



CITY OF  
TUCSON

PLANNING AND  
DEVELOPMENT  
SERVICES  
DEPARTMENT

June 10, 2019

Mr. Tom Warne  
70 West Cushing Street  
Tucson, Arizona 85701

Dear Mr. Warne:

SUBJECT: Partners on Fourth PAD-33, Minor Amendment to allow  
Parking Requirement Reduction

City staff has reviewed your letter (attached) requesting a Minor Amendment to allow a parking requirement reduction that reduces the required residential parking spaces from one space per unit to 0.7 spaces per unit.

The Partners on 4<sup>th</sup> PAD allows for minor changes provided such changes are not in conflict with the overall intent, goals and objectives of the PAD. Parking requirement reductions are considered minor amendments to the PAD.

The Parking Evaluation prepared by PSOMAS evaluated the parking needs for the mixed use project based on local, regional, and national guidelines. The proposed project consists of 323 apartments and 4,587 square feet of retail uses. The PAD required 323 residential spaces, and 35 retail spaces.

The proposed parking levels (229 residential spaces and 32 retail spaces) can be supported because of location and design of project, which also includes additional project features that support the reduction in parking, such as:

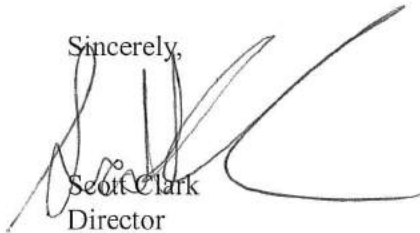
- Car Share on site for residents (Zipcar or similar program)
- Dedicated ride-sharing (i.e. Uber, Lyft) pick-up and drop-off area;
- Tugo bike share station located across the street (9<sup>th</sup> Street and 4<sup>th</sup> Avenue);
- Sun Link streetcar stop in front of project site on 4<sup>th</sup> Avenue
  - Sun Link provides access to major employment areas, including the University of Arizona, Downtown Tucson, the new Caterpillar Mining Center and the Banner Health and University Health Sciences.
  - Sun Link also provides access to many retail, restaurant, and activity areas, including 4<sup>th</sup> Avenue and Main Gate Square.
- Ronstadt Transit Center 0.3 miles away, less than a 10-minute walk from the project. Ronstadt is served by 22 bus routes that provide transit access to the entire City of Tucson;
- The project will provide for 450+ bicycle parking spaces.

Therefore, it is determined that the request for a minor modification to reduce the on-site parking from 1 space per residential unit to 0.7 spaces per residential unit is approved subject to the PAD design review process.

This minor amendment is supported by the following:

- All parking is provided on site;
- The site can accommodate shared parking arrangements for uses with alternate hours of operation or peak use times;
- Site access and traffic circulation are not obstructed;
- Accessible parking spaces required by the City of Tucson's adopted Building Code have not been reduced or eliminated;
- The number of bicycle parking spaces has not been reduced or eliminated;
- Vehicular access, drive-through traffic, and habitual parking in adjacent commercial development and residential neighborhoods is deterred.
- The Parking reduction is consistent with the overall goals of the Partners on Fourth PAD by encouraging a new urban, mixed-use project that is compatible with adjacent developments.

Sincerely,



Scott Clark  
Director

Planning and Development Services Department

Attachments

1. Request Letter
2. Parking Evaluation Report



CITY OF  
TUCSON

PLANNING AND  
DEVELOPMENT  
SERVICES  
DEPARTMENT

May 31, 2018

Mr. Tom Warne  
70 West Cushing Street  
Tucson, Arizona 85701

Dear Mr. Warne:

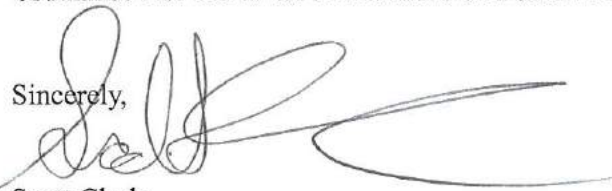
SUBJECT: Partners on Fourth PAD-33, Clarification of Ordinance No.  
11540, Additional Condition for Minimum of Four Storefronts

I have reviewed your email (attached) requesting clarification regarding the additional condition for a minimum of four storefronts at less than or equal to 1,000 square feet.

As outlined in your email and affirmed by Council Member Kozachik who made the motion, the following is understood regarding this additional condition:

“The approximate 1,000 square foot commercial spaces are to be made available as part of the subject project to encourage small business formation, and are part of C9-18-01, PAD-33 rezoning as a result of the Mayor and Council public hearing motion for Ordinance No. 11540 that was approved on April 17, 2018. It is also understood that there is a sunset period of 15 months after Certificate of Occupancy on the four (4) 1,000 square foot or less storefront.”

Therefore, it is determined that the request for clarification to the additional condition for the minimum of four storefronts at less than or equal to 1,000 square feet is to be acknowledged and understood regarding the motion for Ordinance No. 11540 for the Partners on Fourth PAD-33.

Sincerely,  


Scott Clark  
Interim Director  
Planning and Development Services Department

**John Beall - Re: Partners on Fourth PAD--C9-18-01--Clarification of four 1000 sq.ft. commercial Spaces**

---

**From:** Steve Kozachik  
**To:** Beall, John; jlinvestments@aol.com  
**Date:** 05/15/2018 6:24 PM  
**Subject:** Re: Partners on Fourth PAD--C9-18-01--Clarification of four 1000 sq.ft. commercial Spaces  
**Cc:** Charles, Ann; Rankin, Mike; Ortega, Michael

---

correct / there is a sunset of 15 months after CofO on the 4 @ 1,000 sq/ft or less storefronts. Stevek

>>> Thomas Warne <jlinvestments@aol.com> 5/15/2018 4:28 PM >>>

John,

This is to clarify the four approximate 1000 Sq. Ft. commercial spaces to be made available as part of the subject project to encourage small business formation, and are part of the PAD C9-18-01 rezoning as a result of the Public Hearing Motion on April 17, 2018 that was approved by Mayor and Council.

It should be noted that if the spaces are not leased 15 months from the date of the CofO for the project, the project is then not obligated to offer the subject spaces for lease. Also, if the spaces become vacant, the project is obligated to offer the subject spaces for release for 90 days. If the space or spaces are not released, then the project has no further obligation to offer the space or spaces of approximate 1000 Sq. Ft. for lease.

As we discussed I am copying Councilman Kozachik for his acknowledgment and approval to your office of our understanding stated above.

Respectfully Submitted,

Tom Warne

Thomas W. Warne  
70 West Cushing Street  
Tucson, Arizona 85701  
[\(520\) 884-8843](tel:5208848843) Phone  
[\(520\) 882-2640](tel:5208822640) Fax  
[\(520\) 907-0672](tel:5209070672) Cell  
e-mail: [jlinvestments@aol.com](mailto:jlinvestments@aol.com)

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# MAYOR AND COUNCIL – REGULAR MEETING

## LEGAL ACTION REPORT

TUESDAY, APRIL 17, 2018

MAYOR AND COUNCIL CHAMBERS

CITY HALL, 255 W. ALAMEDA, TUCSON, AZ

1. ROLL CALL: 5:35 p.m.

OFFICIAL MEMBERS PRESENT: Mayor Jonathan Rothschild, Vice Mayor Paul Cunningham, Council Members Paul Durham, Shirley C. Scott, Richard G. Fimbres, and Steve Kozachik.

