ALTERNATIVES TO STANDARD MINIMUM PARKING REQUIREMENTS:

A STUDY OF BEST PRACTICES AND ITS APPLICATION

TO DALLAS, TEXAS

by

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ABSTRACT

ALTERNATIVES TO STANDARD MINIMUM PARKING REQUIREMENTS:

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TO DALLAS, TEXAS

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Development in Dallas would be more compact and multi-modal if the city refocuses its parking policies away from parking quantity towards parking quality,. To validate this hypothesis, this professional report compares and contrasts parking policies and best practices of municipalities that have adopted alternatives to standard minimum parking requirements to draw suggestions to present to the City of Dallas.

Current parking policy in Dallas has a simple minimum parking requirement (MPR) based on the size and type of use, calculated by recommended industry standards circa 1950 and adjusted through the mid 1980's as automobile ownership has increased. This has made the development of Dallas in areas developed after the 1950's resemble the suburbs. Since Dallas aims to encourage the development of walkable communities, regulation change is needed. Dallas, like many major cities, has pockets with alternatives to minimum parking requirements to encourage growth in older areas but these areas have specialized and unique

codes that do not translate well to other areas of the city and are prevented, through district boundaries, from doing so. Further, Dallas has almost 900 planned development districts (PDs), many of which have specialized parking regulations. If there are so many PDs in Dallas, there must be a deficiency in its base development code.

This study aims to propose a change to the Dallas Development Code outside of its central business district to reduce its focus on the quantity of parking to allow it to instead concentrate on the form, design, and function of parking. This professional report compares parking requirements of selected municipalities that have adopted alternatives to standardized minimum parking requirements and responses from a questionnaire to better understand the impacts of alternative parking requirements. The gathered data is thus used to form a set of suggestions for alternative parking policies for Dallas.

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CHAPTER 1

INTRODUCTION

1.1 Applicability

Urban design is a popular topic among planners. Old cities, like Paris, London, Rome, and Athens, have high concentrations of attractions, people, and infrastructure. Young cities, like most of the western United States have had a difficult time building similar areas and it is my experience that they are sometimes proud of that difference. The logical reason for the difference is that the western US experienced its highest population growth when the automobile became popular. These cities embraced the car with all its advantages and disadvantages. However, the increase of gas prices and obesity has made Americans reconsider their car culture and want to transform their cities into more urban places like Seattle, Portland, and San Francisco. There are many factors that contribute to urban design; this report focuses on only one of those factors--parking.

The National Association of Realtors published a Community Preference Study in 2011 in an effort to gage what type of community or urban environment the public seeks. Below are some of its findings:

> *Nearly six in ten adults (58%) would prefer to live in a neighborhood with a mix of houses and stores and other businesses within an easy walk. Four in ten (40%) select a community with housing only, where residents need to drive to get to businesses.*
>
> *Two-thirds (66% very or somewhat important) see being within an easy walk of places in their community as an important factor in deciding where to live. Specifically, being within an easy walk of a grocery store (75%), pharmacy (65%), hospital (61%), and restaurants (60%) is important to at least six in ten Americans. (5-6)*

Because walkable communities' desirability is on the rise, it is a logical conclusion that these communities would have less area devoted to off-street parking. This change in community preference challenges planners to crack open their long-standing development

codes to create more walkable communities. If communities become walkable, fewer trips will be made by personal vehicles and thus less off-street parking spaces are needed.

1.2 A Short Course on Parking Requirement History

Before automobiles gained widespread popularity in the mid-twentieth century, parking was sparse and usually provided on-street. The lack of off-street parking facilities and the increasing number of automobiles lead authorities to seek relief from these noisy and dirty machines. This led many municipalities to adopt a standard minimum parking requirement (MPR), which was based on the type and size of a use, and thus required new construction to provide off-street parking (Erik Ferguson, 2003, 52). In addition to requiring off-street parking, zoning regulations separated land use types and set buildings away from the street were also adopted throughout the United States. These two factors effectively switched the orientations of the parking lot and building and was a major paradigm shift from the design of urban areas from old urbanism to the suburban form we see today in an effort to provide relief from traffic congestion and provide more light and air.

Over time, MPRs have universally intensified to keep up with the growing number of automobiles per household and setbacks have pushed buildings to the rear to leave open space towards the street for parking. In the introduction to their book Retrofitting Suburbia, Ellen Dunham-Jones and June Williamson (2009) compares urban form to suburban form in Figure 1.1 below (ix). A remarkable difference in this comparison is the inverted areas which depict that much of the developed areas in urban form is now replaced with open space, often occupied by surface parking lots, in suburban form.

