



CLEARFIELD CITY COUNCIL/PLANNING COMMISSION
AGENDA AND SUMMARY REPORT
November 1, 2022 – JOINT WORK SESSION

Meetings of the City Council of Clearfield City may be conducted via electronic means pursuant to Utah Code Ann. § 52-4-207 as amended. In such circumstances, contact will be established and maintained via electronic means and the meetings will be conducted pursuant to the Electronic Meetings Policy established by the City Council for electronic meetings.

55 South State Street
Second Floor
Clearfield, Utah

6:00 P.M. CITY COUNCIL WORK SESSION

Discussion on the Clearfield Parking Study

(Any item not fully addressed prior to the Policy Session will be addressed in a Work Session immediately following the Policy Session)

****ADJOURN THE JOINT CITY COUNCIL/PLANNING COMMISSION WORK SESSION ****

Dated this 27th day of October 2022.

/s/ Nancy R. Dean, City Recorder

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STAFF REPORT

TO: Mayor Shepherd, City Council, & Planning Commission
FROM: Brad McIlrath, Senior Planner
MEETING DATE: Tuesday, November 1, 2022
SUBJECT: Discussion on the Clearfield Parking Study

RECOMMENDED ACTION

Staff recommends that the Mayor, City Council, and Planning Commission members review and discuss the analysis and recommendations of the study.

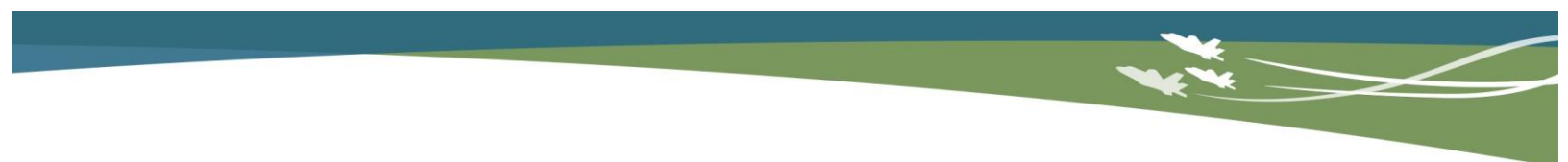
DESCRIPTION / BACKGROUND

In October 2021, Clearfield City, with the assistance of project consultant Fehr & Peers, commenced work on a comprehensive parking study to analyze the efficacy of parking requirements citywide and within the Downtown Form-Based Code area. To determine the parking demand for uses in Clearfield City, Fehr & Peers conducted two field counts to measure peak demands during the holiday season and off-peak demand. Peak demand counts were conducted in December 2021 and off-peak demand counts were conducted in March 2022. Counts were taken multiple times throughout the day based upon the typical peak demands for each use. Recommendations for parking standards are provided for the citywide zoning code and specifically for the form-based code. A summary of parking standard recommendations is provided in the executive summary of the study, with an in-depth review of each recommendation provided in the following sections of the study (data collection & recommendations | national literature review & recommendations).

STUDY / ANALYSIS

In coordination with city staff, Fehr & Peers identified six (6) different topics or parking related issues facing Clearfield City. These topics are reviewed in the study under the parking policy guidance section and have been included below.

1. Design Details & Dimensional Standards
2. Shared Parking Requirements
3. Affordable, Senior, and Transit-Oriented Housing Requirements
4. On-Street Parking and Enforcement
5. Provision of Downtown Public Parking, and
6. Structured Parking



Each topic provides questions about how the issues (tandem parking in the first section) should be handled in the city moving forward. This section of the report is meant to provide information and direction for future policies related to these different parking practices. The different sections of the study provide valuable information that support code changes to better address the needs of Clearfield as related to each topic discussed. With recommendations provided, the study is meant as a resource for the city and is not a regulatory document. Any future amendments to parking standards in city code will be at the discretion of the Planning Commission and City Council.

CORRESPONDING POLICY PRIORITY (OR PRIORITIES)

Providing Quality Municipal Services

The study supports this policy priority by analyzing current policy in seeking for *continuous improvement through innovation*. The innovative study and recommendations encourage improvement of city parking standards that align with local parking demands as well as regional parking trends. By doing so, the city will be able to ensure sufficient parking for businesses and residences while not overburdening those uses with more parking than is needed to serve each business or home.

Improving Clearfield's Image, Livability and Economy

The study supports this policy by providing analysis and recommendations that encourage more efficient use of land for parking based upon the observed needs of local businesses and residential developments. By ensuring adequate parking that is proportionate to the demands of the associated use (commercial, industrial, residential, etc.), appropriately sized parking lots will improve the city's image, livability and support the local economy by "right sizing" parking standards to meet the demand.

FISCAL IMPACT

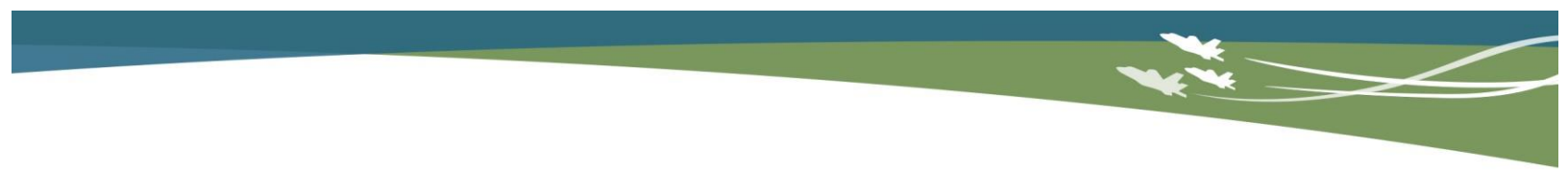
None.

ALTERNATIVES

As part of parking standard ordinance changes, the Planning Commission and City Council have the discretion to accept the recommended changes of the study or adopt alternative standards.

SCHEDULE / TIME CONSTRAINTS

Following the joint review of the study by the bodies, staff will work to prepare ordinance changes that are in line with the recommendations outlined therein. The ordinance amendments will likely come in multiple phases to be specific to each code standard that will be addressed (i.e., parking ratios, shared parking, parking reductions/credits, etc.)



LIST OF ATTACHMENTS

- Clearfield Parking Study – September 2022

Clearfield Parking Study

Prepared for:
Clearfield City

September 2022

UT 21-2318

FEHR  PEERS

Clearfield City 
we've got it made


WASATCH FRONT REGIONAL COUNCIL


TRANSPORTATION
AND
LAND USE CONNECTION

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Acknowledgements

The Clearfield Parking Study team acknowledges the efforts and contributions of the following groups:

- Clearfield Planning
 - Brad McIlrath – Senior Planner
 - Tyson Stoddard –Planner 1
 - Spencer Brimley – Community Development Director
- Clearfield Engineering
 - Braden Felix – City Engineer
- WFRC Community and Economic Development
 - Mikala Jordan – Planner
- WFRC Transportation and Land Use Connection
- Fehr & Peers
 - Tim Baird – Senior Planner
 - Christopher Bender – Senior Engineer

Executive Summary

This study provides Clearfield City with data and recommendations to guide updates to the parking requirements and policies in the City's zoning code and other policies and practices. This study's goal is to align required parking in new developments with the actual parking demand occurring in Clearfield, ensuring that new land uses both meet the parking needs of their users and avoid overbuilding unnecessary parking. It also seeks to improve City policies to maximize the benefits of existing and future public and on-street parking assets.

Fehr & Peers collaborated with Clearfield City staff to identify land uses across both Clearfield's general citywide zoning and form-based code parking requirements that would benefit from modernization, based on typical parking rates observed across the Wasatch Front and in national data sources. The project team conducted a combination of field counts of parking activity at each site (in December 2021 and March 2022) and a review of peer communities' parking requirements for these land uses. Based on the results of these analyses, this study provides recommendations to update the minimum parking requirements at each of these land uses.

Two important qualifications to the recommendations below should be noted. First, recommended rates are for parking *minimum* requirements; developers may supply additional parking stalls if they so choose. Second, recommended minimum parking requirements are based on a representative sample of uses within each category; however, as future developments are proposed, individual parking studies may find that a development would generate more or less parking demand than is required. In those cases, the parking supply should be guided by that study and the approval of Clearfield City staff.

In addition to recommended parking requirements, this study also provides guidance to Clearfield City on a number of parking-related policy questions, including dimensional standards, shared parking requirements, on-street parking restrictions and enforcement, and structured parking.

The following tables summarize key recommendations for Clearfield City:

- **Table 1** includes recommended changes to Clearfield's minimum parking requirements based on findings from the local data collection efforts,
- **Table 2** includes recommended changes to Clearfield's minimum parking requirements based on findings from the national literature review, and
- **Table 3** includes recommended parking policies that address specific questions that were presented during this study.

