means.
  - Does not interfere with pedestrian access.
  - Signs indicate entrance, exit, and direction of travel. (8108-7.2)
  - Drive-throughs not located between street and building entrance. (8108-7.3)

  _______ Queuing lane capacity (# of vehicles) per table. (8108-7.4.1)

### Loading Areas. (8108-8)

#### Passenger Loading Areas. (8108-8.1)

- # of passenger loading spaces per table. (8108-8.1.1) Provided if > 100 spaces.
  - Located at primary pedestrian entrance.
  - At least 9’ wide.
  - Do not impede circulation.

#### Materials Loading Areas. (8108-8.2)

- # of materials loading spaces per table. (8108-8.2.2) Provided at commercial and industrial land uses that receive/distribute materials.
  - Located on site, outside setbacks, near service entrance, to rear or side of building and away from residential uses.

#### Dimensions. (8108-8.2.3(c))

- 10’ x 30’ x 14’ high for small vehicles
- 12’ x 55’ x 15’ high for large vehicles

#### Industrial developments have 1 driveway that accommodates 48’ wheel track turning radius. (8108-8.2.3(d))

#### Safe Design. (8108-8.2.3(f))

- Design avoids intermixing of trucks, autos, pedestrians and bicyclists.
- Located away from pedestrian pathways.
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 4.2.1-1: Facilitate the safe and efficient movement of persons and goods by encouraging the design, construction, and maintenance of an integrated transportation and circulation system consisting of regional and local roads, bus transit, bike paths, ridesharing, rail transit and freight service, airports and harbors.

Goal 4.2.1-5: Promote measures to reduce vehicle miles traveled and disperse peak traffic to better utilize the existing transportation infrastructure.

Goal 4.2.1-6: Promote the development of a safe, efficient, convenient and economical community, intercommunity and countywide bus transit system.

Goal 4.2.1-8: 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 and consequently vehicular emissions, traffic congestion, energy usage, and ambient noise levels.

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.

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.

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

New land uses must meet all applicable parking requirements, including landscaping requirements.
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

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.
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%.

**Figure 1: Parking Requirements Applicability Flow Chart**

**Change to/Expansion of Existing Land Use**

- More spaces required? → Yes or No
  - Yes: Meets current space requirements? → Yes or No
    - Yes: Entire parking area must comply with Article 8.
    - No: Only new spaces must comply with Article 8 (& must add bike racks).
  - No: No requirements (except must add bike racks).

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

<table>
<thead>
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<th># of existing spaces</th>
<th># of new spaces</th>
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<tbody>
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<td>10% 20% 30% 40%</td>
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<td>20% 27% 33% 40%</td>
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<td>4% 16% 20% 24%</td>
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<tr>
<td>500</td>
<td>0% 0% 1%</td>
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*Only new spaces must comply with Article 8*
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.
Section 8108-3 - General Parking Regulations

Section 8108-3.1
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.

Section 8108-3.2
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.

Section 8108-3.3
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 the parking serves 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.

If there is any question about the safety of pedestrians crossing public roads or rights-of-way, the Ventura County Public Works Agency Transportation Department or CalTrans (depending on which entity has jurisdiction over that road) should be consulted.

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. Setback and height restrictions apply, and fire apparatus access lanes may not be obstructed.

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 coverage like a roof should not be included in building coverage calculations.
Section 8108-3.6
Green Roofs

The installation of green roofs, or roofs planted with vegetation, on canopies or other structures over parking areas/spaces is encouraged. As with solar systems, setback and height restrictions apply, and fire apparatus access lanes may not be obstructed. Canopies or similar structures that include green roofs are included in building coverage calculations.

Green roofs help to reduce the “urban heat island effect” caused in part by the large expanses of pavement found in parking areas. Sec. 8108-3.6
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,
parking requirements should be based on the highest number of employees during the largest shift. If this information is not available at the time of permit approval, other available information should be used to determine the appropriate parking requirement. This could include the gross floor area, type of use, seats or other factors.

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.

**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**
- Square feet: .................................. 24,000
- Employees (max. shift): ..................... 110
- Motor vehicle spaces required, no reduction (1 per 300 sq. ft.): .......... 80
- 5% reduction (80 x 0.05): ..................... 4
- Motor vehicle spaces required after 5% reduction (80 - 4): ................. 76
- Carpool spaces required
  (1 per 35 employees): .................... 3
- Short-term bicycle spaces required
  (3% of required vehicle spaces): ........ 2
- Long-term bicycle spaces required (1 per 30 employees – per Planning Director) ... 4
- Motorcycle spaces required
  (1 per 20 auto spaces): ..................... 4
- Motor vehicle spaces required after motorcycle spaces subtracted (76 - 4): ... 72

**EXAMPLE**

**Multiple Uses**

*What is the total number of required motor vehicle spaces for a project that includes a restaurant and a professional office?*

**Proposed Restaurant**
- Square feet: ................................. 1,200
- Parking spaces required
  (1 per 90 sq. ft.): ............................ 13

**Proposed Office**
- Square feet: ................................. 5,000
- Parking spaces required
  (1 per 300 sq. ft.): ........................... 17

**Total Proposed Project**
- Parking spaces required (17 + 13): ...... 30

**Section 8108-4.2**

**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.
Existing land uses may convert existing automobile spaces to motorcycle spaces at a rate of 1 motorcycle space per 20 automobile spaces. For each 1 required motorcycle space provided, the number of required vehicle spaces is reduced by 1 space.

