

EXECUTIVE SUMMARY

Date: May 04, 2026

**Subject: Parking Study and Analysis for 1715 & 1805 Market Center Blvd. and 1800 Irving Blvd.
BOA 25-0071 Special Exception**

The applicant requests a **Special Exception** to reduce required on-site parking from:
424 spaces required to 229 spaces proposed — a 46% reduction

The applicable standard requires that reduction would not “increase traffic congestion” and “would not create a traffic hazard.” As shown below, both conditions are clearly met. The requested reduction also falls within the 50% maximum reduction permitted under PD 621.

Note: The City of Dallas recently eliminated parking minimums from the base zoning code. That change did not extend to Planned Development Districts. Were this property not located in PD 621, no special exception would be required.

No Congestion. According to City of Dallas traffic counts, both Irving Blvd and Market Center Blvd are operating at less than one-third of their design capacity. Each roadway carries roughly 14,000 vehicles per day against a design capacity of 42,000 vehicles per day for a 6-lane divided thoroughfare. Revitalizing a currently vacant property will not meaningfully increase traffic on either road. These corridors have capacity to absorb significantly more vehicular traffic.

No Traffic Hazard. Both streets provide protected median turn lanes for left turns into the property. Driveways are properly spaced and sized, with unobstructed sightlines and existing street lighting for nighttime visibility. Valet queue lanes can easily accommodate more than ten vehicles (220+ feet) to prevent encroaching into the public right-of-way. Parking in the travel lanes of either thoroughfare is prohibited. Therefore, there are no safety concerns or traffic hazards created by approving this parking reduction.

Actual Parking Demand Supports the Reduction. Real-world parking demand for restaurant and nightlife uses has declined measurably due to rideshare services, shared parking, walkable neighborhoods, e-bikes, trails, and professional valet operations. The City’s recent revision to remove parking minimums from the base zoning code reflects this shift. PD 621 anticipated reduced parking demand more than twenty years ago by authorizing up to a 50% reduction. Holding this property to the outdated formula — a standard the City no longer applies elsewhere — would be inconsistent with current practice and would not be a balanced or efficient use of parking.

Mitigation Plan. If the on-site parking were to reach capacity, there would be no risk to the public. The owner controls additional nearby parking that valet operations can access if needed and could work to arrange overflow parking with neighboring properties if ever needed. The greater risk to the City lies in leaving a vacant property undeveloped along two underutilized corridors that would benefit from additional activity and investment.

MEMORANDUM

To: David Nevarez, P.E., PTOE, CFM
Transportation Development Services
City of Dallas

From: Lloyd Denman, P.E., CFM
Consult LD, LLC
Registered Firm F-23598

Date: May 04, 2026



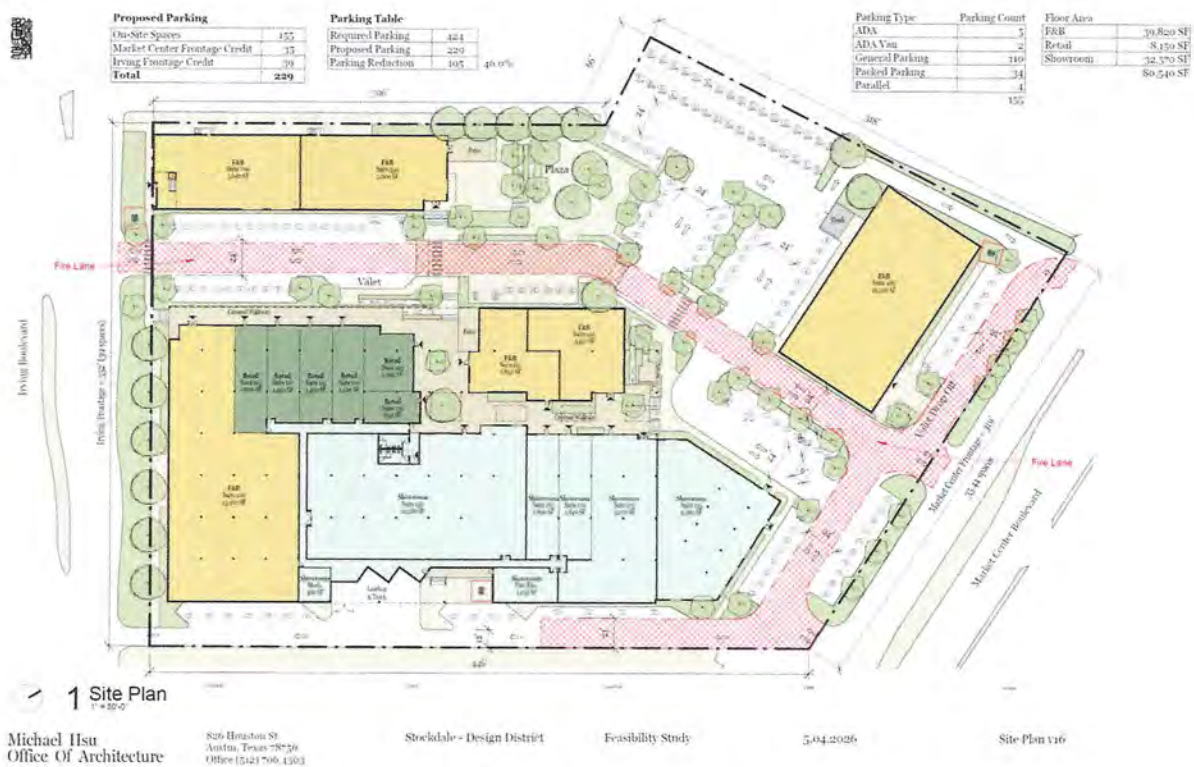
**Subject: Parking Study and Analysis for 1715 & 1805 Market Center Blvd. and 1800 Irving Blvd.
BOA 25-0071 Special Exception**