Table 1: Summary of Recommended Parking Requirements Based on Data Collection

Zoning Area	Land Use	Existing Requirement	Recommended Minimum Requirements
Citywide Zoning Code	Multifamily Residential ¹	- 2.125 spaces per unit.	- 1 space per single bedroom unit. - 2 spaces per two-bedroom unit. - 2.5 spaces per three-bedroom and larger units.
	Distribution	- 2 spaces for each 1,000 square feet of gross floor area or fraction thereof. This shall not apply to floor areas used exclusively for storage.	- 1 passenger vehicle stall per 1,000 sq. ft. of gross floor area. This shall not apply to floor areas used exclusively for storage. - Truck and trailer storage spaces should be provided on a case-by-case basis as determined by a study coordinated with Clearfield staff.
	General Industrial	- 2 spaces for each 1,000 square feet of gross floor area or fraction thereof. This shall not apply to floor areas used exclusively for storage.	- 0.5 passenger vehicle parking stalls per 1,000 sq. ft. of gross floor area. This shall not apply to floor areas used exclusively for storage. - Truck and trailer storage spaces should be provided on a case-by-case basis as determined by a study coordinated with Clearfield staff.
	Restaurant	- 1 space for each 100 square feet of floor area or fraction thereof.	- 10 stalls per 1,000 sq. ft. - Alternatively, provide 0.5 stalls per seat.
	Fast Food	- 20 spaces for each 1,000 square feet of enclosed eating space or a fraction thereof.	- 5 spaces per 1,000 sq. ft. - Alternatively, provide 0.33 stalls per seat.
Form Based Code	Multifamily Residential ¹	- 1.15 space per single bedroom unit. - 1.725 spaces per two-bedroom unit. - 2.3 spaces per three-bedroom and larger units.	- 0.75 spaces per bedroom, up to 2.25 spaces per three-bedroom and larger units.
	Restaurant	- 7 spaces for each 1,000 square feet of sales and enclosed eating space or fraction thereof	- 7 spaces for each 1,000 square feet of sales and enclosed eating space or fraction thereof (maintain current standard).
	Fast Food	- 7 spaces for each 1,000 square feet of sales and enclosed eating space or fraction thereof	- 6 spaces per 1,000 sq. ft., with a minimum of 8 total stalls. - Alternatively, provide 0.33 stalls per seat with a minimum of 8 total stalls.

1. Residential parking rates in this table include the ratio needed for visitor parking. No additional parking is required for visitors beyond the proposed rates.

Table 2: Summary of Recommended Parking Requirements Based on Literature Review

Zoning Area	Land Use	Existing Requirement	Recommended Minimum Requirements
Citywide Zoning Code	Batting Cages	- none	- 2 spaces per cage
	Bowling Alleys	- 2 spaces per 1,000 sq. ft.	- 2 spaces per lane
	Skating Rink/ Swimming Pool	- 2 spaces per 1,000 sq. ft.	- 1 space per 1,000 sq. ft.
	Golf Courses	- Discretionary	- 8.5 spaces per hole
	Tennis Courts	- Discretionary	- 2 spaces per court
	Misc. Indoor Recreation	- Discretionary	- 2 spaces per 1,000 sq. ft.
	Furniture/Appliance/ Lumber Store	- 1.5 spaces per 1,000 sq. ft.	- 0.75 spaces per 1,000 sq. ft.
	General Office	- 2 spaces per 1,000 sq. ft.	- 2.5 spaces per 1,000 sq. ft.
	Medical/Dental Office	- 2 spaces per 1,000 sq. ft.	- 3 spaces per 1,000 sq. ft.
Form Based Code	Library	- 1 space per 600 sq. ft.	- 2 spaces per 1,000 sq. ft.
	Museum	- 1 space per 600 sq. ft.	- 1 space per 1,000 sq. ft.
	Post Office (No distribution)	- 1 space per 600 sq. ft.	- 2 spaces per 1,000 sq. ft.
	Bank	- 1 space per 500 sq. ft.	- 3 spaces per 1,000 sq. ft.
	Fitness, Gym, Dance studio	- 1 space per 500 sq. ft.	- 4 spaces per 1,000 sq. ft.
	Concert hall/Theater	- 1 space per 350 sq. ft.	- 1 space per 5 seats
	Misc. Indoor Recreation Areas	- 1 space per 350 sq. ft.	- Recommend requiring case-by-case parking studies based on estimated facility use, vehicle traffic to the facility, transit use to the facility, potential traffic congestion, and likelihood of overflow parking in surrounding neighborhoods.
	Craftsman Industrial	- Production: 1 space per 1,000 sq. ft. - Retail: 2 spaces per 1,000 sq. ft.	- Production: 1 space per 1,000 sq. ft. - Retail: 2 spaces per 1,000 sq. ft.
	Open Space	- Per Zoning Administrator	- Recommend requiring case-by-case parking studies based on estimated facility use, vehicle traffic to the facility, transit use to the facility, potential traffic congestion, and likelihood of overflow parking in surrounding neighborhoods.

Table 3: Summary of Recommended Parking Policies

Policy Question	Recommended Policy
<i>How is parking use affected by stacked (tandem) parking as opposed to side-by-side parking?</i>	- Each required parking stall within a parking area or garage shall be accessible. Automobiles may be parked in tandem in a public garage or public parking area, which provides attendants to park vehicles at all times the garage or area is open for use. - In the case of townhomes or other multi-family dwellings, tandem garages with space for two vehicles should be calculated as providing 1.5 spaces (rather than two) for purposes of meeting minimum parking requirements.
<i>What design details should be specified in code?</i>	- Driveway length shall be 20 feet from back of curb or sidewalk (if present) to qualify as a parking stall for purposes of meeting minimum parking requirements. - Minimum vertical clearance for parking garages shall be 84 inches. Per ADA requirements, "van-accessible spaces, their associated access aisles, and the vehicular routes serving them must provide vertical clearance of at least 98 inches to allow for the height of typical wheelchair lift-equipped vehicles." - For additional parking dimensions, see the dimensions outlined in Figures 7-3 and 7-4 of ULI's Dimensions of Parking, Fifth Edition (2014) included in Appendix A.
<i>How should parking requirements be adjusted for developments that allow for shared parking?</i>	- The reductions present in Form Based Code Table 9.2 (2) should be updated to require 60% of the residential parking during the 7:00 AM to 6:00 PM period to reflect post-COVID work-from-home patterns. - Incorporate shared parking reductions for Fitness, Gym, and Dance Studio land uses.
<i>How should parking requirements be adjusted for affordable or senior housing?</i>	- Senior housing should be permitted to apply for up to 50% parking reduction. - Affordable housing should be permitted to apply for up to 25% parking reduction. - These reductions should only be granted pending review by Clearfield City staff.
<i>How should parking requirements be adjusted for transit-oriented housing?</i>	- The parking credits outlined in Form Based Code Section 9.2, Part 3: Parking Credits should be updated to specify that the transit should operate with 15-minute headways continuously from the beginning of the AM peak traffic period through the end of the PM peak traffic period to receive parking credits.
<i>How should Clearfield regulate on-street parking during winter months when snowplowing can pose a risk to vehicles parked on-street?</i>	- Identify snow routes where parking is not allowed during snowfall, which can allow parking to be preserved on streets that are primarily for local-use purposes.
<i>Should Clearfield implement paid on-street parking, and if so, how should a paid parking policy be enforced?</i>	- Paid on-street parking is not immediately recommended in Clearfield. However, as Clearfield's downtown develops, these conditions may change and make a paid parking program a viable option.
<i>When would it be feasible to provide or subsidize public parking in downtown Clearfield?</i>	- Constructing a public parking facility is not immediately recommended in Clearfield. However, as Clearfield's downtown develops, these conditions may change and make a public parking facility a viable option.
<i>Is there evidence that structured parking generates less parking demand that would justify a reduction in required parking? If not, what incentives would be appropriate to encouraging structured parking?</i>	- Structured parking has not been found to reduce parking demand. - Clearfield's allowed 25% parking reduction could serve as incentive to convert from surface to structured parking. - Consider allowing additional maximum development density (dwelling units/acre or FAR) or providing flexibility with respect to other dimensional, open space, or other requirements to applicants within the Form Based Code area who provide 75% or more off-street parking in a structured format. - Prioritize encouraging shared parking arrangements within the Form Based Code area

Introduction

In October through December of 2021, Fehr & Peers coordinated with Clearfield City staff to review Clearfield's existing minimum parking requirements dictated by its zoning regulations, including general citywide and Form Based Code requirements. The project team identified common land uses where existing parking requirements may not reflect current conditions, or where existing issues have been noted. Representative sites for these land uses were selected for data collection to verify parking demand during peak times.

Following a review of the parking demand at each site in December 2021 and March 2022, Fehr & Peers provided recommendations to update the minimum parking requirements at each land use. Note that the recommended rates are for parking minimum requirements, not parking supply prescriptions or maximum requirements; developers who choose to supply additional parking stalls may do so if they anticipate that their sites will have higher than average parking occupancy rates.

In addition to recommended parking requirements, this study also provides guidance to Clearfield City on a number of parking-related policy questions, including dimensional standards, shared parking requirements, on-street parking restrictions and enforcement, and structured parking.

Citywide Parking Requirements

The project team reviewed section 11-14-3: *Parking Spaces Required* in Clearfield's code, which includes Clearfield's citywide minimum parking requirements, and concluded that the following four land use categories have parking generation rates that appear to conflict with recommendations in national state-of-the-practice literature from the Institute of Transportation Engineers (ITE) and the Urban Land Institute (ULI):

1. Multifamily housing,
2. Industrial and wholesale establishments,
3. Restaurants & Bars, and
4. Fast-food or drive-in restaurants.

Fehr & Peers collected parking utilization data for these land uses to guide Clearfield in their efforts to update the minimum parking requirements in Clearfield's Citywide Zoning Code. Fehr & Peers also used existing national data to inform adjustments to Clearfield's Citywide Zoning Code minimum parking requirements for the following land uses:

1. Recreation areas including bowling alleys, skating rinks, golf courses, tennis courts, and others,
2. Less intensive commercial businesses including furniture, appliance, and lumber sales,
3. Offices and personal services, including medical and dental clinics.

Downtown Form Based Code Parking Requirements

The project team also reviewed Clearfield City's Downtown Form Based Code which includes minimum parking requirements in Clearfield's downtown area and collected parking utilization data for the following land uses in the Form Based Code area:

1. Multifamily housing,
2. Neighborhood eating & dining,
3. General eating & dining.

Fehr & Peers also used existing national data to inform adjustments to Clearfield's Form Based Code minimum parking requirements for the following land uses:

1. Library / museum / post office (no distribution),
2. Neighborhood service,
3. General service,
4. Craft industry,
5. Open Space & Recreation.