**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.”

**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**

“The Director may reduce the number of required bicycle parking spaces when the applicant demonstrates that providing the otherwise required bicycle parking spaces is not practical because of the remote project location, or because the nature of the land use precludes the use of bicycle parking spaces. The Director may also defer the requirement to provide bicycle parking spaces, but only if the subject permit includes an enforceable commitment by the property owner to supply such deferred bicycle parking spaces as may be needed in the future.”

One motorcycle parking space must be provided for each 20 automobile spaces. Existing parking areas may be converted to provide motorcycle parking up to this ratio.

Land uses with a high demand for motorcycle parking may, with Director approval, convert automobile spaces to motorcycle spaces if the converted spaces can be converted back to automobile spaces in the future. Sec. 8108-4.2
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 ride-sharing 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, and students. An example of parking shared by a middle school and a church in Ventura is shown.

<table>
<thead>
<tr>
<th>Element</th>
<th>Threshold</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorcycle Spaces</td>
<td>20 vehicle spaces</td>
<td>8108-4.2</td>
</tr>
<tr>
<td>Carpool Spaces</td>
<td>25 employees 35 student spaces</td>
<td>8108-4.5</td>
</tr>
<tr>
<td>Trash and Recycling Receptacles</td>
<td>20 vehicle spaces, 80 spaces thereafter</td>
<td>8108-5.13</td>
</tr>
<tr>
<td>Special Landscape Elements at Entrance</td>
<td>100 vehicle spaces</td>
<td>8108-5.14.4 (a)(4)</td>
</tr>
</tbody>
</table>
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 33.)

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 on storage space for vehicles being serviced in addition to required parking spaces.
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
Parking calculations for lumber and building materials sales uses 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 storage 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 Sales and Services, Temporary
Temporary outdoor sales and services include seasonal sales (such as Christmas tree sales), farmer’s markets, and other temporary outdoor uses. Parking for temporary outdoor sales and services should be determined on a case-by-case basis using considerations such as the type of sale or service, adjacent uses, projected number of customers, and the duration and peak period of the sale or service.

Temporary Outdoor Events
The amount of parking required for Temporary 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% 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.

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**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:** ....2 + 4 = 6

The total required parking for the boarded housing includes 2 spaces for the single-family dwelling and 4 spaces for the rented rooms.
Single-Family Dwelling Units
At least 2 parking spaces for single-family dwelling units must be covered, except on parcels larger than 1 acre located in OS, AE, RA, RE, RO, and TP zones.

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. Parking supply can also be adjusted as part of an overall parking management program or to promote alternative transportation goals.

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

This section outlines some of the common justifications for reducing the number of required motor vehicle parking spaces. Other justifications may be considered by the Director.
8108-4.8.1(a) - Parking Study

A parking study can be prepared to assess the motor vehicle parking needs of a particular use. Parking studies must be prepared by a traffic engineer, transportation planner or other person with similar knowledge of parking demand.

THE CODE

“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 proposed by the project proponent or the Planning Director.

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.
The typical parking reductions for TDM measures vary depending on the type of measure, the characteristics of the project area, and the type of project proposed. Measures that are very effective in some circumstances might be less effective in others.

For instance, locating an office project within 1,500 feet of a transit stop that does not provide regular service during peak commute times may not reduce vehicular travel at all. On the other hand, providing additional bicycle facilities for a restaurant adjacent to a bike path could significantly reduce vehicle trips to the restaurant.

Given this, TDM programs should be considered carefully to determine the appropriate parking reduction for each particular program. Project proponents must demonstrate that the measures included in the TDM program have the potential to reduce parking demand for the proposed project.

**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 employees 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 (www.arb.ca.gov/planning/tsaq/cashout/cashout.htm) 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 or senior housing units, commensurate with the reduced parking demand created by the housing facility.

8108-4.8.1(d) - Drive-through Land Uses
If drive-through users comprise a significant percentage of a land use's customers, the Director may approve a reduction in the required number of parking spaces.

8108-4.8.1(e) - On-street Parking
While on-street parking is generally not considered in off-street parking calculations, there may be cases where available on-street parking spaces (they must be contiguous with the proposed land use's parcels) are important in satisfying required parking spaces. The Director may require approval from the Public Works Agency Transportation Department to ensure any on-street parking will not cause traffic or other problems.

8108-4.8.1(f) - Parking Reserve
For some projects it may be appropriate to defer construction of a portion of the required vehicle parking spaces until a later date. With Planning Director approval, project proponents may provide landscaping in lieu of up to 10 percent (or one space, for smaller projects) of required vehicle parking spaces. This landscaping must be in addition to landscaping provided to meet standard landscaping requirements. Landscaping provided in lieu of parking must meet applicable requirements for landscape design.

