Uptown and Surrounding Neighborhoods Parking Study

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Opposite Page: Photo credit: Ruben R. Ramirez/El Paso Times

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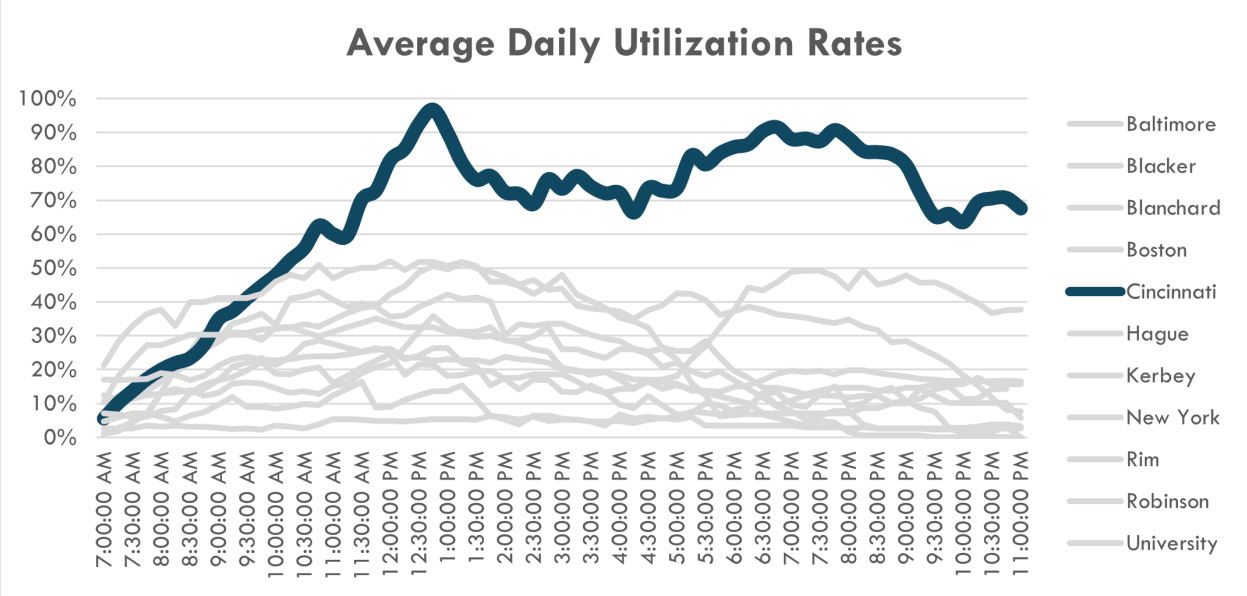
Executive Summary

Leveraging data collected from two different sources, a parking study was conducted in the Uptown/Mesa Corridor area, as defined by the recently-adopted Downtown, Uptown and Surrounding Neighborhoods Master Plan (**"The Plan"**). The first source of data came from in-ground sensors, which detect occupancy of metered parking spaces, regardless of payment. The data collected from this method spanned from April-September 2023.

A second source of data came from cameras deployed at the intersection of 22 city blocks, bounded by Rim, Mesa, Kansas and Baltimore streets. The collection method required the review of daily camera footage from the hours of 7am – 11 pm, with each street being recorded for approximately two weeks and utilization rates recorded at 15-minute intervals. The period of analysis spanned from October 2023 – February 2024. With this data collection method, it was particularly important to account for the demand created by UTEP students parking in the neighborhood. As a result, data collection was not conducted during the winter break, between fall and spring semesters.

Our findings demonstrate that within the two study areas, parking utilization can be categorized as extremely low. In total, ***the 22 city blocks analyzed have a combined average daily utilization rate of 27%***. For comparison, utilization rates of 85% are considered optimal within the parking industry [1] [2]. As the graph below demonstrates, none of the streets meet that standard and only one—Cincinnati Avenue—ever meets that standard at any point during the day.

In general, our analysis supports the conclusion that because parking utilization is low, ***there is adequate on-street parking to support removing off-street parking requirements for development within the study area north of Interstate 10.***



Average daily utilization rate by time of day. Except for Cincinnati Street, no other street analyzed reached optimum utilization of on-street parking.

1 See: https://ops.fhwa.dot.gov/publications/fhwahop12026/sec_2.htm

2 Also: https://www.sciencedirect.com/science/article/abs/pii/S2212012214000380

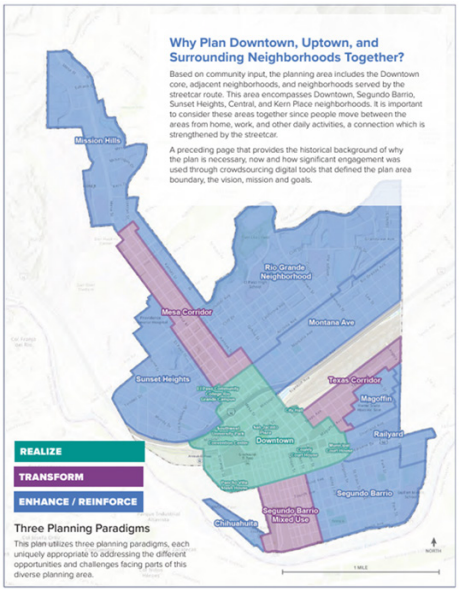
Background

The genesis of this parking analysis stems from City Council action on four studies that were completed in 2019 and 2023, respectively: the Downtown, Uptown and Surrounding Neighborhoods Master Plan; the Market Assessment for the aforementioned plan that was adopted as an appendix; the Zoning Diagnostic that was completed in support of the "Inclusive Neighborhoods" zoning initiative; and the 2019 Comprehensive Downtown Parking Study.

Downtown, Uptown and Surround Neighborhoods Master Plan

In July 2023, the City Council adopted the Downtown, Uptown and Surrounding Neighborhoods Master Plan ("the plan"). This study's purpose was to develop a long-term vision for the study area depicted in the graphic below. Bounded by Mesita, Schuster, Cotton and the U.S/Mexico/New Mexico border, the study contemplates the development of approximately 10,000 new housing units between the adoption date and 2040[3]

One of the key policy recommendations the plan identifies that is integral to meeting the stated housing goal is the elimination of minimum off-street parking requirements within the study area.



The focus of our analysis is based on the plan boundary adopted as part of the Downtown, Uptown, and Surrounding Neighborhoods Master Plan.

Market Assessment: Financial Feasibility

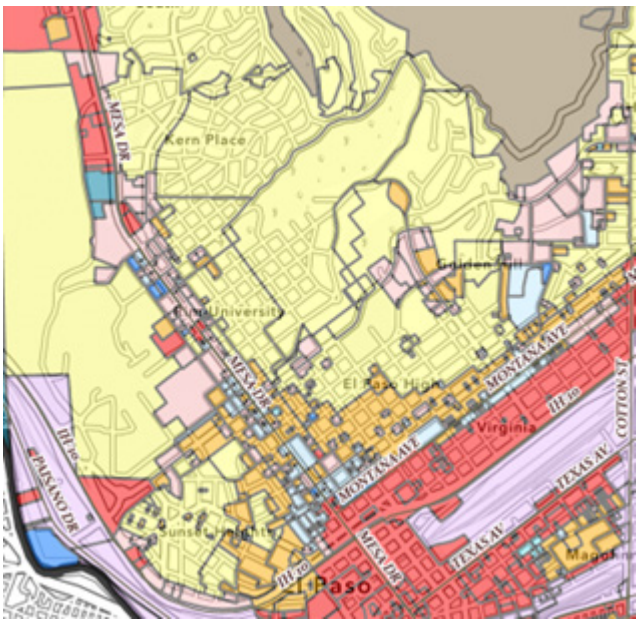
Included as an appendix to the plan was a market assessment that contemplates the market feasibility of new development within the study area. In general, the market assessment analyzes current market rate rents in the study area and compares them to construction costs to determine what gap—if any—there is between expected costs and revenues of residential development. The result of this analysis found that as of 2022, ***there is a gap of approximately 16% between costs and revenues***. Because of this—and combined with the current lending climate—it is unlikely that new housing units will be the result of new construction. Instead, the more likely source of increased housing will come from converting single family housing or adaptive re-use of commercial or industrial buildings in multi-family housing products.

"Inclusive Neighborhoods" Zoning Initiative

Besides financial feasibility, the biggest barrier to realizing the vision of the plan is the current zoning requirements. The current zoning scheme zones much of the area north of Interstate 10 exclusively for single family residential. The most common zoning designation within the "Uptown and Surrounding Neighborhoods" area is R-3, which are the same zoning standards imposed on most new development on the City's fringes. In general, the R-3 zoning standards can be categorized as "suburban" in nature, with minimum lot sizes of 5,000 SF and minimum front and rear setbacks of 20 feet.

3 Other key findings of the market study included the potential to add 350,000 SF of retail, 750,000 SF of office and an additional 400 hotel rooms.

These zoning requirements stand in stark contrast to much of the existing development pattern within the study area north of Interstate 10. This is due to much of the area being developed prior to 1930, which is the year the City adopted its first zoning ordinance. Accordingly, ***many of the properties do not meet current zoning requirements*** and are "nonconforming" with respect to the zoning ordinance. Nonconforming properties generally cannot be expanded without compliance with the existing regulations, essentially "locking in" the property in its current state, discouraging investment and redevelopment.



Zoning Map of the study area north of Interstate 10. Much of the study area is zoning residential, denoted by the yellow on the map.

Recognizing this, the City analyzed its Zoning Ordinance to identify barriers to achieving the vision set out in the plan, as well as the City's Comprehensive Plan, Plan El Paso.

In October 2023, the City Council adopted the Zoning Diagnostic and directed staff to implement the proposed changes, which were broken into two overarching buckets: "quick fixes" and "longer-term efforts". In general, the changes contemplate introducing regulations which match much of what exists in the study area. Recommendations include more flexibility in dimensional standards, allowing more housing typologies (triplexes, quadplexes, etc.), and removal of minimum parking requirements.

2019 Comprehensive Downtown Parking Study

In October 2019, City Council adopted a parking study which analyzed utilization and supply for the study area south of Interstate 10. The parking study identified a total of 11,686 parking spaces—~2,200 on-street and ~9,400 located off-street. According to the Parking Reform Network, when considering solely off-street surface parking, almost ***one-quarter of Downtown El Paso is parking***. The 2019 Parking Study found that ***as of October 2019, there were 4,000 excess parking spaces Downtown alone***. Post-pandemic, Downtown suffers from high rates of vacancies for both office and retail buildings making the excess parking figure quoted in 2019 assuredly higher.

Besides analyzing parking supply and demand, the Parking Study also makes several policy recommendations as it relates to parking supply. Namely, the expansion of the parking meter district, the use of parking benefit districts and the introduction of dynamic pricing for parking meters.

Surface parking in Downtown El Paso. Source: Parking Reform Network.

Discussion

The combination of these four studies demonstrates the relationship between parking, redevelopment, and development feasibility. The Downtown Parking study highlights that within the Downtown footprint, there is a significant over-supply of parking. The Downtown, Uptown and Surrounding Neighborhoods Master Plan calls for a significant influx of new housing units, but development feasibility makes new construction unlikely in the near-term. Instead, the conversion of single-family homes and adaptive re-use of non-residential properties in multi-family housing is more likely. However, significant barriers exist within the current zoning regime do not permit this development as-of-right.

The studies adopted in 2023 similarly recommend the removal of minimum parking requirements as one of the key policies necessary to unlocking development within the study area north of Interstate 10. However, because the 2019 Parking Study did not contemplate analyzing the northern study area, a gap in research existed to understand current parking supply and demand in the area. It is through this parking occupancy study that this void is filled.

