MEMORANDUM

ACME BRICKYARD PARKING STUDY

PROJECT #23-008734.00

10375 Park Meadows Drive, Suite 425
Lone Tree, CO 80124

303.694.6622
walkerconsultants.com

DATE:	August 22, 2025
TO:	Mr. Tony DeSimone & Mr. Tucker Bennett
ORGANIZATION:	Confluence Companies, LLC
ADDRESS:	430 Indiana St., Suite 200
CITY/STATE:	Golden, CO 80401
FROM:	Drew Willsey, AICP
PROJECT NAME:	Parking Study Services for Acme Brickyard
PROJECT NUMBER:	23-008734.00

KEY FINDINGS

- The Client is proposing a mixed-use development just west of downtown Castle Rock.
- The Client, as of August 22, 2025, is proposing development, at full buildout, consisting of:
    - 384 multi-family residential dwelling units.
        - 384 apartment dwelling units.
    - 1 business-orientated hotel.
        - 123 hotel rooms.
        - 6,000 square feet of hotel conference space (performance venue with about 300 seats, all of which are non-fixed).
    - 22,900 square feet (about 723 seats) of fine/casual restaurant dining space.
    - 1,500 square feet of market and 15,000 square feet of supermarket space.
    - A 145,000 square foot Sports Development Center.
    - A 60,000 square foot “traditional” bowling alley.
    - 7,000 square feet of general retail space.
    - 56,000 square feet of office space.
        - 25,000 square feet of traditional office space.
        - 31,000 square feet of medical office space.
- The Client retained Walker Consultants (“Walker”) to conduct a shared parking study to determine parking needs for the proposed development.
    - Walker is a parking and transportation planning, management, and design firm in operation since 1965.
- According to minimum parking requirements by use as a function of traditional zoning, Walker calculated that approximately 2,312 (rounded up) spaces would be required for the site zoning as proposed at buildout.
    - 1,544 spaces total would be required for all non-commercial uses.
        - These uses comprise all uses other than the multi-family residential use, including the hotel, office, bowling, and civic use (the Sports Development Center).
    - 768 spaces total would be required for all residential dwelling units (under the Municipal Code requirement of 2.00 per unit).
    - These parking requirements do not consider any joint use, or shared use, of parking amongst the component land uses, nor do they consider factors such as internal capture and mode split.

- Because the parking requirements under tradition zoning do not consider any joint use, or factors such as internal capture and mode split, the Client has been in negotiation with the Town throughout the planning process to submit a Parking Plan that factors in joint use, or shared use, as well as internal capture and mode split, in order to result in a reduced number of physical spaces provided while ensuring that peak parking needs are being satisfied for all uses during typical peak periods.
    - This includes ensuring that minimum requirements under the traditional zoning are being satisfied for the multi-family and hotel uses during the times when parking demand for those uses is at its highest.
- As a dense, mixed-use development, parking supply for many of the land uses proposed could be shared in order to maximize efficiency and ensure that the parking supply is being well used while still accommodating peak parking demand loads.
    - Sharing of parking could occur for each use outside of peak times and/or outside estimated hours of operation.
- To calculate optimized parking needs for the site, assuming the maximum land use intensity values described above, Walker used its Shared Parking Model, which is a parking demand model that takes into account parking demand for more than 45 different land uses; the availability and use of alternative modes of transportation; captive market effects; and daily, hourly, and seasonal variations for all planned land uses.
    - The intent of the SPM is to design a parking supply for the busiest hour of the year, busiest day of the year, and busiest month of the year, at an 85th percentile level relative to similar properties and under typical conditions.
        - The SPM examines parking demand for a typical (85th percentile) peak weekday as well as a typical (85th percentile) peak weekend day, with the number of physical spaces needed for the system ultimately being determined by whichever day type (peak weekday or peak weekend) results in the greatest parking need.
    - Data points used to determine base ratios for the land uses provided in the SPM are primarily sourced from typical, suburban, auto-orientated development at low or mid densities.
        - Low densities are typically defined as buildings with up to 3 levels.
        - Mid densities are typically defined as buildings with between 3 and 10 levels.
    - Conservative adjustment values for captivity were made where appropriate based on previous experience with mixed-use developments in suburban contexts (Walker made modest, in percentage terms, adjustments down to account for internal capture for most uses).
    - Modest adjustments for mode split were made that are based on auto ownership and other Census data available for the Town of Castle Rock and the surrounding region.
        - Mode split adjustments were not made as a function of transit as Castle Rock is located outside the boundaries of the Regional Transportation District (RTD).
- After determining appropriate baseline parking demand ratios for unique land uses not in the SPM, and making customized adjustments for mode split and captivity for all land uses, Walker projects the following maximum parking supplies required to accommodate typical peak demand loads for the proposed maximum programming:
    - Weekday overall peak parking need, at 6 PM in December, is projected to be 1,466 spaces at buildout (rounded).

  - Weekend/absolute overall peak parking need, at 1 PM in December, **is projected to be 1,521 physical spaces at buildout (rounded).**
    - This is 791 spaces fewer than Town code under traditional zoning with no joint use or other allowances or reductions made for any reason.
    - In Walker's opinion, traditional Town requirements, with no joint use or reductions made for any reason, would therefore result in an overall parking supply that is unnecessarily high, with significant, unused parking supply, even during peak periods.
- To determine parking needs for the planned Sports Development Center (208 spaces on weekdays and 447 spaces on weekends), Walker used and assumed ratios and parking needs figures that were determined from analysis by a separate parking study, and that were accepted by the Town, that analyzed typical activity and tournament activity scenarios for the Sports Development Center.
  - Figures from the recommended "build-to" scenario provided in that study were used here for a typical weekday and a tournament weekend.
  - Peak activity was assumed, based on approved supply figures, to occur during the early evening on weekdays and during late mornings/early afternoons on weekends.
- Based on calculated peak parking needs within a shared or joint parking use model, Walker determined a set of proposed ratios for each component land use based on the systemwide overall projected peak.
  - Walker determined that, during the weekend systemwide projected peak, a build-to supply of 1,521 physical, individual spaces with parking supply sharing amongst the component uses is approximately equivalent to providing 2,068 physical spaces if the needs of each component land use were considered separately and severally, with no shared or joint use.
    - This figure assumes a ratio of 2.00 spaces per dwelling unit and 1.20 spaces per hotel room are provided and available during residential and hotel peak times, which occur overnight when other uses do not generate significant parking demand.
    - This figure is 244 spaces lower than the Town requirement with no joint use or reductions made.
  - Proposed ratios are based on the total maximum available parking supply possible for each land use at each use's peak time(s), when the maximum supply would be needed and required.
  - The difference between projected, actual parking needs ratios per land use under a shared parking model and the proposed ratios constitute the total pool of available or potentially available parking supplies/ratios for other uses during the peak systemwide time.
    - Such spaces, due to their ability to be shared during the peak time with at least one other use, can effectively be "double counted" in order to achieve both proposed ratios per land use as well as count towards the number of physical parking spaces proposed.
    - This model ensures that the proposed parking spaces and parking supply ratios per land use would be able to provide up to the full proposed ratio during individual peak times for each component land use, with some spaces available to be shared by other uses during the individual respective off-peak times when some spaces may be available for sharing.
  - The Client has indicated that all residential apartment parking is to be provided "bundled" at no additional charge to renters.
  - Along Prairie Hawk Drive, approximately 93 on-street parking spaces will be provided to act as "overflow" parking for the proposed development.

        - These spaces could provide "overflow" capacity during the largest tournaments at the Sports Center or during any other time when they may be needed.
- The Town will reserve the right to prohibit Sports Development Center spaces for shared use by other component land uses during certain Town events.
    - In Walker's opinion, even the reservation of such spaces during such events would likely not result in significantly increased parking needs above what has been projected herein.
        - This is because Sports Development Center parking demand is already by far the most significant driver of systemwide demand during the project systemwide peak.
        - Also, there would likely be an even higher captive adjustment for commercial uses than what has been modeled herein during such events, as an even greater share of non-commercial parking demand would likely be associated with captive Sports Development Center users and visitors than on a typical peak day.
- Projected parking demand and Town requirements by land use and development phase have been provided using the Town's joint-use parking tables in the Appendix (three phases shown).

INTRODUCTION

Confluence Companies (the "Client") and its architect, Craine Architecture, are in the planning stages for the zoning of a large mixed-use development in Castle Rock called The Brickyard.

Primary non-residential uses for the development are planned to consist of general retail space, a small food market, fast/casual restaurant space, a hotel with conference space, general office space, medical office space, and a large recreational facility, or Sports Development Center. The Sports Development Center is envisioned to serve as both a recreational center for public use as well as a multi-use sports venue to host basketball, volleyball, and other tournaments for public schools in Castle Rock and surrounding areas.

In addition to the non-commercial uses, 384 multi-family apartment dwelling units are planned as of Aug. 2025.

The Brickyard site is located directly west of downtown Castle Rock, across the 25 Freeway. The site is bordered approximately by Plum Creek Parkway to the south, Prairie Hawk Drive to the east, Topeka Way to the north, and right-of-way for a future Atchison Way extension to the west. At buildout, it will be possible to access the site from both Wolfensberger Road, via Prairie Hawk Drive, as well as from Plum Creek Parkway via the extended Atchison Way.

For the Sports Development Center, the Client is planning to provide around 447 parking spaces, which equates to a ratio of about 3.26 spaces per 1,000 square feet. This planned supply is based on the results of a separate, detailed study that was conducted to determine and quantify parking needs for the Sports Development Center. In this study, it was determined that total peak parking needs would equal about 447 spaces, or a ratio of 3.08, on a typical weekend late morning/early afternoon.

It is Walker's understanding that this study, and associated peak parking need and proposed supply, have been accepted by the Town Parks & Recreation Department. Walker notes that the Town will reserve the right to prohibit Sports Development spaces for shared use by other component land uses during certain Town events.

For all planned residential dwelling units, the Client is planning to provide 2 spaces per unit, for both multi-family apartment units as well as town home units. This ratio is consistent with the increased parking requirements for multi-family developments that was approved by the Town Council in Summer 2023. For the planned town home units, the Client is planning to provide the required parking as tuck-under or garage parking within each town home unit. Outside of those uses, the planned parking supply is still in the process of being determined by the Client.

As of this writing, it is anticipated that all required parking will be provided in the form of mostly surface parking with some garage parking. However, about 93 on-street parking spaces will also be constructed along Prairie Hawk Drive that would be available for general public use for the Brickyard, in addition to the proposed off-street parking supply.

Residential parking demand will be accommodated with a combination of self-contained garage, tuck-under, and surface parking located on-site for each multi-family residential building planned. The Client has indicated that all residential apartment parking is to be provided "bundled" at no additional charge to renters. **Any fees for residential parking spaces will be included in that total cost of rent and will not be assessed for residents as a separate fee or as an amenity that needs to be purchased or leased separately.**

Walker Consultants ("Walker") has been retained to conduct an analysis of parking needs for the proposed development, as well as provide potential strategies for transportation demand management, if needed, that could support more effective operation of the parking system for the development.

This is the 11th issuance of this memo that was initially issued in October 2022, in response to ongoing dialogue with Town planning staff and amendments and continued refinement to the proposed land use mix and respective intensities proposed by the Client for this development, as well as ongoing changes in Town parking requirements.

CURRENT TOWN REQUIREMENT

The proposed development will likely be zoned as part of the Chapter 17.32 of the Castle Rock Municipal Code, as amended, provides the authority for the Town to establish custom zoning regulations for a development through a Planned Development Plan, or PD. As of this writing, the Client is petitioning for the establishment of such a planned development under Town Code. As such, the Client is petitioning to establish custom parking requirements to be established for the development under that authority.

As part of the custom zoning, provisions will be established that allow for joint use of some of the parking supply, as allowed under Section 17.54.060 of the Municipal Code.

BUILDOUT REQUIREMENT UNDER TRADITIONAL ZONING WITH NO JOINT USE

Figure 1 below provides detailed buildout programming for all the site's planned non-residential land uses, as specified in the latest programming documents provided to Walker by the Client, along with corresponding parking minimum requirements by land use for the land use that most closely corresponds to the planned use as they would be calculated under the Town's traditional zoning, without any reductions or exceptions, outside of a PD.

Figure 1: Proposed Buildout Programming & Commercial Parking Requirements by Code (Traditional Zoning)

Proposed Programming					Current Town Requirement (Assuming Individual, Separate Uses with No Joint Use of Parking and No Planned Development)			
Land Use Category	**Type of Unit/Specific Land Use Type**		**Quantity**	**per Unit**	**Use Category Description (Table 64-1 of Castle Rock Municipal Code)**	**Ratio**	**per Unit**	**Number of Spaces Required**
Hotel	Guest Rooms[1]		123	Keys or Rooms	Hotel, motel and bed and breakfast establishment	1.2	Guest Room	148
	Conference Space[2,3,4]		6,000	Square Feet	Places of public assembly	5	1,000 Square Feet	30
			300	Non-Fixed Seats		1	3 Fixed Seats (No Requirement for Non-Fixed Seats)	0
							Sub-Total (Hotel)	**178**
Commercial	All Food & Beverage Space	Restaurant (Fine / Casual Dining)[5]	22,900	Square Feet	Full-service, low turnover	12	1,000 Square Feet	275
			723	Seats		1	3 Seats	
		Restaurant (Fast Casual / Fast Food)[5,6]	0	Square Feet	Fast food, family, high turnover	10	1,000 Square Feet	0
		Market[7]	1,500	Square Feet	Market - supermarket	5	1,000 Square Feet	8
		Supermarket	15,000	Square Feet	Market - supermarket	5	1,000 Square Feet	75
		Sub-Total (All Food & Beverage Space)	**24,400**	**Square Feet**			**Sub-Total (All Food & Beverage Space)**	**357**
	General Retail		7,000	Square Feet	Retail, personal service, repair-oriented use	5	1,000 Square Feet	35
	All Office Space	General Office	25,000	Square Feet	General office facility	4	1,000 Square Feet	100
		Medical / Dental Office	31,000	Square Feet	Medical office and clinic	5	1,000 Square Feet	155
		Sub-Total (All Office Space)	**56,000**	**Square Feet**			**Sub-Total (All Office Space)**	**255**
	Bowling Alley	Lanes[8]	62	Lanes	Bowling	2	Lane	124
		Employees[9]	60,000	Square Feet		1	Employee on Maximum Shift	14
							Sub-Total (Bowling Alley)	**138**
							Sub-Total (Commercial)	**785**
Civic	Sports Development Center		145,000	Square Feet	Health club and sports instruction facility	4	1,000 Square Feet	580
							Total (All)	**1,544**

[1] Assuming no standalone accessory uses.

[2] "Places of public assembly" appears to be nearest land use described in Town code.

[3] Requirement also specifies 1 space for each 3 fixed seats in the main assembly area. Assuming no fixed seats or other additional uses.

[4] Seat capacity of approximately 300 reported by Client as of August 2025.

[5] Walker estimated number of seats proportionately assuming 60% of total square feet dedicated to dining room space and assuming an average 13.5 square feet per diner for fast food space and 19 space feet per diner for fine dining space.