Landscaping reserves must be maintained as landscaping and cannot be converted to any other use except vehicle parking spaces. Conversion to vehicle parking may be completed any time at the project owner's discretion, but must be completed if and when the Planning Director requests a conversion.

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.

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%

Providing shuttle services for employees, visitors, or residents may reduce parking demand for some uses. Section 8108-4.8.1(b)(7)
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 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 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.

**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.
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 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 set back.

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

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)
design requirements, and fencing restrictions. These requirements are administered by the Public Works Agency and Watershed Protection District.

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 widen 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.

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 length to no more than 270 feet (about 30 adjacent standard parking spaces).
**Figure 3: Sample Parking Area Layout (Small)**

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. 8108-5.6.9)

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)
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 are not regulated by Public Works Agency standards. To reduce impervious pavement and enhance the pedestrian environment, driveways widths should be minimized when possible. Standard driveway widths are 10 feet, but these may be reduced under special circumstance (such as properties with low levels of traffic). The size and type of vehicles commonly using the driveway should be considered when determining appropriate widths.

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...
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)
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 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.

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. 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.

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

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

**Sec. 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.
Section 8108-5.9
Surfaces

8108-5.9(a)
The surface of parking spaces, aisles, driveways and loading areas must be strong enough to bear the vehicle load, and must prevent generation of dust, mud or loose materials in any weather. Pervious surfaces and light-colored/high-albedo surfaces are encouraged.

THE CODE

“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).”

8108-5.9(b)
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.

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.

8108-5.9(d)
Ribbon driveways outside of the right-of-way may be installed as an alternative to fully paved driveways.

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 less than 5 spaces) must include documentation that the pervious material has been designed to support anticipated vehicle weights.

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.

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.
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.
and traffic volumes and to minimize surface cracking, crumbling, eroding, and other maintenance problems for the pervious surface as well as any adjacent surfaces or structures.

**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.

**Section 8108-5.12**

*Lighting*

**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 to 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.
Trash and recyclables receptacles help minimize litter and keep surface water clean. 1 trash and 1 recyclables receptacle are required for the first 20 spaces, and another set for every 80 spaces thereafter. Sec. 8108-5.14

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 8108-5.14
Trash and Recyclables Receptacles
Providing trash and recyclables receptacles aids with improving water quality by helping prevent refuse from entering the stormwater drainage system. Parking areas with over 20 spaces must provide at least 1 trash and 1 recyclables receptacle, and another set for every 80 spaces thereafter.
Section 8108-5.14
Landscaping and Screening
The landscaping requirements specific to parking areas are contained in this section. Parking areas must also comply with the landscaping requirements in Ventura County’s Landscape Design Criteria (LDC). The LDC requirements are generally those that apply across most land uses, such as requirements for irrigation system design and water conservation.

Section 8108-5.14.1
Purpose
By providing a detailed purpose statement the regulations allow a certain degree of flexibility in the landscape design approval process, which is needed because of the variety of parking area configurations and constraints. Alternative designs should be evaluated against the purpose statement to ensure they meet the overall purpose of the landscaping requirements.

Section 8108-5.14.2
Applicability
The landscaping requirements apply to all parking areas, which by definition have 5 or more spaces, except underground parking structures.

This section includes a thorough explanation of how and when landscaping requirements may be waived or modified by the Planning Director.

THE CODE

“Planning Director Waivers/Modifications

...The Director shall seek a compromise between reducing the amount of required parking and reducing the amount of required landscaping. Wherever possible, at least some landscaping shall be required. In granting modifications, the Director shall prioritize the provision of landscaping as follows:

• First priority: the provision of landscape screening adjacent to streets.

• Second priority: the provision of shade trees.”

When providing interior landscaping is too difficult, such as in cases of significant space constraints, the Planning Director may allow substitutions for interior landscaping. Substitutions must address the original purpose of landscaping.

In addition to the landscaping requirements in the Zoning Ordinance, parking areas must comply with the landscaping requirements in Ventura County’s Landscape Design Criteria.

Landscaping priorities: screening (above), and shading (below).
Interior Landscaping Substitution Examples:
- High-albedo/light-colored surfacing (Mitigates atmospheric heating from dark pavement.)
- Public art (Provides visual relief from expanses of pavement and motor vehicles; creates pleasant pedestrian conditions.)
- Canopies with solar systems on top (Provides shade; solar systems offset increased energy demand caused by atmospheric heating from pavement.)

Section 8108-5.14.3
Landscape Plans
Conceptual landscape plans must be included with project applications and must demonstrate compliance with planter layout and dimension requirements and appropriate plant numbers, size and location. See the Conceptual Parking Area Landscape Plan Checklist on the next page.

Final landscape plans must be approved before issuance of a Zoning Clearance for construction.

A final inspection to confirm that the landscape has been installed according to the approved plan is required before any land use may be inaugurated or occupied.