The Case for Eliminating Parking Minimums

In our analysis of best practices [4], we have identified three primary motivations for removing off-street parking minimums:

1. Parking minimums reduce the overall tax base;
2. Required off-street parking increases housing costs; and,
3. Within the plan's study area, off-street parking renders development and redevelopment impractical.

To be clear, eliminating off-street parking requirements does not mean that there will no longer be off-street parking. Instead, we acknowledge that there is currently a significant oversupply of off-street parking and that the market should determine whether additional parking is necessary to support their business or provide for their residents.

Increasing the Tax Base

Every improvement within El Paso County has a value; however, some improvements are worth more than others. As a practical matter, permanent improvements such as buildings are valued greater per square foot[5] compared to vacant land, asphalt or concrete used for parking. Consider the example below:

Assessed Value (2019): $350,099
City Taxes: $3,177
Improvement Value: $160,000

Assessed Value (2020): $158,849
City Taxes: $1,441 taxes
Improvement Value: $15,000

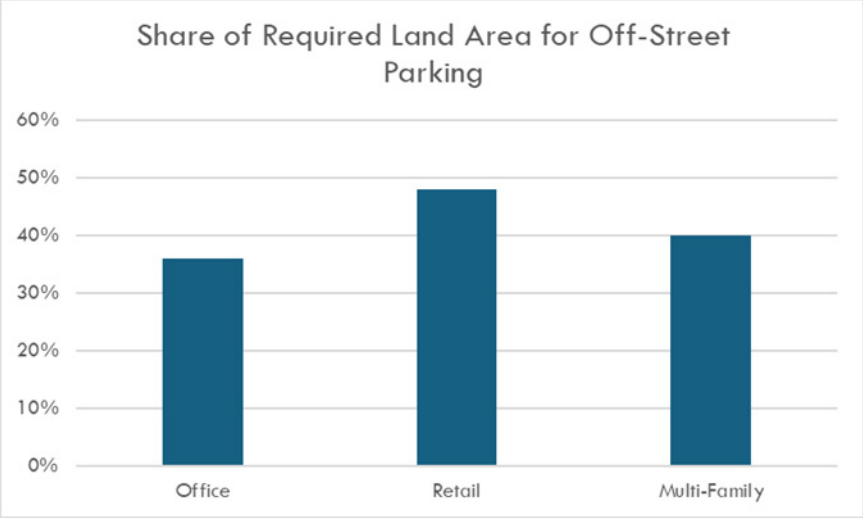
Comparison of 2905 N Stanton St. The image on the left shows the taxable valuable with a structure and on the right is the same property after the structure was demolished.

4 In determining best practices, we reviewed the resources made available from a parking reform advocacy group, The Parking Reform Network as well as the recommendations within the High Cost of Free Parking by Donald Shoup, a preeminent source for parking reform.

5 Comparing costs per square foot accounts for differences in size of improvements.

In 2019, a property located 2905 N Stanton St was demolished to make way for a surface parking lot. Previously assessed at approximately $350,000, its conversion to a surface parking lot reduced its taxable value by more than 45%.

Further, an analysis of surface parking lots within the plan's study area in 2022 revealed that on average, surface parking lots are assessed $1.61/SF for their improvements. Conversely, including all buildings within the study area, the average assessed value for improvements is $61.68/SF. In other words, **requiring off-street parking in lieu of building improvements on average reduces the taxable value of a property by nearly 98%.**



Land area required for off-street parking by land use based on typical parking requirements.

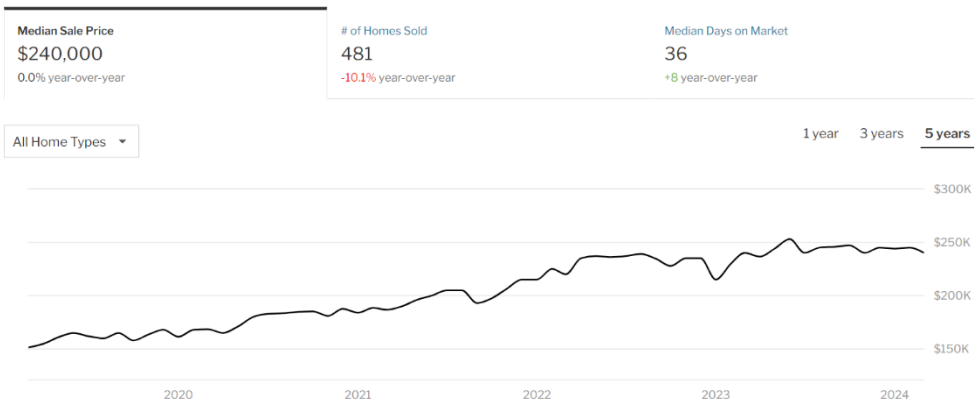
Applied to a single building, parking requirements that are required to reserve between 30-50%[6] of land for off-street parking significantly reduce that building's taxable value, as the first example demonstrates.

However, applying these requirements across entire districts, we see the magnitude of the financial implications as the City is reducing taxable values (and thus taxes) by millions of dollars by enforcing this policy.

Reducing Housing Costs

Since the COVID-19 pandemic, housing prices across the country have skyrocketed. As the graph below demonstrates, El Paso is no exception to this nationwide trend. According to Redfin, **the median home sale price in March 2019 was $140,000. In March 2024, it is $240,000; representing a 71.4% increase.**

Off-street parking requirements are major contributor to housing prices in one of two ways:



Median sale price of a single family home in El Paso, TX. Source: Redfin

Current off-street parking requirements, as a share of the land area they require relative to a building's size.

6 A single parking space is assumed to require 330 SF, when including the stall, drive aisle and driveway.

1. In owner-occupied properties, the cost of parking—typically in the form of a garage—must be absorbed by the owner's mortgage.

2. For rental properties, land set aside for parking restricts the number of units that can be constructed thereby reducing operating income. Lower operating income means that rents must be increased to pay for debt financing.

For renters, off-street parking requirements can increase rents by 17%[7]. For homeowners, off-street parking can increase mortgage payments by thousands of dollars annually. Analyzing residential properties within the study area, we found the average garage is 437 SF—large enough for two cars. Our low-end estimate for a two car garage shows that **off-street parking increases the cost of a single family home by approximately $27,000[8]**. With current interest rates, the required off-street parking increases a mortgage by nearly $200/month and $2,400/year[9].

Unlocking Development Potential

In addition to addressing the first two issues, removing off-street parking requirements can be the key to unlocking development potential in the study area. The previous Downtown Plan—completed in 2006—recognized this. Accordingly, following its adoption, the City Council removed off-street parking requirements within the 2006 plan's boundary[10]. Back then, the rationale for removing off-street parking requirements within the study area was clear—strict compliance with the Code would require buildings to be demolished to comply with the Zoning Ordinance.

Today, the challenge remains much the same, even with an expanded plan area footprint. As noted in the introduction, much of the study area was developed prior to 1930, when the City first adopted zoning regulations. As a result, many of the buildings do not comply—nor have they ever—with the Zoning Ordinance. Our Code maintains some level of flexibility for properties that have historically not conformed to the Zoning Ordinance through the "legal non-conforming provisions". **However, these provisions do not allow for expansions and modifications of properties, effectively locking in any existing development and deterring future investment.**

Downtown Plan area, as defined by the 2015 Downtown Plan. As part of this plan's adoption, off-street parking requirements were waived within the boundary.

7 The study assumed that the cost to acquire, design and construct a parking space is $5,000.

8 Our assumption took the average assessed value of improvements of $61/SF and multiplied by the average garage size in the study area (431 SF) and arrived at a number of $26,657.

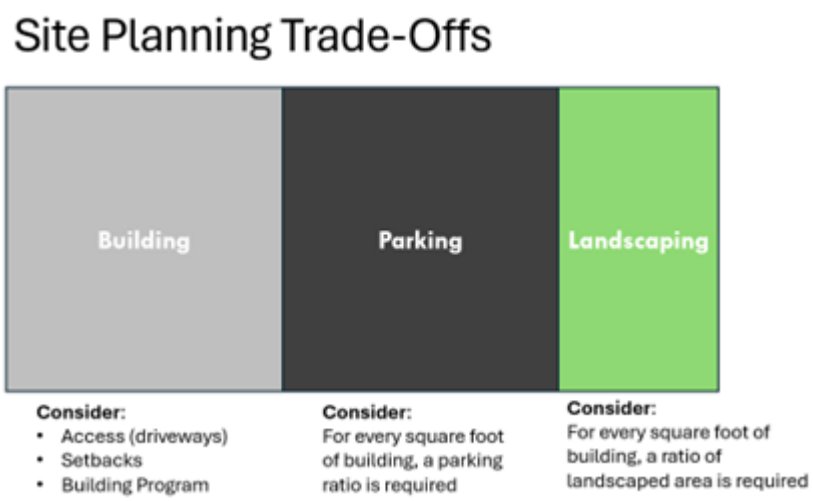
9 We assumed a 30-year fixed mortgage and an interest rate of 7.959%; the typical going rate for April 2024.

10 Per Section 20.14.050.D. "Off-street parking regulations shall not apply to properties in the Improvement District No. 3, established by Ordinance 736 and dated April 3, 1952. The boundaries of Improvement District No. 3 shall also include all property designated under the Downtown 2015 Plan".

Site Planning Trade-Offs

To demonstrate how no off-street parking requirements can induce development, consider the site planning trade-offs graphic. When developing a site, a designer must consider the interdependent relationship between building area, parking, and landscaping requirements. Per City Code, when building area increases, so too does the area required for parking and landscape. Currently, developers must consider the trade-offs between building a larger building and providing more parking and landscaping.

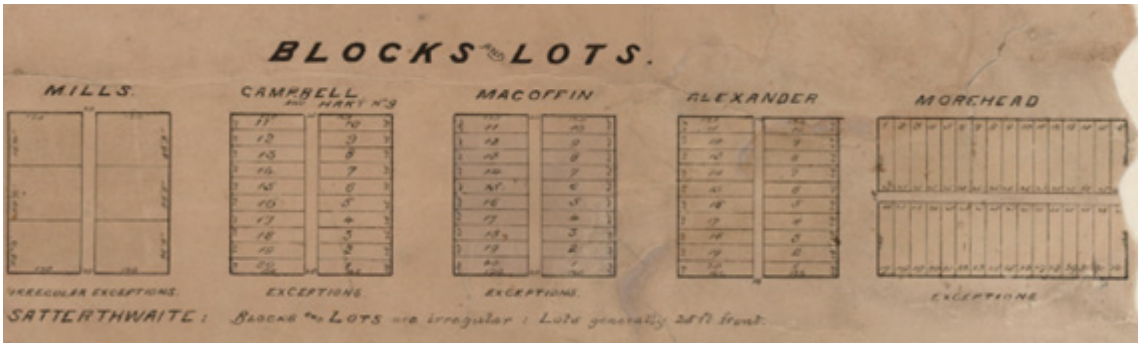
From a purely rational standpoint, a developer will build as much building as they can afford. However, off-street parking requirements can act to artificially constrain a site, particularly when lot sizes are small,[11] [12]. Land that is reserved for parking rather than building produces significantly less revenue and cause the development to not "pencil out". **As a result, off-street parking requirements can make otherwise financially viable projects not happen.** Conversely, their removal no longer constrains the developable area with respect to parking allowing additional development to occur.



When planning the development of a site, designers must consider that increased building area requires additional parking and landscaped areas per City Code.

Site Constraints

A simpler issue can also be at the root of unlocking development within the study area: parcels are simply too small to accommodate off-street parking.