[6] Assuming no drive-thru / stacking spaces. Specifies that requirement is per square feet or per 3 seats, "whichever provides the most parking." Assuming that per square feet provides the most parking.

[7] No minimum size specified for supermarket vs. convenience store; requirement for "market - convenience" specifies 5 per 1,000 plus 1 space per employee; requirement for "market - supermarket" has no employee requirement.

[8] Client reported a maximum possible of 62 lanes.

[9] Assuming 14 employees on maximum shift based on employee parking ratios derived in Walker's Shared Parking Model

Currently, without any reductions or variances and assuming the ratio requirements shown above for the unlisted specific land uses as specified in the project matrix, Walker calculates that a total of 1,544 (rounded) parking spaces would be required for the planned non-commercial space, including the Sports Development Center, if it were planned under traditional zoning.

Figure 2 below provides detailed buildout programming for all the site's planned residential land uses and associated parking supply requirement, as it would be calculated under traditional zoning with no joint use. Note that the Client specified to Walker that it is now assuming a unit mix, by number of bedrooms, of about 5% studio units, 45% 1-bedroom units, 45% 2-bedroom units, and 5% 3-bedroom units. For purposes of this model, Walker multiplied the total planned number of units, as specified in the land use programming provided, by the given percentages for all planned apartment units. These assumed percentages are shown in orange.

It should be noted that the Town recently updated its minimum requirements, under traditional zoning, for all multi-family residential dwelling units to 2 per unit, regardless of the number of bedrooms.

Figure 2: Proposed Buildout Programming & Residential Parking Requirements by Code (Traditional Zoning)

Proposed Programming					Town Requirement (Assuming Individual Uses and No Joint Use of Parking & No Planned Development)			
Type of Unit	Assumed Percent Distribution of Unit Type	Unit Type	Quantity	per Unit	Use Category Description (Table 64-1 of Castle Rock Municipal Code)	Ratio	per Unit	Number of Spaces Required Before Reductions
Multi-family Apartments	5%	Studio	19	Dwelling Units	Multifamily - Downtown Overlay District	2.00	per Dwelling Unit	38
	45%	1 Bedroom	173			2.00		346
	45%	2 Bedrooms	173			2.00		346
	5%	3 + Bedrooms	19			2.00		38
		Sub-Total	**384**				**Sub-Total**	**768**
							Total Requirement (Residential)	**768**

Currently, assuming a requirement ratio of 2.00 spaces per unit for all apartment and town home units, Walker calculates that a total of approximately 768 spaces would be required for the planned residential units.

As of this writing, no town home units are being planned.

PROJECTED PARKING NEED AT BUILDOUT (ASSUMING JOINT USE OF PARKING)

WALKER'S SHARED PARKING MODEL

Shared parking methodology was developed in the 1980s and has been a widely accepted industry standard for rightsizing parking facilities over the past 30+ years. Adopted by cities throughout the U.S. and codified in zoning ordinances as an accepted practice, shared parking is endorsed by the Urban Land Institute (ULI), the American Planning Association (APA), the National Parking Association (NPA), and International Council of Shopping Centers (ICSC), as an acceptable method of parking planning and management.

Shared parking allows for the sharing of parking spaces among uses in a mixed-use environment. Generally, it is defined as the ability to use the same parking resource by multiple nearby or adjacent land uses without encroachment. Walker's Shared Parking Model takes into account parking demand for more than 45 different land uses; the availability and use of alternative modes of transportation; captive market effects[1]; and daily, hourly, and seasonal variations. In the case of this project, a shared parking analysis recognizes the interrelationship of parking among employees, visitors, customers, and residents. A shared parking model generates 456 parking demand computations as follows:

- 19 hours during a day, beginning at 6 a.m. and concluding at 1 a.m.
- 2 days per week, a weekday and a weekend day
- 12 months of the year
- 19 x 2 x 12 = 456 different calculations

The parking need for the modeled land use mix is derived based on the highest figure generated from these 456 computations. Therefore, the intent is to design for the busiest hour of the year, busiest day of the year, and busiest month of the year, at an 85th percentile level relative to similar properties and under typical conditions.

A shared parking analysis begins first by taking the land use quantities of the Project (i.e., square footage of office space, number of hotel rooms, number of dwelling units) and multiplying by a base parking demand ratio and monthly and hourly adjustment factors. All base ratios and hourly and monthly adjustments are industry standards that are based on thousands of parking occupancy studies, vetted by leading parking consultants and real estate professionals, and documented within the Third Edition of ULI/ICSC's *Shared Parking* and the Institute of Transportation Engineers (ITE) Fifth Edition of *Parking Generation*.

Walker, as the consultant for this particular study and in accordance with standard shared-parking methodology, applies two additional adjustments to the base parking demand ratios, one to reflect an estimate of the local transportation modal split (called the driving ratio) and another to account for the best estimate of captive market effects[2] (called the non-captive ratio). These will all be described in more detail in the sections to follow.

Figure 3 provides an illustrative view of the steps involved in the shared parking analysis.

[1] Recognition of a user group already on site for another primary purpose and not generating incremental parking demand for an accessory use. For example, a sandwich shop located in an office tower generates very little, if any, outside parking demand. Since the parking demand for the office tower tenants has already been accounted for, to avoid double counting, a non-captive adjustment factor is applied to the parking demand calculation for the sandwich shop. In this extreme example, the non-captive ratio may be 0 percent.

[2] Captive market means attendees who are on-site for more than one reason and are not creating additive parking demand.

Figure 3: Steps of Shared Parking Analysis

Land Use Units (Number of rooms, square footage, etc.)	X	Standard or Base Parking Generation Ratio	X	Monthly Factor	X	Hourly Factor	X	Driving Ratio	X	Non-Captive Ratio	=	TOTAL

For most land uses, shared parking is based on the 85th percentile of peak-hour observations, a standard espoused by the ITE, the NPA's Parking Consultants Council, the International Parking and Mobility Institute, and renowned parking planners. This 85th percentile is a significant and high threshold to meet in terms of supplying parking capacity in that it is provides a parking supply that will not be needed by a majority of developments.

The key goal of a shared parking analysis is to find the balance between providing adequate parking to support a development from a commercial and operational standpoint and protect the interests of neighboring property owners, while minimizing the negative aspects of excessive land area or resources devoted to parking. The ultimate goal of a shared parking analysis is to find a peak period, reasonably predictable worst-case scenario, or design day condition.

PEAK AND OFF-PEAK TIMES BY SELECTED LAND USE

During the typical month, Walker has determined the expected individual peak activity times - when peak parking demand loads are typically expected to occur - for each of the proposed component land uses for the Brickyards. **Figures 4 and 5** below show expected peak parking demand times, along with the estimated hours of operation, for each component land use on weekdays and weekends respectively.

Figure 4: Peak Parking Demand Times and Estimated Hours of Operation by Land Use (Weekdays)

Land Use	Estimated Hours of Operation	Peak Time(s)
Retail	10 AM - 7 PM	1 PM
Market & Supermarket	9 AM - 9 PM	4 PM
Fine Dining	12 PM - 10 PM	7 - 9 PM
Fast Casual	11 AM - 9 PM	2 PM
Hotel	24/7	Overnight
Conference	N/A	12 - 4 PM
Residential	24/7	Overnight
Office	8 AM - 5 PM	10 - 11 AM
CRSC*	7 AM - 10 PM	7 - 8 PM
Bowling	9 AM - 11 PM	8 PM

Figure 5: Peak Parking Demand Times and Estimated Hours of Operation by Land Use (Weekdays)

Land Use	Estimated Hours of Operation	Peak Time(s)
Retail	10 AM - 7 PM	1 PM
Market & Supermarket	9 AM - 9 PM	4 PM
Fine Dining	12 PM - 10 PM	7 - 9 PM
Fast Casual	11 AM - 9 PM	2 PM
Hotel	24/7	Overnight
Conference	N/A	12 - 4 PM
Residential	24/7	Overnight
Office	8 AM - 5 PM	10 - 11 AM
CRSC*	7 AM - 10 PM	7 - 8 PM
Bowling	9 AM - 1 AM (Next Day)	6 PM, 9 - 11 PM

***** According to study performed by the Town Parks & Recreation Department, CRSC parking demand on the weekend is projected to occur during the late morning and early afternoon on tournament days. Typical non-tournament peaks shown.

Figures 6 and 7 below illustrate, by land use and hour, the hour or hours where peak parking demand is expected to occur. These hours (cells) are highlighted in red. For all other hours, the land use is projected to experience parking demand that is lower than at the peak time for that use. These hours (cells) are highlighted in green.

During these off-peak hours, it can be expected that at least some parking supply allocated or effectively allocated for a given land use will not be needed to accommodate parking demand for that use. Therefore, the parking supply for that use would presumably be able to share, or have the potential to share, at least some excess parking capacity for other uses in order to help meet the parking needs for those uses, particularly when or if parking needs are nearing or have reached their peak for those uses.

A complete quantification of expected parking needs by day and hour for every component land use proposed for the Brickyards is provided in the **Appendix.**

Figure 6: Peak Parking Demand Times and Estimated Hours of Operation by Land Use (Weekdays)

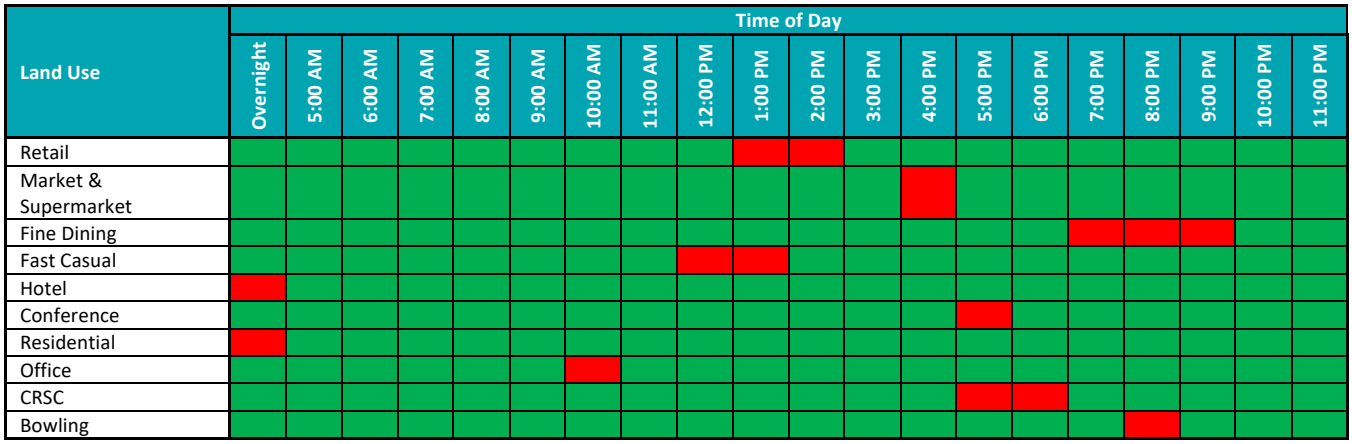
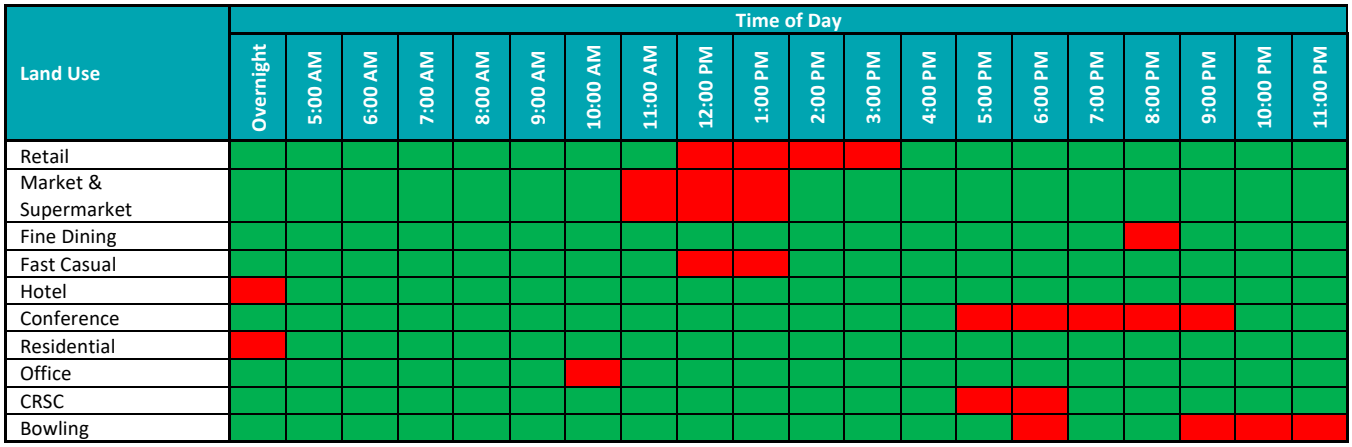


Figure 7: Peak Parking Demand Times and Estimated Hours of Operation by Land Use (Weekends)



MODEL SCENARIOS & ASSUMPTIONS

Our parking demand model assumes conditions typical of a medium-density mixed-use development within a typical suburban land use context. It should be noted that the Town recognizes the Brickyard as a high-density mixed-use development.

Also, note that the Town of Castle Rock falls completely outside of the Regional Transportation District (RTD). As such, the Town, and the Acme Brickyards development, is not served by local or metro-area transit. Moreover, the Bustang statewide regional bus service does not provide service to Castle Rock at this time.

LAND USE CONTEXT & DATA POINTS USED

In all cases, base ratios used for every proposed land use contained in this model, as well as all mode split and captivity adjustments, have been based on data mostly or principally derived from sample sites from across the United States that are located within a general suburban, low- or mid-density context, that are not located close to or near transit. Base ratios, therefore, were not derived exclusively or mostly from urban or high-density context sites and/or sites with excellent transit access.

As a result, in Walker's opinion, base ratios used herein are in line with and appropriate for the context of the Town of Castle Rock.

RESERVED VERSUS UNRESERVED PARKING

Reserved parking is parking that is guaranteed to be available to a respective user at all times of the day, every day. Such parking may be individually signed or numbered, and the user is entitled to that space's availability at all times. Parking may be reserved for any user group. Unreserved parking is parking that is not necessarily guaranteed to be available at every moment of the day for a particular user, regardless of if that user possesses a permit or pays a fee for parking.

For all commercial land uses, parking is assumed to be 100% unreserved and available to be shared throughout the site if/when excess parking capacity allows.

For residential uses, Walker has assumed that 100% of parking for town home units is reserved, and therefore unavailable to be shared at any time. For the remaining multi-family dwelling units, Walker has assumed that about 1.28 spaces per unit would be reserved, with the remainder going into a shared pool where, during business hours and/or peak times for other uses, such spaces may be available for use by non-residents or resident visitors.

Note that during off-peak or overnight hours, such spaces would be nearly guaranteed to be available for use by residents, as parking demand needs for other uses would decrease such that there would not be a need for those spaces during those times. Such spaces could even, optionally, be signed as "for resident parking only" during off-peak hours for other uses.