OFFICIAL MEMBERS ABSENT/EXCUSED: Council Member Regina Romero

STAFF MEMBERS: Michael J. Ortega, City Manager; Michael Rankin, City Attorney; and Roger W. Randolph, City Clerk

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AGENDA ITEM / MAYOR AND COUNCIL ACTION	DEPARTMENT
2. INVOCATION, PLEDGE OF ALLEGIANCE, AND APPOINTMENTS TO BOARDS, COMMITTEES AND COMMISSIONS	
a. INVOCATION - Pastor Otis F. Brown, Siloam Freewill Church	
b. PLEDGE OF ALLEGIANCE – Mayor, Council and public in attendance	
c. PRESENTATIONS	
1. Recognition of the Pima Community College Men's Basketball Team	
2. Presentation of "Outstanding Teen Citizen Awards" from the Metropolitan Education Commission	
3. Proclaiming May 4 and May 5 to be "American Legion Auxiliary Memorial Poppy Days"	
4. Proclaiming May 3 to be "National Day of Prayer"	

AGENDA ITEM / MAYOR AND COUNCIL ACTION	DEPARTMENT
<p>d. <u>APPOINTMENTS TO BOARDS, COMMITTEES AND COMMISSIONS (CITY WIDE) APR17-18-127</u></p> <p>Council Member Fimbres announced his personal appointment of Michael Ford to the 2017 Public Safety Tax Oversight Commission, Eric Kahn to the Transit Task Force, and Larry Goebel to the Tucson Greens Committee.</p>	<p><u>CITY CLERK</u></p>
<p>3. <u>MAYOR AND COUNCIL/CITY MANAGER'S REPORT: SUMMARY OF CURRENT EVENTS (CITY WIDE) APR17-18-118</u></p> <p>Current event reports were provided by Council Members Durham and Fimbres.</p>	
<p>4. <u>BOARDS, COMMITTEES AND COMMISSIONS: REPORTS TO MAYOR AND COUNCIL (CITY WIDE) APR17-18-119</u></p> <p>No reports were provided.</p>	<p><u>CITY CLERK</u></p>
<p>5. <u>LIQUOR LICENSE APPLICATIONS (CITY WIDE) APR17-18-120</u></p>	<p><u>CITY CLERK</u></p>
<p>b. Liquor License Application(s)</p> <p>New License(s)</p> <ol style="list-style-type: none"> <li>1. Hush Social Club, City 10-18</li> <li>2. Native Grill and Wings, City 13-18</li> <li>3. Bisbee Breakfast Club, City 15-18</li> </ol> <p>Person Transfer(s)</p> <ol style="list-style-type: none"> <li>4. The Monkey Bar, City 11-18</li> <li>5. Cobra Arcade, City 14-18</li> <li>6. Hampton Inn Tucson North #161, City 12-18</li> </ol> <p>c. Special Event(s)</p> <ol style="list-style-type: none"> <li>1. Zuzi Dance, City T40-18</li> </ol>	

AGENDA ITEM / MAYOR AND COUNCIL ACTION DEPARTMENT

2. Friends of Tucson’s Birthplace, City T42-18
3. Sonoran Art Foundation dba Sonoran Glass School, City T43-18
4. Native Seeds/Southwest Endangered Aridlands Resources Clearing House, City T44-18
5. Our Lady of Lavang Parish, City T45-18
6. Tucson Kitchen Musicians Association, City T46-18
7. Knights of Columbus #5133, City T47-18
8. Real Change International Group Inc., City T48-18
9. Ben’s Bells Project, City T49-18
10. Combat Veterans Motorcycle Association 32-2, City T50-18
11. The Desert Laboratory on Tumamoc, College of Science, UA, City T51-18
12. CMB Foundation, City T52-18
13. AZMAC-Arizona Media Arts Center, City T53-18
14. Rillito Park Foundation, City T54-18
15. India Society of Southern Arizona, City T55-18

d. Agent Change/Acquisition of Control/Restructure

NOTE: There are no application(s) for agent changes scheduled for this meeting.

It was moved by Vice Mayor Cunningham, duly seconded and CARRIED by a voice vote of 6 to 0 (Council Member Romero absent/excused), to forward Items 5b1-5b6, and 5c1-5c15, to the State Liquor Board with a recommendation for APPROVAL.

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6. CALL TO THE AUDIENCE

The following individuals spoke at the Call to the Audience:

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AGENDA ITEM / MAYOR AND COUNCIL ACTION	DEPARTMENT
John Burnham, Greg Wilson, Frank Velasquez Jr., Marie Tanner, Anthony Potter, Scott Coverdale, and Carrie Nelson.	
7. CONSENT AGENDA	
a. <u>APPROVAL OF MINUTES (CITY WIDE) APR17-18-123</u>	<u>CITY CLERK</u>
b. <u>FINAL PLAT: (S17-032) BERMUDA MINOR SUBDIVISION, LOTS 1 THROUGH 3 (WARD 3) APR17-18-121</u>	<u>PLANNING AND DEVELOPMENT SERVICES</u>
c. <u>FINAL PLAT: (S17-072) CHICANOS POR LA CAUSA IRVINGTON EXPANSION, LOTS 1 THROUGH 2 (WARD 5) APR17-18-122</u>	<u>PLANNING AND DEVELOPMENT SERVICES</u>
d. <u>TUCSON CODE: AMENDING (CHAPTER 10) MODIFICATIONS TO THE ANNUAL COMPENSATION PLAN FOR FISCAL YEAR 2018 AND AMENDING ORDINANCES 11464 AND 11511 (CITY WIDE) APR17-18-128</u>	<u>HUMAN RESOURCES</u>
Ordinance No. <u>11542</u>	
It was moved by Council Member Scott, duly seconded and PASSED by a roll call vote of 6 to 0 (Council Member Romero absent/excused), that Consent Agenda Items a – d be approved and/or adopted and proper action taken.	
8. <u>PUBLIC HEARING: RIVER HOUSE ANNEXATION DISTRICT (WARD 2 AND OUTSIDE CITY) APR17-18-124</u>	<u>ECONOMIC INITIATIVES</u>
It was moved by Council Member Fimbres, duly seconded and CARRIED by a voice vote of 6 to 0 (Council Member Romero absent/excused), to CLOSE the public hearing.	
It was moved by Vice Mayor Cunningham, duly seconded and CARRIED by a voice vote of 6 to 0 (Council Member Romero absent/excused), to direct staff to PROCEED with the River House Annexation District.	
9. <u>PUBLIC HEARING: ZONING (C9-18-01) PARTNERS ON FOURTH PAD - 4TH AVENUE AND 8TH STREET, I-1 AND C-3 TO PAD-33, CITY MANAGER'S REPORT, ORDINANCE ADOPTION (WARD 6) APR17-18-125</u>	<u>PLANNING AND DEVELOPMENT SERVICES</u>



AGENDA ITEM / MAYOR AND COUNCIL ACTION

DEPARTMENT

Michael Rankin, City Attorney, announced that Mayor Rothschild was recusing himself from the item due to a potential conflict of interest as described during Study Session earlier that day.

(Note: Council Member Fimbres departed at 7:24 p.m.; returned at 7:26 p.m.)

(Note: Council Member Kozachik departed at 7:26 p.m.; returned at 7:28 p.m.)

It was moved by Council Member Fimbres, duly seconded and CARRIED by a voice vote of 5 to 0 (Council Member Romero absent/excused, Mayor Rothschild recused), to CLOSE the public hearing.

Ordinance No. 11540

It was moved by Council Member Kozachik, duly seconded and PASSED by a roll call vote of 5 to 0 (Council Member Romero absent/excused, Mayor Rothschild recused), to APPROVE the request as recommended by the Zoning Examiner and PASS AND ADOPT Ordinance No. 11540, with the following additional conditions, which run with the property:

- The Design Review Committee to include a representative from the Fourth Avenue Merchants Association;
- \$25,000 for traffic mitigation in Iron Horse neighborhood;
- \* Up to \$10,000 for a "road diet" on 6<sup>th</sup> Avenue, from 6<sup>th</sup> Street to Speedway Boulevard. This funding is not subject to the results of the traffic study, but would be provided irrespective of that study, with the impact fees generated by the Project being allocated for this purpose to the extent necessary;
- A minimum of four storefronts at less than or equal to 1,000 square feet;
- Parking which is not allocated to residents or guests in the residential portion of the project to be made available as public parking;
- Only Series 12 liquor license(s) for commercial tenant(s);
- Rooftop to close at 10:00 p.m.

10. ZONING: (C9-18-03) TUCSON ELECTRIC POWER PLANNED AREA DEVELOPMENT – IRVINGTON CAMPUS, I-1 AND I-2 TO PAD 34, CITY MANAGER'S REPORT, ORDINANCE ADOPTION (WARD 5) APR17-18-126

PLANNING AND DEVELOPMENT SERVICES

AGENDA ITEM / MAYOR AND COUNCIL ACTION

DEPARTMENT

Ordinance No. 11541

It was moved by Council Member Fimbres, duly seconded and PASSED by a roll call vote of 6 to 0 (Council Member Romero absent/excused), to APPROVE the request as recommended by the Zoning Examiner and PASS AND ADOPT Ordinance No. 11541.