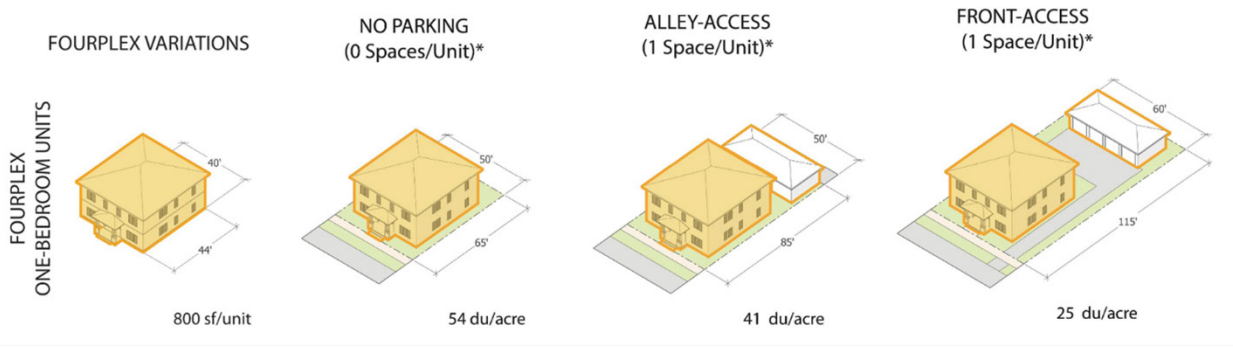
Typical lot sizes, by subdivision. Note: most of the study area is platted within Campbell, Magoffin, and Alexander subdivisions.

11 Most of the study area has block sizes of 260' x 260', with individual lots being 26' x 120'. A typical condition of lots today within the study is that two individually platted lots have been combined into one, reflected by properties that are ~ 52' x 120' (approximately 6,200 SF).

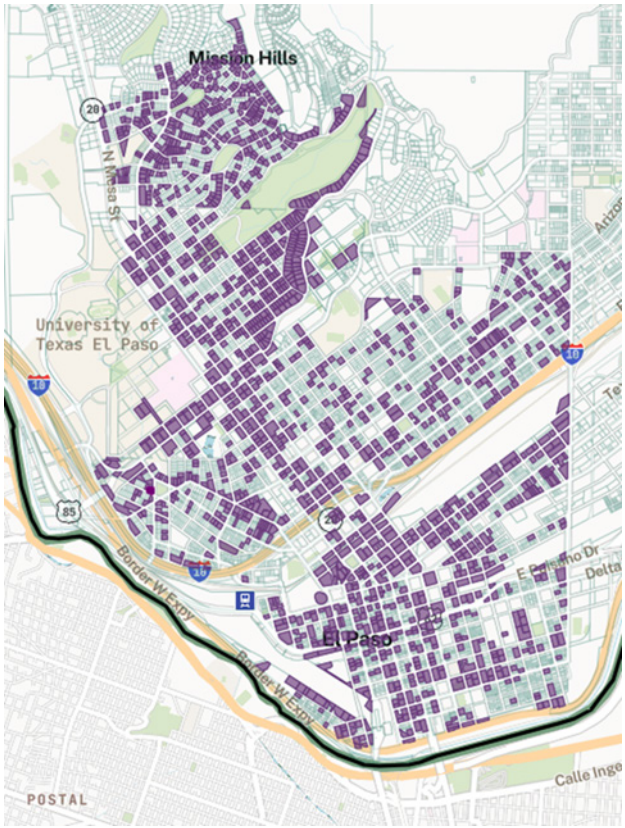
12 Commonly referred to as the "residual land value": that is, the price of acquisition after accounting for all development costs.

An analysis of lots within the study area shows most lots range from 26-52 feet in width and have a depth of 120 feet with typical lot size ranges from 3,000 to 6,000 SF.

As noted in the introduction of this report, one of the main strategies to increasing the number of housing units within the study area is the conversion of single-family dwellings into multi-unit properties. In his seminal work, Missing Middle Housing, architect Daniel Parolek considers the required lot sizes to permit the conversion of homes into a fourplex.



As the diagrams indicate, a larger lot becomes necessary as parking requirements increase. According to an analysis by Sightline Institute[13], **the required land for accommodating off-street parking for a fourplex doubles in area when compared to the same property without parking.** In interviewing Parolek, the architect explains:



For lots 7,500 square feet or smaller, Parolek writes, "the space needed to fit off-street parking on the site typically makes it physically impossible to provide the required amount of parking and get multiple units on the site. If an architect can make the parking fit, oftentimes there is not enough development potential to make the financial sense to pursue."

Lots greater than 7,500 SF. Properties smaller than this cannot accommodate sufficient parking for a quadplex. Within the plan area, only 29% of lots meet this criteria.

13 Sightline Institute, Unlock Middle Housing with Parking Reform: https://www.sightline.org/2024/03/18/unlock-middle-housing-with-parking-reform/

To test whether existing parcels could accommodate even one space per unit (this would represent a 50% parking reduction from current Code requirements), we searched for any parcel 7,500 SF or larger within the study area.

In our analysis, of the approximately 6,000 parcels in our study area, **only 29% are large enough to accommodate 1 space per unit necessary for a fourplex conversion of an existing single-family home.**

In short, the existing development pattern and lot sizes within the study area shows that properties are not large enough to meet off-street parking requirements. Absent additional land acquisition or demolition, they will be unable to be redeveloped.

Discussion

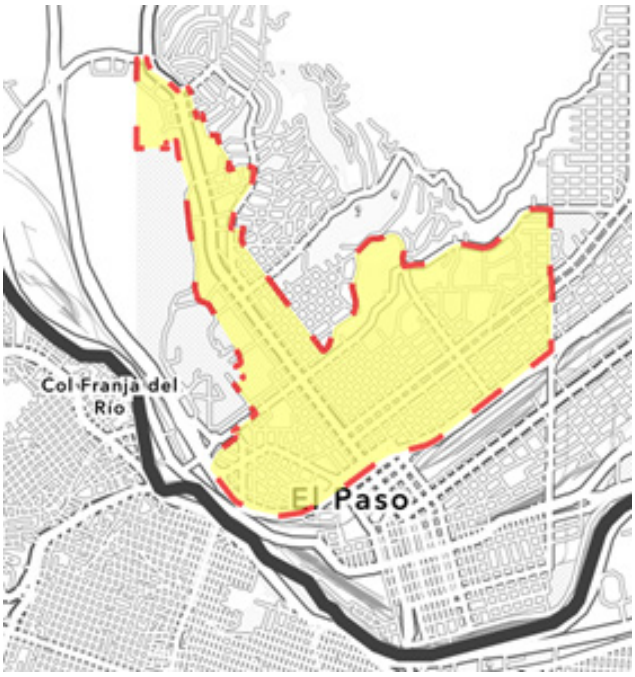
In this section, we build on the introduction of the report by highlighting potential outcomes of eliminating minimum off-street parking requirements. Removing off-street parking requirements can: improve the tax base; make housing more affordable; and unlock development.

We began this section by showing that off-street parking drains property tax revenue because surface parking improvements are assessed at levels 98% lower than building improvements. Not only is off-street parking bad for the city's finances, they also make homeowners and renters' housing more expensive. Studies have found renters pay upwards of 17% additional in rent for a parking space, while homeowners can expect to pay more than $2,000 additional/year for financing a home with a 2-car garage.

Finally, we conclude by showing that removing off-street parking requirements is not a new idea in El Paso. More so, for the same reasons parking requirements were removed as part of the 2006 Downtown Plan area, we propose that rationale is relevant for an even larger geographic footprint today. That is, parking requirements are currently part of a set of trade-offs when developing a site: the larger the building, the more off-street parking required.

When parcels of land are large, building footprints make up a small portion of the total land area. In this scenario, parking requirements are rendered irrelevant because there is adequate land to accommodate both parking and building. However, when parcels are small—as they are within the study area—parking requirements can act to constrain development by limiting how much can be built, even for small-scale development. We conclude by showing that most parcels (71%) are too small to provide just 50% of the required parking for a fourplex, demonstrating that requiring off-street parking for most projects will be infeasible.

Uptown and Surround Neighborhoods Study Area



Area of Analysis

The adopted Downtown, Uptown, and Surrounding Neighborhoods Master Plan defined the overall study area. For purposes of this analysis, we focus on the area north of Interstate 10. As identified previously in this report, the 2006 Downtown Plan removed off-street parking requirements for much of the area south of the Interstate. This analysis focuses on the area generally bounded by: Interstate 10 to the south, Cotton Ave to the East, Schuster Ave/Murchison Dr/Executive Center Blvd to the North and UTEP/Oregon St. to the West.

Study focus area. The general focus area for our analysis is the Uptown and Surrounding neighborhoods area, generally bounded by Mesa, Schuster, Cotton and Interstate 10.

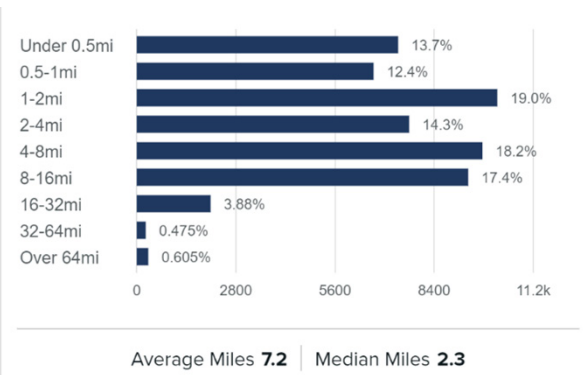
The adopted Downtown, Uptown, and Surrounding Neighborhoods Master Plan defined the overall study area. For purposes of this analysis, we focus on the area north of Interstate 10. As identified previously in this report, the 2006 Downtown Plan removed off-street parking requirements for much of the area south of the Interstate. This analysis focuses on the area generally bounded by: Interstate 10 to the south, Cotton Ave to the East, Schuster Ave/Murchison Dr/Executive Center Blvd to the North and UTEP/Oregon St. to the West.

Demographics

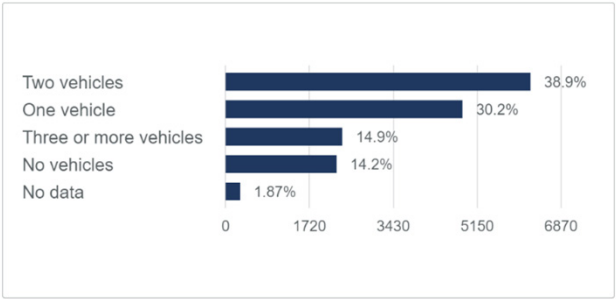
Using Census geographies, the study area falls into the following 2020 Census Tracts: 15.01, 15.02, 16, 22.01 and 22.02.

Recent Census data from the 2021 ACS estimate 17,426 people live within the five study area Census tracts, made up of approximately 6,984 households. Approximately one-half (45%) of households own one car or less and many trips reflect the “car light” lifestyle reflected in the household composition. That is, mobility data shows that in addition to a high share of households with one car or less, 1 in 4 trips of people living within the study area are under 1 mile, representing a significant percentage of trips that can be made by walking or biking.