Section 8108-5.14.4
Perimeter Landscaping and Screening
Perimeter landscape planters are those located on the outside edge of the parking area.

8108-5.14.4(a) · Adjacent to Streets
When parking areas are not visually screened from adjacent streets, such as by buildings, screening is required to buffer the visual impact of the parking area and to block headlight glare.

Planter Width
The minimum width of perimeter planters next to streets is 8’.

Screening Materials and Height
The use of walls or berms for screening is preferred because of their permanence and effectiveness. If vegetation is used, at least half of the shrubs must be 15-gallon in size when installed.
CHECKLIST: PARKING AREA CONCEPTUAL LANDSCAPE AND SCREENING PLAN

Conceptual landscape plans must be submitted as part of the application package. In addition to the landscape plan requirements outlined in the Ventura County Landscape Design Criteria, the following items must be included on conceptual landscape plans for parking areas. This checklist is only meant to be an aid; project applicants should refer to Article 8 of the Non-Coastal Zoning Ordinance for the complete requirements.

Notes

☐ Parking spaces, drive aisles, driveways and pedestrian pathways.
☐ Total number of parking spaces.
☐ Property lines and right-of-ways.
☐ Building outlines – proposed and any existing to be retained.

Parking area landscape planter locations:

☐ adjacent to streets
☐ at ends of parking rows - finger planters
☐ in parking rows – finger planters (1 per 12 adjacent spaces in double-sided rows; 1 per 16 adjacent spaces in single-sided rows)
☐ between finger planters - tree wells (1 per 4 adjacent spaces) or strip planters
☐ side and rear property lines (preferred)

Parking area landscape planter dimensions:

☐ adjacent to streets – min 8’ wide
☐ finger planters – min. 5’ x stall length
☐ tree wells - min. 4’ x 4’
☐ strip planters – min. 4’ wide
☐ stormwater management planters – min. 8’ wide

☐ Indicate all parking spaces that will allow car bumpers to overhang planters.

☐ Calculations showing square footage of each parking area planter and total interior landscaped area (must be 6% of parking area, unless perimeter landscaping is >=10% of parking area).

☐ Any required screening (3’ high if adjacent to streets; materials loading areas, height as needed).

☐ Any required walls (if adjacent to residential).
Notes

Location of required trees:
- 1 tree per 30 linear ft. in perimeter planters adjacent to streets
- 1 tree per 4 adjacent spaces in interior planters
- Trees above flow line in stormwater management planters
- Trees spaced to maximize distance from light poles
- Container size of all required trees.

Location of light poles:
- As far away from trees as possible
- Does not conflict with tree shade
- Not in finger planters, end row planters or tree wells
- Special entrance features if more than 100 spaces
- Walkways or barriers to prevent people from walking through planters, if appropriate.
**Trees and Shrubs**
Trees in perimeter planters adjacent to streets must be spaced no less than 1 every 30 linear feet. Shrubs must be spaced no less than 1 every 5 linear feet, or more if needed for screening.

**Large Projects**
Parking areas with more than 100 parking spaces must have special design elements—such as specimen trees, clusters of larger plants or flower plants—at primary entrances.

**Bus Shelters**
Bus shelters may be located in perimeter planters as long as required trees are not displaced.

**Public Art**
Public art may be substituted for up to 2 required trees.

8108-5.14.4(b) - Adjacent to Residential
A 6’ high masonry perimeter wall is required when parking areas are adjacent to residential land uses in order to block headlight glare and buffer the visual impact of the parking area. The height of the wall must be reduced to 3’ within the front setback of the residential use.

8108-5.14.4(c) - Side and Rear Property Lines
Perimeter planters adjacent to the side and rear property lines should be installed to block the parking area visually from neighboring land uses. Side and rear planters are preferred but not required.

Section 8108-5.14.5
**Interior Landscaping**
Any parking area planter that is not a perimeter planter is considered an interior planter. Parking structures and covered parking are exempt from the interior landscaping requirements specifically, but some requirements may be applied on a case-by-case basis. For example, interior landscaping may still be required in those parts of covered parking areas that receive adequate sunlight.

8108-5.14.5(a) - Amount Required
Parking areas must have 6 percent interior landscaping. This calculation includes everything but the perimeter landscaping. The total interior parking area is computed by adding all areas used for drive aisles, parking spaces and maneuvering within that portion of the site that is devoted to parking and parking circulation. Interior parking areas do not include perimeter landscape planters or entrance driveways. (See the definition for “driveway” in Appendix A. It generally means just that portion in the right-of-way.)

For smaller projects, perimeter landscaping alone can provide sufficient coverage, shading and visual relief. If the perimeter
Figure 6: Perimeter Landscaping and Screening Requirements (Sec. 8108-5.14.4)

Adjacent to Streets
a. Minimum 8' wide perimeter planter.
b. 36” high screen: wall, berm or shrubs (15-gallon container size).
c. Minimum of 1 tree per 30' (or fraction thereof) of perimeter planter.
d. Minimum of 1 shrub per 5' of perimeter planter, or as needed for screening.
e. If >100 parking spaces, concentration of design elements at entrance.
f. Light poles located between trees and outside of tree wells.