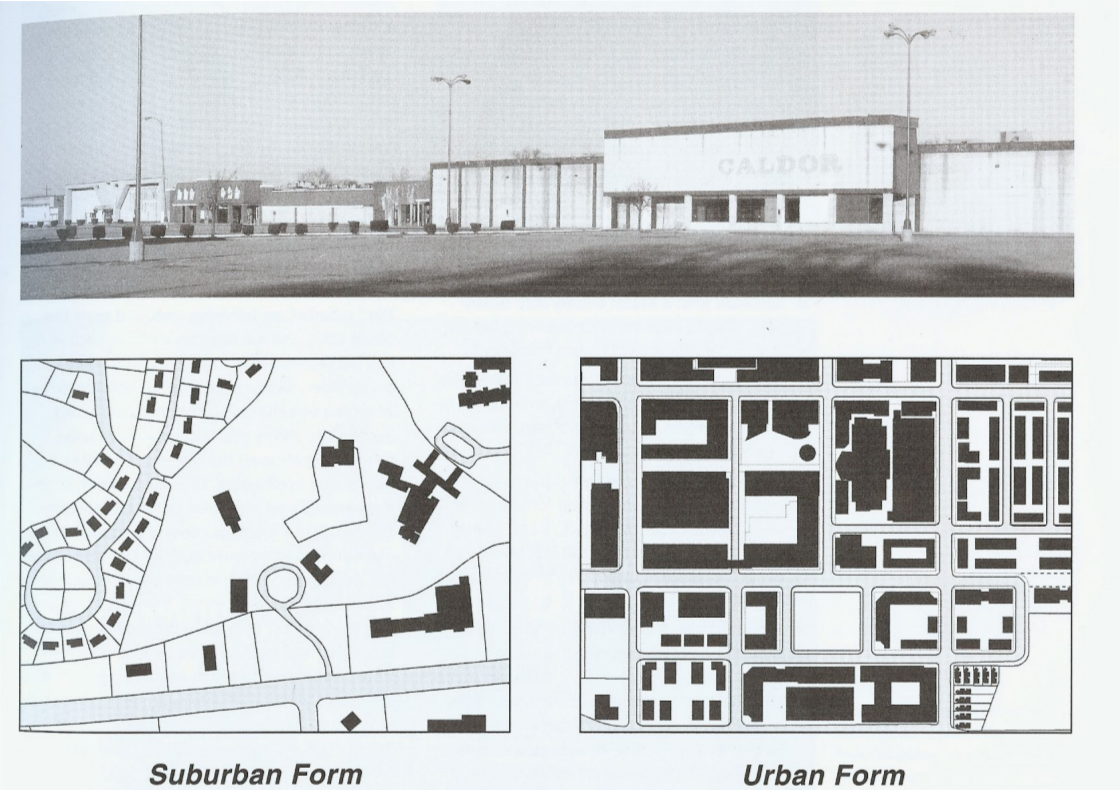


Figure 1.1. Suburban form compared with urban form.

1.3 How MPRs are Determined

The quantity of parking provided often originates with municipal standards. Cities determine whether a property has enough parking by using a simple calculation that originate from industry standards. For example, the Dallas Development Code requires one parking space per two hundred SF of retail floor area and one parking space per one hundred SF of restaurant floor area (§ 51A4.210). Eran Ben-Joseph remarks that many cities have similar parking requirements because they have relied on studies published by the Institute of Transportation Engineers (ITE) handbooks called “Parking Generation” since the 1980’s (*Rethinking A Lot* 2012, 8). The adopted standards are often excessive because they are calculated to be adequate for peak traffic. The recommended ratios also are based on, and therefore work best for, standard business models. However, these standards can require

excessive parking for alternative business models that encourage ride sharing, telecommuting, and transit ridership or simply require large spaces with few employees or customers.

1.4 How Dallas Accommodates Uses That Cannot Comply With MPRs

To accommodate these alternative business models, Dallas has adopted two ways to reduce a property's MPR. The first alternative is to file for a zoning board of adjustment special exception. This option allows a property to request to reduce its total MPR by twenty-five percent (Dallas Development Code, § 51A-4.311). The second alternative is to file a parking agreement (Dallas Development Code, § 51A-4.320). One common type of parking agreement is to share parking based on demand. For example, a bank is normally busy during the day while a bar is busy at night. In a shared parking agreement, both businesses enter into an agreement to have mutually exclusive hours of operation, file it in the deed records, and it remains until the parking is no longer required by the city. Although executing a parking agreement sounds simple, it is a cumbersome legal process and as property owners and tenants change over time, parking agreements are often too rigid to meet the ever changing demands of individual businesses.

Although alternatives exist, the use of those alternatives is often slow and entangled with bureaucratic red tape. They are also ultimately ineffective at solving complex land use and transportation relationships as managers and even property owners often modify their original parking management plans to accommodate their business by making private agreements.