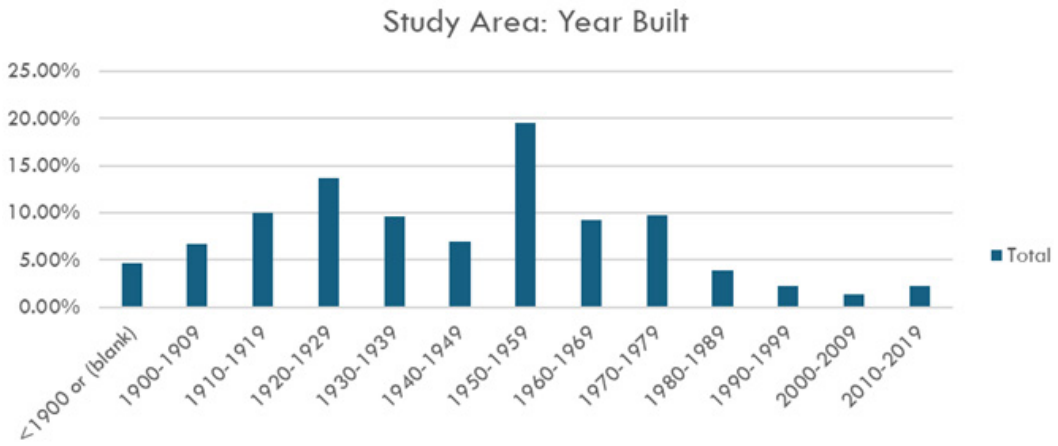
Trip Distance (Miles)



Private Auto Availability



Typical Trip Distances and Automobile Ownership for Census Tracts 15.01, 15.02, 16 and 22.01 and 22.02. Source: 2021 ACS/Replica



As noted earlier in this report, much of this area was developed before the City adopted zoning regulations in 1930. In fact, more than one-half (51%) of all existing structures were built before 1950. Accounting for only residential buildings in major residential subdivisions in the study area (Alexander, Kern Place, Rim Road, Sunset Heights), 62% were developed prior to 1940. For these residential properties built prior to 1940, the following is a summary of their development characteristics:

Pre-1940 Residential Building Characteristics	
Average Lot Size (SF)	6042
Average Living Area (SF)	2053
Lot Coverage	23%
Average Number of Garage Spaces	0.73
Share of Residential Properties With No Parking	55%

Typical residential building characteristics. Source: El Paso Central Appraisal District

The data demonstrates that the typical residential property falls below the necessary 7,500 SF threshold necessary to accommodate four parking spaces to support a conversion to a duplex, an accessory dwelling unit or allow a fourplex. This is despite the fact that most lots have adequate space to accommodate additional building area, with the typical lot coverage at 22%.

Finally, it is highly atypical for residential properties to have off-street parking. Among all residential properties, there is typically less than one garage space per lot. Additionally, 55% have no garage parking at all. In summary, the pre-dominant development pattern of the study area is reflective of the era that pre-dates automobiles. As a result, most cars park on-street or utilize uncovered driveways.

Visualizing Study Area Development

Typical Post-War Development

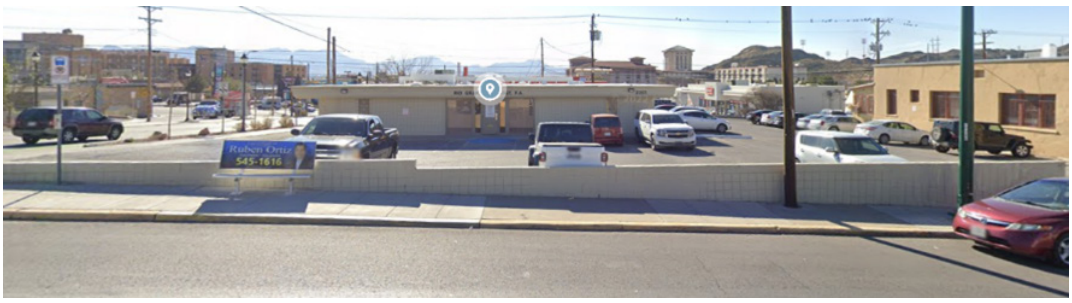
Typical Pre-War Development. This pattern is defined by denser development, alley access and limited off-street parking.

Typical Pre-1940's Development

Post-War Development. This typology is characterized by smaller building footprints and large parking lots.

To visualize the typical development in the study area, refer to the images below. The type of development depicted is reflective of the typical lot sizes, lot coverage and parking availability of the study area in general. Properties with off-street parking have access via alleyways and if any parking is provided at all, tend to have minimal supply.

Lots tend to be maximized, with buildings built up to the front and side setbacks. Where there is open space on a lot, the development potential tends to be to the rear of the property. Such developable space is adequate for building additions, but due to limited lot width, is inadequate for more than two off-street parking spaces.



Juxtaposed against the typical development pattern of the study area is post-war development, defined as buildings constructed after 1950. Unlike the pre-war development pattern, this type of development is characterized by its auto-centric design features: large setbacks on all sides with smaller building footprints surrounded by large areas off-street parking.

More Than Aesthetics

Pre vs. Post Zoning Adoption Off-Street Parking Requirements

Year Built: 1906
Taxes/Acre (2023): $55,500
Total Units: 11
Required/Provided Parking: 17/0
Land Area for Parking Required/Provided:150/0%

Year Built: 2016
Taxes/Acre (2023): $20,757
Total Units: 14
Required/Provided Parking: 27/15
Land Area for Parking Required/Provided:61/34%

More than just design characteristics, there are significant differences in development feasibility, densities and tax productivity of pre and post-war development. The two photos represent similar unit counts, but the development on the left was developed prior to zoning regulation while the apartment building on the right constructed within the past decade.

Comparing the apartment buildings, the pre-zoning structure is on a smaller lot, **provides no parking and generates nearly three times the tax revenue per acre despite it being more than one hundred years older.** Additionally, the newer development on the right received a more than 50% parking reduction from City Council but still cannot match the tax productivity, nor meet similar densities as the pre-zoning development. An important consideration is that under the current Zoning regulations, neither development is feasible. In fact, **the pre-zoning development would likely be a vacant lot under the current rules as 150% of the lot would be required parking if the building were constructed today.**

Zoning Functionality

With respect to the overall functionality of a Zoning Ordinance, the litmus test of its responsiveness to the existing built environment can be measured by the number of zoning requests where applicants seek relief. In general, there are three procedures that property owners can utilize: rezoning/special permits, special exceptions/variances, and/or registration as a legal nonconforming property.

Rezoning and Special Permits

Rezoning and special permits are two application types whereby applicants can apply for the rules and regulations to be changed from the limits imposed on the property based on current zoning regulations. Following two public hearings, City Council may grant an applicant's request. Both rezoning and special permits can be used to modify setbacks, dimensional standards, reduce parking requirements and in the case of rezoning, authorize a certain use. In ideal conditions, the activities property owners want to use their property for are also permitted by zoning regulations. Therefore, when there are many requests for changes, it can be a good approximation of whether a Zoning Ordinance is meeting current market demand.

Special Exceptions and Variances

Similar to rezoning and special permit requests, special exceptions and variances can authorize certain property conditions if they meet criteria outlined in Title 2 of the Municipal Code. Exceptions and variances can legalize both existing conditions that do no meet current zoning regulations as well as authorize new construction. A benefit to the process outlined in Title 2 that does not apply to rezoning and special permit requests is that special exceptions and variances only require one public hearing and can be approved if they meet the conditions outlined in the Code. However, like rezoning and special exceptions, these requests also help diagnose whether current zoning regulations meet property owner expectations.

Legal Nonconformities

Finally, a third avenue for property owner relief from zoning requirements is an administrative process that registers a property as legal nonconforming. This procedure "locks in" existing conditions on properties so long as they have been in existence prior to November 23, 1955, which the City uses as the date for administering this policy. A disadvantage to this process is that nonconformities may not be extended or enlarged and if the property is vacated, the new property owner can be forced to comply with the Code.

Within the older neighborhoods boundary[14], we find the following number requests[15] by procedure type:

- Rezoning and special permits: 29
- Special exception and variances: 147
- Legal nonconformities: 1,818

Again, these three procedures can be used as a measure of the responsiveness of the Zoning Ordinance to the development pattern on which they are applied. Ideally, property owners do not seek relief, meaning the application numbers are close to zero. However, as the numbers summarized above indicate, the large volume of applications reflect zoning regulations that do not match the development that exists, nor the type of development the market demands.

14 For purposes of this analysis, we consider "older neighborhoods" to be those in existence prior to 1930 when the City adopted zoning. Generally, this is the area bounded by current US-54, Fred Wilson Ave., Executive Center and the US/Mexico/New Mexico border.

15 Rezoning and special permit data dates back to 2018, special exceptions, variances and legal nonconformities are undated.

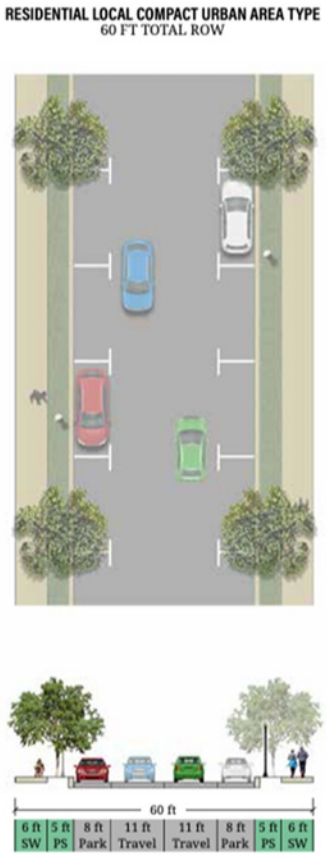
Discussion

In summary, the study area can be described by its pre-zoning development characteristics. That is, much of the area was developed before 1930 when the City initially adopted zoning regulations and the existing development today reflects this. Specifically, many of the residential properties have no off-street parking and as a result, have larger building footprints on relatively smaller lots. Conversely, newer development—especially commercial—are on larger lots with relatively smaller building footprints surrounded by larger parking lots.

Such differences in pre and post-zoning development are not just isolated to design characteristics. **Instead, zoning regulations have a significant impact on the number of units that can be built, the required sizes of lots, the amount of tax revenue that is generated and most importantly, whether the property can be developed altogether.**

Finally, the effectiveness of zoning regulations can be approximated using the number of applications filed by property owners seeking relief from the current zoning rules. **Within the older neighborhoods boundary, approximately 2,000 applications have been filed, reflecting a significant mismatch between the current rules and the development to which they apply.**

Study Area Estimate Parking Inventory



Despite limited off-street parking for single-family residential uses in the study area, there is still substantial overall parking supply. To calculate the total study area parking inventory, we leverage data from three sources: Park 915[16], CoStar and GIS Data[17] maintained by the City of El Paso. Park 915 is a website maintained by the International Bridges Department at the City of El Paso that provides parking information for private, commercial parking lots and garages. According to the website, within the study area there are approximately 1,000 off-street parking spaces in private lots.

CoStar is a proprietary data source that provides building-level data for commercial properties, including the number of off-street parking spaces. Including multi-family, office, retail and industrial uses in the study area, CoStar identifies 12,600 off-street parking spaces.

Typical cross-section design for the study area. Note, however, that the typical right-of-way width is 70 feet, not 60. Source: El Pas Street Design

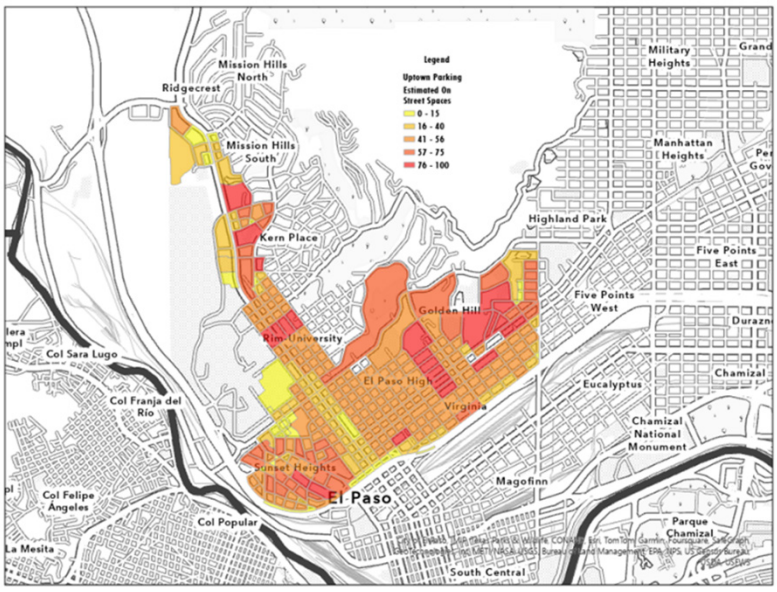
16 Park 915 commercial parking lot data can be found at: Park915.com

17 The City's Open Data platform contains many datasets which are available at: https://city-of-el-paso-open-data-coepgis.hub.arcgis.com/

Study Area Parking Inventory	
Type	**Parking Spaces**
On-Street Parking	14,000
Off-Street Parking (Excluding Single-Family Residential)	12,600
Private Lots	1,000
Total	27,600

Finally, we leverage data available on the City of El Paso's ArcGIS Online Portal that contains data on street length, no parking signage and other restricted parking areas. Within the study area, the typical right-of-way width (measured property line to property line) is 70 feet. A typical condition of the streets is depicted in the cross section: two travel lanes, two areas dedicated for on-street parking, two sidewalks and two parkways. Taking the street length and removing areas that do not permit on-street parking, we estimate an additional 14,000 parking spaces of on-street parking in the study area.