HOTEL

For purposes of this model, the Client has confirmed that the hotel would be more business-orientated than leisure-orientated in nature. For any ancillary communal uses programmed within the hotel, such as a rooftop bar and fitness center, Walker has assumed that such uses would be for guest use only and would therefore 100% captive (a captivity factor of 0%). As a result, such uses would be assumed to not be responsible for generating any additional parking demand beyond the demand generated by hotel guests.

CONFERENCE SPACE

A previously envisioned banquet hall or event space has, as of this writing, evolved into more mainstream hotel conference space adjoining the planned hotel. As such, Walker assumed that hotel guests would be the primary user group, and therefore most parking demand associated with the conference space would be captive in nature (hotel guests already parked for lodging purposes).

RESIDENTIAL

Apartment dwelling units were assumed to be for-rent units for purposes of this model. Town home units were assumed to be to-own units for purposes of this model.

Note that these assumptions were made in order to calculate mode split only based on user profiles for the different types of housing and should NOT be construed to indicate that town home units are intended to actually be provided or sold as condominium (to-own) units.

OFFICE

General and medical office space were modeled separately for purposes of this model.

MARKET & SUPERMARKET

As of June 26, 2025, there is both a planned small market as well as a larger “super” market. From a parking demand modeling perspective, both of these uses fall under Walker’s Shared Parking Model’s “Supermarket/Grocery” use.

Therefore, the uses were combined and modeled as a single “Market” use.

LAND USES NOT INCLUDED IN SHARED PARKING MODEL

While Walker’s Shared Parking Model, discussed in further detail below, incorporates more than 45 different land uses, not every possible unique use is provided. For such uses, the use needs to be manually added to the model using custom base parking demand ratios if there is no existing provided use that is a close-enough match. For the Brickyard, the unique land uses were the food hall and the planned community rec center.

SPORTS DEVELOPMENT CENTER

The Castle Rock Sports Center is planned to be a sports tournament center for swim and other athletic events, though the facility will also be open to use by the general public throughout a typical week. The facility will tentatively incorporate:

- A large field house that can accommodate up to 4 high school basketball courts, 8 elementary school basketball courts, 12 pickleball courts, or 4 volleyball courts at any one time.
- A secondary gymnasium that can accommodate up to 1 high school basketball court, 2 middle school basketball courts, or 1 volleyball court at any one time.
- An 11-lane competition-rated swimming pool.
- 3 smaller lane/warm-up pools.
- A community events hall
- Fitness classrooms
- Open cardio and weights
- An indoor track

A detailed usage analysis was conducted for the proposed Castle Rock Sports Development Center by another consultant, Barker Rinker Seacat ("BRS"). In this analysis, called "Parking Calculator by Court and Aquatics Use," BRS evaluated several use and tournament scenarios sorted by typical weekday, typical weekend, and tournament weekend. The peak number of users per scenario was sorted into players, officials/coaches, spectators, and "waiting." For most scenarios, BRS assumed approximately 3 persons per vehicle.

Out a number of scenarios, it was determined that the "Elementary Tournament Only" scenario represented the highest projected number of users that would simultaneously occur. In this scenario, the highest level of concurrent activity was assumed **excluding** scenarios where swim meets would occur simultaneously with other types of tournaments or meets for other sports or activities, and therefore, 3 persons per vehicle was assumed.

This is based on a stated assumption provided to Walker by the Client that, per the operational agreement or framework under which the center will operate, swim meets/tournaments will not be scheduled simultaneously with other types of tournaments or meets.

Figure 8 below shows the numbers of users/persons expected at peak times by user type and by day of week/activity scenario, as provided to Walker by the Client. Note that, in the table below, Walker has summed the "players," "spectators," and "waiting" groups into one group called "all others." Also, Walker has performed calculations of the associated parking ratios, per 1,000 square feet, for each user/person and day of week/activity combination shown, based on projected user/person figures.

Figure 8: Projected Sports Center Peak Number of Users by User Group and Day of Week and Associated Parking Ratios

Day of Week / Activity Scenario	Users			Parking Need (Assuming Average of 3 Occupants per Vehicle)			Calculated Parking Ratio		
	Employees	All Others	Total	Employees	All Others	Total	Employees	All Others	Total
Typical Weekday	32	589	621	11	196	207	0.07	1.35	1.43
Typical Weekend	32	1,308	1,340	11	436	447	0.07	3.01	3.08

Source: Baker Rinker Seacat, Walker Consultants

It is Walker's understanding that this study, and the associated needed parking supply figures determined, have been studied and accepted by the Town Parks & Recreation Department. Furthermore, it is Walker's understanding that the Town has approved a parking supply for the Sports Development Center in order to serve peak projected needs of 447 spaces, equal to the "typical weekend" scenario described above.

As a result, Walker has assumed and used the associated parking ratios calculated based on those figures in this model, with a peak need of 207 spaces occurring during weekdays and 447 spaces occurring during weekends during expected Sports Center peak activity times.

This means that base ratios for employees and "customers" (i.e., all other users per BRS's analysis) were calculated that would result in adjusted project ratios equal to the calculated parking ratios shown in **Figure 8** above for the peak weekday and peak weekend, respectively.

Walker has assumed, based on information provided by the Client pertaining to the Town Parks and recreation Center's approved supply numbers, that peak activity levels for the Sports Development Center would occur during the early evening on weekdays and during the late morning/early afternoon on weekends.

BOWLING ALLEY

As of this writing, the Client is in negotiations to bring a bowling center to the Brickyard development. The center is currently anticipated to consist of about 60,000 square feet and will contain up to 62 bowling lanes.

Current plans call for the center to be a second location for the Arapahoe Bowling Center, which is an existing bowling center located in Greenwood Village. The center functions primarily as a "traditional" bowling alley, similar in context to facilities such as AMF Bowling, and hosts significant league and tournament activity in addition to casual bowling, including "late night" bowling on Friday and Saturday evenings for casual bowlers.

The facility may serve casual food, such as nachos and pizza, as well as beer, for consumption by bowlers during their bowling sessions. However, it is not anticipated that the facility will have "standalone" food & beverage space; any food and beverage activity will be ancillary to the bowling use.

Walker's Shared Parking Model does not contain the specific land use of "Bowling Alley." However, the use of "Bowling Alley" is provided as a use in the Institute of Transportation Engineers (ITE) Fifth Edition of *Parking Generation*. The PGM states that average peak parking demand for a bowling alley on a weekday in a General Urban/Suburban context is about 4.39 spaces per bowling lane, with weekday peak demand occurring between 6 and 8 PM. Weekend ratios are not provided.

Using the ITE weekday peak demand ratio provided, which uses the number of lanes as its calculation unit, Walker converted the base ratio into terms of spaces per 1,000 square feet for inclusion in its parking model. Based on 62 lanes and 60,000 square feet, the equivalent weekday total base ratio is 4.54 spaces per 1,000 square feet.

Walker then created a weekend base ratio (4.74 spaces per 1,000 square feet) by applying a scaling factor derived from known base ratio differences between the weekday and weekend for similar uses that are included in Walker's SPM, such as "Adult Active Entertainment." "Adult Active Entertainment" is a use that typically includes bowling but also may include other "fun" activities such as laser tag or arcades, along with significant

food & beverage use(s). The use is intended to serve all ages, though it is geared towards teens and adults. Dave & Buster's is an example of such a use. Total base ratios were then separated into customer and employee components also based on the Adult Active Entertainment use's employee ratio relative to its customer ratio.

Finally, Walker derived a custom set of time-of-day adjustment factors based on a combination of factors provided for the weekday in the ITE *PGM*, factors specified for the Adult Active Entertainment use in Walker's SPM for weekdays and weekends, as well as based on known operating hours and scheduled league and tournament play, as provided on the website for the existing Greenwood Village facility, which would be expected to carry over/be similar to the new proposed facility in the Brickyard.

MODE SPLIT (DRIVING RATIO) ADJUSTMENTS

Before running our calculations, Walker adjusted default assumptions for transportation mode split. By default, a driving ratio of between 80% to 100% is used for typical development in the western United States, with 100% representing a scenario where everyone drives vehicles, and no-one uses transit, walks, or bikes. A lower range of ratios may be used for development in urban settings or land use contexts such as this development.

Typically, Walker consults various pertinent United States Census data pertaining to mode split for the census tract in which the proposed development is located in order to make tailored driving ratio adjustments.

RESIDENTIAL MODE SPLIT

For residents, adjustments are based on the latest available vehicle availability data as shown in US Census Table B25044 – Tenure by Vehicles Available. The Census data in Table B25044 distinguishes between owners and renters. Walker used renter data for all units proposed for this project.

Figure 9 shows vehicle availability data for the renters within all Census tracts inside the Town of Castle Rock. Note that, because for this study Walker is trying to account for the actual number of vehicles, the figures for households with two or more vehicles have been appropriately weighted to determine the respective number of vehicles for each household type by number of vehicles available.

Figure 9: Tenure by Vehicles Available (Renters)

Number of Vehicles Available for Renting-Only Households (All Unit Sizes/Types)	Number of Households	Percentage of Households	Number of Households (Weighted by Number of Vehicles)	Percentage of Households (Weighted by Number of Vehicles)
No Vehicle	513	9.0%	513	5.3%
1 Vehicle	2,369	41.5%	2,369	24%
2 Vehicles	1,803	31.6%	3,606	37%
3 Vehicles	890	15.6%	2,670	28%
4 Vehicles	128	2.2%	512	5%
5 or More	0	0.0%	0	0%
Total	**5,703**	**100%**	**9,670**	**100%**

Source: US Census

According to the above data, there is a ratio of about 1.70 vehicles per renter household overall. Renter households with no vehicle represented about 9% of the total number of households in the Town. However, after weighing appropriately to account for multiple vehicles for households with more than one vehicle available, that decreases to about 5%. As a result, a drive ratio adjustment of 5% was applied for renter residents. The drive ratio was therefore assumed to be 95% for such households. This was the adjustment applied for all the proposed rental units.

Figure 10 shows vehicle availability data for the owners within all Census tracts inside the Town of Castle Rock. Note that, because for this study Walker is trying to account for the actual number of vehicles, the figures for households with two or more vehicles have been appropriately weighted to determine the respective number of vehicles for each household type by number of vehicles available.

Figure 10: Tenure by Vehicles Available (Owners)

Number of Vehicles Available for Owner-Only Households (All Unit Sizes/Types)	Number of Households	Percentage of Households	Number of Households (Weighted by Number of Vehicles)	Percentage of Households (Weighted by Number of Vehicles)
No Vehicle	0	0.0%	0	0.0%
1 Vehicle	3,770	17.5%	3,770	8.0%
2 Vehicles	11,499	53.4%	22,998	48.5%
3 Vehicles	4,816	22.4%	14,448	30.5%
4 Vehicles	1,123	5.2%	4,492	9.5%
5 or More	338	1.6%	1,690	3.6%
Total	**21,546**	**100%**	**47,398**	**100%**

Source: US Census

According to the above data, there is a ratio of about 2.20 vehicles per owner household overall. Owner households with no vehicle represented about 0% of the total number of households in the Town. As a result, a drive ratio adjustment of 0% was applied for owner residents. The drive ratio was therefore assumed to be 100% for such households. This was the adjustment applied to the proposed town home units.

Adjustments to mode split made for residential visitors and retail employees are made through analysis of commute flows data provided by the American Association of State Highway and Transportation Officials' (AASHTO) Census Transportation Planning Products Program (CTPP). Walker may then make further adjustments as needed based on other factors or exceptions that are unique to the site.

RESIDENT VISITOR AND EMPLOYEE MODE SPLIT

Figure 11 shows mode split assumed for retail employees, office employees, and residential visitors, as derived through CTPP data using Douglas County Census Tract 145.04 as the destination point. Note that this Census tract represents downtown Castle Rock and its immediate surrounding neighborhoods east of the 25 Freeway. The tract where the development is located, Douglas County Census tract 144.03, is mostly rural in nature and is less representative of the proposed development than tract 145.04 in Walker's opinion. Note that work-from-home/telecommuting trips have been excluded and subtracted out from the total. All of metro Denver was used as the restaurant employee and residential visitor "catchment base."

Figure 11: Mode Split for Employees and Residential Visitors

Statistic	Drove Alone	Carpool	Public Transit	Other	Total
Number of Trips	2,077	270	0	120	2,467
Percentage of Total	84%	11%	0%	5%	100%

Source: CTPP, Walker Consultants

According to the CTPP, 95% of residents within metro Denver drive or carpool (84% + 11%) to Douglas County Census tract 145.04, while the remainder use other means of transportation. As a result of this, Walker has assumed a driving ratio of 95% for all employees and residential visitors.

COMMERCIAL & CIVIC PATRON/VISITOR MODE SPLIT

Figure 12 shows mode split assumed for commercial and civic patrons/visitors, as derived through CTPP data using Douglas County Census Tract 145.04 as the destination point. To account for the likely smaller "catchment base" from which the commercial businesses and civic uses would be likely to draw patrons, only tracts within or encompassing the Town of Castle Rock were included.

Figure 12: Mode Split for Commercial & Civic Patrons & Visitors

Statistic	Drove Alone	Carpool	Public Transit	Other	Total
Number of Trips	734	100	0	110	944
Percentage of Total	78%	11%	0%	12%	100%

Source: CTPP, Walker Consultants

According to the CTPP, 89% of residents approximately within the Town drive or carpool to Douglas County Census Tract 145.04, while the remainder use other means of transportation. As a result of this, Walker has assumed a driving ratio of 89% (78% + 11%) for non-captive commercial and civic patrons.

HOTEL & CONFERENCE SPACE MODE SPLIT

For the business hotel, default model values of 59% during weekdays and 69% during weekends were used. For the conference space, for non-captive hotel conference attendees, default model values of 68% during both weekdays and weekends were used.

As of the 3rd Edition of Shared Parking, these mode split adjustments have been determined to be representative, on average, of a typical business-orientated hotel in a suburban location. Compared to the previous edition of the publication, and the associated shared parking model, these represent between a 6% and 8% reduction, almost exclusively due to the notable rise of the use of transportation network companies such as Uber and Lyft by businesses travelers.

According to a publication released in 2018 on the topic, Walker Consultants cited data and analytics performed by travel and expense management service provider Certify that found that, between 2014 and 2017, the usage

of car rentals to get to and from a hotel for business travelers decreased from about 56% to under 30%, while the usage of TNCs increased from less than 10% to over 40%.[3]

SPORTS DEVELOPMENT CENTER MODE SPLIT

Figure 13 shows mode split assumed for Sports Development Center users, as derived through CTPP data using Douglas County Census Tract 145.04 as the destination point. To account for the likely larger and more regional "catchment base" from which these uses would likely draw visitors and tournament participants, all Census tracts within Douglas County were included.

Figure 13: Mode Split for Sports Development Center

Statistic	Drove Alone	Carpool	Public Transit	Other	Total
Number of Trips	1,647	235	0	120	2,002
Percentage of Total	82%	12%	0%	6%	100%

Source: CTPP, Walker Consultants

According to the CTPP, 94% of residents in all of Douglas County drive or carpool to Douglas County Census Tract 145.04, while the remainder use other means of transportation.