Introduction

1715 & 1805 Market Center Blvd. and 1800 Irving Blvd. (subject site) is one development site located west of Oak Lawn between Market Center Blvd. and Irving Blvd. The property is zoned PD 621, Subdistrict 1, and is in the area known as the Dallas Design District. The site was originally developed in the 1950s and was most recently occupied by Pettigrew Luxury Furnishings. P4Properties, LLC now owns the subject site as well as several other Design District properties. **P4Properties, LLC intends to revitalize the subject site by re-purposing some of the existing buildings and removing and replacing other buildings** for a net decrease in building square footage and a significant increase in internal parking spaces. A balanced mix of Restaurant use, Retail use, and Showroom use is proposed to better utilize the repurposed and revised spaces. The new development mix is intended to replicate other new similar mixed use sites currently developing within the Design District. The existing site has three buildings totaling approximately 108,100 square feet and only 59 internal parking spaces. The proposed site will have four buildings totaling approximately 80,540 square feet and 155 internal parking spaces. **The net reduction is 25% of the building area with a net gain of 96 parking spaces, or nearly 160% gain.** Even so, the PD 621 Code requires even more parking per the old City parking regulations. The City's new parking regulations would be met by the site and not require Board of Adjustment approval if not for it being within PD 621. P4Properties would like to utilize the allowances provided within PD 621 to reduce the required parking to create an efficient and balanced mix of uses for the site and more in line with current neighborhood transportation trends. (See **EXHIBIT 1 – Proposed Site Plan**)

The City of Dallas Development Code requires minimum parking associated with different land use types. PD 621 specifically allows “shared parking” to be considered as a percentage reduction of the required minimum parking for certain mixed uses. Note that the proposed use mix for this site would be the maximum planned space for utilization of Restaurant that may not actually all be transitioned or leased as proposed but is meant to represent what would be the densest future parking use mix. **The calculated maximum parking for the proposed mix of uses is 424 spaces per City Code.** (See **APPENDIX 1 - Proposed Use PD 621 Parking Chart**) Note that the **proposed parking layout of 229 spaces** is adequate for the morning and afternoon times of day per Code to accommodate the maximum proposed mix of uses when applying the “Shared Parking Reduction” table within PD 621.

EXHIBIT 1 – Proposed Site Plan



This site plan shows the proposed 229 parking spaces and the ultimate proposed uses for the repurposed and revised site. The restaurant use may incrementally expand up to the requested maximum of 39,820 square feet. For instance, Suite 100 could be used as Restaurant, Retail, Showroom, or a unique combination depending on the tenant type. Note that the bulk of the parking demand is for the Restaurant use which typically peaks during weekend evenings. The restaurant use will be valet parked. The Retail and Showroom use has plenty of daytime parking and is typically closed during the evenings. Note also that the **Total Proposed Parking** includes “Frontage Credit” of 35 spaces along Market Center Blvd. and 39 spaces along Irving Blvd. as allowed per PD 621. The 74 parking space credit brings the Total Proposed Parking to 229 spaces (from 155) for the PD 621 overall reduction request calculation.

PD 621 Allowance for Parking Reductions and the Owner's Request

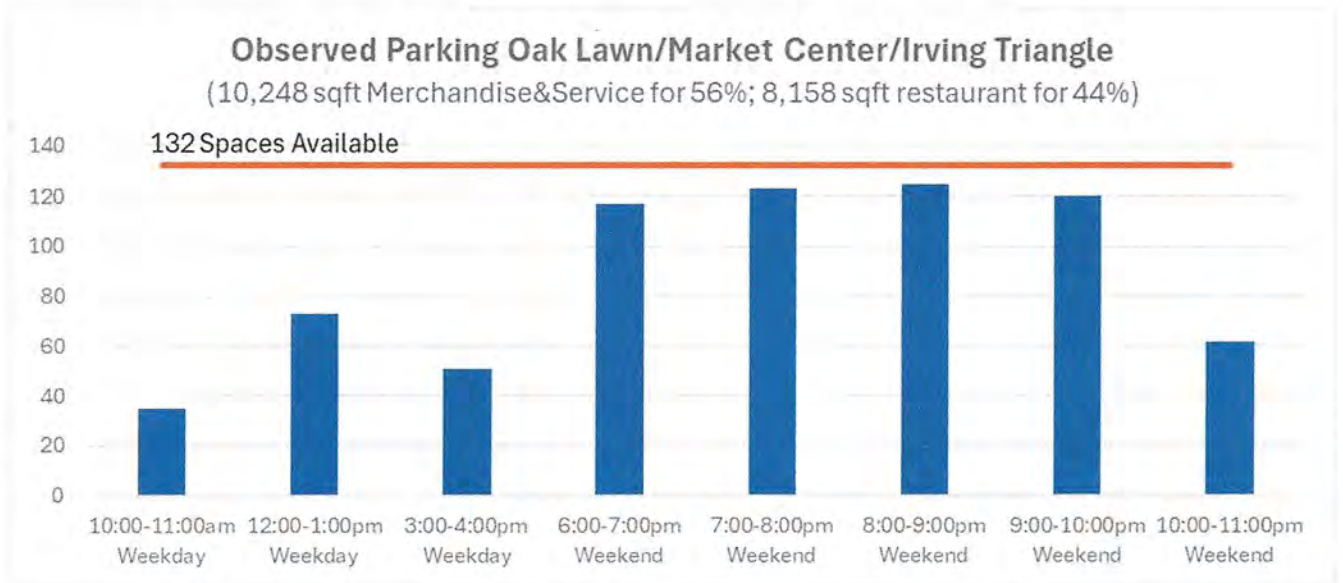
The creators of PD 621 utilized good foresight for the zoning regulations back in 2002 by realizing that the old parking minimums required for certain defined uses are not “one-size fits all”. (See **APPENDIX** Articles on Parking) PD 621 allows for the accommodation of today’s denser urban living that is less “car-centric” and the consideration of alternative modes of transportation that help reduce the need for parking. Specifically, the PD allows for “a special exception of up to 50 percent of the required off-street parking” to help “right-size” parking for dense urban projects. **P4Properties, LLC would like to follow the PD 621 allowance language and request a reduction of 46% in parking requirements from the calculated requirement of 424 spaces to utilize the proposed layout and credit of 229 spaces.** Local observed parking data and recent mobility trends support the request as detailed below.