The map to the right shows the estimated on-street parking supply by City block. Overall, the on-street parking supply ranges between 40-60 spaces on a typical block, with higher amounts available per block in the Golden Hill and Mesa/Stanton Corridor adjacent to Kern Place.

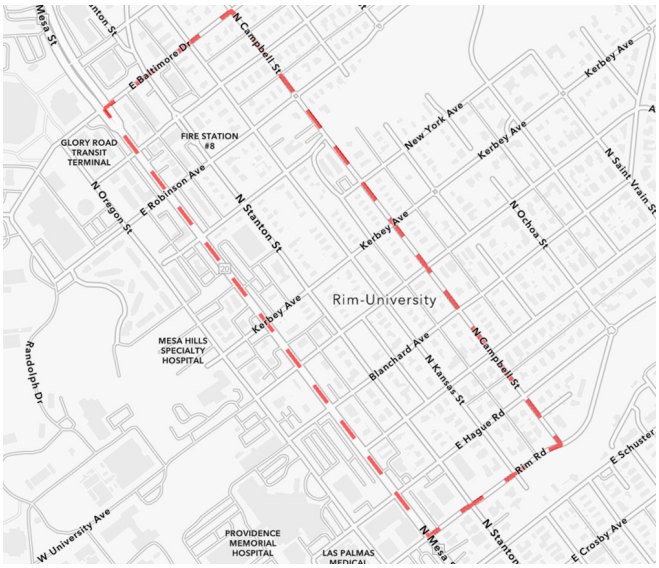


On-street parking inventory. Using block size as a proxy for on-street parking supply, this map estimates the number of available on-street parking spaces.

Discussion

Because City streets are designed with the intent to accommodate on-street parking, ***there is an extensive existing parking supply within the study area, with an estimated 27,000+ parking spaces.*** Additionally, on-street parking is bolstered by commercial lots, parking garages and off-street parking found in development typical of the post war development characteristics described earlier in this report. As we will show later in this report, the robust parking inventory has the ability to be utilized at a higher rate than it is currently being used to support the development identified in the market assessment.

Parking Occupancy Analysis



The parking analysis conducted for our study area relied on data collection from two sources: video feeds and in-ground sensor technology. In general, the video feeds provided greater geographic coverage while the in-ground sensor technology provided more precise data. Together, they helped develop an overall picture of on-street parking utilization within the study area.

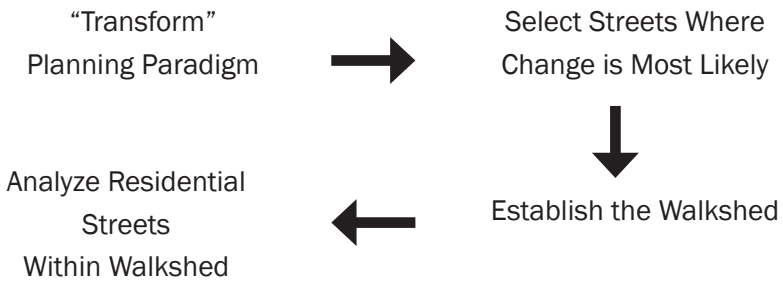
Video Feed Parking Study Area boundary. For purposes of our analysis, we used video cameras to record parking utilization within this boundary.

Video Feed Parking Study

Data collected using the video feed method focused on a geographic area bounded by Mesa St., Rim Rd., Kansas St., and Baltimore Ave. Together, we were able to collect on-street parking utilization data for twenty-two (22) City blocks[18] between October 2023 and February 2024. Because we anticipated UTEP students to have a substantial impact on parking utilization, we were careful to conduct analysis only during times the university was in session. For each block, video feeds recorded parking utilization between the hours of 7am and 11 pm for a total of two weeks[19]. The purpose of this was to allow for multiple data collection points by time of day and day of week to account for any abnormalities in data collection that would skew the results.

Selecting the Study Area

The geographic boundaries that were selected for this analysis followed the following logic:

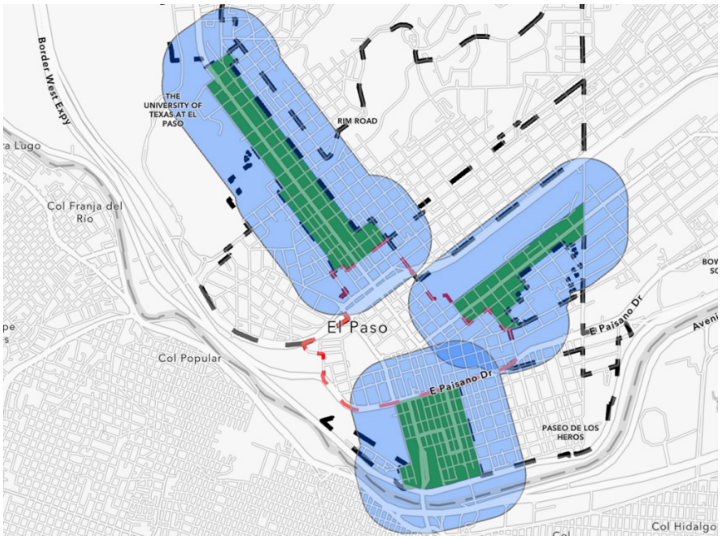


1. Select the Transform Planning Paradigm geographies;
2. Within the paradigm, select the corridor where proposed changes are greatest;
3. Establish a walkshed around the corridor; and
4. Analyze adjacent residential streets that would be most impacted by change.

18 Not every block was analyzed, as current signed parking restrictions did not allow on-street parking or in the case of one block on New York Ave., road construction did not allow for analysis.

19 In some instances, data collection for an individual block was less than two weeks, as there were multiple instances of vandalism that stopped video recording for several hours in a day.

The Downtown, Uptown and Surrounding Neighborhoods Master Plan proposed three planning paradigms that would guide the plan's recommendations; they fell into three categories: realize, transform, and enhance/reinforce. Of these three, the "transform" paradigm referenced geographies where change would be most significant. Within the plan, three areas were designated with this paradigm: the South El Paso/ Stanton, Texas and North Mesa and Stanton Corridors. The three corridors had varying levels of change that were proposed for each, with North Mesa/Stanton representing the greatest level of change[20].



Transform Paradigm Walkshed. The Downtown, Uptown, and Surrounding Neighborhoods Master Plan identified three paradigms. We focus our analysis on the transform paradigm as the level of change proposed was greatest in these areas.

From there, a ¼ mile buffer was generated around the corridor, which represented the maximum distance people are most likely to walk to reach their destination[21]. Finally, within that ¼ mile buffer we selected the residential streets that would be most likely to be impacted by the proposed changes. To make this determination, the plan identified catalyst sites, representing areas with redevelopment potential. Within this corridor, the sites with the greatest redevelopment potential were north of Schuster Ave. and East of North Mesa. With both streets also serving as significant physical barriers to pedestrians due to their auto-oriented design, we focused our analysis on the aforementioned study area.

Video Feed Parking Analysis Results

The results of our analysis conducted from the video feeds are clear: ***parking utilization rates within the study area are well-below the industry standard optimal utilization rate of 85%, with the overall study area having an average occupancy rate of 27%***. Accordingly, the surrounding area would benefit from redevelopment which would increase demand for on-street parking and utilization rates closer to the optimal level. In our analysis, we accounted for and analyzed any differences in time, time of day, day of week, and weekday/weekend. Only one street—Cincinnati Avenue—reaches and exceeds the optimal utilization rate at any point during the day. However, looking at daily utilization rates, even the most parked street falls well below the target rate.

Street Intersection	Average Utilization Rate
Baltimore and Mesa	30%
Baltimore and Stanton	24%
Blacker and Kansas	3%
Blacker and Mesa	26%
Blacker and Stanton	1%
Blanchard and Mesa	26%
Blanchard and Stanton	12%
Boston and Mesa	31%
Boston and Stanton	35%
Cincinnati and Mesa	69%
Cincinnati and Stanton	67%
Hague and Kansas	4%
Hague and Mesa	9%
Hague and Stanton	34%
New York and Campbell	16%
Rim and Kansas	6%
Rim and Mesa	33%
Rim and Stanton	23%
Robinson and Mesa	16%
Robinson and Stanton	4%
Stanton and Kerbey	32%
University and Kansas	21%

Video Feed Daily Average Utilization Rates.

The streets analyzed can generally be categorized into three buckets based on their usage by time of day and day of week:

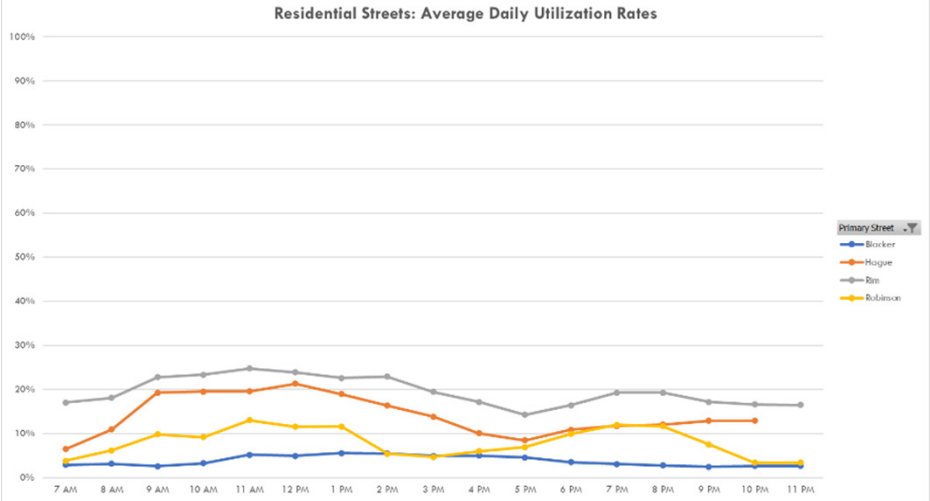
1. Residential;
2. College commuter; and
3. Restaurant/Nightlife

20 The proposed rate of change was determined based on the number of housing units proposed by the housing allocation allowance in the plan.

21 See: https://safety.fhwa.dot.gov/ped_bike/ped_transit/ped_transguide/ch4.cfm

Residential

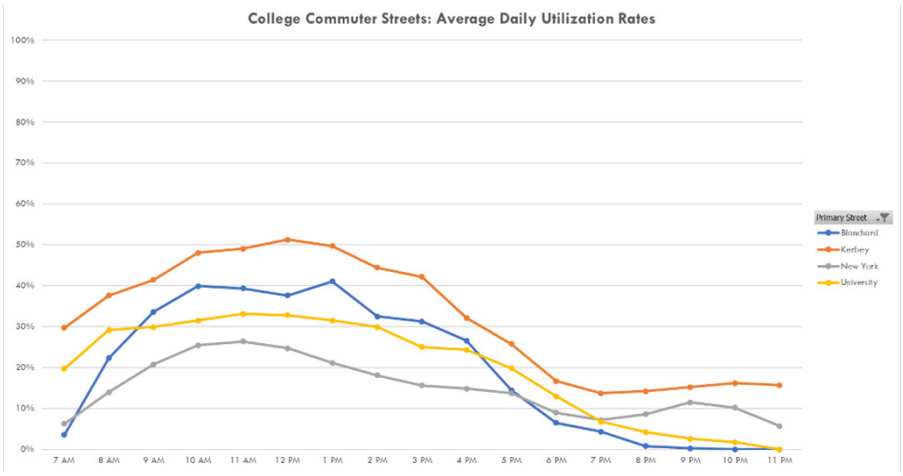
Residential streets are characterized by their low utilization rates throughout the day, regardless of the time of day and day of week. All of Blacker, Hague, Rim, and the Robinson/Stanton intersection fit this description as their utilization rate is below 25% all day and does not fluctuate over time.