1.5 Reduced MPRs Prescribed in the Dallas Comprehensive Plan

Obviously seeing these deficiencies in parking requirements, Dallas prescribed a number of implementation measures in their comprehensive plan *forward*Dallas!, adopted in June 2006. These four measures call for the ideas that are discussed in this professional report and include elements of land use regulation, transportation, and the environment. One measure specifically addressed land use regulation, which determines the MPR of a site, and reads, "Revise off-street parking standards to reflect actual market demand. Promote targeted

development by appropriately reducing parking requirements through the use of innovative parking management tools in designated areas" (Measure 1.2.3.3 Land Use Element). The comprehensive plan further addresses transportation elements with one that hones in on walkability and decreasing parking in those areas.

> *Amend the Development Code to provide for market-tested mixed-use districts, urban design standards for walkability and urban parking standards. Proactively apply these new zoning tools in combination around transit centers and multi-modal corridors through the Area Planning process, to encourage transit oriented development at a variety of densities in a manner that is sensitive to the character of adjoining neighborhoods. (Measure 4.2.1.4 Transportation Element)*

The comprehensive plan also has a large portion devoted to environmental actions. These actions often address storm water runoff that originates from surface parking lots. Two implementation measures to counteract these negative impacts are as follows:

> *Establish standards to limit the amount of impervious surface that can result from development activity, as part of a comprehensive storm water management strategy. Such standards should consider the possible different conditions in new development, as well as denser more urban redevelopment areas. (Measure 6.1.1.5 Environmental Element)*

> *Consider shared parking and other parking reduction strategies to minimize unnecessary paved areas. (Measure 6.1.1.7 Environmental Element)*

1.6 Overview

Currently, the off-street parking requirements of the Dallas Development Code offer little relief to walkable communities. As described in the following chapters, many cities have adopted changes to standard minimum parking requirements in an effort to decrease the amount of parking and therefore increase quality of parking areas. In the coming sections of this professional report, the data indicates that the City of Dallas should take action to revise its current off-street parking regulations that would allow development to incorporate urban design standards, encourage multi-modal transportation options, and to allow for communities to develop private property with an appropriate quantity of parking.

Simple equations cannot address urban design principles, do not encourage multi-modal transportation, nor do they spur compact development. A new way of regulating parking needs consideration. The hypothesis of this professional report is if Dallas decreases or

eliminates its current parking requirements it can allow parking areas to be developed with appropriate urban design requirements, then development would be encouraged to be more compact and multi-modal. This shift would not make Dallas a perfect picture of new urbanist development, but would be an important baby step in that direction. In other words, if the negative effects of MPRs in Dallas are understood, then it can refocus these regulations to make development more attractive and encourage compact and multi-modal development with fewer personal vehicles, thus decreasing emissions.

This professional report compares parking regulations of the City of Dallas, Texas to other municipalities who have sought alternative ways of regulating parking and offers suggestions to decrease parking requirements to allow urban design and development, including denser urban form, within Dallas. This study does not include rationales of parking requirement calculations nor does it analyze what "the market" would do in the absence of MPRs. This study also does not attempt to calculate the fiscal benefits of eliminating MPRs.

This report highlights best practices of cities with alternatives to MPRs in an effort to foster urban design principles. This report is not intended as a ranking of cities but as a sample of some of their parking regulations. The alternatives suggested in this report will not instantaneously create calamitous change but describe one facet that the City of Dallas could undertake in order to transition its development from suburban development with a few pockets of urban design into a healthy and compact city.

CHAPTER 2

LITERATURE REVIEW

Parking requirements have made important improvements in traffic congestion and circulation since their widespread adoption in the mid twentieth century but have remained relatively unchallenged until recently. The sections below review literature on regulating parking and describe the overarching thoughts of each position from maintaining, modifying, and eliminating minimum parking requirements (MPRs).

2.1 Maintaining MPRs

Before the automobile age, buildings were sited close to the street and rarely provided any off-street parking spaces. This created traffic congestion as people blocked traffic because they were waiting for an open parking space or because they circled the block waiting for their passenger to need transportation services; this action was also later coined “cruising for parking” by Donald Shoup (2005). In an effort to mitigate traffic congestion and clean up the streets, municipalities adopted MPRs and had widespread popularity and success. In an article in Transportation Quarterly (2003), Erik Ferguson reviewed MPR history to create a model to determine the period in which MPRs gained the most popularity the results of which are depicted in the following graph (52).

Ferguson concludes that MPRs grew in popularity in the post-war suburbanization era because on-street parking created nuisance problems for communities and off-street parking solved those problems. MPRs were so successful that, “[a]fter 1955, ... the deluge of information on the parking problem rapidly subsided, and it was replaced by an eerie silence” (Ferguson, 2003, 53).