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11. ADJOURNMENT: 8:31 P.M.

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The next regularly scheduled meeting of the Mayor and Council will be held on Tuesday, May 8, 2018, at 5:30 p.m. in the Mayor and Council Chambers, City Hall, 255 West Alameda, Tucson, Arizona.

# Parking Evaluation

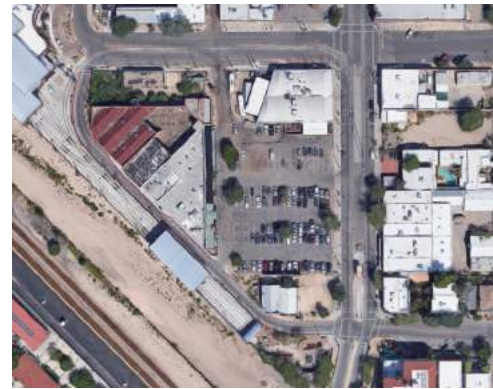
## Partners on Fourth Planned Area Development

PREPARED FOR



February 2019

**DRAFT**



**PARKING EVALUATION  
PARTNERS ON FOURTH PAD  
4<sup>TH</sup> AVENUE MIXED USE PROJECT  
TUCSON, ARIZONA**

Prepared For



Prepared By

**P S O M A S**

Psomas Project No. 7ODC190101

February 2019

## TABLE OF CONTENTS

<b>1. INTRODUCTION</b>	<b>1</b>
1.1. STUDY OBJECTIVES	1
1.2. PROJECT DESCRIPTION	1
<b>2. REQUIRED PARKING – CURRENT CONDITIONS</b>	<b>4</b>
<b>3. LITERATURE REVIEW – BEST PRACTICES</b>	<b>5</b>
3.1. REQUIREMENTS FOR PEER JURISDICTIONS	5
3.2. TCRP 128 – EFFECTS OF TOD ON HOUSING, PARKING, AND TRAVEL	5
3.3. ITE PARKING GENERATION MANUAL	6
<b>4. SUMMARY AND CONCLUSIONS</b>	<b>8</b>
<b>5. REFERENCES</b>	<b>10</b>

APPENDIX A – CITY OF PHOENIX CODE EXCERPT

APPENDIX B – CITY OF TEMPE CODE EXCERPT

APPENDIX C – ITE PARKING GENERATION SHEETS

## LIST OF TABLES

TABLE 1. CITY OF TUCSON PARKING REQUIREMENTS	4
TABLE 2. ITE RESIDENTIAL PARKING REQUIREMENTS	6
TABLE 3. ITE RETAIL PARKING REQUIREMENTS	7
TABLE 4. COMPARISON OF PARKING RATES AND PROPOSED PARKING	8

## LIST OF FIGURES

FIGURE 1. PROJECT LOCATION	3
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## **1. INTRODUCTION**

### **1.1. STUDY OBJECTIVES**

The purpose of this study is to evaluate the parking needs for the 4<sup>th</sup> Avenue Mixed Use Project located on the west side of 4<sup>th</sup> Avenue between 8<sup>th</sup> Street and 9<sup>th</sup> Street. The Partners on Fourth Planned Area Development<sup>1</sup> (PAD) was prepared for the project site and was accepted in April 2018. The PAD includes specific parking requirements for the site given its location and proximity to bicycle and transit uses, and states that any potential reduction in the set parking requirements are to be considered minor amendments.

This evaluation includes additional research into parking needs for the site based on local, regional, and national guidelines. Although it is important to provide sufficient parking for various land uses, providing excessive parking can have negative unintended consequences. Parking can be very costly to construct; recent estimates from the University of Arizona indicate that a single space in a parking structure can cost up to \$20,000 to construct. Further, an abundance of parking can serve as a disincentive for using alternate modes, such as transit or cycling. This would conflict directly with the recently adopted City of Tucson Complete Streets Policy<sup>2</sup>, which includes a goal to “preserve and protect Tucson’s environment and increase health by providing opportunities for active transportation (walking, biking, etc.) reducing vehicle miles traveled, and decreasing pollution caused by motor vehicles.”

This study will provide guidance to help balance the need for sufficient project parking and the desire to emphasize alternate modes of travel and help further the Complete Streets policies being implemented throughout the city.

### **1.2. PROJECT DESCRIPTION**

The 4<sup>th</sup> Avenue Mixed Use Project will be located on the northeast corner of 4<sup>th</sup> Avenue and 9<sup>th</sup> Street in Tucson, Arizona. The project consists of 324 apartments (746 bedrooms) and 5,000 square feet (sf) of retail uses. Based on preliminary concepts, the proposed parking would include 219 residential spaces and 31 retail spaces; those numbers will be evaluated in this report to determine whether or not they will be sufficient.

In addition to standard vehicle parking spaces, the project will include approximately 25 motorcycle/moped parking spaces, 77 short-term bicycle parking spaces, and 375 long-term bicycle parking spaces. Per the City requirements, the project will require 75 short-term and 373 long-term bicycle spaces (0.1 and 0.5 spaces per each of 746 bedrooms, respectively) and a minimum of 2 short-term and 2 long-term retail bicycle spaces. Therefore, the project will meet the minimum bicycle parking requirements.

Figure 1 shows the project location as well as the location of various travel options available to future residents and visitors. As seen in the figure, there is a Sun Link streetcar stop immediately adjacent to the project on 4<sup>th</sup> Avenue. Further, a Tugo bike share station is located across the street from the project and the Ronstadt Transit Center is less than a 10-minute walk from the project.

On site, the project will include car share services for residents (Zipcar or similar service). Further, the site will have a designated ride share area for pick-up and drop-off. Lastly, overflow parking could be provided in the Plaza Centro garage, located less than ¼ mile from the project site.

**Figure 1. Project Location**





## 2. REQUIRED PARKING – CURRENT CONDITIONS

The City of Tucson has various parking requirements for specific areas of the city; in addition to a standard requirement, different parking requirements are provided for the downtown area (south of the Union Pacific Railroad tracks) and the Infill Incentive District (IID), which includes the project area. The Partners on Fourth Planned Area Development (PAD), developed for this project, also includes parking requirements. Table 1 shows the various parking requirements for the project site.

**Table 1. City of Tucson Parking Requirements**

	Residential (per unit)	Retail (per 100 sf)
City of Tucson - Downtown	1	0.25
City of Tucson - IID	0.9375	0.25
Partners on 4th PAD	1	0.33

The PAD also states that parking requirements for the site may be reduced by:

1. Providing Additional Bicycle Parking: For every six non-required bicycle parking spaces that meet the short or long-term bicycle parking standards, the motor vehicle parking requirement may be reduced by one space.
2. Providing Parking for Recharge of Electric Vehicles: The number of spaces required may be reduced at a ratio of one space for every one space for electrical vehicle parking spaces/recharge station.
3. With Individual Parking Plan (IPP) based on the existing transit stops located within ¼ mile of the PAD, if the analysis and findings show the proposed parking is adequate.
4. Institution of an on-site car-share program

The purpose of this evaluation is to assess, under item #3 above, whether the proposed parking is adequate by researching parking best practices and requirements from comparable jurisdictions.

### 3. LITERATURE REVIEW – BEST PRACTICES

Various local and national guidelines for parking requirements were reviewed to develop an understanding of current best practices. The findings are summarized in the following sections.

#### 3.1. REQUIREMENTS FOR PEER JURISDICTIONS

Parking requirements for the cities of Phoenix<sup>3</sup> and Tempe<sup>4</sup> are available for downtown areas, similar to the area where this project will be located. The applicable requirements are listed below, and the applicable sections of the Phoenix and Tempe codes are included in Appendices A and B, respectively.