Residential Streets. These streets are ones with low utilization rates throughout the day.

College Commuter

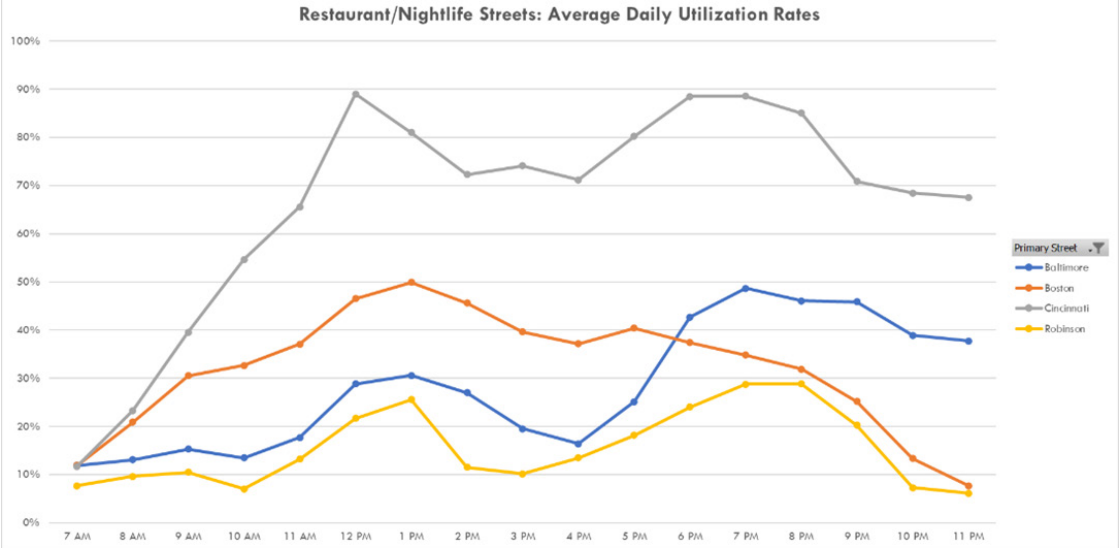
A second category of streets are college commuter, where utilization rates increase during class times, typically between the hours of 9am and 6pm, and then fall off dramatically in the evening, Blanchard, Kerbey, New York and University are examples of this typology.



College Commuter Streets. These streets are ones with higher occupancy during typical school hours but are otherwise low occupancy.

Restaurant/Nightlife

Finally, a third type of street are those used for restaurants and/or nightlife. Utilization rates tend to be low in the mornings with rates increasing during lunch hours, falling again until dinner time and then remaining above-average well into the evening and early morning hours. Baltimore, Boston, and Cincinnati Streets and the Robinson/Mesa intersection are examples of this type.

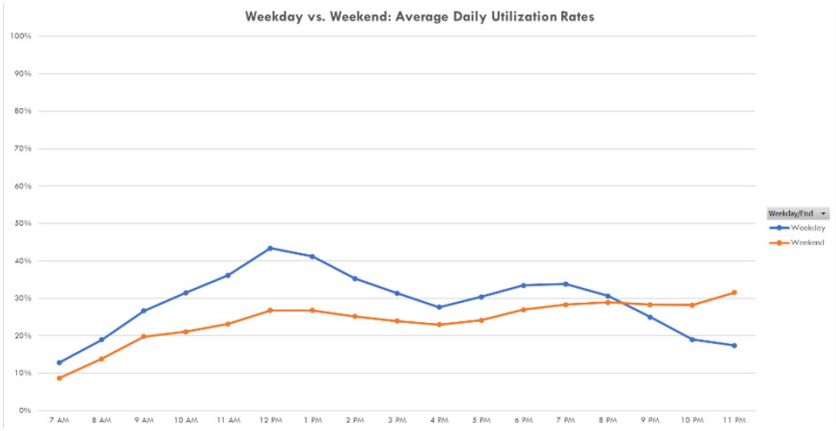


Restaurant/Nightlife Streets. These streets typically have the highest levels of occupancy, with to noticeable spikes of use around lunch and dinner time.

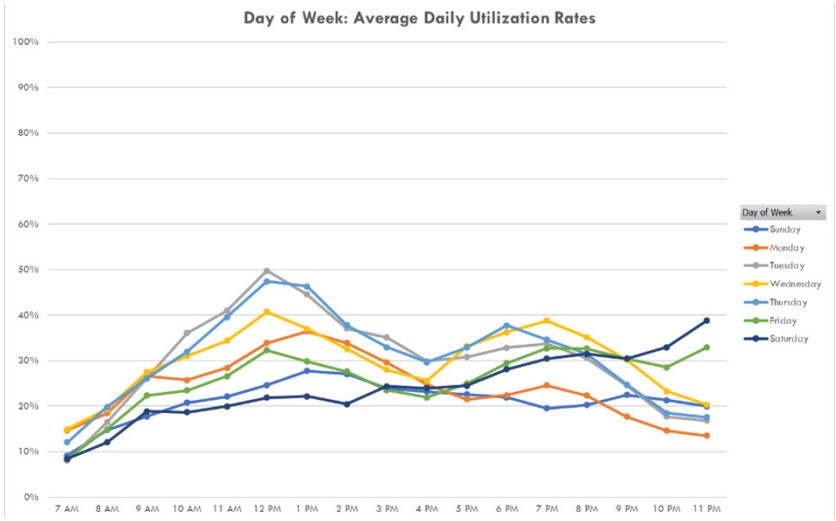
Discussion

Using video feeds, we analyzed twenty-two (22) intersections and eleven (11) city blocks to calculate the utilization rates of on-street parking in residential areas that are adjacent to geographies where The Plan calls for significant redevelopment. Our rationale for their selection is that if developed as proposed, the existing on-street parking supply would be most likely to be affected by such changes.

Overall, we find that utilization rates within the study area are on average, 27% which is far below the target optimization rate of 85%. With our data collection method, we were able to identify three typologies of parking usage: residential, college commuter, and restaurant/nightlife streets. Across all types, utilization was low and only one street—Cincinnati Avenue—ever reached or exceeded the target rate. We also accounted for any differences between weekday versus weekend usage, day of week, and time of day and present the findings below.



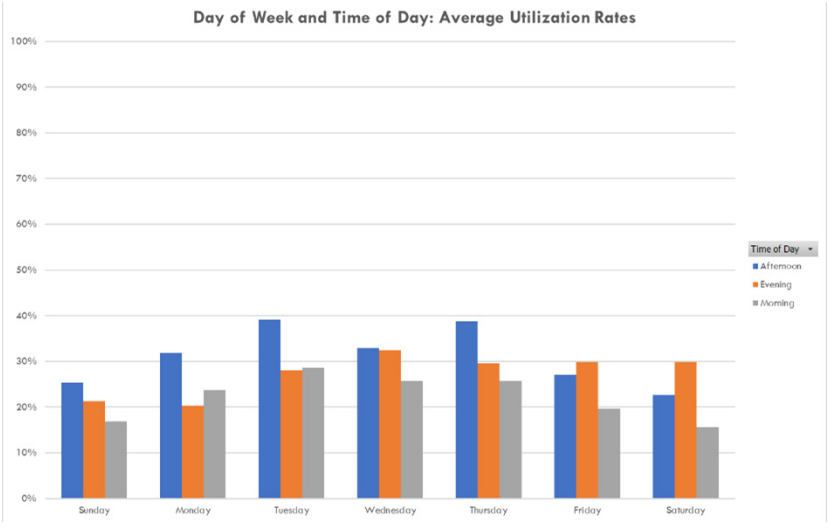
Weekday vs Weekend Utilization. Weekdays see higher rates of occupancy during the day while the weekend has greater utilization in the evening.



Utilization by Day of Week. Occupancy follows the same trend regardless of day of week, with early afternoon typically representing peak utilization.

For weekday versus weekend, there are slight differences with utilization rates approximately 10% higher during the day while weekend usage is 10% higher in the evening. By day of week, overall utilization rates patterns tend to mirror each other by time of day, though there are notable differences by day of week. Within the study area, on-street parking hits its highest occupancy rate around noon with a second, smaller spike again in the evening typically around 7pm. A notable exception to this is on Saturday which sees a gradual rise in parking occupancy throughout the day where it reaches its peak of 39% at 11pm. Finally, we consider any differences by time of day. For weekdays (Monday – Thursday), the afternoon represents the highest utilization rates, usually fluctuating between 30 – 40 % occupancy. On weekends (except Sunday), the evening represents peak utilization which is approximately 30%.

Overall, we find that even splicing the data further and attempting to pinpoint any variations still results in the same conclusion: there is currently excess parking supply and redevelopment which increases the demand for on-street parking could positively affect increasing the occupancy rate closer to the optimal level of 85%.

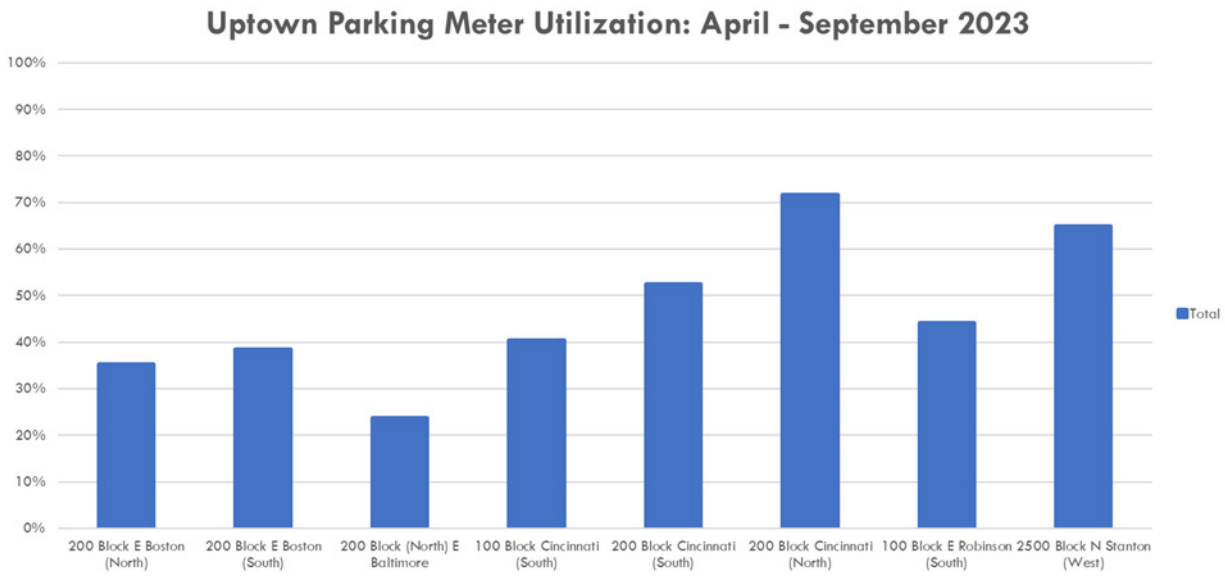


Day of Week and Time of Day. On week days, the afternoons are busiest while on the weekend occupancy rates are highest in the evening.