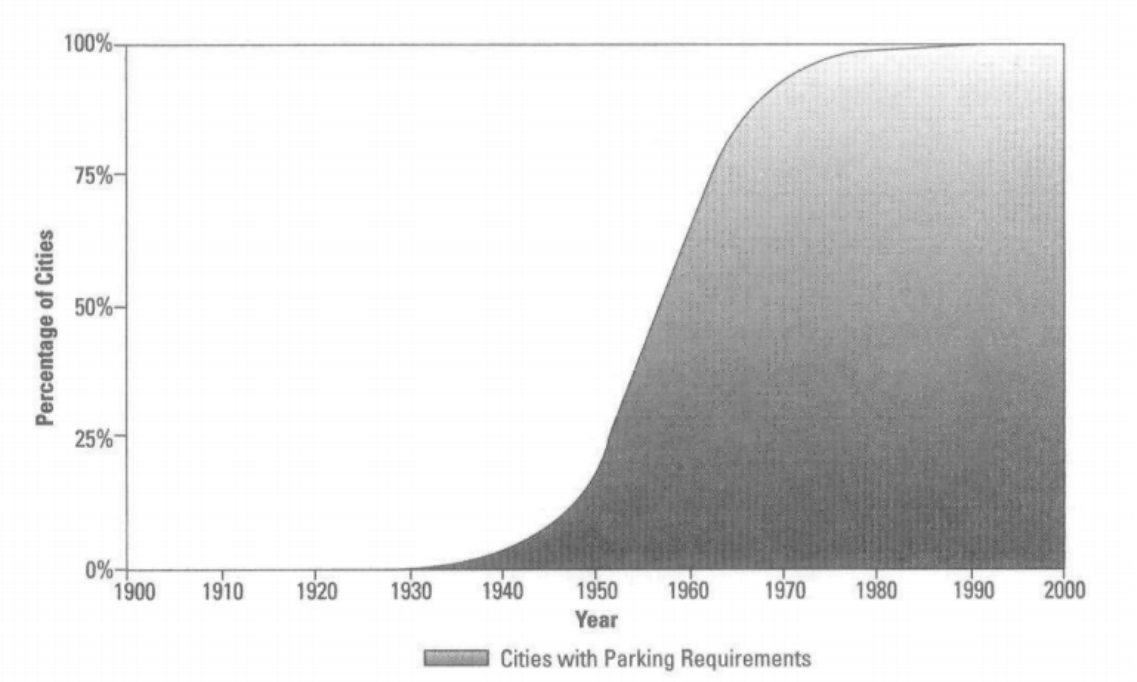


Figure 2.1 Percentage of cities with parking requirements by year.

2.2 Modifying MPRs

Other authors have seen the hardships that MPRs have had on development and have proposed alternatives to meeting the standard minimum parking requirements. The propositions by these authors create a middle-ground to suggest a compromise in MPRs without making fundamental changes. Some promote shared parking where peak demand is varied throughout the day, parking management zones, overall decreased MPRs, or various other tools to mitigate the negative impacts of empty parking lots.

In a policy report for San Francisco by SPUR (1998), the following five recommendations for policy and code changes were proposed to reduce costs associated with parking.

1. Encourage convenient pay-per-use automobile services such as car-sharing organizations.
2. Reduce minimum parking requirements for housing that serves populations that do not have a high frequency of car ownership.
3. Allow reductions in off-street parking requirements when a new curb cut would take away as many on-street spaces as the private parking spaces it would create.

4. For historic buildings, allow exemptions from new off-street parking requirements triggered by a change in use or occupancy.
5. Adjust the Planning Code's parking space size requirements to conform to the Department of Parking and Traffic's size requirements and to allow for a greater proportion of compact parking spaces.

2.3 Eliminating MPRs

Since the advent of the automobile's popularity, expansive and fallow parking lots have become ubiquitous in the suburban landscape. All authors who support the elimination of MPRs claim it to be a factor in this paradigm shift. Donald Shoup (2005) illustrates how zoning and the automobile have separated land uses, provided inexpensive land on the fringe of development, and because MPR are based on peak demand, parking lots are left empty for all but a few hours each day or even one day a year. Other authors also draw this correlation. In *The Compact City* (1996), the authors blame MPRs for empty parking lots and sprawl that create a low-density style of development. They add "Many proposals put forward for urban infill developments are rejected because they are unable to provide the high levels of car parking deemed necessary by local authorities. As one house-builder commented, the results are 'vast tracts of land covered in tarmac, monotonous suburban housing estates and unimaginative cul-de-sacs" (Burton et al, 1996,112).