- Phoenix – Downtown and Warehouse Districts (Section 702, Phoenix Zoning Ordinance)
  - Zero parking requirement (implemented 2013)
- Phoenix – Other Areas
  - Residential
    - Reductions available for buildings over 4 stories tall
    - 25% reduction from code for TOD within ¼ mile of light rail
- Tempe – Downtown (Section 4-603, Tempe Zoning and Development Code)
  - Residential
    - 0.5 spaces per bedroom for 1-2 bedroom units
    - 0.3 spaces per bedroom for 3+ bedroom units
  - Retail
    - No requirement for first 5,000 sf
    - Beyond 5,000 sf requires 1 space per 500 sf

#### 3.2. TCRP 128 – EFFECTS OF TOD ON HOUSING, PARKING, AND TRAVEL

*Transit Cooperative Research Program (TCRP) 128, Effects of TOD on Housing, Parking, and Travel*<sup>5</sup>, provides a summary of research conducted concerning traffic and parking generation for transit-oriented development (TOD). The report shows that TOD projects generate fewer vehicle trips and often own fewer vehicles per household than non-TODs (0.9 cars per household for TODs versus 1.6 cars per household for non-TODs).

The report also states that “Vehicle trip generation rates tend to be higher for TOD projects with more plentiful parking.” This statement supports the idea of providing fewer parking spaces to encourage transit use as well as bicycle and walking trips. The report also states that “Parking ratios developed using ITE trip generation rates over-park TODs by as much as 50%,” which indicates that the number of parking spaces provided for a TOD may not need to match typical requirements in order to be sufficient.

### 3.3. ITE PARKING GENERATION MANUAL

The Institute of Transportation Engineers (ITE) recently released the Parking Generation Manual, 5<sup>th</sup> Edition<sup>6</sup>. The manual provides parking rates for various land use types (residential, retail, etc.) in various settings (suburban, dense urban, city center core, etc.). City center core is equivalent with the downtown area of a city.

Table 2 provides a comparison of the residential parking requirements would be for this project if they were calculated using the ITE rates. The 4<sup>th</sup> Edition of the manual only provided rates for general urban/suburban locations. As shown, the residential parking requirements based on the current ITE rates would be between 149 and 269 spaces depending on whether parking needs are calculated using the number of apartment units, or the number of bedrooms. However, the number of spaces needed based on the average of the two methods is 209 residential parking spaces. The parking generation sheets for the 5<sup>th</sup> Edition are included in Appendix C.

**Table 2. ITE Residential Parking Requirements**

ITE LU 222 - High Rise Multifamily					
Units	ITE Edition	Location	Spaces/Unit	Units	Spaces
Apartments	4th	General urban/suburban	1.37	324	<b>444</b>
Apartments	5th	City center core	0.46	324	<b>149</b>
Bedrooms	5th	City center core	0.36	746	<b>269</b>

Table 3 shows the retail parking requirements for the 4<sup>th</sup> and 5<sup>th</sup> editions of the ITE Parking Generation Manual. Similar to the residential rates, the parking rates for retail uses are much lower for the center city core than general urban/suburban locations.

**Table 3. ITE Retail Parking Requirements**

ITE LU 820 - Shopping Center					
Units	ITE Edition	Location	Spaces/Unit	Units	Spaces
1,000 SF	4th	General urban/suburban	3.76	5	<b>19</b>
1,000 SF	5th	City center core	1.33	5	<b>7</b>

DRAFT

#### 4. SUMMARY AND CONCLUSIONS

As discussed in this memorandum, there is significant and consistent evidence supporting reduced parking rates for TODs and developments in a city center. Further, historic trends have shown that parking needs have decreased over time. Table 4 provides a comparison of parking needs for this project based on the ITE rates and the proposed parking spaces for the project for both the residential and retail uses. As seen in the table, the number of proposed residential parking spaces is slightly higher than the average number of spaces calculated using the average of the ITE rates. Also shown in the table is that the project is expected to provide considerably more retail parking than what is required by the ITE manual. This is intentional, as merchants in the area are sensitive to parking supply constraints for their customers.

**Table 4. Comparison of Parking Rates and Proposed Parking**

Residential				
Units	Source	Spaces/Unit	Units	Spaces
Apartments	ITE	0.46	324	149
Bedrooms	ITE	0.36	746	269
ITE Average				209
<b>Proposed Residential Parking Spaces</b>				<b>219</b>

Retail				
Units	Source	Spaces/Unit	Units	Spaces
100 SF	ITE	0.13	50	7
<b>Proposed Retail Parking Spaces</b>				<b>31</b>

Because of its location and design, this project also includes several unique additional project features that support a reduction in parking relative to the requirements of the PAD and that would help ensure the proposed parking levels (219 residential spaces and 31 retail spaces) will be sufficient. Some of those features include:

- Car share on site for residents (Zipcar or similar program)
- Dedicated ride-sharing (i.e. Uber, Lyft) pick-up and drop-off area
- Tugo bike share station located across the street (9<sup>th</sup> Street and 4<sup>th</sup> Avenue)

- Sun Link streetcar stop in front of the project site on 4<sup>th</sup> Avenue
  - Sun Link provides access to major employment areas, including the University of Arizona, Downtown Tucson, and the new Caterpillar Mining Center
  - Sun Link also provides access to many retail, restaurant, and activity areas, including 4<sup>th</sup> Avenue and Main Gate Square
- Ronstadt Transit Center 0.3 miles away, less than a 10-minute walk from the project. Ronstadt is served by 11 bus routes that provide transit access to the entire city of Tucson.
- Proximity to the Plaza Centro Garage. Public parking at this garage is a 5-minute walk away from the project and can provide convenient overflow parking for visitors.

Finally, it is also important to ensure that the on-site retail parking is not occupied by residents. The building owners and Park Tucson should work together to determine if time restrictions, paid parking or any other measures should be implemented for some or all of the retail spaces to ensure appropriate customer turnover and avoid usage by residents of this or other residential properties near 4<sup>th</sup> Avenue.

## 5. REFERENCES

- 
- <sup>1</sup> *Partners on Fourth PAD*. CDG Architects, February 20, 2018.
- <sup>2</sup> *DRAFT Complete Streets Policy*. City of Tucson,  
[https://www.tucsonaz.gov/files/bicycle/documents/Tucson\\_Complete\\_Streets\\_Policy\\_draft\\_online.pdf?fbclid=IwAR1V8nyNIMz1FDQVDBaDDo1skOCf94oVKrntkOyDhBN7tljMERvNr6wW0a8](https://www.tucsonaz.gov/files/bicycle/documents/Tucson_Complete_Streets_Policy_draft_online.pdf?fbclid=IwAR1V8nyNIMz1FDQVDBaDDo1skOCf94oVKrntkOyDhBN7tljMERvNr6wW0a8), accessed February 2019.
- <sup>3</sup> *Phoenix Zoning Ordinance, Chapter 7 – Development Standards of General Applicability, Section 702, Off-Street Parking and Loading*. City of Phoenix,  
<https://www.codepublishing.com/AZ/Phoenix/html/PhoenixZ07/PhoenixZ0702.html#702>, accessed February 2019.
- <sup>4</sup> *Zoning and Development Code, City of Tempe, Part 4 – Development Standards, Chapter 6 – Parking*. City of Tempe,  
[https://library.municode.com/az/tempe/codes/zoning\\_and\\_development\\_code?nodeId=ZONING\\_DEVELOPMENT\\_CODE\\_PT4\\_DEST\\_CH6\\_PA](https://library.municode.com/az/tempe/codes/zoning_and_development_code?nodeId=ZONING_DEVELOPMENT_CODE_PT4_DEST_CH6_PA), accessed February 2019.
- <sup>5</sup> *TCRP Report 128, Effects of TOD on Housing, Parking, and Travel*. Transportation Research Board, 2008.
- <sup>6</sup> *Parking Generation Manual, 5<sup>th</sup> Edition*. Institute of Transportation Engineers, February 2019.