Meter Sensor Parking Results

Our second method for data collection within and surrounding the study area comes from the use of in-ground sensor technology. The sensor technology automatically detects whether a respective parking space is occupied, regardless of whether the automobile occupying it pays the meter. In this way, the data is more precise and comprehensive, but is more limited in scope geographically compared to the coverage of the camera feeds.

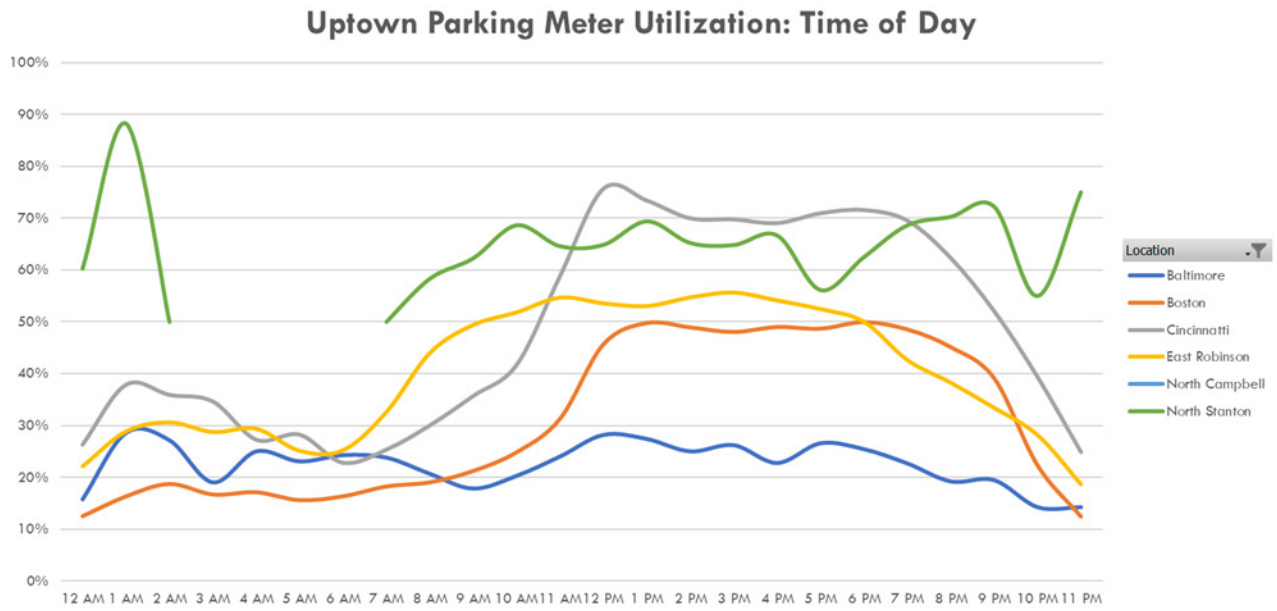
Using this method, we collected data for fifty-eight (58) metered spaces on eight (8) City blocks for 24-hours a day, seven days a week between April 1 and September 30, 2023. In some instances, the data collected using this method overlapped with areas analyzed using the video feeds. As we will show, the occupancy rates of those blocks were similar in both methods, demonstrating the reliability and consistency of the results even across time.



Average daily utilization rates. Only Cincinnati and Stanton streets exceed 50% occupancy on an average day.

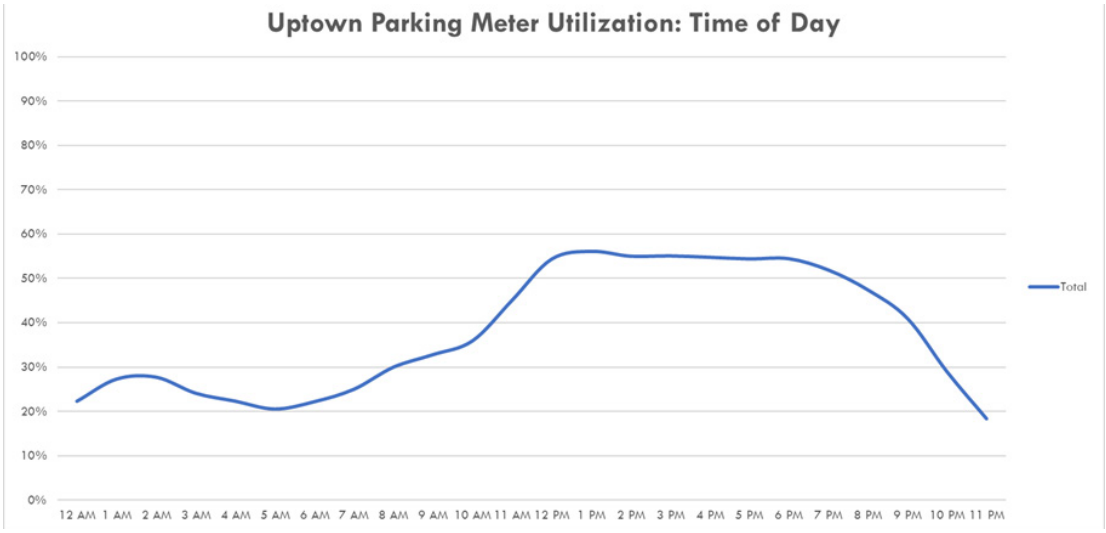
Like the results of the video feed, the parking sensor data demonstrates that parking occupancy data for the eight blocks analyzed is similarly low. Again, ***the 200-block of Cincinnati as well as the 2500-block of North Stanton are the only streets which exceed 50% average daily utilization, but still fall well below the optimal utilization rate of 85%.***

However, unlike the video feeds, the sensor data is deployed only in areas where there are parking meters. In general, parking meters are placed in areas where there is above-average demand necessitating the use of meters to ensure turnover. Typically, they are located in commercial areas where resident and customer traffic are both considerably higher than other areas of the City, including the areas where we analyzed using cameras. As a result, we expect parking occupancy rates to generally be higher in the areas using this technology.



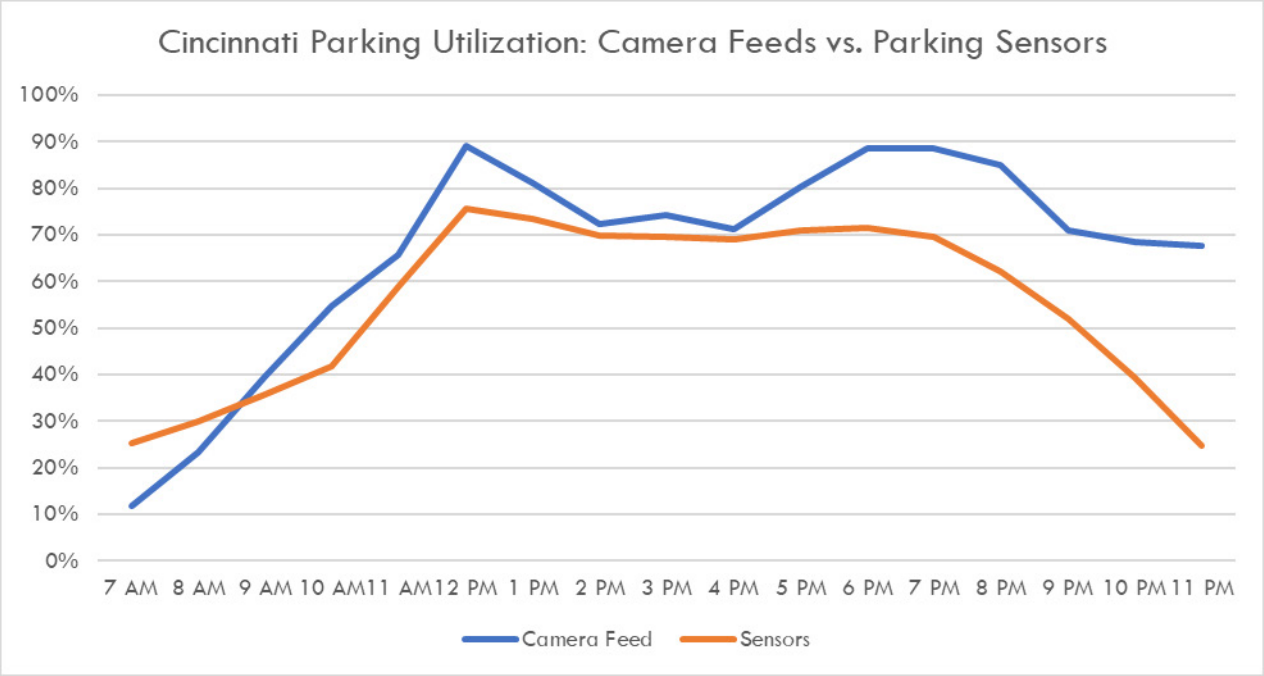
Parking meter utilization by street. Cincinnati and Stanton Streets have the highest occupancy rates of streets analyzed.

With that in mind, the data shows that by time of day, parking occupancy is on average approximately 30% in the overnight hours and begins to increase around the lunch hour. At approximately 9pm, parking occupancy drops dramatically below 20%, except for Cincinnati Avenue. For Cincinnati Avenue and North Stanton Street, daytime utilization hovers between 60 to 80%; this reflects a vacancy of approximately two or three parking spaces per block. For the other streets, parking utilization rarely approaches nor exceeds 50%. ***Overall, even accounting for time of day, parking utilization rarely—if ever—approaches target occupancy.***



Uptown Parking Meter Utilization. Overall, the Uptown on-street parking supply reaches approximately 50% occupancy in the afternoon. Otherwise, occupancy is around 30%.

Finally, the data collected for Cincinnati Avenue using this method mirrors the results collected using the other data collection method. That is, both data sources show a daily average parking occupancy rate of approximately 70% and the fluctuations of occupancy by time of day reflect a lunch time peak followed by a less dramatic secondary spike around dinner time. ***Overall, these findings demonstrate the efficacy of both approaches to calculating on-street parking utilization as well as the transferability of findings of one method to another.***



Comparison of data collected from the camera feeds and in-ground sensors. Overall, the data shows similar occupancy rates despite using two different data collection techniques.

Discussion

Our parking study utilized two different methods for calculating parking utilization within our study area and arrived at the same conclusion: most on-street parking is not occupied the majority of time on a typical day and the streets with highest parking occupancy is at the optimal rate just a few hours a day. As a result, we conclude that additional development utilizing on-street parking would boost the utilization rate closer to the desired level.

The similarity of the findings using two different data collection techniques suggests that the results are highly transferable despite differences in where the data was collected. While the parking study using cameras were deployed in primarily residential areas, sensor technology was utilized in commercial areas. Regardless of the method, our findings show varying degrees of low rates in utilization and when data was collected for the same street, we found similar rates of occupancy.

Maintaining the Status Quo

Thus far, we have provided the context for removing off-street parking requirements; the financial and developmental implications for removing the requirements; an overview of the existing parking supply and the study area; and, an analysis of current utilization rates of on-street parking using two different data collection techniques. However, a critical question remains unanswered: what happens if the current off-street parking requirements remain?

Anticipated Parking Demand

In the introduction of this report, we discussed the Market Assessment that was developed in conjunction with The Plan. In it, the study found that based on future potential development, the following development was feasible within The Plan's boundary between 2020 and 2040:

- 1350 attached/single family units;
- 8700 multifamily units;
- 350,000 SF of retail;
- 750,000 SF of office; and
- 400 hotel rooms

With this as the baseline, we can use these inputs to estimate the total parking that would be required using the current off-street parking requirements in Appendix C of Title 20, the City's Zoning Ordinance.