However, for reasons unique to this specific use that were described previously, such as the expectation of increased carpooling as well as the fact that many, or even most, carpool vehicles will simply be picking up and dropping off visitors and tournament participants, and not parking at the facility, Walker subtracted the carpool mode split percentage from the driving ratio for the indoor component.

As a result of this, Walker has assumed a driving ratio of 82% for non-captive Sports Development Center users/parkers.

CAPTIVITY (NON-CAPTIVE RATIO) ADJUSTMENTS

Due to the intended mixed-use nature of the development site, Walker would expect to see non-captive ratios below 100% for retail and restaurant uses. This is due to the expectation that residents of the building as well as of surrounding buildings, as well as some nearby employees, would be already parked in the building or parked elsewhere while visiting the building's proposed restaurant and retail uses.

For comparison, a non-captive ratio of 100% would imply that everyone visiting the proposed land use has arrived and parked only for that use.

Based on previous experience with similar developments within mixed-use contexts and featuring ground-floor retail and restaurant, Walker has elected to use the following non-captive ratios for various user groups per land use shown in **Figure 14**.

[3] Walker Consultants. "Ride-Hailing Impacts on Parking." 2018. Accessed on October 24, 2023. https://walkerconsultants.com/wp-content/uploads/2017/12/TNC-Impacts.pdf

Figure 14: Non-Captive Ratios Used in Model

User Group	Non-Captive Ratio (Percentage Who are Not Captive)	
	Customers/Patrons	Employees
All Retail (Including Market & Supermarket)	95%	100%
Restaurant	85%	100%
Hotel	100%	100%
Office & Medical Office	100%	96%
Hotel Conference Space	60%	100%
Sports Development Center & Bowling Alley	95%	100%
All Resident Visitors/Guests	100%	100%
All Residents	100%	100%

Non-captive ratios of 100% are always used for hotel guests, residents and associated residential parking demand, as well as for all employees. Ratios below 100% were used for most site retail, restaurant, and office uses to account for use and trips by on-site residents, as well as simultaneous trips between complimentary non-residential uses, such as trips that were made for shopping but that also involved stops at a coffee shop.

Previously, a non-captive ratio of 90% was used for the planned rec center. This has been increased to 95% to account for the changes in intended specific use for the facility, which Walker assumes will cater less to local residents and more to users from outside the immediate area for sports tournaments.

Walker has assumed typical captive ratios for the planned hotel conference space. Typically, conference space in a non-resort hotel in a suburban, auto-orientated context carries a captive ratio of about 60%. This is also an appropriate captive ratio if the space is also used for local and neighborhood events and activities not necessarily associated with the hotel.

As stated previously, other ancillary hotel uses, such as the planned fitness center/pool, will be limited for guest use only. Walker anticipates that there would be no additional parking demand associated with those ancillary uses and therefore would have an effective captive ratio of 0%.

A 96% captive ratio was used for typical office space employees, as Walker assumed that a small number may be Brickyard residents or would otherwise already be parked on-site.

For the bowling alley, as stated previously, it is expected that food & beverage services would be limited and would be fully ancillary to the bowling use and therefore would be effectively fully captive (non-captive ratio of 0%). Also, any such use's component square footage is already included in the total modeled square footage of the bowling facility and associated base parking ratios.

PARKING NEEDS ACCORDING TO SHARED PARKING MODEL

The following series of figures illustrate Walker's adjusted projections for parking needs for the proposed development that consider all the adjustments and assumptions described above. Peak parking needs are shown sorted by weekday and weekend.

Note that, in these models, actual residential parking needs have been projected and are shown. Therefore, residential parking figures shown below should be interpreted to represent spaces intended to be reserved at all times, even during non-peak hours when they are not projected to be fully utilized or needed.

A NOTE ABOUT TOWN-RESERVED RIGHT TO RESERVE PARKING DURING CERTAIN EVENTS

The Town has indicated to the Client and to Walker that it will reserve the right to prohibit Sports Development Center spaces for shared use by other component land uses during certain Town events yet to be determined.

In Walker's opinion, even the reservation of such spaces during such events for the exclusive use of Sports Development Center users/event attendees would likely not result in significantly increased parking needs above and beyond what has been projected herein.

This is because Sports Development Center parking demand is already by far the most significant driver of systemwide demand during the project systemwide peak. Accepted peak demand for the Sports Development Center on the weekend already considers and factors in tournaments.

Also, there would likely be an even higher captive adjustment for commercial uses than what has been modeled herein during such events, as an even greater share of non-commercial parking demand would likely be associated with captive Sports Development Center users and visitors than on a typical peak day.

WEEKDAY NEEDS AT BUILDOUT

Optimized parking needs by land use for the projected peak weekday at buildout are shown in **Figure 15.**

Figure 15: Optimized Weekday Parking Needs by Land Use at Buildout

Land Use	Sub Category	Intensity	per Unit	Base Parking Ratio	% Driving	% Non-Captive	Peak Hour Presence	Peak Month Presence	Peak Hour Need
Retail	Customers	7,000	sf GLA	2.90	89%	95%	90%	100%	16
	Employees			0.70	95%	100%	100%	100%	5
								Sub-Total (Retail)	**21**
Hotel	Guests	123	keys	1.00	59%	100%	75%	60%	33
	Employees			0.15	100%	100%	40%	60%	4
								Sub-Total (Hotel)	**37**
Conference Space	Attendees	6,000	sf GLA	20.24	68%	60%	100%	100%	50
	Employees			1.59	100%	100%	60%	100%	6
								Sub-Total (Conference Space)	**56**
Residential (Apartments)	Residents	384	units	1.31	95%	100%	100%	100%	480
	Visitors			0.10	95%	100%	60%	100%	22
								Sub-Total (Residential Apartments)	**502**
Residential (Townhomes)	Residents	0	units	0.00	100%	100%	100%	100%	0
	Visitors			0.10	95%	100%	60%	100%	0
								Sub-Total (Residential Townhomes)	**0**
Sports Development Center	Customers	145,000	sf GFA	1.74	82%	95%	100%	100%	197
	Employees			0.07	95%	100%	100%	100%	10
								Sub-Total (Sports Development Center)	**207**
Market	Customers	16,500	sf GLA	4.00	89%	91%	100%	100%	54
	Employees			0.75	95%	98%	80%	100%	10
								Sub-Total (Market)	**64**
Office	Visitors	25,000	sf GFA	0.20	100%	100%	5%	100%	0
	Employees			2.60	95%	96%	25%	100%	15
								Sub-Total (Co Work Space)	**15**
Co-Work Space	Visitors		sf GFA	0.20	100%	100%	5%	100%	0
	Employees			2.60	95%	96%	25%	100%	0
								Sub-Total (Office)	**0**
Medical Office	Patients	31,000	sf GFA	3.00	100%	100%	67%	100%	62
	Employees			1.60	95%	96%	67%	100%	31
								Sub-Total (Medical Office)	**93**
Restaurant (Fine / Casual Dining)	Visitors	22,900	sf GLA	13.25	89%	85%	95%	100%	218
	Employees			2.25	95%	100%	100%	100%	49
								Sub-Total (Restaurant Fine Dining)	**267**
Restaurant (Fast Food)	Visitors		sf GLA	12.40	89%	85%	85%	96%	0
	Employees			2.00	95%	100%	90%	100%	0
								Sub-Total (Restaurant Fast Casual)	**0**
Bowling Alley	Visitors	60,000	sf GLA	4.34	89%	95%	87%	100%	192
	Employees			0.20	95%	100%	100%	100%	11
								Sub-Total (Bowling Alley)	**186**
								Total (Commercial)	**85**
								Total (Restaurant)	**267**
								Total (Hotel)	**93**
								Total (Sports Development Center)	**207**
								Total (Residential)	**502**
								Total (Office)	**108**
								Total (Bowling Alley)	**203**
								Total (All) (Rounded)	**1,466**

For the weekday peak, projected to occur at 6 PM in December, Walker projects a peak total parking need for the site of 1,466 spaces at buildout.

Figure 16 below shows how parking needs vary by hour between 6 AM and midnight during the peak weekday. The AM and PM peaks are shown respectively in purple and yellow boxes.

Figure 16: Parking Supply and Weekday Parking Demand by Hour at Buildout

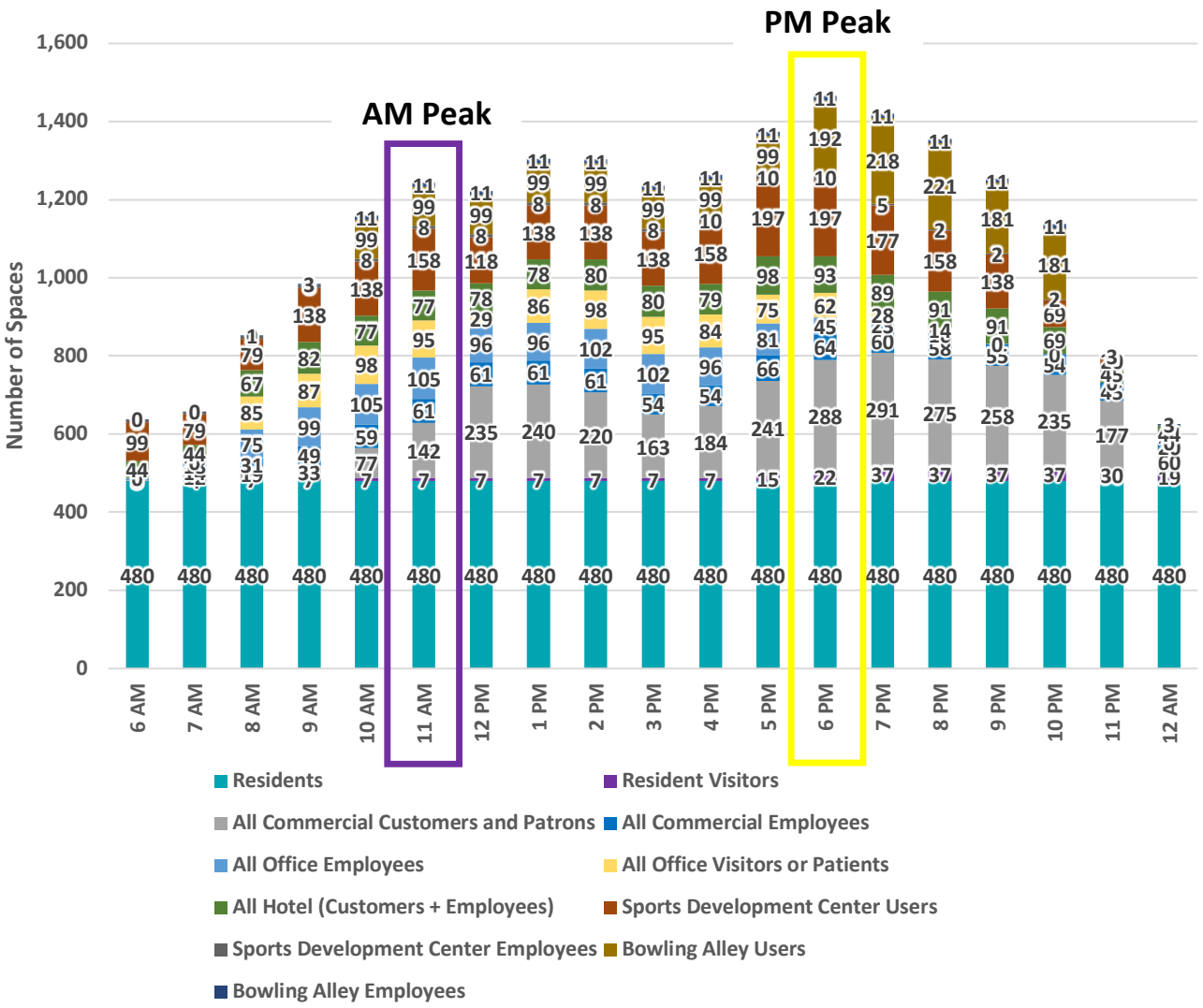


Figure 17 below compares base parking ratios with adjusted base ratios and then compares adjusted base ratios with peak hour needs ratios during the projected weekday peak.

Adjusted base ratios are the base ratios with adjustments for captivity and mode split applied. Peak hour ratios take the adjusted base ratios and adjust them based on the systemwide peak month and time of day determined by the model. Peak hour ratios, therefore, represent parking needs for a particular use as they occur during the systemwide peak time of day during the peak month.

Associated parking needs, in terms of number of spaces, are shown respectively for each ratio type.

Figure 17: Base and Adjusted Ratio Comparison and Associated Parking Needs (Weekday)

Land Use	Sub Category	Base Parking Ratio	Adjusted Base Ratio	Peak Hour Need Ratio	Unadjusted Peak Need	Adjusted Peak Need	Peak Hour Need
Retail	Customers	2.90	2.45	2.29	20	17	16
	Employees	0.70	0.67	0.71	5	5	5
	Sub-Total (Retail)	**3.60**	**3.12**	**3.00**	**25**	**22**	**21**
Hotel	Guests	1.00	0.59	0.27	123	73	33
	Employees	0.15	0.15	0.03	18	18	4
	Sub-Total (Hotel)	**1.15**	**0.74**	**0.30**	**141**	**92**	**37**
Conference Space	Attendees	20.24	8.26	8.33	121	50	50
	Employees	1.51	1.51	1.00	9	9	6
	Sub-Total (Conference Space)	**21.76**	**9.77**	**9.33**	**131**	**59**	**56**
Residential (Apartments)	Residents	1.31	1.25	1.25	505	480	480
	Visitors	0.10	0.10	0.06	38	36	22
	Sub-Total (Residential Apartments)	**1.41**	**1.34**	**1.31**	**543**	**516**	**502**
Residential (Townhomes)	Residents	0.00	0.00	0.00	0	0	0
	Visitors	0.10	0.10	0.00	0	0	0
	Sub-Total (Residential Townhomes)	**0.10**	**0.10**	**0.00**	**0**	**0**	**0**
Sports Development Center	Customers	1.74	1.36	1.36	252	197	197
	Employees	0.07	0.07	0.07	11	10	10
	Sub-Total (Sports Development Center)	**1.81**	**1.43**	**1.43**	**263**	**207**	**207**
Market	Customers	4.00	3.25	3.27	66	54	54
	Employees	0.75	0.70	0.61	12	12	10
	Sub-Total (Market)	**4.75**	**3.95**	**3.88**	**78**	**65**	**64**
Office	Visitors	0.20	0.20	0.00	5	5	0
	Employees	2.60	2.37	0.60	65	59	15
	Sub-Total (Office)	**2.80**	**2.57**	0.60	**70**	**64**	**15**
Co-Work Space	Visitors	0.20	0.20	0.00	0	0	0
	Employees	2.60	2.37	0.00	0	0	0
	Sub-Total (Co Work Space)	**2.80**	**2.57**	**0.00**	**0**	**0**	**0**
Medical Office	Patients	**3.00**	**2.99**	2.00	93	93	62
	Employees	**1.60**	**1.46**	1.00	50	45	31
	Sub-Total (Medical Office)	**4.60**	**4.45**	**3.00**	**143**	**138**	**93**
Restaurant (Fine / Casual Dining)	Visitors	13.25	10.02	9.52	303	230	218
	Employees	2.25	2.14	2.14	52	49	49
	Sub-Total (Restaurant Fine Dining)	**15.50**	**12.16**	**11.66**	**355**	**278**	**267**
Restaurant (Fast Food)	Visitors	12.40	9.38	0.00	0	0	0
	Employees	2.00	1.90	0.00	0	0	0
	Sub-Total (Restaurant Fast Casual)	**14.40**	**11.28**	**0.00**	**0**	**0**	**0**
Bowling Alley	Visitors	4.34	3.67	3.20	260	220	192
	Employees	0.20	0.19	0.18	12	11	11
	Sub-Total (Bowling Alley)	**4.54**	**3.86**	**3.38**	**272**	**231**	**203**
Total (Commercial)		**8.35**	**7.06**	**6.88**	**104**	**87**	**85**
Total (Restaurant)		**29.90**	**23.44**	**11.66**	**355**	**278**	**267**
Total (Hotel)		**22.91**	**10.52**	**9.63**	**272**	**150**	**93**
Total (Sports Development Center)		**1.81**	**1.43**	**1.43**	**263**	**207**	**207**
Total (Residential)		**1.51**	**1.44**	**1.31**	**543**	**516**	**502**
Total (Office)		**10.20**	**9.59**	**3.60**	**213**	**202**	**108**
Total (Bowling Alley)		**4.54**	**3.86**	**3.38**	**272**	**231**	**203**
Total (All) (Rounded)		**79.22**	**57.33**	**37.89**	**2,021**	**1,672**	**1,466**