1212 Oak Lawn and 1617 Market Center Blvd (Pie Tap and Town Hearth) Observed Parking Data (Oak Lawn/Market Center/Irving Blvd Triangle)

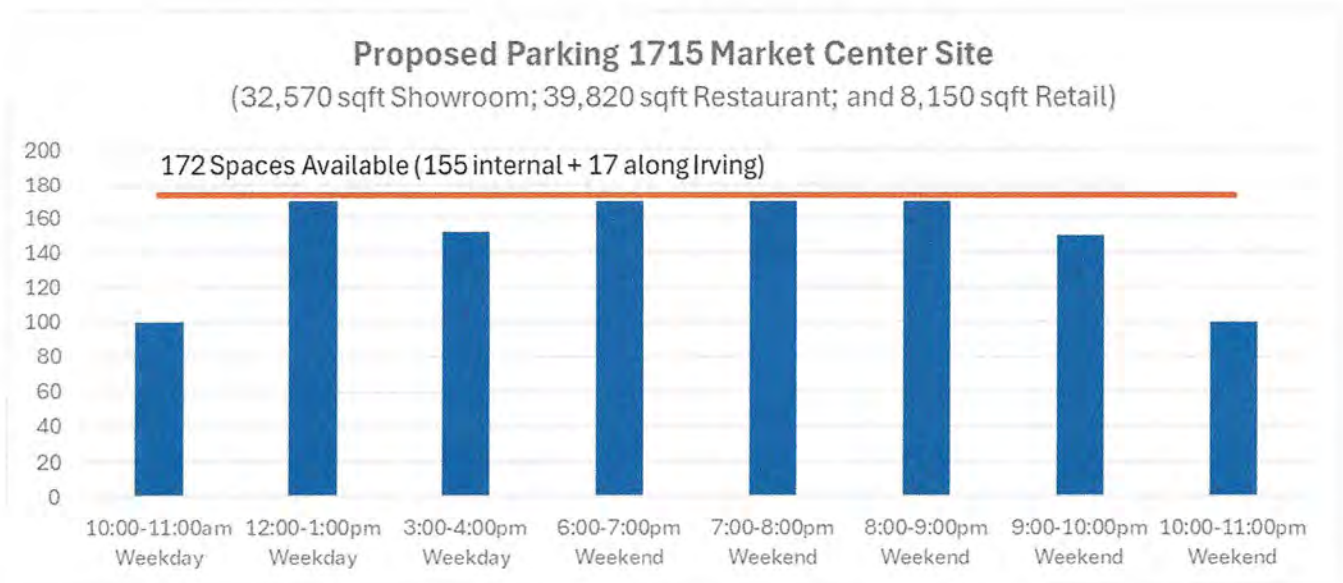
Exhibit 3, on the next page, illustrates observed parking during peak use times in October of 2024 for 1212 Oak Lawn and 1617 Market Center, a triangular shaped property, which has the Pie Tap and Town Hearth restaurants and is only one-half block to the east of the subject site. The exhibit is annotated with comments about the observed parking data and what is proposed.

It is evident from the observed data that the adjacent Oak Lawn Triangle property is able to support two restaurants with its available parking and with the use of valet. It was observed while counting, and confirmed by the restaurant valet manager, that employee parking occupied a significant number of the available interior parking spaces (15% or more). It is recommended to consider more efficiently managing employee parking to provide more patron parking for the subject site when needed. The Design District encourages a comprehensive neighborhood approach for all the property owners to work and cooperate together for mutual benefit. There is currently a synergistic goal of common and cumulative benefit of redevelopment and new use mixes throughout the greater Design District. Granting this request would not adversely affect neighboring property since parking is already prohibited along Oak Lawn and Market Center Blvd. And, seventeen angled parking spaces currently exist along Irving Blvd. that will serve as additional available parking. The proposed mix of uses for this site will be able to successfully accommodate the parking demand without adversely impacting neighboring properties or the public streets. Utilizing valet service for the restaurant use will help ensure that parking needs are sufficiently and efficiently met. Note that there is more than adequate street volume capacity on both Market Center and Irving Blvds. and there is more than adequate queue length for valet parking within the site so that no traffic congestion or traffic safety hazard due to queue spillover would be introduced by allowing the proposed reduction of required parking as allowed by PD 621.

EXHIBIT 3 – OBSERVED PARKING NEARBY AND PROPOSED PARKING



Note that the very close by Oak Lawn Triangle property with two restaurants, Pie Tap and Town Hearth, makes it work with the 132 parking spaces available. The valet manager said if the parking spaces ever happen to temporarily fill up the restaurant has a “relief agreement” with the property to the south which helps keep the valet parking operation smooth and consistent.