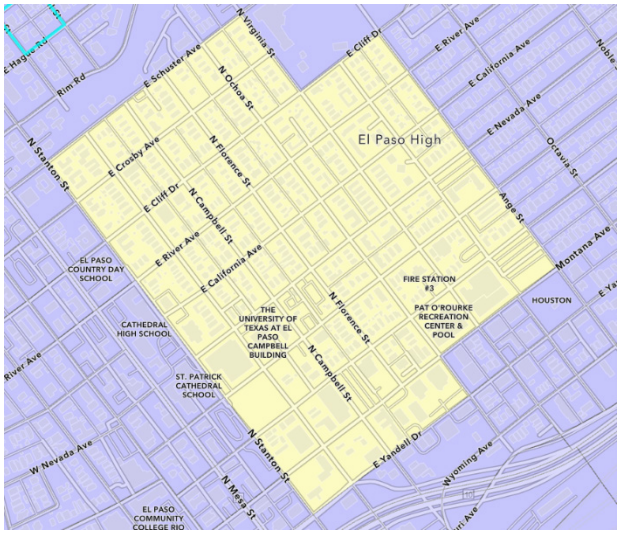
Parking Requirements		2030 Spaces	2040 Spaces	Total Spaces	Acreage of Parking
Multifamily	1.5/unit	5700	7350	13050	98.86
Single Family	2/unit	1100	1600	2700	20.45
Retail	360/SF	417	556	973	7.37
Office	576/SF	608	695	1303	9.87
Hotel	.9/room	180	180	360	2.73
Total		8005	10381	18386	139

Potential parking required. This table summarizes the amount of off-street parking that would be required if the development potential identified in the Plan's market study are realized.

In the above table, we can observe that ***absent the removal of off-street parking requirements, an additional 18,386 parking spaces would be required*** in addition to the existing supply of ~14,000 spaces. These ***additional off-street spaces would consume approximately 139 acres, the equivalent of 54 City blocks*** within the study area.

To put this in context, solely ***off-street parking would consume a geography roughly the size of an area bounded by: Stanton, Montana/Yandell, Ange, and Cliff/Schuster.***

For reasons outlined earlier in this report under the section entitled "The Case for Eliminating Parking Minimums", an area of this magnitude dedicated solely to off-street parking would be nothing short of catastrophic for improving the City's tax base, making housing more affordable, and helping make otherwise infeasible development possible.



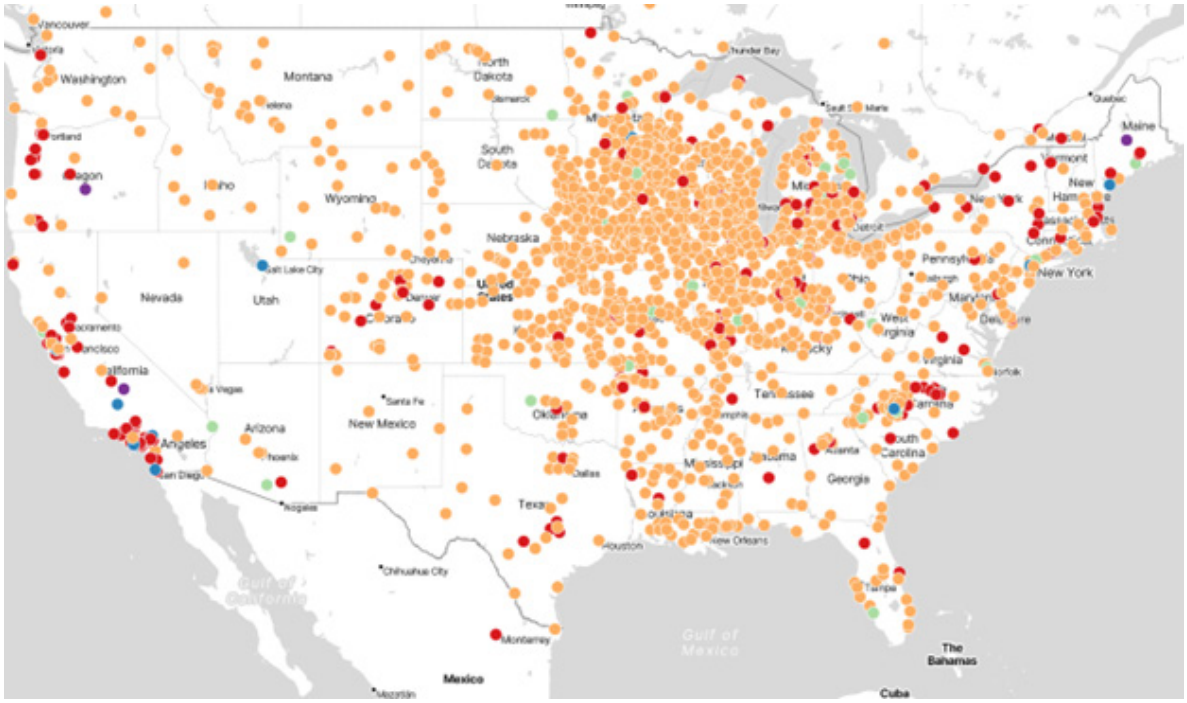
Total Parking Area Required. This image depicts the total area (139 acres/54 city blocks) that would be required by our current regulations if the development identified in the market study were constructed.

22 The off-street parking requirements contained in Appendix C of Title 20 provide hyper-specific requirements based on the actual use of development. To estimate the required off-street parking for purposes of this analysis, the most common parking requirement for the respective category was used.

Policy Recommendations

As the documentation provided in this report makes clear, ***the overarching recommendation is that within The Plan's boundaries, off-street parking requirements should be eliminated.*** Overall parking supply demonstrates that there is a current oversupply of parking in both Downtown and the Surrounding Neighborhoods in the study area. In support of that conclusion, analysis of current rates of utilization demonstrate that ***on-street parking is utilized at a rate of 27% in residential areas and 44% in commercial areas***. Both geographies fall well below the optimal utilization rate of 85% if on-street parking supply and demand are effectively balanced.

The notion of removing off-street parking requirements may seem extreme, but is something that is becoming increasingly common in cities throughout the country. Within Texas, Austin recently removed off-street parking requirements Citywide, while the City of Dallas is currently in the process of abolishing theirs. As of this writing, more than 2,000 North American cities have removed some or all of their parking requirements.



Cities who have reformed parking requirements. Removal of parking requirements is a common occurrence as demonstrated by the shear number off cities changing their requirements.

Where Will Residents Park?

Removing off-street parking requirements is the first of three essential policies[23] the City should undertake to fix its "parking problem". Doing some, but not all, of these policy recommendations can lead to unintended consequences which could lead to an actual parking supply shortage. In brief, the policy recommendations necessary to support the decision to remove off-street parking requirements are:

1. Charge the right price for on-street parking; and
2. Spend the money collected by charging for on-street parking to improve neighborhood services.

Such recommendations are not only best practice but were also key policy recommendations contained in the 2019 Comprehensive Downtown Parking Study that have yet to be implemented in their entirety.

23 The three policies follow those contained in the Downtown Parking Study but are also recommended as best practice by Donald Shoup: https://transfersmagazine.org/2018/07/19/donald-shoups-three-parking-reforms/

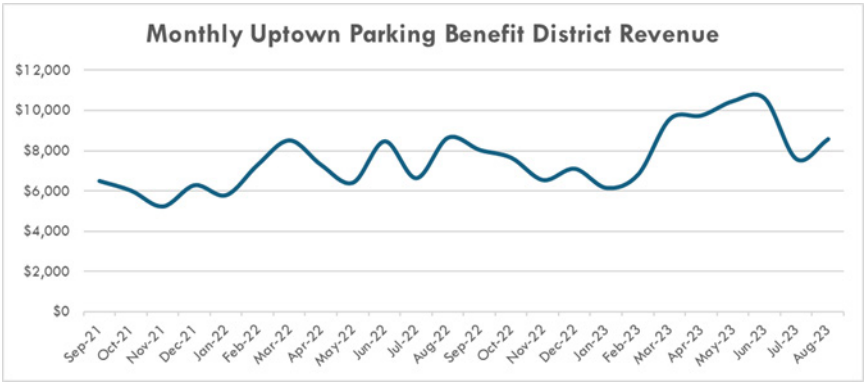
Pricing the Curb

If off-street parking requirements are removed, an important next step to follow is to ensure that a meter district is created or extended before parking supply begins approaching the optimal occupancy rate of 85%. In addition to creating a meter district and installing parking meters, the price for parking must be set at an appropriate rate.

A key recommendation of the Downtown Parking Study, yet to be implemented, calls for the allowance of dynamic pricing as it relates to the rates charged at meters. Dynamic pricing[24] is a means of adjusting parking meter rates based on actual demand, with the goal of maintaining one or two open spaces per block at any given time. This contrasts with the current static rates charged at all meters which contributes to the perception that there is inadequate parking. Instead, by charging a variable price, we can maintain on-street parking vacancy even as demand increases due to development and redevelopment.

Parking Benefit Districts

Once the price for on-street parking is correctly set to match demand, the revenue the curb generates is expected to increase. However, increased demand for on-street parking may not be viewed in a favorable manner by residents who previously utilized the curb space in front of their home for free. To make paid meter parking a more palatable arrangement for residents, a potential solution is to create a parking benefit district[25].



Monthly Parking Benefit District revenue. The Uptown Parking Benefit District typically generates between $6-10,000 per month.

Currently, the City has one functioning parking benefit district in the Uptown area where there are parking meters. Even with a limited geographic boundary, the current parking benefit district typically generates between $6,000-$10,000 monthly and produced more than $250,000 in revenue since its inception in 2018. The City's ordinance creating the benefit allows the money to be spent within the district for any type of improvement, including physical enhancements to the neighborhood to increased police enforcement[26].

Discussion

Removing requirements for off-street parking is the first step of three policies necessary to ensure adequate parking supply and neighborhood support for the reform effort. Once off-street parking is no longer required, pricing must be set to match demand in order to maintain one to two open parking spaces per block. Additionally, when the curb is appropriately priced, the revenue it generates will increase. To maintain neighborhood support, a parking benefit district is a beneficial tool that allows for meter revenue to be spent in the neighborhood to fund improvements residents desire.

24 See here for a brief summary of dynamic pricing and benefits: https://www.phila.gov/media/20211119112925/OTIS-dynamic-parking-pricing-one-pager.pdf
25 For more information about Parking Benefit Districts, read: https://parkingreform.org/playbook/pbd/
26 To read the ordinance refer to: https://library.municode.com/tx/el_paso/ordinances/code_of_ordinances?nodeId=881378

Conclusion

In this analysis, we have demonstrated that recently-adopted plans have called for the elimination of off-street parking requirements. A parking analysis conducted for downtown in 2019 and a subsequent analysis conducted in 2023 through 2024 in Uptown come to the same conclusion: there is significant oversupply in parking within the study area identified in the *Uptown, Downtown and Surrounding Neighborhoods Plan*.

Removing off-street parking requirements is the key to unlocking parcels in the study area for development and redevelopment to help realize the potential to build the approximately 10,000 housing units the plan identifies. More than that, off-street parking has been demonstrated to increase housing costs, significantly reduce our tax base, and renders many of the parcels in the study area in their current configuration undevelopable. Further, we have shown that maintaining the current parking requirements for the study area would result in approximately 54 City blocks being used for off-street parking if the recommendations of The Plan come to fruition.

Finally, the policy decision to abolish off-street parking is not an untested idea. Cities across the country, both big and small, are seeing the benefits of not requiring parking and are realizing the benefits provided to its residents. However, not requiring off-street parking will not ensure adequate supply on its own. Instead, it is recommended that once off-street parking is no longer required, the parking meter district is expanded to include affected areas, dynamic pricing be authorized, and finally parking benefit districts be extended to maintain the parking system, provide for parking enforcement, and offer a funding source for public improvements in the neighborhoods where districts are located.