Adjacent to Residential Land Uses

  g. 6' tall masonry wall adjacent to residential property.

Side and Rear Property Lines

  h. Preferred: Perimeter planter at side and rear property lines.
Screening is required to buffer the visual impact of the parking area and to block headlight glare. If vegetation is used, at least half of the shrubs must be 15-gallon in size when installed.

Figure 7: Interior Landscaping and Screening Requirements (Sec. 8108-5.14.5)

a. Minimum of 6% of the parking area must be landscaped (excluding perimeter landscaping); unless required perimeter landscaping amounts to more than 10% of the parking area.
b. Minimum of 1 tree per 4 adjacent spaces.
c. Finger planters minimum 5’ wide by length of space.
d. Tree wells minimum 4’ x 4’.
e. Strip planters in front of or between rows of spaces minimum of 4’ wide.
f. Light poles located between trees and outside of finger planters, end row planters or tree wells.

End-of-row finger planters protect parked vehicles from the turning movements of other vehicles.

Finger planters must be at least 5’ wide and as long as the adjacent parking space.
landscaping amounts to 10 percent or more of the parking area, then no other interior landscaping is required.

**8108-5.14.5(b) - Tree Spacing**
The interior landscaping tree requirement is 1 shade tree for every 4 adjacent parking spaces, whether single- or double-sided rows. In most cases, single-sided parking rows face into perimeter landscape planters, where the requirement for 1 tree every 30' applies (rather than 1 tree per 4 adjacent spaces).

Trees must be provided at the same rate per unit of area for motorcycle spaces. The area of a motorcycle space is approximately one-fifth that of an automobile space. Thus 1 shade tree should be provided for every 20 motorcycle parking spaces.

**8108-5.14.5(c) - Interior Planter Dimensions**
Finger planters must measure at least 5' wide by the length of the parking space. Tree well planters must measure at least 4' by 4'. Strip planters must measure at least 4' wide. To count toward required parking area landscaping, stormwater management planters must be at least 8' wide.

**8108-5.14.5(d) - Pedestrian-Oriented Design**
Parking area landscape design must consider pedestrians and where they are likely to walk. For example, if parking rows are oriented parallel to the main building entrance, tree wells would be a better choice than a strip planter between parking rows, as pedestrians will tend to walk through the strip planter to get to the building entrance. Barriers or other means should be used to keep pedestrians out of planters when necessary.

**8108-5.14.5(e) - Preferred Layout**

**Ends of Parking Rows**
To protect parked vehicles, the ends of rows of parking spaces should be separated from drive aisles or driveways by finger planters or sidewalks.

**Double-sided Parking Rows**
In double-sided parking rows, finger planters should be placed every 12 adjacent parking spaces, with 2 shade trees in each planter (one per side). Between the finger planters, tree wells should be spaced every 4 adjacent spaces, or a strip planter containing trees with the same spacing may be used.

**Single-sided Parking Rows**
In single-sided parking rows, finger planters containing 1 shade tree should be placed every 16 adjacent parking spaces. Between the
Most parking areas must have 6 percent interior landscaping.

On single-sided parking rows, strip planters between finger planters should contain at least 1 tree per 4 adjacent spaces.

Most parking areas must have 6 percent interior landscaping.

On single-sided parking rows, strip planters between finger planters should contain at least 1 tree per 4 adjacent spaces.
A study of shade trees in Davis, California found that trees in parking areas reduced surface temperatures of the asphalt by as much as 36°F, temperatures inside the cars by more than 47°F, and fuel-tank temperatures by nearly 7°F.

The Benefits of Trees in Parking Areas

**Trees cool the air and save energy.** Unshaded parking areas are miniature heat islands, where temperatures can be even higher than surrounding areas. Trees cool the air naturally and counter this urban heat island effect in two ways: through water evaporating from the leaves and through direct shade. Buildings shaded by parking area trees need less energy for cooling.

**Trees clean the air.** Tree foliage works as a natural air filter of particulate matter such as dust, micro sized metals and pollutants like ozone, nitrogen oxides, ammonia and sulfur dioxides. In addition, the temperature reduction from shade trees in parking areas lowers the amount of evaporative gasoline emissions and volatilized plastics from parked cars.

**Trees reduce greenhouse gases.** As they grow, trees take carbon dioxide, a greenhouse gas, out of the air and transform it into roots, leaves, bark, flowers and wood. Over the lifetime of a tree, several tons of carbon dioxide are taken up. In addition, by cooling the air and therefore cutting energy use, the production of carbon dioxide at power plants is reduced. Two-thirds of the electricity produced in the U.S. is created by burning a fuel that produces carbon dioxide.

The California Climate Action Team report (2006) recommended planting 5 million trees in cities to reduce 3.5 million metric tons of carbon dioxide. (McPherson, Arborist News, June, 2007)

**Trees reduce stormwater runoff and improve water quality.** Tree canopies and root systems slow and reduce stormwater runoff, flooding and erosion. Trees also help filter water runoff, reducing potential sources of water pollution into our rivers and storm drains.