## Appendix A – City of Phoenix Code Excerpt



**C. Parking Requirements.** Off-street automobile parking space or area shall be provided according to the following table, except for large scale retail commercial uses (see Section [702.D](#)). The parking ratios in the table identify the minimum level of parking required to serve that use and receive site plan approval. \*18

Type of Land Use	Parking Requirements
+18 Art Gallery	1 space per 300 sq. ft.
+18 Art Studio	1 space per 500 sq. ft. or 1 per 1.5 employees
+12 Basketball and Volleyball Courts	9 spaces per court, 6 spaces per half-court
Batting Cages	1 space per 60 s.f. of batting area (area where batter is standing)
Billiard Parlors	1.5 spaces per table (3 feet around pool tables will not be counted for parking in bars & lounges)
Car Wash, Automated	1 space per 3 non-office employees and 1 space per 300 s.f. of office and sales area and 2 space per 24 feet of wash bay
Churches, Synagogues, Temples, or Other Places of Worship (See Public Assembly—General, for public event facilities)	1 space per 3 seats or 1 space per 58 lineal inches of pew space
*18—20, 28, 29 Community Residence Center, Nursing Home, Specialized Treatment Facility, Structured Sober Living Home (with more than ten residents), and Hospice	1 space per 2 resident/patient beds
+18 Convention/Conference Centers	1 space per 100 sq. ft.
Court Rooms, Detention Facilities	1 space per 60 s.f. of hearing rooms or 1 space per 90 lineal inches of pew space and 1 space per 300 s.f. office area and 1 space per 3 employees in jail area and 1 space per 5 beds
*28 Day Care Center (Adult and Child Care)	1 space per 300 s.f. of floor area (20% reduction allowed for storage, restrooms, etc).
Dormitories, Fraternity and Sorority Houses	1 space per 1 dwelling unit and 1 space for each 2 guest rooms
Dwelling Unit, Multi-family	Total required parking 1.3 spaces per efficiency unit and 1.5 spaces per 1 or 2 bedroom unit and 2 spaces per 3 or more bedroom unit, 1.0 space per unit of less than 600 square feet regardless of number of bedrooms *16 *22

Type of Land Use	Parking Requirements
	<p>When the required parking is reserved for residents, additional unreserved parking is required as follows:            +220.3 spaces for each efficiency unit and 0.5 spaces per each 1 or 2 bedroom unit and 1.0 space per each 3 or more bedroom unit. +22            Exception for unreserved parking: where minimum 18-foot driveways are provided for individual units, .25 space per each unit. +22            Unreserved parking shall be distributed throughout the site.            Note: Any unreserved parking spaces required by this section may be counted toward the total required parking count.</p>
Dwelling Unit, Single-Family Attached	1.3 spaces per efficiency unit and 1.5 spaces per 1 or 2 bedroom unit and 2 spaces per 3 or more bedroom unit, 1.0 space per unit of less than 600 square feet regardless of number of bedrooms
Dwelling Unit, Single-Family Detached	2 spaces per 1 dwelling unit
+18 Field Sports i.e. Softball, Soccer, Football	15 spaces per field
Fire Station	1 space for each 3 employees for the two largest shifts
*18 Fitness Center/Family Activity Center	1 space per 150 s.f. floor area
Furniture Store	1 space per 400 s.f. floor area
Go Cart Tracks	2 spaces per cart and 1 space per 60 s.f. floor area
Golf Course	2 spaces per hole and (60/tee time spacing (in minutes)) spaces and 2 spaces per designated station on the driving range tee area and 1 space per 50 square feet of dining area (indoor and outdoor combined) and 1 space per 300 s.f. of retail sales area and 1 space per golf course facility staff and 1 space per 500 s.f. putting and chipping green
	For golf course facilities located adjacent to or within a resort to and from which the golf course facility provides free motorized transportation (e.g. golf cart), the 'course' golfer, range user, diner and customer parking requirements stated above will be reduced by 30%.
*29 Group Home or Boarding House	1 space per 2 resident beds

Type of Land Use	Parking Requirements	
Hospital	1 space per 3 employees, including nurses not domiciled on the property and 1 space per resident doctor and 1 space per 2 patient beds	
Industrial Plants, Manufacturing, Wholesale, including but not limited to warehouses and storage buildings and yards, public utility buildings, contractor equipment and lumber yards, business service establishments, such as blueprinting, printing and engraving, soft drink bottling establishments and fabricating plants	Specified industrial use: 1 space per 1.5 warehouse or production workers. If the facility runs more than one shift a day, employee count will be based on the two largest shifts and 1 space per 300 s.f. of administration office.	
	Unspecified Industrial Use (Shell Building):	
	Gross Floor Area	Parking Ratio
	0 to 150,000 sq. ft.	1 space per 1,000 sq. ft.
	150,001 to 500,000 sq. ft.	1 space per 2,000 sq. ft.
	500,001 and greater sq. ft.	1 space per 2,500 sq. ft.
	Office square footage that is incidental to the industrial operation, e.g. manager's office, will be calculated based on the industrial ratio. Office square footage that is the administrative or research component of an industrially based business will use the office ratio.	
Libraries	1 space per 190 s.f. gross floor area and 1 space per 3 employees	
Medical Offices: Doctor, Dentist, Clinics, Centers	1 space per 200 s.f. gross floor area between exterior walls	
Mini-Warehouses	1 space for each 35 storage units (storage stalls or lockers) and 2 spaces for manager's apartment	
Miniature Golf Courses	1.5 spaces for each hole and 1 space per 60 s.f. of game room area	
Mixed Use Project	Sum of the requirements of the various uses computed separately. The parking spaces for one use shall not provide required parking for another use except through use of the shared parking model.	
Mobile Home Development	2 spaces per 1 dwelling unit	

Type of Land Use	Parking Requirements	
Motels, Hotels, Resort Hotels	1 space per 1 dwelling unit or rooming unit (each curbside parking space shall be 8 feet 6 inches wide by 23 feet long)	
Movie Theaters	1 space per 3.5 seats	
*12 Office Building(s) with less than 50,000 s.f. of gross building area	1 space per 300 s.f. floor area	
*12 Office Building(s) or Centers with 50,000 s.f. or greater of gross building area	Square feet of tenant leasable area (TLA)	Spaces per 1,000 square feet of TLA
	50,000 to 250,000	3.5
	250,001 to 600,000	3.2
	600,001 to 1,000,000	2.8
	Over 1,000,000	2.7
*18 Public Assembly—Active Recreational	Requires parking study	
Public Assembly—Entertainment	1 space per 50 s.f. exclusive of kitchen, rest rooms, storage, etc.	
Public Assembly—General	1 space per 60 sq. ft.	
Public Assembly—Spectator	1 space per 4 seats and 1 space per 60 s.f. of area in public assembly	
+18 Public Museum	1 space per 60 sq ft of public area, 1 space per 300 sq. ft. for retail and office	
Racquetball/Handball Courts	3 spaces for each court.	
Recreational Vehicle Park	1.1 spaces for each recreational vehicle space	
+18 Resort	Requires parking study or is based on previously approved parking interpretation for a like use	
Restaurants, Bars, Taverns, Night Clubs, or Similar Drinking Establishments	1 space per 50 s.f. (including outside dining/sales) exclusive of kitchen, rest rooms, storage, etc. 1 space per 200 s.f. of outdoor recreational areas. Landscape planters with trees and shrubs, ingress/egress pathways and retention areas will not be counted as outdoor recreational areas. +27	
Retail Establishments including those not specified with less than 50,000 sq. ft. of gross building area	1 space per 300 s.f. floor area	

Type of Land Use	Parking Requirements		
Retail Establishments or Centers with 50,000 sq. ft. or greater of gross building area—(Large scale commercial retail developments not included)	Square feet of tenant leasable area (including outside dining/sales)	Spaces per 1,000 square feet of TLA	Gross assembly without surcharge
	50,000 to 350,000 sq. ft.	4	20%
	Greater than 350,000 sq. ft.	4.5	20%
	Centers with more than 20% of area in public assembly uses will be assessed a parking surcharge based on actual tenant use for the portion in excess of 20%. Gross, not net, public assembly is used in these calculations. Parking for theaters, hotels, schools, and medical offices is calculated separately from the rest of the center. This requirement will apply to any tenant improvements.		
Schools, Including Academies, Colleges, Universities, Elementary Schools, Junior High Schools, High Schools, Prep Schools and All Other Similar Institutions of Learning	1 space per 3 employees including administrators, teachers, and building maintenance personnel and 1 space per 5 high school, college, or university students, predicated on the designed capacity of the physical plant.		
Schools, Beauty and Vocational	1 space per 60 s.f. of classroom area and 1 space per 300 s.f. of administration		
Service Stations	2 spaces per service bay (pump islands not considered bays; standing areas at a pump islands and interior circulation areas shall not be counted as parking areas).		
Skate Board Tracks	1 space per 400 s.f. of track area on a concrete surface open to the public and space for other mixed uses as detailed in this table		
+29 Structured Sober Living Home (with six to ten residents)	4 spaces per 1 dwelling unit, 2 of which may be located within the required front yard setback		
+18 Swap Meet	1 space per 300 sq. ft. of office and 1 space per leasable vender space.		
Swimming Pools/Spas	1 space per 60 s.f. of deck area		
+18 Tanning, Health and Beauty Salon	1 space per 300 s.f. office/waiting area and 1 space per service station/area		