Donald Shoup (1999) also argues that free and abundant parking has increased the costs of goods and services because the cost to provide that parking (land, construction, maintenance, etc.) is bundled into the costs of goods and services provided by that property. Shoup's agenda aims to eliminate MPRs and to instead shift the cost of parking to users and consumers. Shoup recognizes that removing MPRs with no other controls could create cruising for parking, which has a negative impact on air pollution and traffic congestion but suggests parking management and pricing tools to level out demand so that there will always be a supply of on-street parking. This would allow drivers to easily find parking for their vehicles in an appropriately priced space. Michael Llewyn and Shane Cralle (2007) largely agree but add, "Even if a free market in off-street parking might increase cruising, there is no reason to believe

that this problem outweighs the negative consequences of existing regulations. So when in doubt, we should give the free market a try" (7). In an article that shifts attention away from economic principles, Vinit Mukhija and Shoup (2006) argue for promoting quality of parking as opposed to quantity. They argue, "regulating the quality of parking has the potential to improve urban design" (296).

2.4 Conclusion

Dallas currently has a mix of all three of the above methods for parking requirements. The vast majority of Dallas falls within the maintaining MPRs scope with allowances to alternatives such as shared parking and special parking options. Some pockets of Dallas have decreased or eliminated MPR for historical buildings (i.e. Bishop Arts District, State-Thomas District, and Deep Ellum) and the downtown area has nearly eliminated MPRs (except new construction must provide parking at a rate of one space per two thousand SF of floor area). Since maintaining MPRs is the current practice for areas not in special districts or in the central business district in Dallas, this study examines best practices of other cities to discover a set of recommendations for Dallas.

CHAPTER 3

METHODS

Quantitative data on the cost of on-street parking is readily available but qualitative data, such as opinions and political implications, is scarce. This professional report aims to bring awareness to Dallas of alternative parking policies and their implications by learning from pioneering cities around the United States and through comparison of Dallas with other cities.

3.1 Selection of US Cities

This professional report compiles parking requirements of selected cities to compare and contrast alternatives to minimum parking requirements (MPRs) as adopted by other cities. The cities were selected based on a 2011 report by the New York City Planning Department, "Parking Best Practices: A Review of Zoning Regulations and Policies in Select US and International Cities". This report reviewed twelve cities, among those twelve cities nine were selected based on significant differences between Dallas and those nine cities parking requirements for office, retail, and restaurant and because they were located within the United States of America. The selected nine US cities are: Chicago, Milwaukee, Minneapolis, Philadelphia, Portland, San Diego, San Francisco, Seattle, and Washington, DC. Parking requirements of four of the largest cities in Texas, which are Austin, Fort Worth, Houston, and San Antonio, were also studied to compare to Dallas due to similarities in culture and demographics. Cities selected may differ from Dallas in size, density, and culture but each provide useful insights as to alternative parking policies and practices.

3.2 Selection of Parking Requirement Table

A matrix of the parking requirements of office, retail and restaurant uses and examples of how those requirements translate into the number of parking spaces required are located in Chapter 4. The City of Dallas has compiled multiple plans that indicate their desire to reduce

automobile use and it also has the most extensive mass transit system in Texas. For these two reasons, suggestions for adopting alternatives to MPRs are also included in Chapter 5.

3.3 Selection of Questionnaire Responses

Specific questions as to their effects on development, politics, and public opinion were sent to planners of ten cities, including Chicago, Fort Worth, Milwaukee, Minneapolis, Philadelphia, Portland, San Diego, San Francisco, Seattle, and Washington, DC. Responses were returned by three cities, Milwaukee, Minneapolis, and Portland. Based on the answers provided, insights were gained as to policy implications to adopting alternative parking requirements and are discussed in Chapter 4. The data collected for this professional report includes email correspondence and internet research on the selected cities' parking requirements. IRB approval was approved and the research is considered exempt.

CHAPTER 4

RESULTS

The following sections describe the outcome of research conducted for this report. Research includes two comparisons of other cities with Dallas and selected responses from a questionnaire regarding the efficacy of adopting alternatives to minimum parking requirements. The first comparison of alternative parking requirements includes data from nine cities in the United States and the second compares data of the four largest cities, by population, in Texas. The final section of this chapter includes selected responses by the three cities who participated in a questionnaire that was sent to ten cities on the effectiveness of adopting alternatives to minimum parking requirements.

4.1 US Cities with Alternative Parking Requirements

Nine cities were surveyed, Chicago, Milwaukee, Minneapolis, Philadelphia, Portland, San Diego, San Francisco, Seattle, and Washington, DC, who each have adopted regulations to reduce parking requirements outside of their respective Central Business District (CBD). All nine have significant parking reductions allowed by right or administratively or no parking requirements, unlike Dallas where outside of its CBD or certain planned development districts has antiquated minimum parking requirements based on use and floor area only.