WEEKEND NEEDS AT BUILDOUT

Optimized parking needs by land use for the projected peak weekend at buildout are shown in **Figure 18.**

Figure 18: Optimized Weekend Parking Needs by Land Use at Buildout

Land Use	Sub Category	Intensity	per Unit	Base Parking Ratio	% Driving	% Non-Captive	Peak Hour Presence	Peak Month Presence	Peak Hour Need
Retail	Customers	7,000	sf GLA	3.20	89%	95%	100%	100%	19
	Employees			0.80	95%	100%	100%	100%	6
								Sub-Total (Retail)	**25**
Hotel	Guests	123	keys	1.00	69%	100%	55%	60%	28
	Employees			0.15	100%	100%	100%	60%	11
								Sub-Total (Hotel)	**39**
Conference Space	Attendees	6,000	sf GLA	10.11	68%	60%	65%	100%	16
	Employees			1.51	100%	100%	100%	100%	10
								Sub-Total (Conference Space)	**26**
Residential (Apartments)	Residents	384	units	1.31	95%	100%	100%	100%	480
	Visitors			0.15	95%	100%	20%	100%	11
								Sub-Total (Residential Apartments)	**491**
Residential (Townhomes)	Residents	0	units	0.00	100%	100%	100%	100%	0
	Visitors			0.15	95%	100%	20%	100%	0
								Sub-Total (Residential Townhomes)	**0**
Sports Development Center	Customers	145,000	sf GFA	3.87	82%	95%	100%	100%	437
	Employees			0.07	95%	100%	100%	100%	10
								Sub-Total (Sports Development Center)	**447**
Market	Customers	16,500	sf GLA	4.00	89%	95%	100%	100%	56
	Employees			0.75	95%	98%	100%	100%	12
								Sub-Total (Market)	**68**
Office	Visitors	25,000	sf GFA	0.02	100%	100%	80%	100%	1
	Employees			0.26	95%	96%	80%	100%	5
								Sub-Total (Co Work Space)	**6**
Co-Work Space	Visitors		sf GFA	0.02	100%	100%	80%	100%	0
	Employees			0.26	95%	96%	80%	100%	0
								Sub-Total (Office)	**0**
Medical Office	Patients	31,000	sf GFA	0.00	100%	100%	0%	100%	0
	Employees			0.00	95%	96%	0%	100%	0
								Sub-Total (Medical Office)	**0**
Restaurant (Fine / Casual Dining)	Visitors	22,900	sf GLA	15.25	89%	85%	55%	100%	146
	Employees			2.50	95%	100%	75%	100%	41
								Sub-Total (Restaurant Fine Dining)	**187**
Restaurant (Fast Food)	Visitors		sf GLA	12.70	0.89	0.85	100%	96%	0
	Employees			2.00	0.95	1.00	100%	100%	0
								Sub-Total (Restaurant Fast Casual)	**0**
Bowling Alley	Visitors	60,000	sf GLA	4.74	0.89	0.95	90%	100%	217
	Employees			0.25	0.95	1.00	100%	100%	14
								Sub-Total (Bowling Alley)	**231**
								Total (Commercial)	**93**
								Total (Restaurant)	**187**
								Total (Hotel)	**65**
								Total (Sports Development Center)	**447**
								Total (Residential)	**491**
								Total (Office)	**6**
								Total (Bowling Alley)	**231**
								Total (All) (Rounded)	**1,521**

For the weekend peak, projected to occur at 1 PM in December, Walker projects a peak total parking need for the site of 1,521 spaces at buildout.

Figure 19 below shows how parking needs vary by hour between 6 AM and midnight during the peak weekend. The AM and PM peaks are shown respectively in purple and yellow boxes.

Figure 19: Parking Supply and Weekend Parking Demand by Hour at Buildout

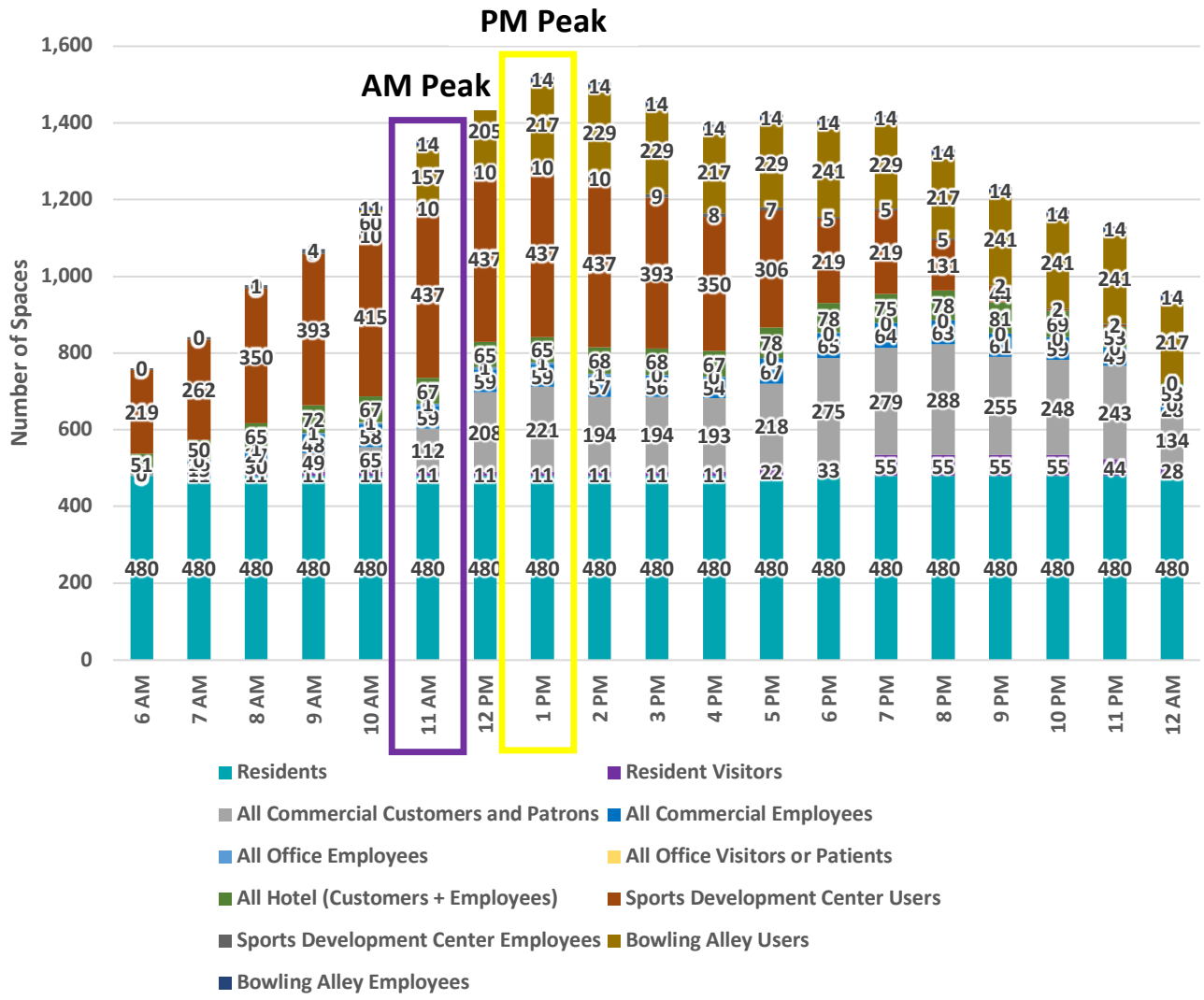


Figure 20 below compares base parking ratios with adjusted base ratios and then compares adjusted base ratios with peak hour needs ratios during the projected weekend peak.

Adjusted base ratios are the base ratios with adjustments for captivity and mode split applied. Peak hour ratios take the adjusted base ratios and adjust them based on the systemwide peak month and time of day determined by the model. Peak hour ratios, therefore, represent parking needs for a particular use as they occur during the systemwide peak time of day during the peak month.

Associated parking needs, in terms of number of spaces, are shown respectively for each ratio type.

Figure 20: Base and Adjusted Ratio Comparison and Associated Parking Needs (Weekend)

Land Use	Sub Category	Base Parking Ratio	Adjusted Base Ratio	Peak Hour Need Ratio	Unadjusted Peak Need	Adjusted Peak Need	Peak Hour Need
Retail	Customers	3.20	2.71	2.71	22	19	19
	Employees	0.80	0.76	0.86	6	5	6
	Sub-Total (Retail)	**4.00**	**3.47**	**3.57**	**28**	**24**	**25**
Hotel	Guests	1.00	0.69	0.23	123	85	28
	Employees	0.15	0.15	0.09	18	18	11
	Sub-Total (Hotel)	**1.15**	**0.84**	**0.32**	**141**	**104**	**39**
Conference Space	Attendees	10.11	4.12	2.67	61	25	16
	Employees	1.51	1.51	1.67	9	9	10
	Sub-Total (Conference Space)	**11.62**	**5.64**	**4.33**	**70**	**34**	**26**
Residential (Apartments)	Residents	1.31	1.25	1.25	505	480	480
	Visitors	0.15	0.14	0.03	58	55	11
	Sub-Total (Residential Apartments)	**1.46**	**1.39**	**1.28**	**562**	**534**	**491**
Residential (Townhomes)	Residents	0.00	0.00	0.00	0	0	0
	Visitors	0.15	0.14	0.00	0	0	0
	Sub-Total (Residential Townhomes)	**0.15**	**0.14**	**0.00**	**0**	**0**	**0**
Sports Development Center	Customers	3.87	3.01	3.01	561	437	437
	Employees	0.07	0.07	0.07	11	10	10
	Sub-Total (Sports Development Center)	**3.94**	**3.08**	**3.08**	**572**	**447**	**447**
Market	Customers	4.00	3.39	3.39	66	56	56
	Employees	0.75	0.70	0.73	12	12	12
	Sub-Total (Market)	**4.75**	**4.09**	**4.12**	**78**	**67**	**68**
Office	Visitors	0.02	0.02	0.04	1	1	1
	Employees	0.26	0.24	0.20	7	6	5
	Sub-Total (Office)	**0.28**	**0.26**	0.24	**7**	**6**	**6**
Co-Work Space	Visitors	0.02	0.02	0.00	0	0	0
	Employees	0.26	0.24	0.00	0	0	0
	Sub-Total (Co Work Space)	**0.28**	**0.26**	**0.00**	**0**	**0**	**0**
Medical Office	Patients	**0.00**	**0.00**	0.00	0	0	0
	Employees	**0.00**	**0.00**	0.00	0	0	0
	Sub-Total (Medical Office)	**0.00**	**0.00**	**0.00**	**0**	**0**	**0**
Restaurant (Fine / Casual Dining)	Visitors	15.25	11.54	6.38	349	264	146
	Employees	2.50	2.38	1.79	57	54	41
	Sub-Total (Restaurant Fine Dining)	**17.75**	**13.91**	**8.17**	**406**	**319**	**187**
Restaurant (Fast Food)	Visitors	4.74	9.61	0.00	0	0	0
	Employees	0.25	1.90	0.00	0	0	0
	Sub-Total (Restaurant Fast Casual)	**4.99**	**11.51**	**0.00**	**0**	**0**	**0**
Bowling Alley	Visitors	4.74	4.01	3.62	284	240	217
	Employees	0.25	0.24	0.23	15	14	14
	Sub-Total (Bowling Alley)	**4.99**	**4.25**	**3.85**	**299**	**255**	**231**
Total (Commercial)		**8.75**	**7.55**	**7.69**	**106**	**92**	**93**
Total (Restaurant)		**22.74**	**25.42**	**8.17**	**406**	**319**	**187**
Total (Hotel)		**12.77**	**6.48**	**4.65**	**211**	**138**	**65**
Total (Sports Development Center)		**3.94**	**3.08**	**3.08**	**572**	**447**	**447**
Total (Residential)		**1.61**	**1.53**	**1.28**	**562**	**534**	**491**
Total (Office)		**0.56**	**0.51**	**0.24**	**7**	**6**	**6**
Total (Bowling Alley)		**4.99**	**4.25**	**3.85**	**299**	**255**	**231**
Total (All) (Rounded)		**55.37**	**48.83**	**28.96**	**2,164**	**1,790**	**1,521**

ALLOCATING PARKING TO SERVE NEEDS (SINGLE USE VERSUS JOINT USE)

From the models above, it is possible to understand the peak parking needs during the projected systemwide peak. The total systemwide peak for all uses of 1,560 spaces, occurring at around 1 PM on a weekend in December, is the physical number of parking spaces that will satisfy all parking needs for all uses, as projected, during the peak time and all other typical times and days.

The shared parking efficiencies that are possible that were "baked into" and considered in projecting the actual number of physical parking spaces considered to be necessary to adequately accommodate all parking demand at a given time have the effect of increasing the "maximum available" capacity that is possible for the parking system throughout the day by dynamically reallocating a certain percentage of parking spaces to different uses throughout the day as needed and as excess capacity allows.

While the projected systemwide peak time, day, and month is ultimately used to determine the maximum number of spaces needed for single land uses and user groups, there is a constant "give and take" of spaces that become available for use by other land uses as the day progresses, assuming such spaces are not explicitly reserved 24/7 for any specific user group or use. This constant, continuous "reallocation," or use distribution, is taking place within the same physical parking system and within a given overall total parking supply. For instance, while excess parking capacity within the unreserved residential parking supply may exist and can be used during the day, it may not exist, and cannot potentially be used, during the mid-morning. Meanwhile, the reverse may be the case for unreserved office parking.