The proposed mix of uses intends to fill the available parking during the weekend evening peaks for Restaurant use. There is adequate parking available to satisfy the PD 621 City Code during mornings and afternoons for the proposed mix of uses. The use of valet and alternative transportation modes can offset the evening restaurant peaks.

Walkability and Alternative Modes of Transportation

The parking reduction request is also supported by a walkability analysis of nearby residential units and the current urban trend uses of alternative modes of transportation like walking, bicycling, and Uber/Alto. (See **APPENDIX** Walkability Study.) Note that the City of Dallas recently reduced and eliminated parking requirements for many areas and uses throughout the City. Although the recent reduction and elimination of parking requirements by the City of Dallas does not directly affect the project site since the property is located within PD 621, the Code change is still an indication that the old parking requirement ratios are excessive for dense urban living. And newer alternative modes of transportation are readily available today that require less parking.

Conclusion

Based on: (1) the observed parking data for similar uses adjacent to the site, (2) the allowances for parking reductions written into PD 621, (3) the utilization of valet to most efficiently park the site, (4) the similar recent introduction of restaurant use mixes to the Design District for its overall benefit, and (5) the current trends of more mobility choices and more dense urban living that together reduce the need for parking; **it is recommended that the proposed 229 parking spaces for the project site will be adequate to serve the proposed mix of Restaurant, Retail, and Showroom uses.** Furthermore, if the parking demand were to exceed the spaces provided and beyond what valet can accommodate, the greater risk would be loss of business to the site rather than any obstruction of the public right-of-way or creation of a traffic hazard since parking is internal to the site and is currently prohibited along both Oak Lawn and Market Center. The owners have other properties where valet could park vehicles if the internal parking was exceeded. The accommodation of shared parking, Uber/Alto and similar ride shares including the Virgin Hotel shuttle service, availability of pedestrian and bicycle trails, availability of remote parking lots within a ten minute walk, and the presence of newer dense inner-city residential developments that currently include 2000+ units within a ten minute walk of the subject site have all convened at this time to help reduce the need for parking and support the proposed mix of uses for the subject site. The proposed plan to revitalize, repurpose, and reconstruct part of the site to decrease the building area and add new parking spaces and reduce the code required parking within the allowances of PD 621 will provide mutual benefits to the property owner/operator, the neighborhood, and the City of Dallas. "Right-sizing" and "right-mixing" the proposed uses of the existing and reconstructed buildings to more fully utilize the project site to its potential **will not create a traffic hazard or increase traffic congestion** on adjacent or nearby streets because no spillover effect of queueing or parked cars is expected to occur and the roadways have exceedingly more than adequate traffic capacity.

APPENDIX

- Proposed Use PD 621 Parking Chart
- Walkability Study within a five to ten-minute walking distance of 1715 Market Center Blvd.
- Annotated Articles: "The Parking Problem – Why Cities Overbuilt Parking Spaces" 9-30-2023
"Parking Generation... Park +" by Kimley-Horn May 2016
- Capacity Charts/Counts for Irving and Market Center Boulevards

City of Dallas PD 621 Shared Parking Chart

for properties regulated by Dallas Development Code, Chapter 51A

Address: 1715-1801 Market Center & 1800 Irving

Use	Use Categories	Total SF (including vacancies)	Parking Ratio	Standard Parking Requirement	Parking Adjustment By Time of Day (Weekday)						
					Morning	Noon	Afternoon	Late Afternoon	Evening		
	Multifamily # units	0	1.5	0.00	80%	60%	-	70%	-	100%	-
	Office-related	0	358	0.00	100%	80%	-	85%	-	35%	-
	Retail-related	8,150	275	29.64	60%	75%	22.23	70%	20.75	19.26	20.75
	General merchandise	0	275	0.00	60%	75%	-	70%	-	65%	-
	Furniture store	0	1000	0.00	60%	75%	-	70%	-	65%	-
	Bar & Restaurant (+outside seating)	39,820	105	379.24	20%	100%	75.85	30%	113.77	113.77	379.24
	Warehouse/Showroom up to 20,000SF floor area (includes common area)	32,570	1100	29.61	100%	75%	-	65%	-	-	10.36
	Warehouse/Showroom above 20,000SF floor area	0	4100	0.00	100%	75%	-	65%	-	-	-
	Any other use	0	100	0	100%	100%	-	100%	-	100%	-
	Total SF (- residential)	80,540		438	123	424		164	152		410

Therefore, 424 is the parking requirement for 1715-1801 Market Center & 1800 Irving

PD 621 Sub 1	Required	Provided	Deficiency	Reduction
1715-1801 Market Center & 1800 Irving	424	229	195	46.0%

Provided	
On-site spaces	155
Market Center frontage credit/9'	35
Irving Frontage Credit	39
	229

WALKABILITY STUDY

According to statistics listed on the Dallas Design District Property Brochure, by “DunhillProperties.com”, there are approximately 20,000 residents that live within one mile, or a 10 to 20 minute walk, of the Dallas Design District. Even closer to the heart of the Design District and to 1715 and 1801 Market Center Blvd. and 1800 Irving Blvd., within a 5 to 10-minute walk or less, are eight large multi-family communities that total nearly 3000 units. Also, the Virgin Hotel with 268 rooms and a 75 space pay parking lot are within a 10-minute walk to the subject site. (See annotated map attached) According to the Federal Highway Administration, “Most people are willing to walk for five to ten minutes, or approximately ¼ to ½ mile” to reach a destination. (See FHA Pedestrian Safety Guide attached)

The close proximity within a five to ten-minute walk of so many residential units and hotel rooms certainly helps decrease the parking demand for patrons that would frequent the subject site for Restaurant uses. (Walk times were physically verified by Lloyd Denman, P.E. during the parking observations made in May 2025.) There is also a free hotel shuttle at the Virgin Hotel that ferries guests within a 3-mile radius of the hotel to and from restaurants and other attractions. In May of 2024, the shuttle attendant said the shuttle stays busy and a second vehicle should be added to the service.