The following tables list the nine cities parking requirements for office, retail, and restaurants outside the CBD. Unless otherwise noted, each number represents the ratio of parking required as one parking space for each specified SF of gross floor area and, similarly, the maximum amount of parking that is allowed.

	Minimum Required Parking Spaces for Office (1 space per sq. ft. of GSF)			
	Minimum		Maximum	
City	Low FAR	High FAR	Low FAR	High FAR
Chicago	500	752	None	None
Dallas	333	333	None	None
Milwaukee	1/500 of the first 2,000 SF; 1/1,000 SF over 2,000 SF		None	None
Minneapolis	500	300	Sometimes	Sometimes
Philadelphia	0	0	None	None
Portland	500	294	None	400 in EX
San Diego	300	1,000	200	200
San Francisco	500	500	None	None
Seattle	1,000	1,000	145 spaces	145 spaces
Washington, DC	600	1,800	None	None

Table 4.1.1. Parking requirements for offices in selected cities in the United States.

	Minimum Required Parking Spaces for Retail (1 space per sq. ft. of GSF)			
	Minimum		Maximum	
City	Low FAR	High FAR	Low FAR	High FAR
Chicago	500	752	None	None
Dallas	200*	200	None	None
Milwaukee	1,000	1,000	285	285
Minneapolis	500	300	Sometimes	Sometimes
Philadelphia	0	0	None	None
Portland	196	500	None	200 in EX
San Diego	200	1,000	181	154
San Francisco	500 less than 20,000 SF plus 250 in excess of 20,000 SF		None	None
Seattle	500	500	145 spaces	145 spaces
Washington, DC	300	3,000	None	None

*For uses under 10,000 SF; 220 for uses under 40,000 SF; 250 for uses under 100,000 SF; 300 for uses over 100,000 SF

Table 4.1.2. Parking requirements for retail in selected cities in the United States.

	Minimum Required Parking Spaces for Restaurant (1 space per sq. ft. of GSF)			
	Minimum		Maximum	
City	Low FAR	High FAR	Low FAR	High FAR
Chicago	500	752	None	None
Dallas	100	100	None	None
Milwaukee	1,000	1,000	285	25
Minneapolis	500	300	Sometimes	Sometimes
Philadelphia	0	0	None	None
Portland	63	350	None	75 in EX
San Diego	67	1,000	40	153
San Francisco	200	200	None	None
Seattle	250	250	145 spaces	145 spaces
Washington, DC	300	3,000	None	None

Table 4.1.3. Parking requirements for restaurants in selected cities in the United States.

Although the difference between these ratios may appear to be negligible, the differences and the area devoted to parking vary greatly from the regulations of Dallas. Some notable differences of these cities parking regulations include the following:

- Every city has some degree of parking reduction by right or administratively based on proximity to transit or zoning district.
- Chicago has no MPR for the first four thousand, ten thousand or 35,000 square feet or twice the lot area, whichever is greater, depending on the district.
- Philadelphia does not have MPRs for office, retail, or restaurant, among other uses not described in this professional report.
- Employment and industrial zones in Portland do not have MPRs but rather a maximum allowed number of parking spaces. Additionally, Portland does not have MPRs if a site is located within five hundred feet of a transit street with frequent service.

- San Diego has comparable parking requirements to Dallas in its low density districts, but significantly lower parking requirements, the same MPR that Dallas has for warehouses, in its high density districts.
- San Francisco also has lower MPRs than Dallas but also does not have MPRs for office uses less than five thousand square feet of floor area.
- Seattle can waive the parking requirement for restaurants less than five thousand square feet and retail less than 1,500 SF in designated pedestrian zones.

Shown graphically, the effects of these parking requirements, as compared with Dallas can be seen below for a 3,500 SF office (Figure 4.2.1), retail (Figure 4.2.2), and restaurant (Figure 4.2.3) in a high density areas with reductions near transit. Each of the below figures demonstrate that Dallas has almost twice as much parking required than each of the listed cities because its minimum parking requirements grant no standard reduction of parking.