**Trees prolong pavement life.** The volatile components of asphalt pavement evaporate more slowly in shaded parking areas. The shade not only reduces emissions, but reduces shrinking and cracking so that maintenance intervals can be lengthened.

**Trees provide wildlife habitat.** Just ask a bird.

**Trees beautify and make us feel better.** Shading parking areas makes for a more beautiful and comfortable environment. Studies have even shown that exposure to green spaces reduces stress and the incidence of aggression.
finger planters, tree wells should be spaced every 4 adjacent spaces, or a strip planter containing trees at the same spacing may be used.

**Adjacent to On-Site Buildings**

Parking areas and driveways should be separated from on-site buildings by a sidewalk or a landscaped planter at least 4’ wide.

**Section 8108-5.14.6**

**Stormwater Management Landscaping**

Stormwater management landscaping includes bioretention areas, vegetated drainage swales, tree box filters, dry swales and the like. These landscapes are a very important part of the County’s strategy to manage stormwater and achieve clean water goals.

The purpose of stormwater management landscaping is different from the general purpose of parking area landscaping, and hence the techniques used for each can be significantly different. While berms are often used in parking area landscaping for screening, depressions are used in stormwater management landscaping to retain water; while the use of low water using plants is expected in parking area landscaping, stormwater management landscaping requires plants tolerant of saturated conditions.

Because of these differences in purpose and technique, stormwater management landscaping is not always considered parking area landscaping. This section clarifies when stormwater management landscaping can count toward general parking area landscaping requirements, and outlines the basic design criteria for stormwater management landscapes.

Of particular importance is ensuring that stormwater management landscaping does not compromise the number, type, size, location or health of trees. Trees must be planted above the flow line of stormwater swales and planters with trees must be at least 8’ wide to count toward required parking area landscaping.

Stormwater management landscaping must also be consistent with Ventura County’s Landscape Design Criteria.
Section 8108-5.14.7

Trees

The integration of shade trees is an important part of parking area design. Tree species must be consistent with the requirements in Ventura County’s Landscape Design Criteria. Larger-growing trees are encouraged wherever planter size permits, but trees must be a minimum of 24-inch box size when planted. Trees and light poles should be separated as much as possible to avoid the blocking of light. Trees must be kept trimmed to allow vehicle clearance.

Section 8108-5.14.8

Curbs

Landscape planters must be protected by curbs or wheel stops at least 4" high. The curbs around landscape planters may be used as wheel stops, allowing the car to overhang the planter. Where such a “bumper overhang” is used, the length of the parking space may be reduced by 2'. Because this can reduce the total amount of impervious surface in a parking area (when impervious pavement is used), landscape planter bumper overhangs are encouraged.

Any plants or landscape materials within the 2' bumper overhang may not extend more than 2" above the 4" curb. To protect sprinklers, they should be placed outside of the bumper overhang or aligned with the parking space stripe so they are out of range of car bumpers.

Curbs around stormwater management landscape planters may contain curb cuts to allow stormwater to pass into the planter.

Section 8108-5.14.9

Materials Loading Area Screening

Materials loading areas must be visually screened from adjacent streets and residential land uses. If this required screening is not provided by a building or structure, a screen composed of a solid wall and plant material must be provided. Plant material may be used as the main screening element only if a minimum of 50 percent of the plants are of 15-gallon can size when planted, the rest are of 5-gallon can size, and the plants form a dense hedge.

Trees must be a minimum of 24-inch box size when planted.
Figure 9: Bumper Overhangs

a. 2' of a parking space may overhang a landscape planter and counts toward the required length of the parking space. (Sec. 8108-5.6.3(a))

b. The concrete curb around landscape planters may function as the wheel stop. (Sec. 8108-5.6.3)

c. Stormwater management planters with trees must be a minimum of 8' wide (inclusive of bumper overhang). (Sec. 8108-5.14.6)
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 provide 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.

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.
Unacceptable Bike Rack Designs

Acceptable Bike Rack Designs
**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.
Section 8108-6.4

Layout

Short-term bicycle parking facilities must conform to the layout criteria in the following sections. The layout of long-term facilities is approved on a case-by-case basis.

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.

Figure 10: Bicycle Parking Area Layout
(Sec. 8108-6.4.4)

a. Bicycle parking spaces minimum 6' long.
b. Minimum 2' 6" space between racks.
c. Minimum 2' 6" between rack end and perpendicular wall.
d. Minimum 2' 6" between rack and parallel wall.
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 8108-6.3**
**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**
**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.
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>
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</tr>
<tr>
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<tr>
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<td>150,000 and over</td>
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</table>

Hospitals & Educational Land Uses

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<th>Gross Floor Area (sq. ft.)</th>
<th>Loading Spaces Required</th>
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<tr>
<td>50,001-100,000</td>
<td>2</td>
</tr>
<tr>
<td>100,000 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>0-15,000</td>
<td>1</td>
</tr>
</tbody>
</table>
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.