Data Collection & Recommendations

The ULI reports in *Shared Parking, Third Edition*, that most land uses experience peak parking demand in early December and typical parking demand in early spring. Therefore, to collect both the peak and typical parking demands at the data collection locations, Fehr & Peers collected parking occupancy data on December 7th, 8th, and 9th, in 2021, and on March 15th, 16th, and 17th, in 2022. All parking data was collected on weekdays between Tuesday and Thursday to avoid any variations that can occur on weekends that could affect parking conditions on Mondays and Fridays.

Residential developments typically experience peak parking demand at night when residents are at home, which is different from most businesses. To better understand the varying demand that these developments experience, Fehr & Peers collected parking counts at the residential developments at midnight as well as at approximately 12 PM and 6 PM. Parking data for all other developments was counted at approximately 10 AM, 12 PM, 4 PM, and 7 PM.

Residential Land Use Parking Data Collection

Table 4 shows the residential parking data that was collected in early December 2021, while **Table 5** shows the residential parking data that was collected in mid-March 2022. It should be noted that, since the data collection team was unable to determine if garages were occupied or not during the counts, all garages were counted separately. In both tables, columns that outline the ratio of occupied stalls per housing unit and the ratio of occupied stalls per bedroom assume all of the garage stalls were occupied to avoid underestimating the total parking demand.

As shown in the tables, the parking demand at the residential developments in the Citywide Zoning Code areas was comparatively inconsistent and didn't follow the same trends that *Shared Parking* assumed would occur. That is, the mid-March occupancy counts were found to be higher than the early December counts. It is possible that, due to the recent high residential demand in Utah, fewer units were unoccupied in March than December, which would reflect in the parking demand.

On the other hand, the parking demand at the residential developments in the Form Based Code areas was very consistent between both counts, with the December counts being slightly higher. This pattern is likely due to the residential units in the Form Based Code areas being occupied at a high rate.

For comparison, the data provided in ITE's *Parking Generation* manual indicates that low-rise multifamily housing (the land use that matches the data collection sites) typically generates 0.66 stalls of demand per bedroom. These sites indicated a slightly higher demand per bedroom at 0.87 stalls per bedroom in the Citywide Zoning area and 0.74 stalls per bedroom in the Form Based Code area.

Table 4: Residential Parking Data Collection - December 2021

Location - Citywide Zoning	Total Residential Units	Total Bedrooms	Occupied Parking Stalls			Garage Spots	Occupied Stalls/ Unit	Occupied Stalls/ Bedroom
			12 PM	5 PM	12 AM			
Country Oaks	72	108	29	36	47	30	1.07	0.71
Clearfield Station Apartments	216	408	170	250	337	-	1.56	0.83
West Square Condos	142	308	101	113	164	46	1.48	0.68
Pinnacle Mountain View Apartments	324	552	149	228	291	130	1.30	0.76
Goldstone Place Apartments	228	380	187	231	294	-	1.29	0.77
Average							1.36	0.76
Location - Form Based Code	Total Residential Units	Total Bedrooms	Occupied Parking Stalls			Garage Spots	Occupied Stalls/ Unit	Occupied Stalls/ Bedroom
			12 PM	5 PM	12 AM			
Oakmont Townhomes*	29	87	14	16	21	29	1.72	0.57
City Center Apartments	123	195	88	115	160	-	1.30	0.82
Newcastle Greene Townhomes	99	283	108	135	184	12	1.98	0.69
Depot Crossing Townhomes	62	165	65	89	125	12	2.21	0.83
Average							1.73	0.74

* Although Oakmont Townhomes is not within the Form Based Code area, it was used as a close comparable site due to the development's design, layout, and similar to townhome developments in the Form Based Code area.

Source: Fehr & Peers.

Table 5: Residential Parking Data Collection - March 2022

Location - Citywide Zoning	Total Residential Units	Total Bedrooms	Occupied Parking Stalls			Garage Spots	Occupied Stalls/ Unit	Occupied Stalls/ Bedroom
			12 PM	5 PM	12 AM			
Country Oaks	72	108	25	30	40	30	0.97	0.65
Clearfield Station Apartments	216	408	190	250	342	-	1.58	0.84
West Square Condos	142	308	129	121	194	46	1.69	0.78
Pinnacle Mountain View Apartments	324	552	230	287	412	130	1.67	0.98
Goldstone Place Apartments	228	380	180	237	341	-	1.50	0.90
Average							1.59	0.87
Location - Form Based Code	Total Residential Units	Total Bedrooms	Occupied Parking Stalls			Garage Spots	Occupied Stalls/ Unit	Occupied Stalls/ Bedroom
			12 PM	5 PM	12 AM			
Oakmont Townhomes*	29	87	14	16	21	29	1.72	0.57
City Center Apartments	123	195	98	112	170	-	1.38	0.87
Newcastle Greene Townhomes	99	283	95	118	187	12	2.01	0.70
Depot Crossing Townhomes	62	165	49	90	107	12	1.92	0.72
Average							1.72	0.74

* Although Oakmont Townhomes is not within the Form Based Code area, it was used as a close comparable site due to the development's design, layout, and similar to townhome developments in the Form Based Code area.

Source: Fehr & Peers.

Residential Land Use Parking Recommendations

Based on the data collected at the nine observed sites, Fehr & Peers recommends implementing the minimum parking rates for multifamily residential land uses shown in **Table 6**.

Table 6: Recommended Parking Rates for Multifamily Residential Land Uses

Zoning Area	Existing Requirement	Recommended Minimum Requirements
Citywide Zoning Code	- 2.125 spaces per unit.	- 1 space per single bedroom unit. - 2 spaces per two-bedroom unit. - 2.5 spaces per three-bedroom and larger units.
Form Based Code	- 1.15 space per single bedroom unit. - 1.725 spaces per two-bedroom unit. - 2.3 spaces per three-bedroom and larger units.	- 0.75 spaces per bedroom, up to 2.25 spaces per three-bedroom and larger units.

Source: Fehr & Peers.

It should be noted that these recommended parking rates already account for visitor parking; that is, no additional parking should be required to be set aside for visitors. These recommended parking rates would meet the observed demand for parking with a slight buffer for garages and guest parking, while avoiding oversupplying parking stalls.

Industrial Land Use Parking Data Collection

Table 7 shows the industrial parking data that was collected in early December 2021, while **Table 8** shows the industrial parking data that was collected in mid-March 2022. At all sites, passenger vehicles were counted separately from trucks and trailers, so two parking occupancy rates are provided for each site. The demand for passenger vehicle spaces is shown as a rate of passenger vehicles per 1,000 sq. ft.; the rate for truck spaces is shown as a rate of trucks per 1,000 sq. ft.

It should be noted that the Freeport M7 Distribution site is a wholesale distribution site, whereas the Northrop Grumman / ATK and the Americold Logistics site are both industrial sites that include office, manufacturing, and warehousing space.

For comparison, the data provided in ITE's *Parking Generation* manual indicates that industrial park land uses like the Freeport M7 Distribution site typically generate 1.2 passenger vehicle stalls of demand per 1,000 sq. ft., and that "general light industrial" sites similar to the Northrop Grumman / ATK and the Americold Logistics sites typically generate 0.65 passenger vehicle stalls of demand per 1,000 sq. ft.

Table 7: Industrial Parking Data Collection - December 2021

Location	Address	Gross Floor Area [sq. ft.]	Occupied Parking Stalls [Passenger Vehicles / Trucks]				Passenger Vehicles per 1,000 sq. ft.	Trucks per 1,000 sq. ft.
			10 AM	12 PM	4 PM	7 PM		
Freeport M7 Distribution	7 S 775 W	79,520	53 / 7	53 / 4	20 / 9	24 / 9	0.67	0.11
Northrop Grumman / ATK	1101 Freeport Industrial Pkwy	854,685	302 / 13	281 / 11	143 / 13	63 / 10	0.35	0.02
Americold Logistics	755 E 1700 S	666,641	47 / 146	44 / 146	42 / 153	35 / 146	0.07	0.23
Average							0.25	0.11

Source: Fehr & Peers.

Table 8: Industrial Parking Data Collection – March 2022

Location	Address	Gross Floor Area [sq. ft.]	Occupied Parking Stalls [Passenger Vehicles / Trucks]				Passenger Vehicles per 1,000 sq. ft.	Trucks per 1,000 sq. ft.
			10 AM	12 PM	4 PM	7 PM		
Freeport M7 Distribution	7 S 775 W	79,520	31 / 1	36 / 2	18 / 2	19 / 2	0.39	0.03
Northrop Grumman / ATK	1101 Freeport Industrial Pkwy	854,685	293 / 18	290 / 15	196 / 20	63 / 14	0.34	0.02
Americold Logistics	755 E 1700 S	666,641	59 / 124	49 / 134	27 / 128	29 / 120	0.09	0.20
Average							0.24	0.09

Source: Fehr & Peers.

Industrial Land Use Parking Recommendations

Based on the data collected at the three observed sites, Fehr & Peers recommends implementing the following minimum parking rates for industrial land uses shown in **Table 9**.

Table 9: Recommended Parking Rates for Industrial Land Uses

Land Use	Existing Requirement	Recommended Minimum Requirements
Distribution	- 2 spaces for each 1,000 square feet of gross floor area or fraction thereof. This shall not apply to floor areas used exclusively for storage.	- 1 passenger vehicle stall per 1,000 sq. ft. of gross floor area. This shall not apply to floor areas used exclusively for storage. - Truck and trailer storage spaces should be provided on a case-by-case basis as determined by a study coordinated with Clearfield staff.
General Industrial	- 2 spaces for each 1,000 square feet of gross floor area or fraction thereof. This shall not apply to floor areas used exclusively for storage.	- 0.5 passenger vehicle parking stalls per 1,000 sq. ft. of gross floor area. This shall not apply to floor areas used exclusively for storage. - Truck and trailer storage spaces should be provided on a case-by-case basis as determined by a study coordinated with Clearfield staff.