As a result, "maximum available" parking supplies and supply ratios that are possible are generated, which will add up to more spaces than actually physically constructed for most land uses in a shared parking context. This means that, while full proposed parking ratios and supplies for individual land uses may not be fully available at all times, they are or will be available when they're needed or potentially needed by those any individual use or group of like uses.

To that end, based on Walker's projected parking needs described above, Walker has calculated a set of ratios for all proposed land uses that are based on the "maximum available" parking supply or capacity possible for each land use during the projected systemwide peak. These figures are composed of two components:

- Spaces that are not available for sharing during the peak time with other uses
- Spaces that are available or potentially available during the peak time for at least one other use.

The spaces that are available or potential available during the peak time or any other time area used to satisfy the needs of other uses and thus can be thought of as going into a "shared pool" during that time and day.

For instance, during the weekday peak, Walker proposes a maximum available supply ratio possible for apartments of 2 spaces per dwelling unit at buildout, or 768 spaces. This ratio has been pre-determined by Town of Castle Rock minimum requirements. However, during the weekday systemwide peak time, Walker projects that only 502 spaces are needed to satisfy resident and resident visitor demand. The remaining spaces, in this case, then would be shared, or be effectively reallocated for use by other land uses that require more parking than they have or may have during that particular hour on weekdays. However, during the overnight period when residential parking demands typically peak, at least 768 spaces would be available for residents and resident visitors.

Therefore, for any given land use, the "build-to" parking supply consists of the number of spaces considered to be available for a respective designated single use at the peak systemwide time that, collectively with all other uses being built, results in the desired or required maximum available ratios and supplies for each use after shared, or joint use of, parking is taken into account. These shared, or joint use, spaces are considered to be available, or potentially available, for other uses at the peak systemwide time.

In most cases, the total maximum available ratio or supply possible is based directly on "adjusted peak needs" provided in the previous sub-section while the number or ratio of spaces that are available for designated uses at peak times is based directly on the "peak hour needs" provided in the previous sub-section. The difference between the two is considered to be the number of spaces or ratio that is available or potentially available for other uses at the peak systemwide time.

Collectively, the number of spaces available or potentially available for other uses at the peak time forms the shared, or joint use, parking pool during that time. This figure and associated ratio would, on net, increase or be expected to increase, during all times outside of the systemwide projected peak.

A NOTE ABOUT APARTMENT, TOWNHOME, AND HOTEL USES

Note that, in some cases, the maximum available supply and supply ratio Walker is targeting has been pre-determined by Town of Castle Rock minimum requirements that exceed peak needs as predicted and projected by the Shared Parking Model. For these uses, the Town has required the Client build to Town minimums.

As a result, for these uses – apartments, townhomes, and hotel rooms, Walker has manually overridden previously-determined projected shared parking model values with the required Town minimum values. Such values are shown in yellow. For these uses, the Town required supply would be made available during known peak hours for those uses.

For all three uses, it Is expected that peak demand hours would occur overnight.

WEEKDAY USE DISTRIBUTION & TOTAL MAXIMUM AVAILABLE SUPPLY POSSIBLE AT BUILDOUT

Figure 21 below shows the combination of spaces that need to be available for designated use at peak times during the typical peak weekday at buildout by specific single land uses and spaces that are available or potentially available for other uses at the peak time required in order to achieve the proposed maximum potential supply ratios and supplies possible for each use.

Figure 21: Maximum Potentially Available Supply Possible During Systemwide Peak at Buildout (Weekday)

Land Use	Sub Category	Proposed Ratios			Proposed Parking Supplies		
		Build-To	As Part of Shared Pool	Total "Effective" Ratio	Build-To	As Part of Shared Pool	Total "Effective" Supply
Retail	Customers	2.29	0.17	2.45	16	1	17
	Employees	0.71	0.00	0.71	5	0	5
	Sub-Total (Retail)	**3.00**	**0.12**	**3.12**	**21**	**1**	**22**
Hotel	Guests	0.27	0.78	1.05	33	96	129
	Employees	0.03	0.12	0.15	4	14	18
	Sub-Total (Hotel)	**0.30**	**0.90**	**1.20**	**37**	**111**	**148**
Conference Space	Attendees	8.33	-0.07	8.26	50	0	50
	Employees	1.00	0.51	1.51	6	3	9
	Sub-Total (Conference Space)	**9.33**	**0.44**	**9.77**	**56**	**3**	**59**
Residential (Apartments)	Residents	1.25	0.66	1.91	480	252	732
	Visitors	0.06	0.04	0.10	22	14	36
	Sub-Total (Residential Apartments)	**1.31**	**0.69**	**2.00**	**502**	**266**	**768**
Residential (Townhomes)	Residents	0.00	0.00	1.91	0	0	0
	Visitors	0.00	0.10	0.10	0	0	0
	Sub-Total (Residential Townhomes)	**0.00**	**2.00**	**2.00**	**0**	**0**	**0**
Sports Development Center	Customers	1.36	0.00	1.36	197	2	199
	Employees	0.07	0.00	0.07	10	0	10
	Sub-Total (Sports Development Center)	**1.43**	**0.00**	**1.43**	**207**	**2**	**209**
Market	Customers	3.27	-0.02	3.25	54	0	54
	Employees	0.61	0.00	0.61	10	-7	3
	Sub-Total (Market)	**3.88**	**0.00**	**3.88**	**64**	**1**	**65**
Office	Visitors	0.00	0.20	0.20	0	5	5
	Employees	0.60	1.77	2.37	15	44	59
	Sub-Total (Office)	**0.60**	**1.97**	**2.57**	**15**	**49**	**64**
Co-Work Space	Visitors	0.00	0.20	0.20	0	0	0
	Employees	0.00	2.37	2.37	0	0	0
	Sub-Total (Co Work Space)	**0.00**	**2.57**	**2.57**	**0**	**0**	**0**
Medical Office	Patients	**2.00**	**0.99**	**2.99**	**62**	**31**	**93**
	Employees	**1.00**	**0.46**	**1.46**	**31**	**14**	**45**
	Sub-Total (Medical Office)	**3.00**	**1.45**	**4.45**	**93**	**45**	**138**
Restaurant (Fine / Casual Dining)	Visitors	9.52	0.50	10.02	218	12	230
	Employees	2.14	0.00	2.14	49	0	49
	Sub-Total (Restaurant Fine Dining)	**11.66**	**0.50**	**12.16**	**267**	**11**	**278**
Restaurant (Fast Food)	Visitors	0.00	9.38	9.38	0	0	0
	Employees	0.00	1.90	1.90	0	0	0
	Sub-Total (Restaurant Fast Casual)	**0.00**	**11.28**	**11.28**	**0**	**0**	**0**
Bowling Alley	Visitors	3.20	0.47	3.67	192	28	220
	Employees	0.18	0.01	0.19	11	0	11
	Sub-Total (Bowling Alley)	**3.38**	**0.47**	**3.86**	**203**	**28**	**231**
				Total (Commercial)	**85**	**2**	**87**
				Total (Restaurant)	**267**	**11**	**278**
				Total (Hotel)	**93**	**113**	**206**
				Total (Sports Development Center)	**207**	**2**	**209**
				Total (Residential)	**502**	**266**	**768**
				Total (Office)	**108**	**94**	**202**
				Total (Bowling Alley)	**203**	**28**	**231**
				Total (All) (Rounded)	**1,466**	**517**	**1,982**

WEEKEND USE DISTRIBUTION & TOTAL MAXIMUM AVAILABLE SUPPLY POSSIBLE AT BUILDOUT

Figure 22 below shows the combination of spaces that need to be available for designated use at peak times during the typical peak weekend by specific single land uses and spaces that are available or potentially available for other uses at the peak time required in order to achieve the proposed maximum potential supply ratios and supplies possible for each use.

Figure 22: Maximum Potentially Available Supply Possible During Systemwide Peak at Buildout (Weekend)

Land Use	Sub Category	Proposed Ratios			Proposed Parking Supplies		
		Build-To	As Part of Shared Pool	Total "Effective" Ratio	Build-To	As Part of Shared Pool	Total "Effective" Supply
Retail	Customers	2.71	-0.01	2.71	19	0	19
	Employees	0.86	-0.10	0.76	6	-1	5
	Sub-Total (Retail)	**3.57**	**-0.11**	**3.47**	**25**	**-1**	**24**
Hotel	Guests	0.23	0.82	1.05	28	101	129
	Employees	0.09	0.06	0.15	11	7	18
	Sub-Total (Hotel)	**0.32**	**0.88**	**1.20**	**39**	**109**	**148**
Conference Space	Attendees	2.67	0.00	2.67	16	9	25
	Employees	1.67	-0.15	1.51	10	-1	9
	Sub-Total (Conference Space)	**4.33**	**0.00**	**4.33**	**26**	**8**	**34**
Residential (Apartments)	Residents	1.25	0.61	1.86	480	233	713
	Visitors	0.03	0.11	0.14	11	44	55
	Sub-Total (Residential Apartments)	**1.28**	**0.72**	**2.00**	**491**	**277**	**768**
Residential (Townhomes)	Residents	0.00	0.00	1.86	0	0	0
	Visitors	0.00	0.14	0.14	0	0	0
	Sub-Total (Residential Townhomes)	**0.00**	**2.00**	**2.00**	**0**	**0**	**0**
Sports Development Center	Customers	3.01	0.00	3.01	437	0	437
	Employees	0.07	0.00	0.07	10	0	10
	Sub-Total (Sports Development Center)	**3.08**	**0.00**	**3.08**	**447**	**0**	**447**
Market	Customers	3.39	-0.01	3.39	56	0	56
	Employees	0.73	-0.03	0.70	12	0	12
	Sub-Total (Market)	**4.12**	**-0.03**	**4.09**	**68**	**-1**	**67**
Office	Visitors	0.04	-0.02	0.02	1	-1	1
	Employees	0.20	0.04	0.24	5	1	6
	Sub-Total (Office)	**0.24**	**0.02**	**0.26**	**6**	**0**	**6**
Co-Work Space	Visitors	0.00	0.02	0.02	0	0	0
	Employees	0.00	0.24	0.24	0	0	0
	Sub-Total (Co Work Space)	**0.00**	**0.26**	**0.26**	**0**	**0**	**0**
Medical Office	Patients	**0.00**	**0.00**	**0.00**	**0**	**0**	**0**
	Employees	**0.00**	**0.00**	**0.00**	**0**	**0**	**0**
	Sub-Total (Medical Office)	**0.00**	**0.00**	**0.00**	**0**	**0**	**0**
Restaurant (Fine / Casual Dining)	Visitors	6.38	5.16	11.54	146	118	264
	Employees	1.79	0.00	1.79	41	13	54
	Sub-Total (Restaurant Fine Dining)	**8.17**	**5.75**	**13.91**	**187**	**132**	**319**
Restaurant (Fast Food)	Visitors	0.00	9.61	9.61	0	0	0
	Employees	0.00	1.90	1.90	0	0	0
	Sub-Total (Restaurant Fast Casual)	**0.00**	**11.51**	**11.51**	**0**	**0**	**0**
Bowling Alley	Visitors	3.62	0.39	4.01	217	23	240
	Employees	0.23	0.00	0.24	14	0	14
	Sub-Total (Bowling Alley)	**3.85**	**0.40**	**4.25**	**231**	**24**	**255**
				Total (Commercial)	**93**	**-1**	**92**
				Total (Restaurant)	**187**	**132**	**319**
				Total (Hotel)	**65**	**116**	**181**
				Total (Sports Development Center)	**447**	**0**	**447**
				Total (Residential)	**491**	**277**	**768**
				Total (Office)	**6**	**0**	**6**
				Total (Bowling Alley)	**231**	**24**	**255**
				Total (All) (Rounded)	**1,521**	**548**	**2,068**

APPENDIX

Figure 23: Monthly Comparison Chart (Weekday)

Monthly Comparison Summary								
Month	Weekday							
	Overall Peak		AM Peak Hour		PM Peak Hour		Eve Peak Hour	
	Time	Demand	Time	Demand	Time	Demand	Time	Demand
January	5 PM	1,344	11 AM	1,239	5 PM	1,344	6 PM	1,344
February	5 PM	1,342	11 AM	1,240	5 PM	1,342	6 PM	1,341
March	6 PM	1,355	11 AM	1,245	5 PM	1,352	6 PM	1,355
April	6 PM	1,321	11 AM	1,222	5 PM	1,320	6 PM	1,321
May	6 PM	1,318	11 AM	1,216	5 PM	1,315	6 PM	1,318
June	6 PM	1,310	11 AM	1,212	5 PM	1,308	6 PM	1,310
July	6 PM	1,306	11 AM	1,204	5 PM	1,302	6 PM	1,306
August	6 PM	1,311	11 AM	1,206	5 PM	1,306	6 PM	1,311
September	5 PM	1,325	11 AM	1,228	5 PM	1,325	6 PM	1,325
October	6 PM	1,347	11 AM	1,243	5 PM	1,346	6 PM	1,347
November	6 PM	1,333	11 AM	1,233	5 PM	1,333	6 PM	1,333
December	6 PM	1,376	11 AM	1,257	5 PM	1,371	6 PM	1,376
Late December	6 PM	1,319	11 AM	1,196	5 PM	1,311	6 PM	1,319

Figure 24: Monthly Comparison Chart (Weekend)

Monthly Comparison Summary								
Month	Weekend							
	Overall Peak		AM Peak Hour		PM Peak Hour		Eve Peak Hour	
	Time	Demand	Time	Demand	Time	Demand	Time	Demand
January	1 PM	1,394	11 AM	1,310	1 PM	1,394	7 PM	1,324
February	1 PM	1,381	11 AM	1,298	1 PM	1,381	7 PM	1,322
March	1 PM	1,364	11 AM	1,271	1 PM	1,364	7 PM	1,337
April	7 PM	1,300	11 AM	1,209	1 PM	1,297	7 PM	1,300
May	7 PM	1,297	11 AM	1,186	1 PM	1,279	7 PM	1,297
June	7 PM	1,287	11 AM	1,184	1 PM	1,273	7 PM	1,287
July	7 PM	1,287	11 AM	1,183	1 PM	1,274	7 PM	1,287
August	7 PM	1,291	11 AM	1,199	1 PM	1,290	7 PM	1,291
September	1 PM	1,328	11 AM	1,244	1 PM	1,328	7 PM	1,303
October	1 PM	1,360	11 AM	1,272	1 PM	1,360	7 PM	1,328
November	1 PM	1,347	11 AM	1,262	1 PM	1,347	7 PM	1,311
December	1 PM	1,420	11 AM	1,323	1 PM	1,420	7 PM	1,357
Late December	1 PM	1,373	11 AM	1,276	1 PM	1,373	7 PM	1,324

Figure 25: Monthly Adjustment Factors (Weekday)