Map data ©2025 Google 200 ft

2000 ft

1715 Market Center Residential Proximity Map

Federal Highway Administration

1200 New Jersey Avenue, SE

Washington, DC 20590

202-366-4000

Safety

Pedestrian Safety Guide for Transit Agencies

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Chapter 4: Actions to Increase the Safety of Pedestrians Accessing Transit

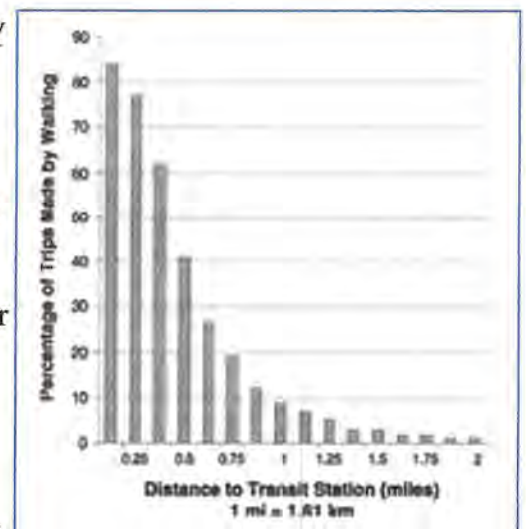
Understanding pedestrian characteristics and facilities (e.g., sidewalks, crosswalks, pedestrian signals, etc.) is an important step in providing safe access to transit systems. This section introduces basic pedestrian safety concepts to help readers understand issues, solutions, and resources that are presented in other parts of this guide. Concepts addressed in this chapter include:

- Typical walking distance to transit.
- Motor vehicle speed and pedestrian safety.
- Pedestrian characteristics and behavior.

A. Typical Walking Distance to Transit

Most people are willing to walk for five to ten minutes, or approximately ¼- to ½-mile to a transit stop (see figure below). However, recent research has shown that people may be willing to walk considerably longer distances when accessing heavy rail services. Therefore, in order to encourage transit usage, safe and convenient pedestrian facilities should be provided within ¼- to ½-mile of transit stops and stations, and greater distances near heavy rail stations. Note that bicyclists are often willing to ride significantly further than ½-mile to access rail transit stations, so safe facilities should be provided for bicycling within a larger catchment area around transit hubs.

Transit route spacing and location are important considerations for pedestrian access to transit. For example, in a city with a regular street grid pattern of streets, appropriate stop spacing can be achieved when transit routes are spaced between ½- to 1-mile apart. If the stops on these routes are spaced 1/8- to ¼- mile apart, then a majority of the people in the neighborhoods served by the transit system will be within ¼- to ½-mile of a transit stop.⁷⁰



B. The Effect of Motor Vehicle Speed on Pedestrian Safety

Pedestrians accessing transit stops and stations must often walk along or cross roadways that carry motor vehicle traffic. Pedestrians may feel less comfortable and safe as nearby motor vehicle speeds increase. The faster a driver is traveling, the more difficult it is to stop (see figure below).⁷¹ Larger vehicles, such as buses and trucks require even longer stopping distances.

The Parking Problem: Why Cities Overbuilt Parking Spaces

by [Lauren Palmer](#) | Sep 20, 2023 | [Land Use](#), [Transportation](#), [Urban Planning](#) | [0 comments](#)

The [Institute of Transportation Engineers](#) (ITE) was founded in 1930 with the goal “to improve mobility and safety for all transportation system users and help build smart and livable communities.” The idea behind the ITE was to help developers with roadway design, traffic management, and parking requirements. However, the ITE has created more problems, particularly when it comes to parking. For decades, the ITE recommended parking minimum requirements ill-suited for the municipalities implementing them.

The primary issue with parking recommendations from the ITE is that the studies they relied on were based on [selective data](#). For instance, in the 1987, second edition of the ITE’s *Parking Generation*, the ITE created half of their parking generation rates based on [just four or fewer studies](#) that were conducted in suburban areas. Researchers conducted these studies during times of peak parking demand and in areas where there was plenty of free parking and [little to no use of public transit](#).

This led urban planners in cities to use suburban rates to set parking requirements that were incompatible with urban environments, resulting in excessive amount of parking in some areas. This created a circular planning process that has only exacerbated issues. It goes something like this:

1. The ITE published their findings in *Parking Generation* using the selective suburban data,
2. City urban planners set parking requirements based on those findings,
3. Developers implemented those parking plans,
4. The resulting ample supply of parking drove the price of parking in specifically designated lots down to zero,
5. Because of the massive amount of land used to create these parking specifications, cities saw decreased walkability and density of facilities,
6. The sprawl, combined with the plethora of free parking options, led to increased vehicle usage,
7. The increased parking demand again validated the ITE’s findings.

And the cycle repeats. [This process has, unsurprisingly, resulted in an overabundance of parking](#). In the United States, surface parking lots alone cover more than five percent of all urban land, representing an area greater than the states of Rhode Island and Delaware combined.

To be clear, the ITE is not solely to blame. As mentioned in *Rethinking A Lot*, urban planners and policymakers frequently rely on the recommendations provided by the ITE for parking requirements without ensuring their accuracy for their respective municipalities. The ITE has an inherent authority that makes planners regard its findings as valid, precluding in planners’ minds the need for further inquiry. The use of ITE’s manuals also allow public officials to avoid responsibility for excessive parking lots.