Stormwater Management Landscaping – Landscape features that make use of vegetation, land forms, soil or filtering media to provide retention, treatment, evapotranspiration, or infiltration of stormwater. Examples include bioretention areas, rain gardens, vegetated drainage swales, vegetated buffer strips, tree box filters, infiltration trenches, and dry swales.
**APPENDIX B**

**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.

Again, you will need to use your best judgment to decide how much to scale down each use on its “off” day. For example, an office might use only 10% of its parking on a weekend, but 100% on a weekday. Therefore, for the weekend analysis you should use the reduced 10% value as a starting point. The Urban Land Institute's (ULI) *Shared Parking* handbook can offer guidance on this.

**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.

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 *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.
### 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 27**

#### Total Required Parking Spaces Without Sharing

14 + 11 + 27 = 52

#### Total Required Parking Spaces With Sharing

Total = 41

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Maximum Shared Parking Demand = 39
### Ventura County Parking Design Guidelines

**Recommended Time-of-Day Factors for Weekdays**

| Land Use | User | 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. | 11 p.m. | Midnight |
|----------|------|--------|--------|--------|--------|---------|---------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Shopping Center - Typical Customer | 1% | 5% | 15% | 35% | 65% | 85% | 95% | 100% | 95% | 90% | 90% | 95% | 95% | 95% | 80% | 50% | 30% | 10% | - |
| Peak December Customer | 1% | 5% | 15% | 30% | 55% | 75% | 90% | 100% | 100% | 95% | 85% | 80% | 75% | 65% | 50% | 30% | 10% | - |
| Late December Customer | 1% | 5% | 10% | 20% | 40% | 65% | 90% | 100% | 100% | 95% | 85% | 70% | 55% | 40% | 25% | 15% | 5% | - |
| Employee | 10% | 15% | 40% | 75% | 85% | 95% | 100% | 100% | 100% | 95% | 95% | 95% | 90% | 75% | 40% | 15% | - |
| Fine/Casual Dining Customer | - | - | - | - | - | 15% | 40% | 75% | 75% | 65% | 40% | 50% | 75% | 95% | 100% | 100% | 100% | 90% | 75% | 25% |
| Family Restaurant Customer | 1% | 5% | 10% | 20% | 50% | 90% | 90% | 100% | 95% | 90% | 85% | 75% | 65% | 50% | 30% | 20% | 10% | 5% | - |
| Fast Food Employee | 25% | 50% | 60% | 75% | 85% | 90% | 100% | 100% | 100% | 95% | 90% | 85% | 80% | 75% | 65% | 50% | 30% | 20% | 10% | 5% |
| Night Club Customer | - | - | - | - | - | 20% | 45% | 55% | 45% | 35% | 25% | 15% | 10% | 5% | - | - | - | - | - | - |
| Cinplex - Typical Customer | - | - | - | - | - | 20% | 45% | 55% | 55% | 60% | 65% | 70% | 75% | 70% | 60% | 50% | 40% | 30% | 20% | 10% |
| Late December Customer | - | - | - | - | - | 35% | 60% | 75% | 80% | 80% | 80% | 70% | 70% | 60% | 60% | 50% | 40% | 30% | 20% | 10% |
| Cineplex - with Matinee Customer | - | - | - | - | - | 25% | 50% | 75% | 100% | - | - | - | - | - | - | - | - | - | - |
| Arena (two shows) Employee | - | - | - | - | - | 50% | 60% | 60% | 55% | 45% | 35% | 25% | 10% | 5% | - | - | - | - | - | - |
| Stadium (1 p.m. start; see weekday for evening game) Customer | - | - | - | - | - | 50% | 60% | 60% | 60% | 55% | 45% | 35% | 25% | 10% | 5% | - | - | - | - | - |
| Health Club Customer | 70% | 40% | 40% | 70% | 70% | 60% | 60% | 60% | 70% | 70% | 70% | 60% | 60% | 50% | 40% | 30% | 20% | 10% | - |
| Convention Center Visitor | - | - | - | - | - | 50% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 90% | 80% | 70% | 50% | 40% | 20% | 10% |
| Residential Guest | 1% | 10% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% |
| Residential Resident | - | - | - | - | - | 50% | 90% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% |
| Residential Employee | 5% | 30% | 90% | 90% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 75% | 50% | 20% | 20% | - |
| Office Visitor | - | - | - | - | - | 45% | 45% | 45% | 45% | 45% | 45% | 45% | 45% | 45% | 45% | 45% | 45% | 45% | 45% | 45% |