Monthly Adjustments for Customer/Visitor Parking													
Land Use	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Late Dec**
Retail	59%	61%	70%	67%	72%	72%	70%	73%	66%	69%	76%	100%	85%
Supermarket/Grocery	93%	86%	94%	92%	97%	94%	96%	95%	92%	95%	95%	100%	95%
Pharmacy	89%	85%	92%	89%	91%	89%	89%	90%	88%	92%	89%	100%	95%
Discount Stores/Superstores	72%	72%	79%	76%	81%	79%	79%	81%	74%	79%	85%	100%	90%
Home Improvement Stores/Garden	63%	62%	79%	90%	100%	92%	87%	84%	80%	85%	80%	75%	65%
Fine/Casual Dining	88%	87%	98%	94%	99%	94%	96%	96%	89%	93%	89%	100%	95%
Family Restaurant	88%	87%	98%	94%	99%	94%	96%	96%	89%	93%	89%	100%	95%
Fast Casual/Fast Food	85%	85%	97%	95%	99%	98%	100%	100%	93%	96%	92%	96%	95%
Bar/Lounge/Night Club	87%	87%	100%	93%	97%	94%	97%	96%	94%	98%	92%	96%	95%
Family Entertainment (Weekdays)	20%	26%	36%	50%	23%	45%	87%	68%	22%	25%	20%	48%	100%
Family Entertainment (Weekends)	79%	90%	91%	100%	60%	70%	72%	76%	70%	72%	74%	60%	80%
Active Entertainment	79%	90%	91%	100%	60%	70%	72%	76%	70%	72%	74%	60%	100%
Bowling Alley	85%	86%	95%	92%	96%	95%	98%	99%	91%	96%	93%	100%	95%
All Movies (Weekdays)	50%	50%	45%	33%	55%	50%	75%	55%	25%	25%	55%	55%	100%
All Movies (Weekends)	25%	40%	60%	35%	70%	75%	75%	45%	35%	40%	80%	90%	100%
Banquet Hall	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Outdoor Amphitheater	0%	0%	0%	10%	100%	100%	100%	100%	100%	50%	10%	10%	0%
Public Park/Destination Open Space	25%	25%	50%	75%	100%	100%	100%	100%	100%	100%	75%	75%	25%
Museum/Aquarium (Weekdays)	20%	26%	36%	50%	23%	45%	87%	68%	22%	25%	20%	48%	100%
Museum/Aquarium (Weekends)	79%	90%	91%	100%	60%	70%	72%	76%	70%	72%	74%	60%	100%
Arena	90%	100%	100%	100%	100%	75%	0%	0%	60%	65%	90%	100%	95%
Pro Football Stadium	0%	0%	0%	0%	67%	67%	67%	67%	100%	100%	100%	100%	100%
Pro Baseball Stadium	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	0%	100%	0%
Health Club	100%	95%	85%	70%	65%	65%	65%	70%	80%	85%	85%	100%	95%
Public Library	75%	75%	80%	85%	90%	90%	90%	90%	95%	95%	90%	65%	50%
Day Care Center	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%
Convention Center	75%	100%	90%	55%	60%	50%	45%	75%	80%	85%	100%	100%	0%
Hotel-Business	60%	75%	90%	100%	95%	95%	95%	85%	90%	95%	80%	60%	55%
Hotel-Leisure	80%	90%	100%	100%	90%	90%	100%	100%	75%	75%	75%	50%	100%
Restaurant/Lounge	85%	86%	95%	92%	96%	95%	98%	99%	91%	96%	93%	100%	95%
Meeting/Banquet (< 100 sq ft/key)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Convention (> 100 sq ft/key)	75%	100%	90%	55%	60%	50%	45%	75%	80%	85%	100%	100%	0%
Residential Guest	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	100%
Active Senior Housing	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Office	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%
Medical/Dental Office	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%
Bank (Drive In Branch)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Food Hall	85%	85%	97%	95%	99%	98%	100%	100%	93%	96%	92%	96%	95%
Recreational Community Center	100%	95%	85%	70%	65%	65%	65%	70%	80%	85%	85%	100%	50%

Figure 26: Monthly Adjustment Factors (Weekend)

Monthly Adjustments for Employee/Resident Parking													
Land Use	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Late Dec**
Retail	69%	71%	79%	77%	82%	82%	80%	83%	76%	78%	86%	100%	95%
Supermarket/Grocery	100%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Pharmacy	99%	95%	100%	99%	100%	98%	98%	99%	98%	100%	98%	100%	100%
Discount Stores/Superstores	82%	82%	88%	86%	91%	89%	89%	91%	84%	89%	95%	100%	100%
Home Improvement Stores/Garden	72%	71%	89%	100%	100%	100%	97%	94%	90%	94%	90%	85%	75%
Fine/Casual Dining	99%	98%	100%	100%	100%	100%	100%	100%	99%	100%	100%	100%	100%
Family Restaurant	99%	98%	100%	100%	100%	100%	100%	100%	99%	100%	100%	100%	100%
Fast Casual/Fast Food	96%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Bar/Lounge/Night Club	95%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Family Entertainment (Weekdays)	50%	50%	50%	60%	50%	55%	97%	78%	50%	50%	50%	58%	100%
Family Entertainment (Weekends)	89%	100%	100%	100%	70%	80%	82%	86%	80%	82%	84%	70%	90%
Active Entertainment	89%	100%	100%	100%	70%	80%	82%	86%	80%	82%	84%	70%	100%
Bowling Alley	95%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
All Movies (Weekdays)	60%	60%	55%	50%	65%	60%	85%	65%	50%	50%	65%	65%	100%
All Movies (Weekends)	50%	50%	70%	50%	80%	85%	85%	55%	50%	50%	90%	100%	100%
Banquet Hall	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Outdoor Amphitheater	10%	10%	10%	50%	100%	100%	100%	100%	100%	60%	50%	50%	10%
Public Park/Destination Open Space	50%	50%	60%	85%	100%	100%	100%	100%	100%	100%	85%	85%	50%
Museum/Aquarium (Weekdays)	50%	50%	50%	60%	50%	55%	97%	78%	50%	50%	50%	58%	100%
Museum/Aquarium (Weekends)	89%	100%	100%	100%	70%	80%	82%	86%	80%	82%	84%	70%	100%
Arena	100%	100%	100%	100%	100%	100%	10%	10%	75%	75%	100%	100%	100%
Pro Football Stadium	10%	10%	10%	10%	10%	10%	10%	100%	10%	10%	10%	100%	80%
Pro Baseball Stadium	10%	10%	25%	90%	100%	100%	100%	100%	100%	100%	10%	100%	10%
Health Club	100%	100%	95%	80%	75%	75%	75%	80%	90%	95%	95%	100%	0%
Public Library	85%	85%	85%	90%	95%	95%	90%	95%	100%	100%	95%	65%	45%
Day Care Center	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%
Convention Center	85%	100%	100%	65%	70%	60%	55%	85%	90%	95%	100%	100%	0%
Hotel	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Residential Reserved	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Residential Nonreserved	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	100%
Active Senior Housing	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Office Nonreserved	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%
Office Reserved	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Medical/Dental Office	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%
Bank (Drive In Branch)	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%
Food Hall	96%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Recreational Community Center	100%	100%	95%	80%	75%	75%	75%	80%	90%	95%	95%	100%	50%

Figure 27: Time of Day Adjustment Factors (Weekday)

Time-of-Day Factors for Weekday Demand																			
Land Use	**User Group**	**6:00 AM**	**7:00 AM**	**8:00 AM**	**9:00 AM**	**10:00 AM**	**11:00 AM**	**12:00 PM**	**1:00 PM**	**2:00 PM**	**3:00 PM**	**4:00 PM**	**5:00 PM**	**6:00 PM**	**7:00 PM**	**8:00 PM**	**9:00 PM**	**10:00 PM**	**11:00 PM**	**12:00 AM**
Retail Typical	Visitors	1%	5%	15%	35%	60%	75%	100%	100%	95%	85%	85%	85%	90%	80%	65%	45%	15%	5%	0%
December	Visitors	1%	5%	15%	30%	55%	75%	90%	100%	100%	95%	80%	85%	90%	90%	85%	50%	30%	10%	0%
Late December	Visitors	1%	5%	10%	20%	40%	65%	90%	100%	100%	100%	95%	85%	70%	55%	40%	25%	15%	5%	0%
All	Employees	10%	15%	25%	45%	75%	95%	100%	100%	100%	100%	100%	100%	100%	100%	90%	60%	40%	20%	0%
Supermarket/Grocery	Visitors	5%	20%	30%	50%	60%	67%	85%	90%	95%	97%	100%	100%	100%	85%	55%	35%	20%	5%	5%
	Employees	20%	30%	40%	80%	90%	100%	100%	100%	100%	100%	100%	100%	80%	50%	35%	20%	20%	20%	20%
Fine/Casual Dining	Visitors	0%	0%	0%	0%	15%	40%	75%	75%	65%	40%	50%	75%	95%	100%	100%	100%	95%	75%	25%
	Employees	0%	20%	50%	75%	90%	90%	90%	90%	90%	75%	75%	100%	100%	100%	100%	100%	100%	85%	35%
Fast Casual/Fast Food	Visitors	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Employees	20%	20%	30%	40%	75%	100%	100%	100%	95%	70%	60%	70%	90%	90%	60%	40%	30%	20%	20%
Bar/Lounge/Night Club	Visitors	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	50%	75%	100%	100%	75%	50%
	Employees	0%	0%	0%	5%	5%	5%	5%	10%	10%	10%	20%	45%	70%	100%	100%	100%	100%	90%	60%
Bowling Alley	Visitors	0%	0%	0%	0%	45%	45%	45%	45%	45%	45%	45%	45%	87%	99%	100%	82%	82%	0%	0%
	Employees	0%	0%	5%	25%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	25%	25%
Hotel-Business	Visitors	95%	90%	80%	70%	60%	60%	55%	55%	60%	60%	65%	70%	75%	75%	80%	85%	95%	100%	100%
Hotel-Leisure	Visitors	95%	95%	90%	80%	70%	70%	65%	65%	70%	70%	75%	80%	85%	85%	90%	95%	95%	100%	100%
Employee	Employees	10%	30%	100%	100%	100%	100%	100%	100%	100%	100%	70%	70%	40%	20%	20%	20%	20%	10%	5%
Restaurant/Lounge	Visitors	0%	10%	30%	10%	10%	5%	100%	100%	33%	10%	10%	30%	55%	60%	70%	67%	60%	40%	30%
Meeting/Banquet (< 100 sq ft/key)	Visitors	0%	0%	30%	60%	60%	60%	65%	65%	65%	65%	65%	100%	100%	100%	100%	100%	50%	0%	0%
Convention (> 100 sq ft/key)	Visitors	0%	0%	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	30%	30%	10%	0%	0%	0%
Employee	Employees	10%	10%	60%	100%	100%	100%	100%	100%	100%	100%	100%	100%	60%	40%	40%	20%	0%	0%	0%
Residential Guest	Visitors	0%	10%	20%	20%	20%	20%	20%	20%	20%	20%	20%	40%	60%	100%	100%	100%	100%	80%	50%
Resident Reserved	Residents	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Resident (Apartments)	Residents	95%	80%	67%	55%	50%	45%	40%	40%	40%	40%	45%	50%	60%	70%	80%	85%	95%	97%	100%
Resident (Townhome)	Residents	95%	85%	75%	65%	60%	55%	50%	50%	50%	55%	60%	65%	70%	75%	80%	85%	95%	97%	100%
Office	Visitors	0%	1%	20%	60%	100%	45%	15%	45%	95%	45%	15%	10%	5%	2%	1%	0%	0%	0%	0%
	Employees Unreserved	3%	15%	50%	90%	100%	100%	85%	85%	95%	95%	85%	60%	25%	15%	5%	3%	1%	0%	0%
	Employees Reserved	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Medical/Dental Office	Visitors	0%	0%	90%	90%	100%	100%	30%	90%	100%	100%	90%	80%	67%	30%	15%	0%	0%	0%	0%
	Employees	0%	20%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	67%	30%	15%	0%	0%	0%	0%
Food Hall	Visitors	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Employees	20%	20%	30%	40%	75%	100%	100%	100%	95%	70%	60%	70%	90%	90%	60%	40%	30%	20%	20%
Recreational Community Center	Visitors	70%	40%	40%	70%	70%	80%	60%	70%	70%	70%	80%	100%	100%	90%	80%	70%	35%	10%	0%
	Employees	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%	100%	100%	50%	20%	20%	20%	20%	0%

Figure 28: Time of Day Adjustment Factors (Weekend)

Time-of-Day Factors for Weekend Demand																			
Land Use	**User Group**	**6:00 AM**	**7:00 AM**	**8:00 AM**	**9:00 AM**	**10:00 AM**	**11:00 AM**	**12:00 PM**	**1:00 PM**	**2:00 PM**	**3:00 PM**	**4:00 PM**	**5:00 PM**	**6:00 PM**	**7:00 PM**	**8:00 PM**	**9:00 PM**	**10:00 PM**	**11:00 PM**	**12:00 AM**
Retail Typical	Visitors	1%	5%	30%	50%	70%	90%	95%	100%	100%	95%	90%	80%	75%	70%	65%	50%	30%	10%	0%
December	Visitors	1%	5%	10%	35%	60%	85%	100%	100%	100%	100%	90%	80%	65%	60%	55%	50%	35%	15%	1%
Late December	Visitors	1%	5%	10%	20%	40%	60%	80%	95%	100%	100%	95%	85%	70%	60%	50%	30%	20%	10%	0%
All	Employees	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	85%	80%	75%	65%	45%	15%	0%
Supermarket/Grocery	Visitors	8%	25%	50%	75%	95%	100%	100%	100%	100%	100%	100%	90%	50%	33%	25%	15%	5%	4%	3%
	Employees	15%	35%	70%	85%	100%	100%	100%	100%	85%	75%	60%	55%	45%	40%	30%	20%	10%	10%	5%
Fine/Casual Dining	Visitors	0%	0%	0%	0%	0%	15%	50%	55%	45%	45%	45%	60%	90%	95%	100%	90%	90%	90%	50%
	Employees	0%	20%	30%	60%	75%	75%	75%	75%	75%	75%	75%	100%	100%	100%	100%	100%	100%	85%	50%
Family Restaurant	Visitors	10%	25%	45%	70%	90%	90%	100%	85%	65%	40%	45%	60%	70%	70%	65%	30%	25%	15%	10%
	Employees	50%	75%	90%	90%	100%	100%	100%	100%	100%	75%	75%	95%	95%	95%	95%	80%	65%	65%	35%
Fast Casual/Fast Food	Visitors	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Employees	15%	20%	30%	40%	75%	100%	100%	100%	95%	70%	60%	70%	90%	90%	60%	40%	30%	20%	20%
Bar/Lounge/Night Club	Visitors	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	50%	75%	100%	100%	100%	100%
	Employees	0%	0%	0%	5%	5%	5%	5%	10%	10%	10%	20%	45%	70%	100%	100%	100%	100%	100%	100%
Bowling Alley	Visitors	0%	0%	0%	0%	25%	65%	85%	90%	95%	95%	90%	95%	100%	95%	90%	100%	100%	100%	90%
	Employees	0%	0%	5%	25%	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Hotel-Business	Visitors	95%	90%	80%	70%	60%	60%	55%	55%	60%	60%	65%	70%	75%	75%	80%	85%	95%	100%	100%
Hotel-Leisure	Visitors	95%	95%	90%	80%	70%	70%	65%	65%	70%	70%	75%	80%	85%	85%	90%	95%	95%	100%	100%
Employee	Employees	10%	30%	100%	100%	100%	100%	100%	100%	100%	100%	70%	70%	40%	20%	20%	20%	20%	10%	5%
Restaurant/Lounge	Visitors	0%	10%	30%	10%	10%	5%	100%	100%	33%	10%	10%	30%	55%	60%	70%	67%	60%	40%	30%
Meeting/Banquet (< 100 sq ft/key)	Visitors	0%	0%	30%	60%	60%	60%	65%	65%	65%	65%	65%	100%	100%	100%	100%	100%	50%	0%	0%
Convention (> 100 sq ft/key)	Visitors	0%	0%	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	30%	30%	10%	0%	0%	0%
Employee	Employees	10%	10%	60%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	60%	10%	10%
Residential Guest	Visitors	0%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	40%	60%	100%	100%	100%	100%	80%	50%
Resident Reserved	Residents	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Resident (Apartments)	Residents	100%	95%	88%	80%	75%	70%	68%	65%	65%	68%	71%	74%	77%	80%	83%	86%	89%	92%	100%
Resident (Townhome)	Residents	90%	85%	80%	75%	70%	69%	68%	67%	66%	55%	60%	55%	50%	55%	65%	75%	85%	90%	100%
Office	Visitors	0%	20%	60%	80%	90%	100%	90%	80%	60%	40%	20%	10%	5%	0%	0%	0%	0%	0%	0%
	Employees Unreserved	0%	20%	60%	80%	90%	100%	90%	80%	60%	40%	20%	10%	5%	0%	0%	0%	0%	0%	0%
	Employees Reserved	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Medical/Dental Office	Visitors	0%	0%	90%	90%	100%	100%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Employees	0%	20%	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food Hall	Visitors	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Employees	15%	20%	30%	40%	75%	100%	100%	100%	95%	70%	60%	70%	90%	90%	60%	40%	30%	20%	20%
Recreational Community Center	Visitors	50%	60%	80%	90%	95%	100%	100%	100%	100%	90%	80%	70%	50%	50%	30%	10%	1%	1%	0%
	Employees	50%	60%	80%	90%	95%	100%	100%	100%	100%	90%	80%	70%	50%	50%	50%	20%	20%	20%	0%