Due to a lack of planning and engaging the proper parties involved in parking use and development, inaccurate parking demands arise. While [urban planners](#) readily observe this problem, they often fail to take the necessary steps to actually address it. Even municipalities directly contribute to the overabundance of parking by offering free spaces, which inevitably fill up quickly, and then opting to add more parking, which creates an overabundance without addressing the root problem.

Municipalities also look to other authorities, such as the [Urban Land Institute](#) (ULI) for parking guidance. However, the ULI has many of the same problems as the ITE. ULI reports have recommended an excessive amount of parking, with some ULI reports calculating a “need” for more spaces than ITE reports. Municipalities cannot blindly rely on these institutions to supply perfectly accurate data. Municipalities need to measure parking demands with the “ongoing data analysis, community assessment, and demand analysis” that is most relevant to them.

The ITE, recognizing that municipalities still rely on its findings, is also attempting to fix the situation by adapting and changing the new *Parking Generation* manuals. The most recent, the 2019 *Parking Generation Manual*, features land use descriptions and data plots of a variety of available land uses, time periods, and independent variables in the ITE database. The parking database is now broken up into settings that include “Multi-Use Urban” and “Center City Core,” which work to pinpoint the most relevant studies for specific cities’ needs. The goal of this manual is to help describe the relationship between parking demand and the characteristics of the individual development site.

Donald Shoup, Professor in the Department of Urban Planning at UCLA, recommends that the ITE follow in the footsteps of the British counterpart to *Trip Generation*, the “Trip Rate Information Computer System.” This system gives information about the characteristics of every surveyed site and its surroundings, which would allow municipalities to use comparable sites before making land use decisions.

Despite the empirical evidence surrounding the overabundance of parking, as well as its deleterious environmental effects, few municipalities are changing parking requirements and financiers still pass on projects that “don’t have enough parking,” even with the new ITE recommendations.

One successful technique is [shared parking](#), a parking management tool that communities can employ when setting parking requirements. Different types of land uses attract customers, workers, and visitors during different times of the day, which results in differing peak parking demand hours for the related land uses. Shared parking takes advantage of these varying demand patterns and allows adjacent land uses with complementary peak demands to share a parking lot space. This not only encourages centralized parking rather than scattered lots, but also reduces overall construction costs which could greatly benefit both municipalities and developers.

Several municipalities have implemented [shared parking](#), including **Ventura, CA** which has a zoning ordinance that permits different land uses to have shared parking because of opposite peak parking demand periods. The shared parking is allowed to satisfy one hundred percent of the minimum parking requirements for each land use. Similarly, **North Kansas City, MO**, by permit, allows a reduction of the number of parking spaces multi-use developments need to have if they have different peak parking demand periods.

Finally, in **West Hartford, CT**, the zoning code provides an alternative method of meeting parking requirements. So long as the applicant seeking to enter into a shared parking agreement can prove the lot would be convenient for all parties and would not cause traffic congestion, it can get approved. The municipality has since consolidated many parking lots down for shared use.

To truly reverse the detrimental impacts of the old ITE reports on the development of cities, urban planners and lawmakers will need to implement a multi-faceted approach. In addition to conducting their own parking studies based on the proposed uses and characteristics of the community, urban planners and lawmakers should focus on enhancing multi-modal transit and implementing shared parking. Parking minimums need to be eliminated and more parking maximums need to be developed. Focusing on the parking demands of individual development sites will help stop the cycle of creating unnecessary parking and meet parking demands in a smarter and more efficient manner.

Parking Generation—

Replacing Flawed Standards
with the Custom Realities of **Park+**

WHITE PAPER SERIES

May 2016

#3
vol.

Kimley»Horn
Expect More. Experience Better.

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Introduction

For the longest time, our industry's approach to defining "How much parking?" has been relegated to the use of national parking requirement standards, either from the Institute of Transportation Engineers (ITE), Urban Land Institute (ULI), or local code requirements. Anyone who has read the workings of Donald Shoup, or more recently Richard Willson, knows the fallacy in using these sources when designing downtown or campus parking systems.

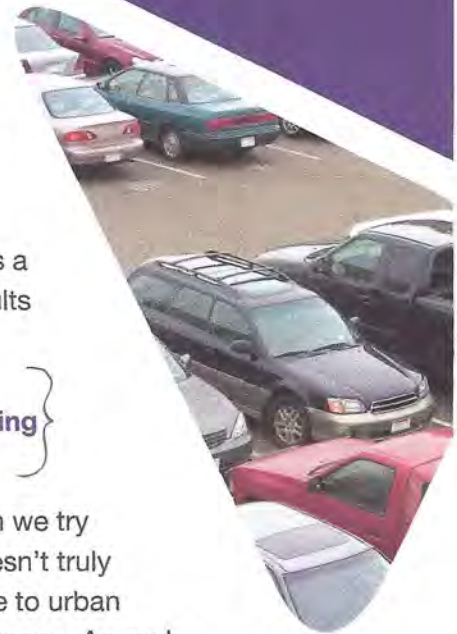
National parking requirement standards are based on outdated and under-represented data, which tend to skew wildly from the actual parking needs of a community. In my years as a parking consultant, I've very rarely completed a single downtown parking study where the peak observed parking demands consumed the majority of the total parking spaces. A study completed in Dallas a few years ago yielded some 30,000 empty parking spaces at peak. Similar results were found in Atlanta, Houston, St. Petersburg, Seattle, and the list goes on.

When communities plan downtowns based on outdated suburban design standards, we achieve the same inevitable results—empty, restricted parking areas that deaden the density, walkability, and vitality of urban areas.