Source: Fehr & Peers.

It should be noted that the recommended minimum parking requirements do exceed the observed parking occupancy data because the gross floor areas in the observed sites included storage space. However, in line with the existing parking requirements, the recommendations are based on the floor area that isn't used exclusively for storage. Also, the ITE manual indicates that the demand for these uses was higher at other sample sites, but the local data collected showed that these rates would provide more than enough parking, while requiring fewer than the current Citywide Zoning Code currently requires.

Restaurant Parking Data Collection

Table 10 shows the restaurant parking data that was collected in early December 2021, while **Table 11** shows the restaurant parking data that was collected in mid-March 2022. Summarized data to shows the demand of parking stalls per 1,000 sq. ft. and the demand of parking stalls per customer seat.

Since the data was collected on a weekday, additional adjusted rates were included to show what the likely demand would be on a weekend. Based on the "Fine/Casual Dining" parking rates shown in ULI's *Shared Parking, Third Edition*, an approximate 15% increase was made to reflect the higher weekend demand for restaurants.

For comparison, the data provided in ITE's *Parking Generation* manual indicates that "High-Turnover Restaurant" land uses like the ones included in this study typically generate 9.44 stalls of demand per 1,000 sq. ft. on weekdays and 11.25-12.28 stalls of demand per 1,000 sq. ft. on Fridays and weekends.

Table 10: Restaurant Parking Data Collection - December 2021

Location – Citywide Zoning	Gross Floor Area [sq. ft.]	Seating Capacity	Occupied Parking Stalls				Stalls / 1,000 sq. ft.	Stalls / Seat	Weekend Adjusted	
			10 AM	12 PM	4 PM	7 PM			Stalls / 1,000 sq. ft.	Stalls / Seat
Chris's Café	3,956	115	32	32	0	0	8.09	0.28	9.26	0.32
Golden Ginger	2,220	68	2	8	2	4	3.60	0.12	4.13	0.13
Rita's Pizzeria	1,650	44	1	6	2	2	3.64	0.14	4.16	0.16
Manuel's El Burrito	5,506	124	8	45	19	25	8.17	0.36	9.36	0.42
Average							6.83	0.26	7.82	0.30
Location – Form Based Code	Gross Floor Area [sq. ft.]	Seating Capacity	Occupied Parking Stalls				Stalls / 1,000 sq. ft.	Stalls / Seat	Weekend Adjusted	
			10 AM	12 PM	4 PM	7 PM			Stalls / 1,000 sq. ft.	Stalls / Seat
Wingers	3,852	100	2	19	4	17	4.93	0.19	5.65	0.22

Source: Fehr & Peers.

Table 11: Restaurant Parking Data Collection – March 2022

Location – Citywide Zoning	Gross Floor Area [sq. ft.]	Seating Capacity	Occupied Parking Stalls				Stalls / 1,000 sq. ft.	Stalls / Seat	Weekend Adjusted	
			10 AM	12 PM	4 PM	7 PM			Stalls / 1,000 sq. ft.	Stalls / Seat
Chris's Café	3,956	115	24	22	0	0	6.07	0.21	6.95	0.24
Golden Ginger	2,220	68	1	4	2	10	4.50	0.15	5.16	0.17
Rita's Pizzeria	1,650	44	3	6	3	3	3.64	0.14	4.16	0.16
Manuel's El Burrito	5,506	124	6	32	19	27	5.81	0.26	6.66	0.30
Average							4.80	0.18	5.50	0.21

Location – Form Based Code	Gross Floor Area [sq. ft.]	Seating Capacity	Occupied Parking Stalls				Stalls / 1,000 sq. ft.	Stalls / Seat	Weekend Adjusted	
			10 AM	12 PM	4 PM	7 PM			Stalls / 1,000 sq. ft.	Stalls / Seat
Wingers	3,852	100	2	23	9	20	5.97	0.23	6.84	0.26

Source: Fehr & Peers.

Restaurant Parking Recommendations

Based on the data collected at the five observed sites, Fehr & Peers recommends implementing the following minimum parking rates for restaurant land uses shown in **Table 12**.

Table 12: Recommended Parking Rates for Industrial Land Uses

Zoning Area	Existing Requirement	Recommended Minimum Requirements
Citywide Zoning Code	- 1 space for each 100 square feet of floor area or fraction thereof.	- 10 stalls per 1,000 sq. ft. - Alternatively, provide 0.5 stalls per seat.
Form Based Code	- 7 spaces for each 1,000 square feet of sales and enclosed eating space or fraction thereof	- 7 spaces for each 1,000 square feet of sales and enclosed eating space or fraction thereof (maintain current standard).

Source: Fehr & Peers.

The Citywide Zoning Code already requires ten stalls per 1,000 sq. ft., which was found to meet the observed peak demand experienced in December after weekend adjustment and is within the range of data points shown in ITE's *Parking Generation* manual. Therefore, Fehr & Peers recommends maintaining this rate. We also recommend providing an alternative option to provide parking based on the number of seats; if a restaurant has proportionally high amount of kitchen space and few seats, then fewer patrons would be able to park, so that restaurant should be permitted to operate with fewer parking stalls. Developers should only be required to meet one of these requirements, but not both. That is, whichever of these requirements would require fewer parking stalls would be the minimum parking requirement for a restaurant in the Citywide Zoning Code area.

The Form Based Code also already requires seven stalls per 1,000 sq. ft. of restaurant "sales and enclosed eating space," which meets the observed peak in December after weekend adjustment but is lower than the ITE rate.

Additionally, Fehr & Peers found that the Form Based Code includes a requirement that restaurants with over 12,000 sq. ft. of space provide parking at 15 spaces per 1,000 sq. ft. Of the restaurants included in this study, the average size was less than 3,500 sq. ft., and the average size of the restaurants included in the ITE *Parking Generation* manual was 4,500 sq. ft. Fehr & Peers recommends removing the requirement for the 12,000 sq. ft. restaurant, as it appears to be an outlier, and may also incentivize overparking for large establishments. Should a large restaurant be proposed to be constructed in Clearfield, Fehr & Peers recommends either applying the same parking requirement as the standard sized restaurants or performing an individual study to provide an appropriate amount of parking for the development.

Fast-Food Parking Data Collection

Table 13 shows the fast-food parking data that was collected in early December 2021, while **Table 14** shows the fast-food parking data that was collected in mid-March 2022. The data was summarized to provide the demand of parking stalls per 1,000 sq. ft. and also the demand of parking stalls per customer seat.

Since the data was collected on a weekday, additional adjusted rates were included to show what the likely demand would be on a weekend, similar to the restaurant land use data. Based on the "Fast Casual/Fast-food" parking rates shown in ULI's *Shared Parking*, an approximate 2% increase was made to reflect the slightly higher weekend demand for fast-food restaurants.

For comparison, the data provided in ITE's *Parking Generation* manual indicates that "fast-food restaurant with drive-through" land uses similar to the ones included in this study typically generate 8.66 stalls of demand per 1,000 sq. ft. on weekdays and 9.18-12.41 stalls of demand per 1,000 sq. ft. on Fridays and weekends.

Table 13: Fast-food Parking Data Collection - December 2021

Location – Citywide Zoning	Gross Floor Area [sq. ft.]	Seating Capacity	Occupied Parking Stalls				Stalls / 1,000 sq. ft.	Stalls / Seat	Weekend Adjusted	
			10 AM	12 PM	4 PM	7 PM			Stalls / 1,000 sq. ft.	Stalls / Seat
Pace's Drive in	2,560	63	3	11	4	5	4.30	0.17	4.39	0.18
Wendy's	3,327	60	2	13	8	6	3.91	0.22	3.99	0.22
Taco Time*	2,262	-	4	7	3	4	3.09	-	3.16	-
Average							3.80	0.20	3.88	0.20

Location – Form Based Code	Gross Floor Area [sq. ft.]	Seating Capacity	Occupied Parking Stalls				Stalls / 1,000 sq. ft.	Stalls / Seat	Weekend Adjusted	
			10 AM	12 PM	4 PM	7 PM			Stalls / 1,000 sq. ft.	Stalls / Seat
Beto's	1,072	16	5	3	3	2	4.66	0.31	4.76	0.32
Subway	1,218	32	1	7	0	1	5.75	0.22	5.87	0.22
Taco Bell	2,154	55	4	9	5	4	4.18	0.16	4.27	0.17
Average							4.28	0.18	4.36	0.19

* Taco Time was closed for business and began renovation shortly after parking occupancy counts were collected in December, so seating counts were unable to be gathered later.

Source: Fehr & Peers.

Table 14: Fast-food Parking Data Collection – March 2022

Location – Citywide Zoning	Gross Floor Area [sq. ft.]	Seating Capacity	Occupied Parking Stalls				Stalls / 1,000 sq. ft.	Stalls / Seat	Weekend Adjusted	
			10 AM	12 PM	4 PM	7 PM			Stalls / 1,000 sq. ft.	Stalls / Seat
Pace's Drive in	2,560	63	3	6	3	9	1.17	0.05	1.20	0.05
Wendy's	3,327	60	5	15	8	3	4.51	0.25	4.60	0.26
Taco Time*	-	-	-	-	-	-	-	-	-	-
Average							3.57	0.17	3.64	0.17

Location – Form Based Code	Gross Floor Area [sq. ft.]	Seating Capacity	Occupied Parking Stalls				Stalls / 1,000 sq. ft.	Stalls / Seat	Weekend Adjusted	
			10 AM	12 PM	4 PM	7 PM			Stalls / 1,000 sq. ft.	Stalls / Seat
Beto's	1,072	16	2	2	3	2	2.80	0.19	2.86	0.19
Subway	1,218	32	1	9	4	3	7.39	0.28	2.86	0.29
Taco Bell	2,154	55	2	6	3	7	3.25	0.13	3.32	0.13
Average							3.83	0.17	3.91	0.17

* Taco Time was closed for business during the March data collection.