Type of Land Use	Parking Requirements
Television Stations	1 space per 3 employees in studio areas and 1 space per 300 s.f. of office and sales area
Tennis Courts	3 spaces for each court
Vehicle Sales: Recreational, Mobile Home Displays, New and Used Car Agencies, Marine Sales, and Other Businesses Selling Motorized and Non-Motorized Land or Marine Vehicles or Mobile Living and/or Transporting Units	1 space per 300 s.f. office and covered sales area and 1 space per 10,000 square feet of outdoor display or portion thereof and 1 space per 10,000 square feet thereafter and 1 space per 3 employees and 1 space for each service bay
Veterinary Offices	1 space per 200 s.f. gross floor area, excluding indoor and outdoor kennel areas.

**D. Parking Requirements For Large Scale Commercial Retail Developments. \*18**

1. A minimum of 4 spaces per 1,000 square feet of tenant leasable area and a maximum of 5 spaces per 1,000 square feet of tenant leasable area (not including public assembly, theaters, hotels, schools, medical, restaurants and veterinary offices). Parking may be increased above the maximum allowable number of spaces by including one or more of the following options listed below: \*18

*Incentive Options:*

- a. *Provide additional 100 lineal feet of landscaped pedestrian walkway through parking areas in one or more locations: Twenty (20) spaces. \*18*
- b. *Provide enhanced landscaping within customer parking areas beyond required minimum: Four (4) spaces for each fifty (50) square feet of additional landscaped area. \*18*
- c. *Provide shaded bus shelter that is architecturally integrated with the design of the primary structure and as approved by the public transit department: Twenty-five (25) spaces. \*18*
- d. *Provide covered customer parking: Ten (10) spaces for each covered space. \*18*
- e. *Provide parking structure: Fifty (50) spaces for each one (1) space provided in a parking structure. Said parking structure shall be a maximum of forty-eight (48) feet high and subject to a use permit as provided in Section 307. \*18*
- f. *Improved outdoor public areas (plazas, courtyards, etc.), located adjacent to and integrated with the main pedestrian circulation: Four (4) spaces for every fifty (50) square feet with seating. \*18*

g. *Permanent public art detached from the building and developed by a commercial artist that occupies a minimum of ten (10) cubic feet: Ten (10) spaces. \*18*

h. *A freestanding or attached architectural tower of a minimum twenty-five (25) feet high (no tenant signage permitted): Ten (10) spaces per tower. \*18*

i. *A freestanding or attached clock of a minimum twenty-five (25) feet high (no tenant signage permitted): Fifty (50) spaces. \*18*

**E. Modifications to Parking Requirements. \*18**

1. **Parking management study.** The purpose of a parking management study is to ensure that required site parking is available within reasonable walking distances, i.e., the walking distance from a required parking stall is less than 600 feet as the pedestrian travels to the curb directly in front of a business or mall entrance or the curb of the plaza or courtyard directly in front of the business or mall entrance. \*18

a. A parking management study may be required when one of the following conditions exists on the same site: \*18

(1) A retail center or mixed use project has more than 100,000 square feet of public assembly uses, including movies theaters, concentrated in the same general location. \*18

(2) A retail user of 100,000 square feet is located within 200 feet of a public assembly user of 50,000 square feet, including movie theaters. \*18

b. A final parking management study must be approved as part of the site plan review. It may include parking structures, site layout, use of shuttle system, valet service, or other techniques approved by the Planning and Development Department to make all required parking functional. The Planning and Development Director or his designee is authorized to approve parking management studies. \*18

c. The parking management study may designate an area for employee parking if it is designed and sectioned off in such a way that it functions as a separate lot. The employee parking spaces shall use the minimum size dimensions for office/industrial spaces. \*18

2. **Shared parking model.** The shared parking model can be used as a basis for predicting the parking demand for a particular mix of uses on a site as an alternative to the parking requirements table. The model is a demand matrix and accompanying documentation and is available from the Planning and Development Department. The model assumes that every separate use will need the full amount of parking that is called for in the parking requirements at some point during the day (called the "peak" period for that use). Where different uses need parking at different times of the day, there is an opportunity for them to share parking. The total number of parking spaces needed to serve

a mixed use site (the parking demand) may be significantly less than the number of stalls that would have to be built if each of the uses had to provide parking on its own. \*18

The standard shared parking model, developed and administered by the Planning and Development Department, is a tool for estimating the parking demand for a specific mix of uses. The demand curves represent the parking needed for an average, typical use, based on studies and observations. The curves are represented in a table showing the percent of the parking requirement needed by hour of day for each use. Modifications to the standard model can be proposed based on more detailed information on specific center uses as specified below. The Planning and Development Director or his designee may periodically modify the shared parking model to improve it as a predictor of parking demand based on national or local research, including site observations.

- a. A retail, office, or mixed use center may use the shared parking model when: \*18
  - (1) The gross floor area is at least 25,000 square feet; and \*18
  - (2) The mix of businesses have compatible operating hours in terms of shared parking. \*18
- b. The shared parking model analysis must be performed, and the report must be sealed, by a professional civil engineer who has extensive experience with traffic and parking issues in private development when one of the following conditions exists: \*18
  - (1) If the project, or any site or tenant improvement, warrants a traffic study, or \*18
  - (2) If modifications to the standard demand matrix are proposed. \*18
- c. A reduction in parking of up to fifteen percent (15%) based on the shared parking model may be granted by the Planning and Development Department Traffic Engineer. Parking reductions greater than fifteen percent (15%) and based on the model must obtain a use permit in accordance with the standards and procedures of Section 307. \*18
- d. Properties or businesses approved to share parking must be approved under a combined site plan. \*18
- e. An applicant may petition the Planning and Development Traffic Engineer for review of parking situations which do not correlate with one of the standard uses in the model. \*18
- f. In addition to shared parking situations, the following items may be considered and counted toward parking reductions within the shared parking model: +9 \*18



(1) Transit service available within one-quarter mile of the site with rush hour frequencies of thirty (30) minutes or less. \*18

(2) The area fits the criteria for a level 2 pedestrian area as outlined in the Maricopa Association of Governments' Pedestrian Area Policies and Design Guidelines. \*18

(3) The business participates in a transportation management association that sponsors trip reduction programs. \*18

3. **Reductions.** Parking reductions are specified within the specific zoning districts. The listed zoning districts offer parking reductions: \*18

a. *Downtown Core District:* No parking required. (Section [643](#)) \*18

b. *Warehouse District:* No parking required. (Section [645](#)) \*18

c. *Urban Residential District.* (Section [642](#)) \*18

d. *Interim Transit-Oriented Zoning District One (TOD-1).* (Section [662](#)) +18

e. *Interim Transit-Oriented Zoning District Two (TOD-2).* (Section [663](#)) +18

4. **Reductions for buildings higher than four stories.** The Zoning Administrator or Board of Adjustment may grant a request to reduce the otherwise applicable parking requirements for buildings in excess of four (4) stories or forty-eight (48) feet in height through a use permit in accordance with the standards and procedures of Section [307](#) upon a showing by the applicant that: \*18

a. Because of the nature of the existing or proposed use or the existence of pedestrian, mass transit, or service trips, adherence to applicable parking requirements is not necessary; and \*18

b. The reduced parking will accommodate vehicular traffic without increasing traffic and on street parking of vehicles in adjacent neighborhoods. \*18

## Appendix B – City of Tempe Code Excerpt

**E. Parking Ratio Table.** Table 4-603E provides minimum off- *street parking* requirements for uses allowed by this Code. Requirements for uses not specifically listed shall be determined by the Zoning Administrator using the similar use ruling procedure in [Section 6-301](#). *Parking* ratios for uses in all MU zoning districts shall be established through the PAD Overlay process. Parking ratios for uses located in the CC, City Center District, shall comply with the standards established in Table 4-607A, Downtown Parking Standards.