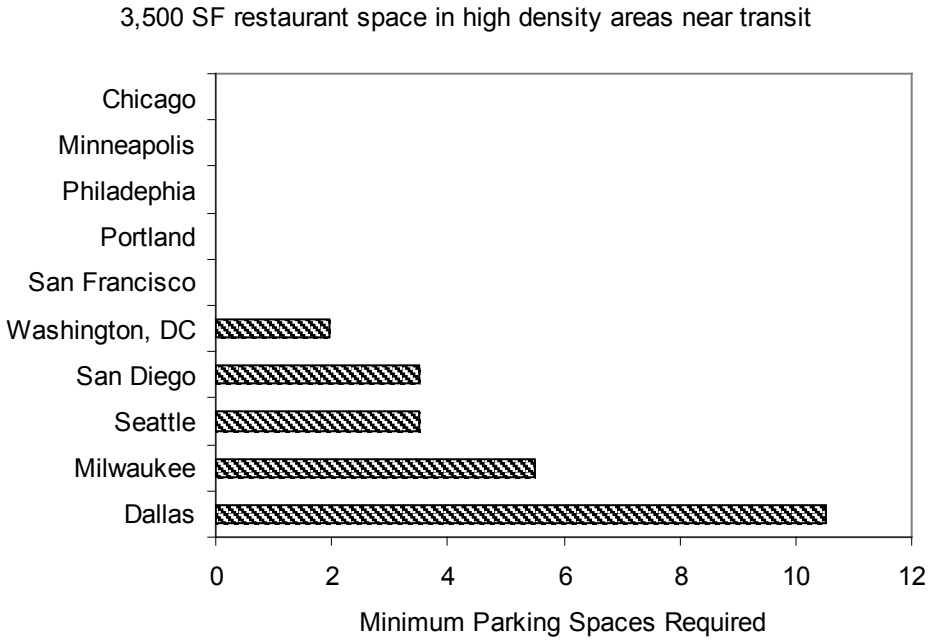


Figure 4.1.1 Parking required for 3,500 square feet of office.

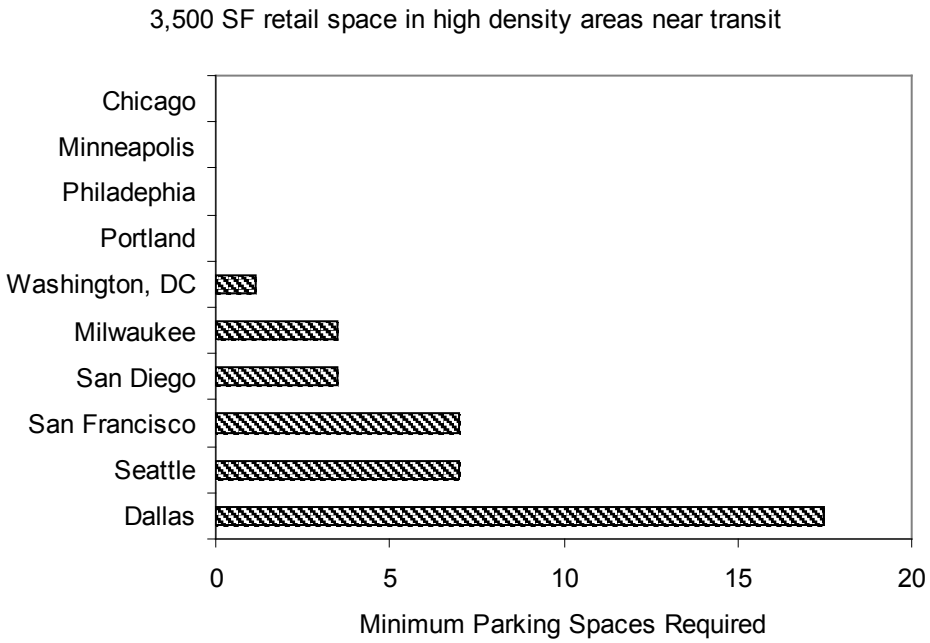


Figure 4.1.2 Parking required for 3,500 square feet of retail.

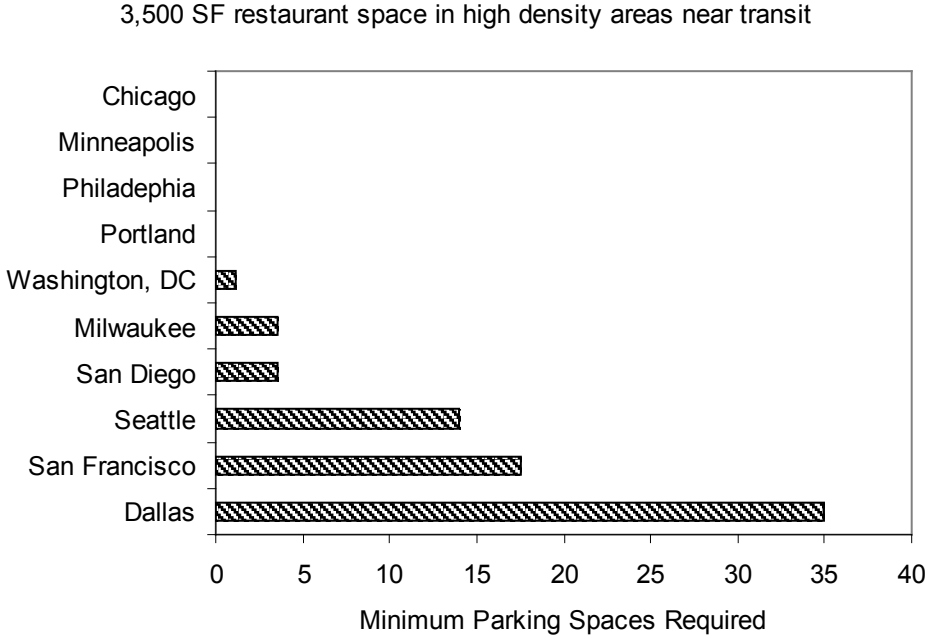


Figure 4.1.3 Parking required for 3,500 square feet of restaurant.