The parking quantity question is always a challenging exercise, especially when we try to solve it using inaccurate data. Most times, we rely on outdated data that doesn't truly represent the real context of our downtowns. As more and more people migrate to urban areas, the dynamics of how they get around and their relationships with cars change. As such, we've seen a drastic downshift in the need to provide parking. But our planning tools have not evolved to better align with this shift.

Equally challenging is deciding how the parking characteristics in one community compares to another community. In reality, it's hard to define how one neighborhood acts compared to another. Here in Phoenix, the Roosevelt neighborhood, home to the area's up-and-coming artists and requisite "hipsters," enjoys a higher amount of transit, walking, and cycling than most other parts of the city. In turn, the overall demand for parking is lessened as area residents and patrons find other ways to access the uses within the area. In my neighborhood, you almost can't survive without the use of a car to work, shop, and play. This variability exists in every city and is the reason it's absurd to continue leaning on archaic, cookie-cutter methods to plan for parking.

This question is the central reason we created Park+ — to find a way to localize the analysis of parking demand and challenge the conventional notion that all parking demand is created the same. Within this white paper we summarize the findings of the first five years of Park+ modeling and define the dynamic nature of each community served. In our time developing, testing, and applying this model, we have encountered an incredible diversity of data and outcomes in each community. In the following sections, we'll walk through those results, as well as the more global movement afoot in our industry.



Unfortunately, those data points are routinely applied in areas they should not be. I've seen exercises where entire swaths of a downtown are planned with these metrics, resulting in over-built facilities. In some cases, it's a lack of understanding of the context the development is occurring in. In other cases, it's a requirement of financial institutions that are backing a development. Whatever the cause, a better understanding of the true dynamics of a development and the area it serves produces better results.

In recent years, urban planners have begun to lean more and more on these decisions as a primary reason that downtowns and communities don't work. One of my favorite terms in the industry is the "parking crater," which was coined by the website Streetsblog and its editor Angie Schmitt. In fact, that website holds an annual March Madness tournament, with a full-on bracket to determine the worst parking crater of that year. The parking crater is a portion of a downtown that has been hollowed out by the presence of large surface parking lots. Whether these are highly or poorly utilized, they deaden a downtown, its walkability, and most importantly its viability.

If asked, many people would say the provision of ample parking makes our cities more desirable. But in fact, ample parking promotes single occupancy vehicle trips and impedes the ability for our communities to develop and grow. Pedestrian walkability, dense design, and connectedness are extremely important for the success of a community. Large areas of parking tend to counter these tenets and disrupt the ability for a community to work properly. This is only exacerbated by the over-provision of parking.

Clearly, something must be done...

Right-Sized Parking

Recently in the planning arm of the parking industry, we've seen a very distinct shift toward finding the right amount of parking for a downtown, campus, study area, development, etc. This movement is aptly dubbed the Right-Sized Parking movement. The name speaks for itself, as the intent is to determine the correct amount of parking to serve an area without over- or under-burdening area patrons.

Too much parking tends to be an expensive endeavor. In today's world where more and more parking is found in consolidated structures, the cost to build a single space can range from \$8,000 to \$40,000, or more. This price is astronomical and is a primary contributing reason that rents are increasing and the cost of living in urban areas is skyrocketing. In King County¹, WA, a recent study searched to find the answer to the right-size for multi-family housing parking. The result of that large-scale effort was...it depends.

¹ Visit rightsizeparking.org to learn more and to play with their awesome right-size parking calculator



That result may seem nebulous, but in reality it's the most accurate response that could have emerged from such a study. The data indicated that a number of factors—location, access to transit, employment density, walkability, population demographics—were responsible for the parking demand characteristics of a multi-family development. In short, people tended to adapt to their environment, and their driving (and car ownership patterns) adapted right along with them.

Unfortunately, in a lot of those instances, the provision of parking did not adapt. Instead, developers continued to provide parking as if every location was the same, and the result was a high amount of underutilized parking. The data showed that in the heart of Seattle (the most urbanized area in the county), the parking demand was at or below 0.5 spaces per unit. In the far reaches of the county, the ratio was closer to 1.5 spaces per unit.

This analysis has borne some incredible outcomes. First, many developers in the King County area have begun to lessen their parking capacity as a result of this analysis, basically “right-sizing” their supply. That in and of itself is a win and would deem the effort a success. However, the study also pushed communities in the King County area to reassess their parking requirements, helping to define right-sized parking at the review level. Even more incredibly, King County transit has now begun to pursue empty parking spaces in multi-family housing complexes to serve as park-and-ride spaces for transit riders.

It's very exciting to see the results coming out of King County. They spent a tremendous amount of time and effort to collect viable data and determine how their community works. The project was well funded by the Federal Highway Administration and led by a brilliant young planner² whose mission is to prove the fallacy of poor parking planning. But how about the communities not funded by FHWA...how do they learn more about the true nature of their parking systems?

Park+ and Right-Sized Parking

Park+ —the Kimley-Horn parking scenario planning tool — was created with the intention of right-sizing parking in the communities we serve. The model is built on an algorithm that matches parking demand with land uses to more accurately depict parking behavior. Previous white papers (xxx) have depicted how this relationship works, but in simplistic terms, we match parking demand to its origin using localized data. The result is a much more accurate depiction of parking demand in the environments our models serve.

The primary output of a calibrated Park+ dataset is a unique set of parking generation characteristics that represent the dynamic nature of a community. These results differ from community to community and are a direct reflection of the areas they serve. The following tables and figures provide a representative sample of parking demand characteristics and geographic demand metrics. These are only representative in nature, but show the varied results that come from Park+ modeling exercises.



² Dan Rowe of King County Metro. If you ever meet him at a conference, engage him about parking...you won't be sorry.