Table 4-603E: Ratios for Off-Street Parking			
Use	Vehicle Parking Minimums	Bicycle Parking Minimums	Bicycle Commute Area
Bed and breakfast	1 space per guest bedroom	NS	NS
Church/place of worship	1 space per 100 sf for sanctuary + school, etc.	1 per 1,500 sf	1 per 1,500 sf
Clinic (medical, dental, veterinary)	1 space per 150 sf	1 per 12,000 sf, 2 min	1 per 12,000 sf, 2 min
Club			
Bar/tavern/nightclub/teen night club	1 space per 50 sf	1 per 1,000 sf	1 per 500 sf
Lodge/club or similar	1 space per 125 sf	1 per 2,000 sf	1 per 2,000 sf
Outdoor (no parking first 300 sf; per tenant space)	1 space per 150 sf	1 per 2,000 sf	1 per 2,000 sf

**Table 4-603E: Ratios for Off-Street Parking**

Use	Vehicle Parking Minimums	Bicycle Parking Minimums	Bicycle Commute Area
Conference/assembly	1 space per 125 sf	1 per 2,000 sf	1 per 2,000 sf
Childcare center	1 space per 300 sf	1 per 3,000 sf	1 per 1,500 sf
Entertainment			
Amusement park	1 per 500 sf of public area	1 per 5,000 sf	1 per 2,500 sf
Arcade	1 space per 150 sf	1 per 1,000 sf	1 per 500 sf
Billiard establishment	1 space per 125 sf	1 space per 2,000 sf	1 space per 1,500 sf
Bowling alley	5 spaces per lane + bar, etc.	0.5 per lane	0.5 per lane
Court (tennis, racquetball, etc.)	2 per court + restaurant, etc.	0.5 per court	0.5 per court
Golf course/clubhouse	4 spaces per green + restaurant, pro shop, etc.	0.2 per green	0.2 per green

Table 4-603E: Ratios for Off-Street Parking

Use	Vehicle Parking Minimums	Bicycle Parking Minimums	Bicycle Commute Area
Golf driving range	0.5 space per tee + retail (pro shop)	1 per 10 tees	1 per 10 tees
Mini-golf	1 space per hole + arcade, etc.	0.5 per hole	0.5 per hole
Museum	1 space per 250 sf	1 per 4,000 sf	1 per 3,000 sf
Stadium/arena	0.2 space per seat + restaurant, etc.	1 per 100 seats	1 per 100 seats
Team sports (volleyball, baseball, soccer, etc.)	9 per field or court	4 per field or court	4 per field or court
Theater	1 space per 3 seats	1 per 40 seats	1 per 30 seats
Fitness center	1 space per 125 sf or sum of components (courts, daycare, office, etc.), whichever is less	1 per 2,000 sf	1 per 2,000 sf
Fraternity/sorority	1.5 spaces per bedroom	0.5 per bedroom	1 per bedroom

**Table 4-603E: Ratios for Off-Street Parking**

Use	Vehicle Parking Minimums	Bicycle Parking Minimums	Bicycle Commute Area
Hospital	0.5 space per bed & 1 space per doctor on staff + 0.5 space per employee	0.2 space per employee	0.2 space per employee
Hotel/motel	1 space per unit + office, etc.	1 per 20 units	1 per 20 units
Manufacturing	1 space per 1,000 sf + office	1 per 10,000 sf	1 per 10,000 sf
Mini-warehouse/rental storage facilities	1 per 5,000 sf; includes manager's office	NS	NS
Mortuary	1 space per 125 sf	2 spaces	2 spaces
Nursing home/elder care	0.5 space per bed	0.05 per bed	0.05 per bed
Office	1 space per 300 sf	1 per 10,000 sf, 2 min	1 per 8,000 sf, 4 min
Call center	1 space per 150 sf	1 per 1,500 sf	1 per 750 sf
Restaurant			

**Table 4-603E: Ratios for Off-Street Parking**

Use	Vehicle Parking Minimums	Bicycle Parking Minimums	Bicycle Commute Area
Indoor	1 space per 75 sf	1 per 1,000 sf	1 per 500 sf
Outdoor (no parking first 300 sf; per tenant space)	1 space per 150 sf	1 per 2,000 sf	1 per 2,000 sf
Take out only (no tables/chairs)	1 space per 300 sf	1 per 10,000 sf, 2 min	1 per 7,500 sf, 4 min
Retail			
Indoor	1 space per 300 sf	1 per 10,000 sf, 2 min	1 per 7,500 sf, 4 min
Outdoor (no parking first 300 sf; per tenant space)	1 space per 500 sf	1 per 5,000 sf	1 per 5,000 sf
Convenience store/gas	1 space per 300 sf	1 per 2,000 sf	1 per 1,000 sf
Furniture sales	First 10,000 sf @ 1 space per 500 sf + 1 space per 5,000 sf remaining	1 per 5,000 sf	1 per 5,000 sf

**Table 4-603E: Ratios for Off-Street Parking**

Use	Vehicle Parking Minimums	Bicycle Parking Minimums	Bicycle Commute Area
Residential			
Mobile home/trailer	2 spaces + 0.2 guest spaces per unit	NS	NS
Multi-family			
Guest	0.2 space per unit	0.2 space per unit	0.2 space per unit
Studio	1 space per unit	0.5 per unit	0.75 per unit
1 Bedroom	1.5 spaces per unit	0.5 per unit	0.75 per unit
2 Bedroom	2 spaces per unit	0.5 per unit	0.75 per unit
3 Bedroom	2.5 spaces per unit	0.75 per unit	1 per unit
4 Bedroom	3 spaces per unit	0.75 per unit	1 per unit
Single-family	2 spaces per unit	R1-PAD requirement shall be established	R1-PAD requirement shall be



Table 4-603E: Ratios for Off-Street Parking

Use	Vehicle Parking Minimums	Bicycle Parking Minimums	Bicycle Commute Area
		with the PAD Overlay	established with the PAD Overlay
School			
Elementary/junior high	1 space per 300 sf of classroom + office	1 per 1,000 sf	1 per 1,000 sf
Instructional	1 space per 200 sf of classroom + office	1 per 1,500 sf	1 per 1,500 sf
High school/college	1 space per 200 sf of classroom + office	1 per 1,500 sf	1 per 1,500 sf
Vocational	1 space per 200 sf of classroom + office	1 per 1,500 sf	1 per 1,500 sf
Service	1 space per 300 sf	1 per 10,000 sf, 2 min	1 per 7,500 sf, 4 min
Financial institution	1 space per 300 sf	1 per 3,000 sf	1 per 1,500 sf
Vehicles			

**Table 4-603E: Ratios for Off-Street Parking**

Use	Vehicle Parking Minimums	Bicycle Parking Minimums	Bicycle Commute Area
Car wash - automatic	1 space per 300 sf	4 spaces	4 spaces
Car wash - self serve	0.5 spaces per bay	NS	NS
Sales/rental	1 spaces per 300 sf; 7 spaces min	4 spaces	4 spaces
Services station	1 spaces per 300 sf; 7 spaces min	4 spaces	4 spaces
Warehouse			
Specified tenant(s)	First 10,000 sf of warehouse @ 1 space per 500 sf + 1 space per 5,000 sf for remaining warehouse+ office	1 per 10,000 total sf	1 per 10,000 total sf
Unspecified tenant(s)	See <a href="#">Section 4-603(D)(3)(b)</a>	Based on any office space (1 per 10,000 sf)	Based on any office space (1 per 10,000 sf)