Figure 29: Projected Need by Land Use and Time of Day During Peak Day and Month (Weekday)

Weekday Estimated Peak-Hour Parking Demand																								
Land Use	Monthly Adjustment	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM	Overall Peak 6 PM	AM Peak Hour 11 AM	PM Peak Hour 5 PM	Eve Peak Hour 6 PM
Retail																								
Retail (<400 ksf)	100%	0	1	3	5	10	13	16	18	18	17	14	15	16	16	15	9	5	2	0	16	13	15	16
Employee	100%	0	1	1	2	4	5	5	5	5	5	5	5	5	5	4	3	2	1	0	5	5	5	5
Supermarket/Grocery	100%	0	1	1	2	3	3	4	4	4	4	4	4	4	3	2	1	1	0	0	4	3	4	4
Employee	100%	0	1	1	1	2	2	2	2	2	2	2	2	1	1	1	0	0	0	0	1	2	2	1
Food and Beverage																								
Fine/Casual Dining	100%	0	0	0	0	34	92	172	172	149	92	115	172	218	230	230	230	218	172	57	218	92	172	218
Employee	100%	0	10	25	37	44	44	44	44	44	37	37	49	49	49	49	49	49	42	17	49	44	49	49
Entertainment and Institutions																								
Bowling Alley	100%	0	0	0	0	99	99	99	99	99	99	99	99	192	218	221	181	181	0	0	192	99	99	192
Employee	100%	0	0	1	3	11	11	11	11	11	11	11	11	11	11	11	11	11	3	3	11	11	11	11
Hotel and Residential																								
Hotel-Business	60%	42	39	35	31	26	26	24	24	26	26	28	31	33	33	35	37	42	44	44	33	26	31	33
Hotel-Leisure	50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Hotel Employees	60%	1	3	11	11	11	11	11	11	11	11	8	8	4	2	2	2	2	1	1	4	11	8	4
Restaurant/Lounge	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Meeting/Banquet (0 to 20 sq ft/key)	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Meeting/Banquet (20 to 50 sq ft/key)	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Meeting/Banquet (50 to 100 sq ft/key)	100%	0	0	15	30	30	30	32	32	32	32	32	50	50	50	50	50	25	0	0	50	30	50	50
Convention (100 to 200 sq ft/key)	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Convention (> 200 sq ft/key)	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Restaurant/Meeting Employees	100%	1	1	5	8	8	8	8	8	8	8	8	8	5	3	3	2	0	0	0	5	8	8	5
Residential, Suburban																					-	-	-	-
Studio Efficiency	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
1 Bedroom	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
2 Bedrooms	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
3+ Bedrooms	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Reserved	100%	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480
Visitor	100%	0	4	7	7	7	7	7	7	7	7	7	15	22	37	37	37	37	30	19	22	7	15	22
Office																								
Office <25 ksf	100%	0	0	1	3	5	2	1	2	5	2	1	1	0	0	0	0	0	0	0	0	2	1	0
Reserved	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Employee	100%	2	9	30	53	59	59	50	50	56	56	50	36	15	9	3	2	1	0	0	15	59	36	15
Medical/Dental Office	100%	0	0	84	84	93	93	28	84	93	93	84	74	62	28	14	0	0	0	0	62	93	74	62
Employee	100%	0	9	46	46	46	46	46	46	46	46	46	46	31	14	7	0	0	0	0	31	46	46	31
Day Care Center	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Employee	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Bank (Drive In Branch)	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Employee	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Additional Land Uses																								
Food Hall	96%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Employee	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Recreational Community Center	100%	99	79	79	138	138	158	118	138	138	138	158	197	197	177	158	138	69	20	0	197	158	197	197
Employee	100%	8	8	8	8	8	8	8	8	8	8	10	10	10	5	2	2	2	2	0	10	8	10	10
Outdoor Turf Field	75%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Employee	85%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Additional Land Use 4	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Employee	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
	Customer/Visitor	143	134	240	325	476	558	545	627	621	561	594	707	844	835	789	701	588	270	123	844	558	707	844
	Employee/Resident	15	44	131	180	204	206	198	198	204	196	190	187	141	106	87	74	70	51	23	141	206	187	141
	Reserved	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480
		638	658	851	985	1,160	1,244	1,223	1,304	1,304	1,237	1,263	1,374	1,466	1,420	1,356	1,255	1,138	801	625	1,466	1,244	1,374	1,466

Figure 30: Projected Need by Land Use and Time of Day During Peak Day and Month (Weekend)

Weekend Estimated Peak-Hour Parking Demand																								
Land Use	Monthly Adjustment	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM	Overall Peak	AM Peak Hour	PM Peak Hour	Eve Peak Hour
																					1 PM	11 AM	1 PM	7 PM
Retail																								
Retail (<400 ksf)	100%	0	1	2	7	12	17	19	19	19	19	18	16	13	12	11	10	7	3	0	19	17	19	12
Employee	100%	1	1	2	4	5	5	6	6	6	6	6	5	5	5	4	4	3	1	0	6	5	6	5
Supermarket/Grocery	100%	0	1	2	3	4	4	4	4	4	4	4	3	2	1	1	0	0	0	0	4	4	4	1
Employee	100%	0	1	1	2	2	2	2	2	2	1	1	1	1	1	1	0	0	0	0	2	2	2	1
Food and Beverage																								
Fine/Casual Dining	100%	0	0	0	0	0	40	132	146	119	119	119	159	238	252	265	238	238	238	132	146	40	146	252
Employee	100%	0	11	17	33	41	41	41	41	41	41	41	55	55	55	55	55	55	47	28	41	41	41	55
Entertainment and Institutions																								
Bowling Alley	100%	0	0	0	0	60	157	205	217	229	229	217	229	241	229	217	241	241	241	217	217	157	217	229
Employee	100%	0	0	1	4	11	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Hotel and Residential																								
Hotel-Business	60%	49	46	41	36	31	31	28	28	31	31	33	36	38	38	41	43	49	51	51	28	31	28	38
Hotel-Leisure	50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Hotel Employees	60%	1	3	11	11	11	11	11	11	11	11	8	8	4	2	2	2	2	1	1	11	11	11	2
Restaurant/Lounge	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Meeting/Banquet (0 to 20 sq ft/key)	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Meeting/Banquet (20 to 50 sq ft/key)	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Meeting/Banquet (50 to 100 sq ft/key)	100%	0	0	7	15	15	15	16	16	16	16	16	25	25	25	25	25	12	0	0	16	15	16	25
Convention (100 to 200 sq ft/key)	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Convention (> 200 sq ft/key)	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Restaurant/Meeting Employees	100%	1	1	6	10	10	10	10	10	10	10	10	10	10	10	10	10	6	1	1	10	10	10	10
Residential, Suburban	100%																				-	-	-	-
Studio Efficiency	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
1 Bedroom	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
2 Bedrooms	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
3+ Bedrooms	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Reserved	100%	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480
Visitor	100%	0	11	11	11	11	11	11	11	11	11	11	22	33	55	55	55	55	44	28	11	11	11	55
Office																								
Office <25 ksf	100%	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0
Reserved	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Employee	100%	0	1	4	5	6	6	6	5	4	3	1	1	0	0	0	0	0	0	0	5	6	5	0
Additional Land Uses																								
Food Hall	96%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Employee	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Recreational Community Center	100%	219	262	350	393	415	437	437	437	437	393	350	306	219	219	131	44	4	4	0	437	437	437	219
Employee	100%	5	6	8	9	10	10	10	10	10	9	8	7	5	5	5	2	2	2	0	10	10	10	5
Outdoor Turf Field	75%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Employee	85%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Additional Land Use 4	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Employee	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
	Customer/Visitor	272	334	440	505	598	763	906	931	919	875	820	836	831	845	756	663	609	584	430	931	763	931	845
	Employee/Resident	10	28	57	87	106	111	111	110	107	103	96	107	100	96	95	90	83	67	44	110	111	110	96
	Reserved	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480
		761	842	977	1,071	1,183	1,354	1,496	1,521	1,506	1,458	1,395	1,423	1,410	1,421	1,331	1,233	1,172	1,131	953	1,521	1,354	1,521	1,421

Figure 31: Projected Parking Needs at Selected Time Periods by Land Use (Phase 1) – Town of Castle Rock Table

Uses	Quantity	Per Unit[6]	Peak Weekday Morning Use[7] (11 AM)	Peak Weekday Afternoon Use[8] (5 PM)	Peak Weekday Evening Use[9] (6 PM)	Peak Weekday Overnight Use[10] (12 AM)[2]	Peak Weekend Morning Use[7] (11 AM)	Peak Weekend Afternoon Use[8] (1 PM)[1]	Peak Weekend Evening Use[9] (7 PM)	Peak Weekend Overnight Use[10] (12 AM)[2]
General Retail	5,421	GSF	14	15	16	0	17	20	13	0
Retail - Market Place	0	GSF	0	0	0	0	0	0	0	0
Retail - Supermarket	0	GSF	0	0	0	0				
Restaurant - Low Turnover	11,000	GSF	66	107	129	36	39	90	147	77
Bowling Alley[14,15]	0	GSF	0	0	0	0	0	0	0	0
Hotel - Guest Rooms	0	Rooms	0	0	0	0	0	0	0	0
Hotel - Conference Center[4]	0	GSF	0	0	0	0	0	0	0	0
Multifamily[5,11]	298	Dwelling Units	378	384	390	596	381	381	415	596
General Office	8,500	GSF	22	13	5	0	4	3	0	0
Medical Office	14,500	GSF	66	57	44	0	0	0	0	0
CR Sports Center[12,13]	145,000	GSF	166	208	208	0	447	447	224	0
			712	**784**	**792**	**632**	**888**	**941**	**799**	**673**

Figure 32: Projected Parking Needs at Selected Time Periods by Land Use (Phase 1 + 2) – Town of Castle Rock Table

Uses	Quantity	Per Unit[6]	Peak Weekday Morning Use[7] (11 AM)	Peak Weekday Afternoon Use[8] (5 PM)	Peak Weekday Evening Use[9] (6 PM)	Peak Weekday Overnight Use[10] (12 AM)[2]	Peak Weekend Morning Use[7] (11 AM)	Peak Weekend Afternoon Use[8] (1 PM)[1]	Peak Weekend Evening Use[9] (7 PM)	Peak Weekend Overnight Use[10] (12 AM)[2]
General Retail	7,000	GSF	18	20	21	0	22	25	16	0
Retail - Market Place	1,500	GSF	5	6	5	1	6	6	2	0
Retail - Supermarket	0	GSF	0	0	0	0				
Restaurant - Low Turnover	22,900	GSF	136	222	268	75	81	187	307	160
Bowling Alley[14,15]	0	GSF	0	0	0	0	0	0	0	0
Hotel - Guest Rooms	123	Rooms	37	38	37	148	42	39	41	148
Hotel - Conference Center[4]	6,000	GSF	40	60	56	0	25	26	35	1
Multifamily[5,11]	384	Dwelling Units	487	495	502	768	491	491	535	768
General Office	25,000	GSF	62	36	15	0	7	6	0	0
Medical Office	31,000	GSF	138	120	93	0	0	0	0	0
CR Sports Center[12,13]	145,000	GSF	166	208	208	0	447	447	224	0
			1,089	**1,205**	**1,205**	**992**	**1,121**	**1,227**	**1,160**	**1,077**

Figure 33: Projected Parking Needs at Selected Time Periods by Land Use (Full Buildout) – Town of Castle Rock Table

Uses	Quantity	Per Unit[6]	Peak Weekday Morning Use[7] (11 AM)	Peak Weekday Afternoon Use[8] (5 PM)	Peak Weekday Evening Use[9] (6 PM)	Peak Weekday Overnight Use[10] (12 AM)[2]	Peak Weekend Morning Use[7] (11 AM)	Peak Weekend Afternoon Use[8] (1 PM)[1]	Peak Weekend Evening Use[9] (7 PM)	Peak Weekend Overnight Use[10] (12 AM)[2]
General Retail	7,000	GSF	18	20	21	0	22	25	16	0
Retail - Market Place	1,500	GSF	5	6	5	1	6	6	2	0
Retail - Supermarket	15,000	GSF	45	60	58	5	62	62	19	2
Restaurant - Low Turnover	22,900	GSF	136	222	268	75	81	187	307	160
Bowling Alley[14,15]	60,000	GSF	111	111	203	3	171	231	243	231
Hotel - Guest Rooms	123	Rooms	37	38	37	148	42	39	41	148
Hotel - Conference Center[4]	6,000	GSF	40	60	56	0	25	26	35	1
Multifamily[5,11]	384	Dwelling Units	487	495	502	768	491	491	535	768
General Office	25,000	GSF	62	36	15	0	7	6	0	0
Medical Office	31,000	GSF	138	120	93	0	0	0	0	0
CR Sports Center[12,13]	145,000	GSF	166	208	208	0	447	447	224	0
			1,245	**1,376**	**1,466**	**1,000**	**1,354**	**1,520**	**1,422**	**1,310**