Source: Fehr & Peers.

Fast-Food Parking Recommendations

Based on the data collected at the six observed sites, Fehr & Peers recommends implementing the following minimum parking rates for fast-food land uses shown in **Table 15**.

Table 15: Recommended Parking Rates for Industrial Land Uses

Zoning Area	Existing Requirement	Recommended Minimum Requirements
Citywide Zoning Code	- 1 space for each 100 square feet of floor area or fraction thereof.	- 5 spaces per 1,000 sq. ft. - Alternatively, provide 0.33 stalls per seat.
Form Based Code	- 7 spaces for each 1,000 square feet of sales and enclosed eating space or fraction thereof	- 6 spaces per 1,000 sq. ft., with a minimum of 8 total stalls, - Alternatively, provide 0.33 stalls per seat with a minimum of 8 total stalls.

Source: Fehr & Peers.

Counter-intuitively, many parking requirements for fast-food restaurants with drive-through facilities are higher than requirements for sit-down restaurants in the same area. However, as is shown in ITE's *Parking Generation* manual, as well as the data collected during these counts, fast-food restaurants typically require less parking than sit-down restaurants. This is likely due to a significant portion of the customers being served via a drive-through. Reducing the parking requirements as outlined above would meet or exceed peak observed rates after weekend adjustment.

Like the previous recommendation for restaurant land uses, we also recommend providing an alternative option to provide parking based on the number of seats; if a fast-food restaurant has a proportionally high amount kitchen space and few seats, then fewer patrons would be able to park, so that fast-food restaurant should be permitted to operate with fewer parking stalls. Developers should only be required to meet one of these requirements, but not both. That is, whichever of these requirements would require fewer parking stalls would be the minimum parking requirement for a restaurant in the Citywide Zoning Code area.

National Literature Review & Recommendations

To provide recommendations about the minimum parking requirements for land uses that were not included in the data collection efforts, Fehr & Peers reviewed ITE's *Parking Generation* manual, ULI's *Shared Parking* manual, as well as Salt Lake City and Ogden's minimum parking requirements.

The following land uses in the Citywide Zoning Code were reviewed:

1. Recreation areas including bowling alleys, skating rinks, golf courses, tennis courts, and others,
2. Less intensive commercial businesses including furniture, appliance, and lumber sales,
3. Offices and personal services, including medical and dental clinics.

The following land uses in the Form Based Code were also reviewed:

1. Library / museum / post office (no distribution),
2. Neighborhood service,
3. General service,
4. Craft industry,
5. Open Space & Recreation.

Citywide Zoning Code Requirements

Fehr & Peers coordinated with Clearfield City staff to identify land uses in Clearfield's Citywide Zoning Code that would benefit from modernized parking requirements. Specifically, Clearfield and Fehr & Peers staff agreed to review and provide updates to the parking requirements for recreation areas, office space, and "less intensive commercial" land uses.

Currently, the Clearfield Citywide Zoning Code requires two parking spaces per 1,000 sq. ft. for bowling alleys, skating rinks, and swimming pools. Other recreation area parking requirements are determined by specific review by the planning commission. Fehr & Peers recommends separating the land uses to provide more specificity in minimum parking requirements for the different types of recreation areas.

Similar to the recreation area land uses, Fehr & Peers recommends separating the general office land uses from medical/dental offices as they tend to experience different parking demand rates but are grouped together in Clearfield's parking requirements.

The project team also selected "less intensive commercial" as a land use for review because it was identified as an area with potential for overparking.

Table 16 outlines the recommended parking rates for several recreation, office, and commercial land uses. The table also compares the recommended rates to Clearfield's existing requirements and references the reviewed literature guided the project team's recommendations.

Table 16: Citywide Zoning Code Parking Requirement Recommendations

Land Use	Existing Requirement	Recommended Requirement	Literature Reference
Batting Cages	none	2 spaces per cage	- Meets recommendation in ITE at 2 spaces per cage.
Bowling Alleys	2 spaces per 1,000 sq. ft.	2 spaces per lane	- Meets recommendation in SLC at 2 spaces per lane.
Skating Rink/ Swimming Pool	2 spaces per 1,000 sq. ft.	1 space per 1,000 sq. ft.	- Similar to recommendation in ITE for ice skating rinks at 1.18 spaces per 1,000 sq. ft. - Meets SLC for both at 1 space per 1,000 sq. ft.
Golf Courses	Discretionary	8.5 spaces per hole	- Meets recommendation in ITE at 8.5 space per hole.
Tennis Courts	Discretionary	2 spaces per court	- Similar to recommendation in ITE at 2.67 spaces per court. - Meets SLC at 2 spaces per court.
Misc. Indoor Recreation	Discretionary	2 spaces per 1,000 sq. ft.	- Similar to recommendation in ITE at 2.07 spaces per 1,000 sq. ft. - Meets ULI at 2 spaces per 1,000 sq. ft. - Maintains existing Clearfield Requirements.
Furniture/ Appliance/ Lumber Store	1.5 spaces per 1,000 sq. ft.	0.75 spaces per 1,000 sq. ft.	- Exceeds recommendation in ITE for "Building Materials & Lumber Store" and for Furniture Store at 0.57 and 0.48 spaces per 1,000 sq. ft. - Is lower than SLC at 2 spaces per 1,000 sq. ft.
General Office	2 spaces per 1,000 sq. ft.	2.5 spaces per 1,000 sq. ft.	- Meets recommendation in ITE at 2.39 spaces per 1,000 sq. ft. - Meets the average of SLC's "general context" and "neighborhood center context" zones at 3 and 2 spaces per 1,000 sq. ft. - Is less than Ogden at 1 space per 300 sq. ft.
Medical/Dental Office	2 spaces per 1,000 sq. ft.	3 spaces per 1,000 sq. ft.	- Exceeds recommendation in ITE recommendations at 3.23 spaces per 1,000 sq. ft. - Meets SLC at 4 spaces per 1,000 sq. ft. - Is less than Ogden at 1 space per 150 sq. ft.

ITE = Institute of Transportation Engineers' *Parking Generation*, 5th Edition, 2019

ULI = Urban Land Institute's *Shared Parking*, 3rd Edition, 2020

SLC = Salt Lake City Code 21A.44: *Off Street Parking, Motility, and Loading*, May 2019

Ogden = Ogden City Code 15-12-3: *Number of Parking Spaces Required*, October 2018

Source: Fehr & Peers.

Form Based Code Requirements

Fehr & Peers coordinated with Clearfield City staff to identify land uses in Clearfield’s Form Based Code that would benefit from modernized parking requirements. Specifically, Clearfield and Fehr & Peers staff agreed to review and provide updates to the parking requirements for library, museum, post office, neighborhood service, general service, craftsman industrial, and open space & recreation land uses. These land uses were identified as ones that may not be currently requiring enough parking or would benefit from being separated into more specific land uses to provide more precise parking guidance.

Table 17 outlines the recommended parking rates for the previously identified land uses in the Form Based Code zones in Clearfield. The table also compares the recommended rates to Clearfield’s existing requirements and references the reviewed literature guided the project team’s recommendations.

Table 17: Form Based Code Parking Requirement Recommendations

Land Use	Existing Requirement	Recommended Requirement	Literature Reference
Library	1 space per 600 sq. ft.	2 spaces per 1,000 sq. ft.	- Similar to recommendation in ITE at 2.35 spaces per 1,000 sq. ft. & ULI at 2.25 spaces per 1,000 sq. ft. (on weekdays). - Meets SLC at 2 spaces per 1,000 sq. ft. - Is lower than Ogden at 1 space per 300 sq. ft.
Museum	1 space per 600 sq. ft.	1 space per 1,000 sq. ft.	- Exceeds recommendation in ITE at 0.76 spaces per 1,000 sq. ft. - Meets SLC at 1 space per 1,000 sq. ft. - Is lower than Ogden at 1 space per 300 sq. ft. and ULI at 4.5 spaces per 1,000 sq. ft. (on weekdays).
Post Office (No distribution)	1 space per 600 sq. ft.	2 spaces per 1,000 sq. ft.	- Less than recommendation in ITE at 3.01 spaces per 1,000 sq. ft. - Similar to SLC at 1 space per 1,000 sq. ft. plus 1 space per fleet vehicle. - Lower than Ogden at 1 space per 250 sq. ft.
Bank	1 space per 500 sq. ft.	3 spaces per 1,000 sq. ft.	- Similar to recommendation in ITE at 3.72 spaces per 1,000 sq. ft. - Exceeds SLC at 2 spaces per 1,000 sq. ft. - Similar to Ogden at 1 space per 300 sq. ft.
Fitness, Gym, Dance studio	1 space per 500 sq. ft.	4 spaces per 1,000 sq. ft.	- Meets recommendation in ITE at 4.73 spaces per 1,000 sq. ft. - Higher than SLC at 2 spaces per 1,000 sq. ft. - Lower than Ogden at 1 space per 125 sq. ft.
Concert hall/ Theater	1 space per 350 sq. ft.	1 space per 5 seats	- Meets recommendation in ITE at 0.19 space per seat - Meets the average of SLC's general and neighborhood zones at 1 space per 4 seats or 1 space per 6 seats, respectively. - Uses different units from Ogden's "Theaters" use but meets Ogden's "Stadiums or arenas" use at 1 stall per 5 seats.
Misc. Indoor Recreation Areas	1 space per 350 sq. ft.	Recommend requiring case-by-case parking studies based on estimated facility use, vehicle traffic to the facility, transit use to the facility, potential traffic congestion, and likelihood of overflow parking in surrounding neighborhoods.	
Craftsman Industrial	Production: 1 space per 1,000 sq. ft. Retail: 2 spaces per 1,000 sq. ft.	Production: 1 space per 1,000 sq. ft. Retail: 2 spaces per 1,000 sq. ft.	- Agrees with current Clearfield requirement. - Meets recommendation in ITE for manufacturing space at 0.92 spaces per 1,000 sq. ft. and for retail space at 1.95 spaces per 1,000 sq. ft. - Meets SLC requirement for "Artisan food production" at 1 space per 1,000 sq. ft. of production area plus 2 spaces per 1,000 sq. ft. of office/retail. - Lower than Ogden at 1 space per 500 sq. ft.
Open Space	Per Zoning Administrator	Recommend requiring case-by-case parking studies based on estimated facility use, vehicle traffic to the facility, transit use to the facility, potential traffic congestion, and likelihood of overflow parking in surrounding neighborhoods.	