| Office Employee | 3% | 30% | 75% | 95% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Medical/Dental Office Visitor | - | - | - | - | - | 30% | 90% | 90% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Bank Customer | - | - | - | - | - | 50% | 90% | 90% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Bank Employee | - | - | - | - | - | 60% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Source: ULI Shared Parking, Second Edition
| Land Use | User | 6 a.m. | 7 a.m. | 8 a.m. | 9 a.m. | 10 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. | 11 p.m. | Midnight |
|----------|------|--------|--------|--------|--------|---------|------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|----------|
| Shopping Center - Typical | Customer | 1% | 5% | 10% | 30% | 50% | 65% | 80% | 90% | 100% | 100% | 95% | 90% | 80% | 75% | 65% | 50% | 35% | 15% | - |
| Peak December | Customer | 1% | 5% | 10% | 35% | 60% | 70% | 85% | 95% | 100% | 100% | 95% | 90% | 80% | 75% | 65% | 50% | 35% | 15% | - |
| Late December | Customer | 1% | 5% | 10% | 20% | 40% | 60% | 80% | 100% | 100% | 100% | 95% | 90% | 80% | 75% | 65% | 50% | 30% | 20% | 10% | - |
| Fine/Casual Dining | Customer | 1% | 5% | 10% | 20% | 30% | 60% | 75% | 95% | 100% | 100% | 100% | 95% | 90% | 80% | 75% | 65% | 45% | 15% | - |
| Family Restaurant | Customer | 10% | 25% | 45% | 70% | 90% | 90% | 100% | 100% | 100% | 100% | 95% | 90% | 80% | 75% | 65% | 50% | 35% | 15% | - |
| Fast Food | Customer | 5% | 10% | 20% | 30% | 50% | 75% | 90% | 100% | 100% | 100% | 100% | 90% | 80% | 70% | 60% | 50% | 30% | 20% | 10% | - |
| Employee | - | 20% | 30% | 60% | 75% | 75% | 75% | 75% | 75% | 75% | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 85% | 50% |
| Night Club | Customer | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 25% | 50% | 75% | 100% | 100% | 100% |
| Employee | - | - | - | 5% | 5% | 5% | 10% | 10% | 10% | 10% | 20% | 45% | 70% | 100% | 100% | 100% | 100% | 100% | 100% | 20% | 20% |
| Cinema - Typical | Customer | - | - | - | - | - | - | - | 20% | 45% | 55% | 55% | 55% | 60% | 60% | 80% | 100% | 100% | 100% | 85% | 50% |
| Late December | Customer | - | - | - | - | - | - | - | 35% | 60% | 75% | 80% | 80% | 80% | 70% | 80% | 100% | 100% | 100% | 85% | 70% |
| Fine/Casual Dining | Customer | - | - | - | - | - | - | - | 50% | 80% | 60% | 75% | 75% | 75% | 75% | 100% | 100% | 100% | 100% | 100% |
| Family Restaurant | Customer | 10% | 25% | 45% | 70% | 90% | 90% | 100% | 100% | 100% | 100% | 100% | 95% | 90% | 80% | 75% | 65% | 50% | 35% | 15% | - |
| Fast Food | Customer | 5% | 10% | 20% | 30% | 50% | 75% | 90% | 100% | 100% | 100% | 100% | 90% | 80% | 70% | 60% | 50% | 30% | 20% | 10% | - |
| Employee | - | 20% | 30% | 60% | 75% | 75% | 75% | 75% | 75% | 75% | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 85% | 50% |
| Night Club | Customer | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 25% | 50% | 75% | 100% | 100% | 100% |
| Employee | - | - | - | 5% | 5% | 5% | 10% | 10% | 10% | 10% | 20% | 45% | 70% | 100% | 100% | 100% | 100% | 100% | 100% | 20% | 20% |
| Performing Arts Theater | Customer | - | - | 1% | 1% | 1% | 1% | 1% | 1% | 17% | 67% | 67% | 1% | 1% | 1% | 25% | 100% | 100% | - | - | - |
| Arena - no matinee | Customer | - | - | 1% | 1% | 1% | 1% | 1% | 1% | 25% | 95% | 95% | 81% | 1% | 1% | 25% | 100% | 100% | - | - | - |
| Stadium (8 p.m. start) | Customer | - | 1% | 1% | 5% | 5% | 50% | 100% | 100% | 85% | 25% | - | - | - | - | - | - | - | - | - |
| Health Club | Customer | 80% | 45% | 35% | 50% | 35% | 50% | 50% | 30% | 25% | 30% | 55% | 100% | 95% | 60% | 30% | 10% | 1% | - | - |
| Employee | 50% | 50% | 50% | 50% | 50% | 50% | 50% | 50% | 50% | 50% | 50% | 50% | 50% | 50% | 100% | 75% | 50% | 20% | 20% | - |
| Convention Center | Visitor | - | - | 50% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 95% | 80% | 50% | 30% | 10% | - | - | - |
| Office Employee | - | 20% | 60% | 80% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 95% | 80% | 40% | 20% | 10% | 5% | - | - | - |
| Medical/Dental Office | Visitor | - | 20% | 60% | 80% | 90% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 80% | 60% | 40% | 20% | 10% | 5% | - | - | - |
| Bank | Customer | - | - | 25% | 40% | 75% | 100% | 90% | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Employee | - | - | 90% | 100% | 100% | 100% | 100% | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Source: ULI Shared Parking , Second Edition