## Appendix C – ITE Parking Generation Sheets

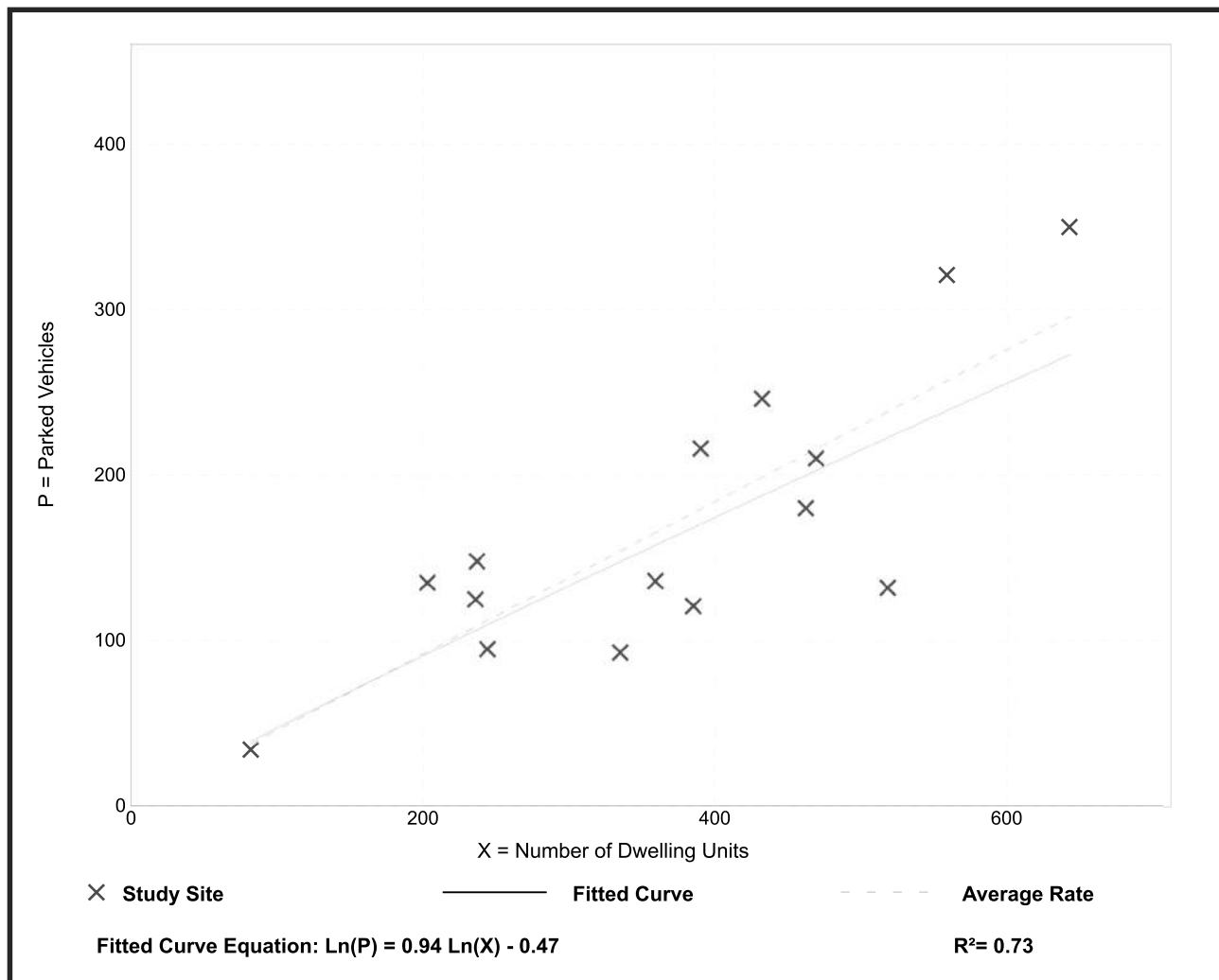
## Multifamily Housing (High Rise) (222)

**Peak Period Parking Demand vs: Dwelling Units**  
**On a: Weekday (Monday - Friday)**  
**Setting/Location: Center City Core**  
**Peak Period of Parking Demand: 10:00 p.m. - 5:00 a.m.**  
 Number of Studies: 15  
 Avg. Num. of Dwelling Units: 370

### Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.46	0.25 - 0.67	0.39 / 0.60	***	0.13 (28%)

### Data Plot and Equation



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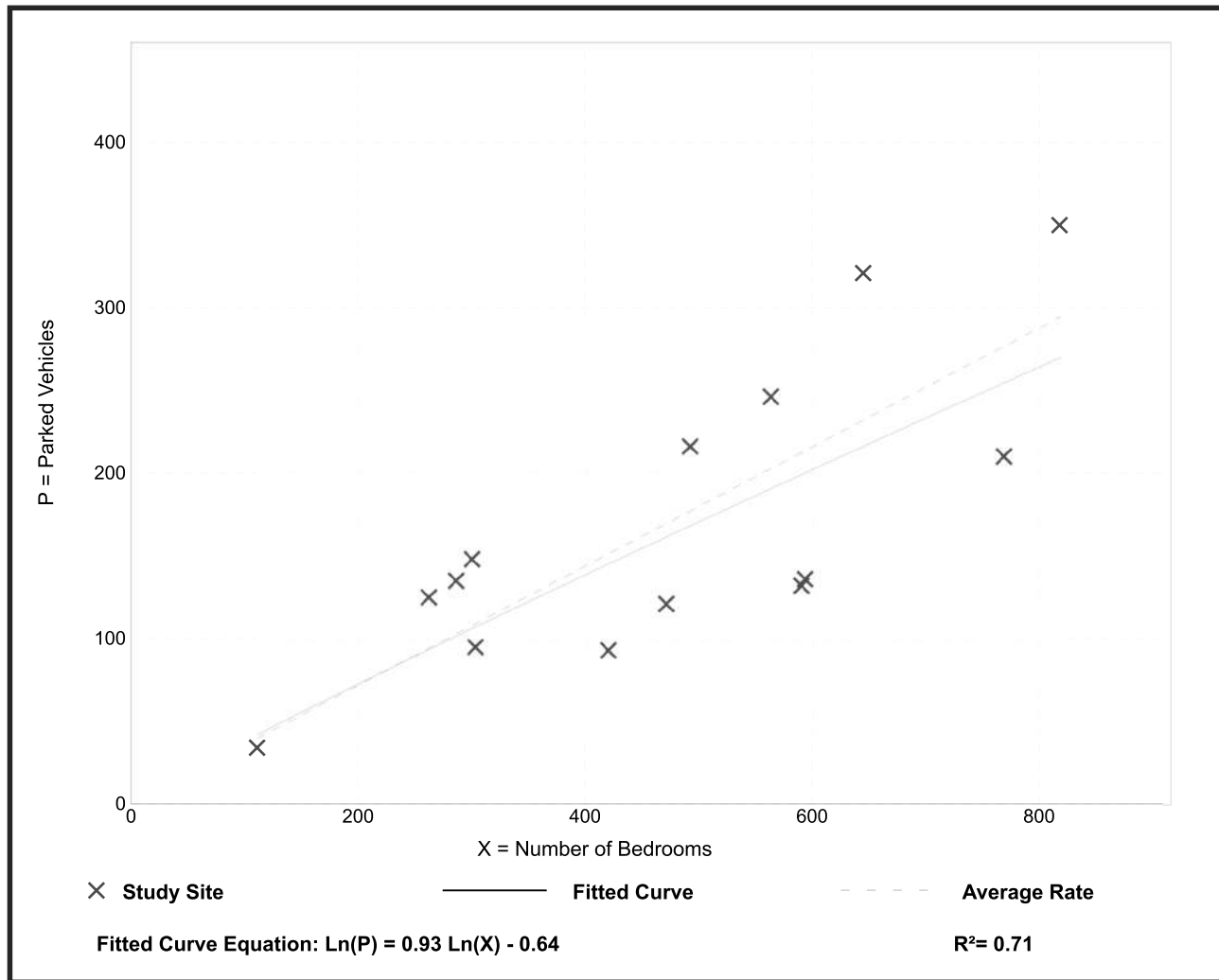
# Multifamily Housing (High Rise) (222)

**Peak Period Parking Demand vs: Bedrooms**  
**On a: Weekday (Monday - Friday)**  
**Setting/Location: Center City Core**  
**Peak Period of Parking Demand: 10:00 p.m. - 5:00 a.m.**  
 Number of Studies: 14  
 Avg. Num. of Bedrooms: 473

## Peak Period Parking Demand per Bedroom

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.36	0.22 - 0.50	0.27 / 0.49	***	0.11 (31%)

## Data Plot and Equation



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