ITE = Institute of Transportation Engineers' *Parking Generation*, 5th Edition, 2019

ULI = Urban Land Institute's *Shared Parking*, 3rd Edition, 2020

SLC = Salt Lake City Code 21A.44: *Off Street Parking, Motility, and Loading*, May 2019

Ogden = Ogden City Code 15-12-3: *Number of Parking Spaces Required*, October 2018

Source: Fehr & Peers.

Parking Policy Guidance

In addition to reviewing Clearfield's minimum parking requirements, Fehr & Peers consulted with Clearfield City staff to address individual parking policy elements in Clearfield's zoning code and recommend potential revisions. For this report, the reviewed policies were grouped into the following categories:

- Design Details & Dimensional Standards,
- Shared Parking Requirements,
- Affordable, Senior, and Transit-Oriented Housing Requirements,
- On-Street Parking and Enforcement,
- Provision of Downtown Public Parking, and
- Structured Parking

Design Details & Dimensional Standards

How is parking use affected by stacked (tandem) parking as opposed to side-by-side parking?

Stacked or tandem parking designs allow vehicles to park immediately behind each other longitudinally, instead of side-by-side laterally. The benefit of tandem parking is that it can reduce the overall square footage of a parking lot by allowing two spaces to be accessed by the same amount of drive aisle that would normally be required for a single space. Because of this, valet parking can make effective use of tandem parking spaces where parking space is limited. However, when tandem parking isn't managed by a third party, drivers can be frustrated when they have been "double parked" and are unable to move a vehicle in a tandem parking space.

Los Angeles, California provides the following language to dictate the use of when tandem parking may be used in a parking area or garage:

(h) Tandem Parking. (Amended by Ord. No. 179,191, Eff. 11/5/07.) Each required parking stall within a parking area or garage shall be accessible. Automobiles may be parked in tandem in the following instances:

- (1) In a public garage or public parking area, which provides attendants to park vehicles at all times the garage or area is open for use.*
- (2) In a private garage or private parking area serving a one-family dwelling, an apartment house, apartment hotel, hotel, two-family dwelling, or multiple or group dwelling, where the tandem parking is not more than two cars in depth. Tandem parking shall not be allowed in parking areas for recreational vehicles or guest parking.*

Fehr & Peers recommends that the first clause under the Los Angeles code would be valuable to Clearfield in the City's efforts to modernize parking and reduce the overall footprint of parking facilities.

Tandem parking configurations can also be used in townhome-style multifamily housing developments where individual units occupy a narrow frontage and floorplate. This approach may allow developers and architects to produce more efficient unit configurations. However, Fehr & Peers and Clearfield staff have both observed that tandem parking configurations, especially in garaged parking lots, may be more likely to be used by occupants for storage of a single vehicle only (with additional space used for other storage purposes) compared to side-by-side garage configurations. Accordingly, in the case of townhomes or other multi-family dwellings, Fehr & Peers recommends that tandem garages with space for two vehicles should be calculated as providing 1.5 spaces (rather than two) for purposes of meeting minimum parking requirements.

What design details should be specified in code?

Typically, zoning codes recommend minimum geometric measurements that a parking stall must meet.

- Driveway length shall be 20 feet from back of curb or sidewalk (if present) to qualify as a parking stall for purposes of meeting minimum parking requirements.
- Fehr & Peers recommends that minimum vertical clearance for parking garages shall be 84 inches. Furthermore, per the accessible parking requirements in the Americans with Disabilities Act, “van-accessible spaces, their associated access aisles, and the vehicular routes serving them must provide vertical clearance of at least 98 inches to allow for the height of typical wheelchair lift-equipped vehicles.”
 - o Fehr & Peers recommends requiring the 98 inches clearance for at least a portion of one access level to meet ADA requirements for van accessible spaces.
- For additional guidance on parking dimensions, Fehr & Peers recommends following the dimensions outlined in Figures 7-3 and 7-4 of ULI’s *Dimensions of Parking, Fifth Edition* (2014). These figures are included in Appendix A for reference.

Shared Parking Requirements

How should parking requirements be adjusted for developments that allow for shared parking?

As described in ULI's *Shared Parking, Third Edition*, "shared parking is the use of a parking space to serve two or more individual land uses without conflict or encroachment. The ability to share parking spaces is the result of two conditions:

- "Variations in the accumulation of vehicles by hour, by day, or by season at the individual land uses; and
- Relationships among the land uses that result in visiting multiple land uses on the same automobile trip."

The ULI recommends that municipalities reduce the amount of parking in downtown areas by allowing for the various land uses in mixed-use developments to share parking facilities. Clearfield City's Downtown Form Based Code, Chapter 9.2, Section 4 outlines parking reductions that are permitted for mixed-use developments, in line with the ULI recommendations.

Table 9.2 (2) of the Form Based Code includes shared parking percentages that outline a factor that can be used to reduce the parking requirements for some land uses at different times of the day. Fehr & Peers compared the data collected during this study to the rates in the table to provide recommended updates to the residential (non-lodging) shared parking reductions.

As shown in the table, on weekdays, residential (non-lodging) land uses require 100% of their parking spaces from midnight to 7:00 AM, only 50% of their spaces from 7:00 AM to 6:00 PM, and 80% of their spaces from 6:00 PM to midnight. On weekends, residential land uses require 100% of their parking spaces from midnight to 7:00 AM and 80% of their spaces from 7:00 AM to midnight. The reduced parking requirements during weekday midday reflect the reduced residential parking utilization during typical work hours; similarly, the higher requirements in the evening periods reflect the higher residential parking utilization outside of typical work hours. No reductions are provided at night since the peak parking occupancy occurs when residents are typically at home.

In line with those assumptions in Clearfield City's Downtown Form Based Code, Fehr & Peer's collected residential parking data shows that the period after midnight was the peak parking occupancy period for residential development. The period after 5 PM was the second highest residential parking occupancy period and was found to experience about 70-75% of the parking utilization that was observed during the peak period counts. The midday period was the lowest residential parking occupancy period and was found to experience about 56% of the parking utilization that was observed during the peak period counts. These trends were consistent across both early the December and March counts. Notably, the 56% occupancy during midday counts was slightly higher than the 50% assumed in the Form Based Code table; it is possible that the higher parking occupancy rates reflect the higher "work from home" rates following the COVID-19 pandemic. The 5 PM parking rates were also notably lower than the rates

recommended in the Form Based Code, though that may be due to the counts being collected too early in the evening to capture the full parking demand of commuters who have returned home from work.

In line with the collected data, Fehr & Peers recommends modifying the table to require 60% of the residential parking during the 7:00 AM to 6:00 PM period. This updated shared parking rate, in combination with the reduced parking requirement outlined in the **Residential Land Use Parking Recommendations** section of this report is intended to reflect the observed parking rates at residential developments in Clearfield.

Fehr & Peers also recommends incorporating a Fitness, Gym, & Dance studios land use category into Table 9.2 (2) of the Form Based Code. Based on adjustments shown in ULI's *Shared Parking*, Fehr & Peers recommends using the following shared parking percentages for that land use:

- Weekdays
 - o Midnight – 7:00 AM = 70%
 - o 7:00 AM – 6:00 PM = 80%
 - o 6:00 P – Midnight = 100%
- Weekends
 - o Midnight – 7:00 AM = 40%
 - o 7:00 AM – 6:00 PM = 50%
 - o 6:00 PM – Midnight = 100%

Affordable, Senior, and Transit-Oriented Housing Requirements

How should parking requirements be adjusted for affordable, or senior housing developments?

In general, affordable (specifically, income restricted) and/or senior multifamily housing, especially those located in walkable and transit-oriented contexts, generate less parking demand than market rate and non-age-restricted housing. Recently, Fehr & Peers performed three parking studies for the City of Millcreek, Utah to assess parking utilization for various types of housing sites.

- The first study, performed from 2020 to 2022, evaluated parking utilization at standard, non-income or age restricted multifamily housing sites across Utah, Salt Lake, Davis, and Weber Counties (including the City Center Apartments in Clearfield). Fehr & Peers observed that the multifamily developments had the following peak parking occupancy rates:
 - o 1.14 spaces per dwelling unit,
 - o 0.76 spaces per bedroom,
 - o 1.19 spaces per occupied dwelling unit, and
 - o 0.82 spaces per occupied bedroom.
- The second study, performed in the summer of 2020, evaluated parking utilization at five senior housing developments in Salt Lake County. The observed senior housing developments utilized parking at a rate of approximately 0.6 stalls per unit.
- The third study, performed in the spring of 2022, evaluated parking utilization at six affordable, income-restricted, transit-oriented housing developments in Salt Lake County. The observed affordable housing developments utilized parked at a rate of approximately 1 stall per unit or 0.5 stalls per bedroom.

It should be noted that both the senior housing and the affordable housing studies recommended more than a 50% reduction of requirements from Millcreek's standard parking requirements, both of which were approved by the city.