1715 and 1805 MARKET CENTER and 1800 IRVING
CITY OF DALLAS STREET DESIGN MANUAL ROAD CAPACITIES

2.2.9 Street Volumes and Capacities

A correlation exists between the classification of a street and the volume and capacity of the street. Typically, a local or collector street carries less volume and capacity than that of an arterial street. Arterial streets due to their higher volume and capacities are designed with a wider, divided, multi-lane configuration. Table 2.2 shows typical volumes and capacities for streets of given designs within Dallas and demonstrates the relationship between functional classification, roadway configuration, volume, and capacity.

Table 2.2 Typical Volumes and Capacities for Streets of Given Design

Roadway Functional Classification	Roadway Configuration	Typical 24 Hour Volume	Typical 24 Hour Capacity
Arterial	6 Lane Divided	22,000 vpd ¹	42,000 vpd
Arterial, Collector	4 Lane Divided	18,500 vpd	28,000 vpd
Collector	4 Lane Undivided	10,000 vpd	20,000 vpd
Local, Collector	2 Lane Undivided	4,000 vpd	10,000 vpd

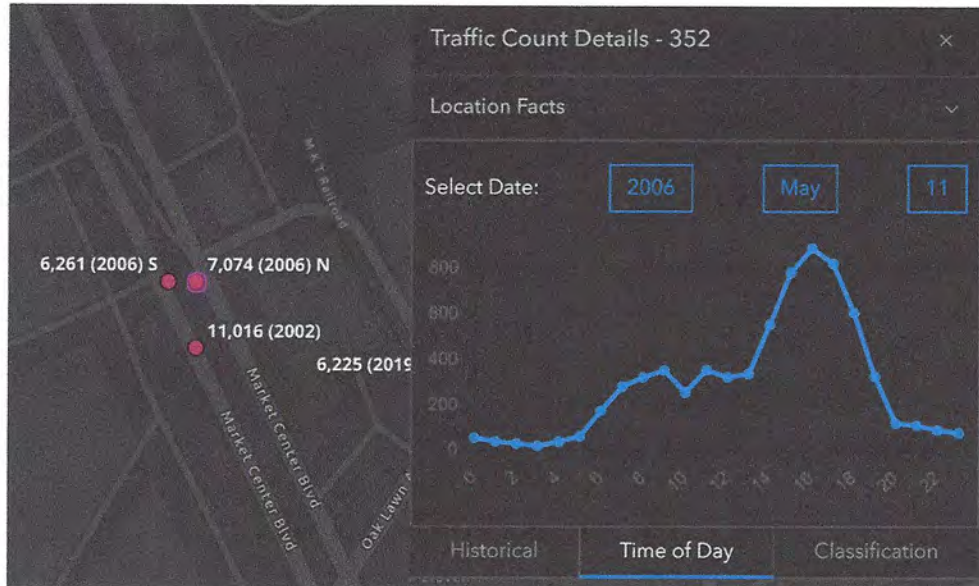
Market Center at Oak Lawn is a 6 Lane Divided Arterial Collector (13K vs 42K capacity)

Irving Blvd at Oak Lawn is a 6 Lane Divided Arterial (14K count vs 42K capacity)

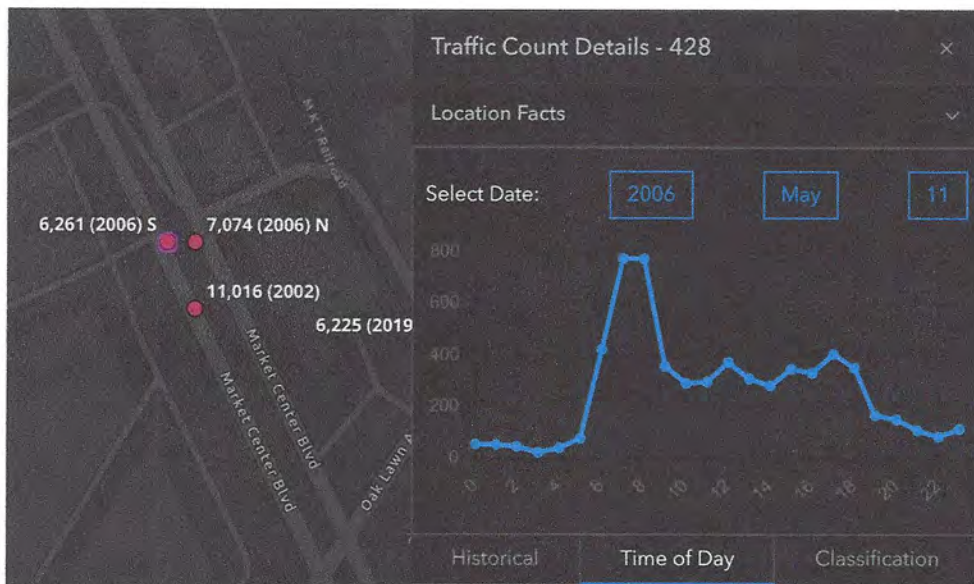
Note that Market Center and Irving Blvd. are at 1/3 capacity or less so volume congestion is not a concern.

CONGESTION LOOK - MARKET CENTER BLVD IS COMMUTER

Note that Market Center is a 6-Lane Divided with traffic counts at less than 1/3 capacity. The traffic counts show well defined AM and PM peaks which indicate commuter traffic primarily uses the road rather than local traffic. The area needs commuters to stop and patronize businesses like restaurants rather than just passing through.



Market Center – Note afternoon peak nb reflects commuter traffic AND traffic drops considerably after 6:00pm when prime dining hours begin.



Market Center – Note morning peak sb reflects commuter traffic.