As another point of comparison, ITE's *Parking Generation* manual reports the following average parking rates for residential housing types:

- Multifamily Housing (Low-Rise) = 1.21 parking stalls per unit
- Affordable Housing = 0.99 parking stalls per unit
- Senior Adult Housing = 0.61 parking stalls per unit

Based on the findings from the studies performed for Millcreek City, as well as the data shown in the ITE manual, Fehr & Peers recommends allowing for a 50% parking requirement reduction for senior housing and 25% reduction for affordable housing in Clearfield. These reductions should only be granted pending review by Clearfield City staff.

How should parking requirements be adjusted for transit-oriented housing developments?

As outlined previously, all of the affordable housing developments in the third Millcreek study were selected because they were adjacent to transit. In contrast, Clearfield Station Apartments was the only transit adjacent development studied in Clearfield for this report. Notably, Clearfield Station Apartments did not experience lower parking rates than the other similar developments studied in Clearfield. Furthermore, transit options in Clearfield do not appear to reduce parking demand the way that transit options did in the developments observed in Salt Lake County. Therefore, Fehr & Peers does not recommend allowing for transit-related reductions until transit services in Clearfield have matured enough to reduce vehicle traffic and parking demand, specifically in the form of Core 15 service (defined by UTA as service running at 15 minute or better headways all day).

Currently, the language in the Form Based Code *Section 9.2, Part 3: Parking Credits* allows for the following parking reductions for transit-oriented developments

- 1) *Transit Credit. Vehicular parking requirements may be reduced with proximity to any rail station or transit line with up to 15-minute headways. Proximity is measured using network distance along dedicated public pedestrian pathways from any point along the property line to the platform or transit stop.*
 - a) *Within 660 feet. A reduction of 10% of the required off-street parking.*
 - b) *Within 1320 feet. A reduction of 5% of the required off-street parking.*

As written, the language in the Form Based Code does not specify how long the 15-minute headways are required to be active in any given day for a nearby development to gain the transit credit. Fehr & Peers recommends updating the language to specify that the transit should operate with 15-minute headways *all day* to receive parking credits.

On-Street Parking and Enforcement

How should Clearfield regulate on-street parking during winter months when snowplowing can pose a risk to vehicles parked on-street?

Currently, many northern Utah communities restrict on-street parking at night hours during specified winter months (e.g., midnight to 6am from December through February), regardless of whether snowy or icy conditions exist at any given time. Currently, most of Clearfield's neighbors in northern Davis County and Weber County follow this practice.

However, other northern Utah communities are less restrictive and prohibit on-street parking only during and after winter storm events that require plowing. The following bullets outline sample policies from nearby Utah cities:

- North Salt Lake: "It is unlawful to park or leave parked any vehicle or trailer upon the City's paved portion of the street or roadway during a snow event or until snow removal or plowing from pavement edge to pavement edge is complete."
- Millcreek: "No person shall park a vehicle on any city street when it is snowing, or snow is on the street during the months of November, December, January, February, March, and April."

A third approach that isn't currently implemented by any jurisdictions in Utah is to identify snow routes where parking is not allowed during snowfall, which can allow parking to be preserved on streets that are primarily for local-use purposes. Functional classification could be used as the basis for this definition. This would be focused on keeping key roads (e.g., arterial & collector roads) clear for essential connectivity and/or throughput, and thus accepts that local streets may not be cleared as well.

Of the three options, Fehr & Peers recommends the option that would identify snow routes where parking is not allowed during snowfall. This option would allow for some amount of on-street parking along local streets where residents regularly rely on a supply of on-street parking, while still prohibiting on-street parked cars from interfering with plowing arterial and collector routes that are essential for vehicle traffic.

Should Clearfield implement paid on-street parking, and if so, how should a paid parking policy be enforced?

Where it is allowed, on-street parking throughout Clearfield is currently free for drivers, which is consistent with other suburban municipalities in Davis County and Weber County. Implementing paid on-street parking in higher-density, commercial or mixed-use nodes can have several key benefits, including:

- Raising revenue
- Increasing the turnover of prime parking spots (and potential economic benefit to adjacent businesses)
- Reducing 'circling for parking' behavior
- Incentivizing use of transportation alternatives such as transit and active modes, and
- Encouraging the use of off-street parking options (including paid lots)

However, these benefits may not always exceed the costs of paid parking policies in every context, which include the financial costs of parking payment systems and enforcement, inconvenience and increased costs for users, and potential impacts on local businesses.

In the context of Clearfield's existing downtown, many of the potential benefits are currently unlikely to be realized to a substantial extent if implemented in the near term. Current utilization of on-street parking in downtown Clearfield is low, due to an abundance of available off-street parking in adjacent land uses. Frequent all-day transit service is not currently available, and high-comfort bicycle facilities are planned but for the most part not yet implemented, meaning that users have limited transportation alternatives available. Implementation of paid on-street parking would likely generate limited revenue under current conditions, to the extent that payment collection and enforcement costs would likely exceed funds generated by the parking policy.

For these reasons, a paid on-street parking policy is not recommended for immediate implementation. However, as Clearfield's downtown develops, these conditions may change and make a paid parking program a viable option. Downtown Clearfield would be ready for paid parking once the following thresholds have been met:

- On-street parking stalls are regularly heavily utilized (greater than 85% occupancy rates) during peak periods,
- Feedback from business community and field observations indicates that prime on-street parking near street-fronting businesses is often occupied for long periods by employee or resident vehicles (preventing these highly desirable spaces from turning over frequently and contributing to business vitality),
- Vehicles are observed circling around blocks in search of on-street parking,
- Private businesses are charging for parking in off-street lots and structures, and/or
- High-comfort active transportation facilities and/or frequent public transit options are available.

As downtown Clearfield continues to develop towards the mix and intensity of uses envisioned in the *Creating Downtown Clearfield Plan*, city staff should periodically evaluate whether these conditions are occurring using direct observation and outreach to residents, business/property owners, and other stakeholders.

When most or all of the indicators above are achieved, next steps for moving towards a paid parking system would include developing a more detailed parking plan and strategy, covering topics such as:

- Geographic area(s) and time periods in which to implement pricing,
- Pricing and fine schedule,
- Payment methods and vendors (e.g., meters, kiosks, mobile apps, etc.), and
- Enforcement approach and responsible entity (e.g., law enforcement officers, civilian enforcement staff, or contractors).

Provision of Downtown Public Parking

When would it be feasible to provide or subsidize public parking in downtown Clearfield?

As outlined in the discussion of **On-Street Parking and Enforcement**, free on-street parking is available throughout much of Clearfield (including in the downtown area) and is not heavily utilized. Because of this, a downtown public parking facility (whether a surface, structure, or underground lot) would not address an immediate, existing need, and a future scenario in which such a facility could be a valuable investment would only occur if and when demand for parking in downtown Clearfield expands to regularly exceed the available supply of on-street parking. Clearfield's current and recommended future parking requirements are intended to ensure future development continues to fully meet parking needs via private off-street parking; if these policies are successful, additional demand for public parking should be limited, and the willingness of users to pay for public parking options should be low.

As outlined by Carl Walker in a 2016 case study of mean parking construction costs, surface parking lots were estimated to cost between \$5,000-\$10,000 per space depending on location. Structured parking was found to cost significantly more, with even basic parking structures costing between \$15,000-\$25,000 per space. A 100-stall facility would likely cost \$500,000-\$1m or more for a surface lot and \$1.5m-\$2.5m or more for a structure, prior to factoring in land acquisition costs, with larger facilities costing proportionally more.

Due to the high cost of constructing new parking facilities and abundant on-street parking availability currently seen in Clearfield, Fehr & Peers recommends focusing on other parking management strategies in the near term, rather than near-term investment in a public parking facility. However, as Clearfield's downtown develops, these conditions may change and make a downtown public parking facility a viable option. Factors that could indicate a favorable environment for building a public parking facility include:

- Paid and time-limited on-street parking policies have been implemented to efficiently manage the existing parking supply,
- Paid parking areas begin to be regularly heavily utilized (greater than 85% occupancy rates) during peak periods, and
- If that parking demand is concentrated in a small area (within approximately a quarter-mile radius or less) with high-comfort pedestrian facilities.

If these conditions are met in downtown Clearfield, the City would likely benefit from further study and planning for a public parking structure. Such a study would likely include evaluation of where unmet parking demand currently occurs, evaluation of potential sites, and high-level costing and market feasibility analysis to determine whether the market could support the capital and operating costs of a parking facility, and if not, what level of subsidy would be required to support the facility.

Structured Parking

Is there evidence that structured parking generates less parking demand that would justify a reduction in required parking? If not, what incentives would be appropriate to encouraging structured parking?

Clearfield's Form Based Code currently allows for a 25% reduction in required parking stalls for projects that provide at least 75% of parking within the building envelope or a nearby parking structure. Parking demand is typically driven by the quantity and type of land uses included in a project, not the type of parking provided. Whether a land use provides that parking in a parking lot or in a structure is not typically a major driver of parking demand, and limited evidence suggests that (other factors being equal), structured parking may see slightly higher utilization than surface parking. However, in light of the broad availability of on-street parking in Downtown Clearfield, this policy is unlikely to cause acute parking issues under near future conditions and may help incentivize Clearfield's urban design and placemaking goals. Therefore, Fehr & Peers does not recommend repealing this code provision at this time.

Donald Shoup, in his book *The High Cost of Free Parking* (2005), indicates that where land is less expensive, a greater share of parking is surface, and where land is more expensive, a greater share of parking is structured. Structured parking substitutes capital investment (the parking structure) for land, and the point at which development can justify structured parking occurs when market prices and zoning allow for the marginal returns on additional non-parking land uses to exceed the marginal cost of converting from surface parking to structured parking (which may cost an additional \$10,000 to \$40,000 per stall).

Existing developments in Clearfield currently meet parking needs using surface lots and small single-level garages rather than multi-level parking structures, indicating that Clearfield has not yet reached the point where structured parking meets this market test. While the currently allowed 25% reduction in parking requirements could serve as a meaningful incentive to convert from surface to structured parking as land values increase and structured parking approaches economic viability, this incentive is not effective for a proponent who intends to provide stalls equal or greater to the required quantity of parking for their proposed use. Future development of structured parking in Downtown Clearfield may be more effectively encouraged by the following additional strategies:

- Allow additional maximum development density (dwelling units/acre or FAR) to applicants within the Form Based Code area who provide 75% or more off-street parking in a structured format.
- Provide flexibility with respect to other dimensional requirements (e.g., setbacks, stepbacks, maximum building height, maximum impervious surface), open space requirements, or other to applicants within the Form Based Code area who provide 75% or more off-street parking off-street parking in a structured format.
- Work proactively with landowners and businesses to identify potential opportunities for shared parking to spread the cost of structured parking across a larger total volume of users. Land uses that are adjacent to parking structures and have non-overlapping periods of peak demand would likely be good candidates for shared parking reductions.

Appendix A:
ULI *Dimensions of Parking, Fifth
Edition*, Figures 7-3 and 7-4

ULI Figure 7-3: Common Parking Dimensions

									Width of Stall							
									8' 3"	8' 6"	8' 9"	9' 0"				
Angle (in Degrees)	Base Module	Vehicle Projection	Aisle Width	Single- Loaded Module	Wall to Inter- lock (8' 6")	Interlock to Interlock (8' 6")	Curb to Curb	Overhang	Width Projection	Interlock	Width Projection	Interlock	Width Projection	Interlock	Width Projection	Interlock
Θ	M ₁	VP	A	M ₂	M ₃	M ₄	M ₅	o	WP	i	WP	i	WP	i	WP	i
30	41' 2"	15' 1"	11' 0"	26' 1"	37' 6"	33' 10"	38' 8"	1' 3"	16' 6"	3' 7"	17' 0"	3' 8"	17' 6"	3' 9"	18' 0"	3' 11"
35	43' 0"	16' 0"	11' 0"	27' 0"	39' 6"	36' 0"	40' 2"	1' 5"	13' 5"	3' 5"	14' 10"	3' 6"	15' 3"	3' 7"	15' 8"	3' 8"
40	44' 10"	16' 11"	11' 0"	27' 11"	41' 7"	38' 4"	41' 8"	1' 7"	12' 10"	3' 2"	13' 3"	3' 3"	13' 8"	3' 4"	14' 0"	3' 5"
45	47' 0"	17' 7"	11' 10"	29' 5"	44' 0"	41' 0"	43' 6"	1' 9"	11' 8"	2' 11"	12' 0"	3' 0"	12' 4"	3' 1"	12' 9"	3' 2"
50	48' 6"	18' 2"	12' 2"	30' 4"	45' 9'	43' 0"	44' 8"	1' 11"	10' 9"	2' 8"	11' 1"	2' 9"	11' 5"	2' 10"	11' 9"	2' 11"
55	50' 0"	18' 8"	12' 8"	31' 4"	47' 7"	45' 2"	45' 10"	2' 1"	10' 1"	2' 4"	10' 5"	2' 5"	10' 8"	2' 6"	11' 0"	2' 7"
60	51' 6"	19' 0"	13' 6"	32' 6"	49' 4"	47' 2"	47' 2"	2' 2"	9' 6"	2' 1"	9' 10"	2' 2"	10' 1"	2' 2"	10' 5"	2' 3"
65	53' 0"	19' 2"	14' 8"	33' 10"	51' 2"	49' 4"	48' 6"	2' 3"	9' 1"	1' 9"	9' 5"	1' 10"	9' 8"	1' 10"	9' 11"	1' 11"
70	54' 0"	19' 3"	15' 6"	34' 9"	52' 7"	51' 2"	49' 4"	2' 4"	8' 9"	1' 5"	9' 1"	1' 5"	9' 4"	1' 6"	9' 7"	1' 6"
75	55' 0"	19' 1"	16' 10"	35' 11"	53' 10"	50' 10"	50' 2"	2' 5"	8' 6"	1' 1"	8' 10"	1' 1"	9' 1"	1' 2"	9' 4"	1' 2"
90	59' 0"	18' 0"	23' 0"	41' 0"	59' 0"	59' 0"	54' 0"	2' 6"	8' 3"	0' 0"	8' 6"	0' 0"	8' 9"	0' 0"	9' 0"	0' 0"

All dimensions are rounded to the nearest inch.

Recommendations assume (1) one-way traffic for angles less than 90 degrees, and two-way traffic for 90-degree parking; (2) double-loaded aisles; and (3) a design vehicle that is 6' 7" by 17' 3".

1. In structures, or in lots where at least 30 percent of the stalls have guides or curbs, 1 foot (0.3 meters) may be deducted from the aisle width and the corresponding module.

2. In stalls that are adjacent to walls, columns, or other obstructions that might interfere with door opening or turning movement into the stall, add at least 10 inches (25 centimeters) to the width of the stall.

3. In stalls that are adjacent to curbs or islands, add at least 10 inches (25 centimeters) to the width of the stall to reduce the risk of tripping.

4. Aisle width may be increased by up to 3 feet (0.9 meters) to provide a higher level of comfort.

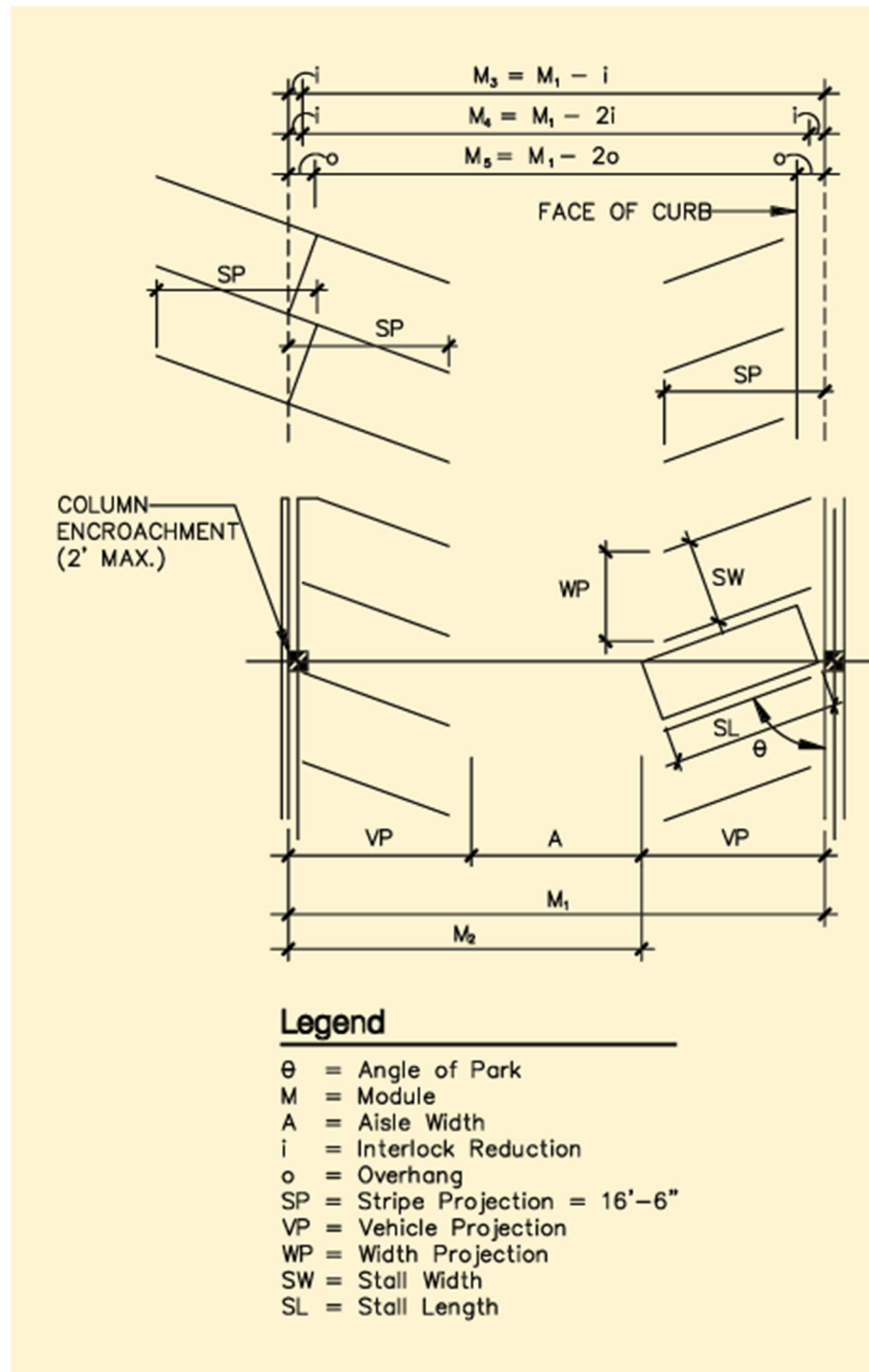
5. Light poles and columns may protrude into a parking module a maximum of 2 feet (0.6 meters), as long as they do not encroach on more than 30 percent of the stalls. For example, either a 1-foot (0.3-meter) encroachment on both sides of the aisle, or a 2-foot (0.6-meter) encroachment on one side only, would be acceptable.

6. Where columns, light poles, or other obstructions encroach on more than 30 percent of the stalls in the bay, interlock reductions cannot be taken.

7. For each 1-inch (2.5-centimeter) addition to the width of the stall—to a maximum stall width of 9 feet (2.7 meters)—3 inches (7.6 centimeters) can be deducted from the module without decreasing turning comfort.

Source: *Dimensions of Parking, Fifth Edition*, ULI, 2010

ULI Figure 7-4: Parking Dimensions Illustrated



Source: *Dimensions of Parking, Fifth Edition*, ULI, 2010