4.2 Large Cities in Texas

The five largest cities in Texas, based on population, are Houston, San Antonio, Dallas, Austin, and Fort Worth, respectively (2010 Census). On a strict ratio basis without parking reductions, Dallas is average with these cities in Texas as shown in Table 4.2.1 through Table 4.2.3. However, Fort Worth and San Antonio, with maximum parking allowed regulations, have some provisions that go beyond the traditional minimum parking requirement based on use and gross floor area.

	Required Parking Spaces for Office	
City	Minimum	Maximum
Austin	1 per 275 SF	None
Dallas	1 per 333 SF	None
Fort Worth	1 per 400 SF	None
Houston	1 per 400 SF	None
San Antonio	1 per 300 SF	1 per 140 SF

Table 4.2.1. Parking requirement for offices in large Texas cities.

	Required Parking Spaces for Retail	
City	Minimum	Maximum
Austin	1 per 275 SF	None
Dallas	1 per 200 SF*	None
Fort Worth	1 per 250 SF	None
Houston	1 per 200-500 SF, based on size	None
San Antonio	1 per 300 SF	1 per 250 SF

Table 4.2.2. Parking requirement for retail in large Texas cities.

	Required Parking Spaces for Restaurant	
City	Minimum	Maximum
Austin	1 per 100 SF if <2500 SF, 1 per 75 SF if >2500 SF	None
Dallas	1 per 100 SF	None
Fort Worth	1 per 100 SF	None
Houston	1 per 125 SF	None
San Antonio	1 per 100 SF	1 per 40 SF

Table 4.2.3. Parking requirement for restaurants in large Texas cities.

For large Texas cities, Fort Worth is the leader in creative parking requirement solutions because it allows the market to dictate the number of parking spaces for development. Its zoning code does not require parking for developments that are farther than 250 feet from one and two family zoning districts and allows significant reductions for developments in mixed use districts that are within that buffer.

> *The following table establishes the minimum parking requirements for uses located in residential zoned property or within two hundred fifty feet (250') of One or Two-Family zoned property. For all other uses, no minimum parking spaces shall be required.*
>
> (§ 6.201 B2)

Additionally, mixed use developments that are within 250 feet of those districts and are within one thousand feet of an approved passenger station, their parking requirements may be reduced up to half.

Reductions and Maximums in Mixed Use Districts

Location	Minimum	Maximum
Project not located within a 250 ft of a One or Two family zoned property	None	100 percent
Project located within a 250 ft of a One or Two family zoned property	75 percent	100 percent
Parking provided within 1000 feet of an entrance to an existing or approved passenger station	50 percent	100 percent

Table 4.2.4. Parking reductions and maximums for mixed use districts in Fort Worth. Fort Worth Planning Department, 2012.

Fort Worth has also adopted maximum parking standards where developments that provide 125 percent or more the number of required parking spaces must provide additional parking lot trees in the order of one tree for every ten spaces above the maximum.

> *The maximum number of parking spaces shall not exceed 125% of the minimum parking requirement for all uses listed in the table set out below. Parking in excess of the maximum shall be allowed by meeting the requirement of one tree above the minimum required under Chapter 6, Article 3, for every additional ten (10) parking spaces beginning with the first additional parking space and for each ten (10) spaces thereafter.*
>
> (§ 6.201 B2)

4.3 Questionnaire Responses

Questionnaires were electronically sent to planners of the above listed nine US cities and Fort Worth to gain insights on the effects on development, politics, and public opinion. Of those ten cities, three responded Milwaukee, Minneapolis, and Portland. Below are selected segments of their responses.

In each city, businesses supported allowing flexibility with parking requirements. In Portland, the public had mixed feelings about parking reductions. Some commercial neighbors with nearby apartments with little or no parking were concerned about lowering parking requirements. However, other businesses supported the parking reductions in favor of more walkable communities. In Minneapolis, a nearby neighborhood voiced concerns that a nearby popular mixed use area would bring traffic to their streets. However, residents of Minneapolis were generally supportive of increasing parking lot landscaping and therefore the ordinance was passed.

When asked if the modifications to the parking requirements been effective in changing the urban environment to date, Milwaukee responded that MPRs in have historically been lower than the national average and therefore no significant impact was made when they were further reduced in 2002 and 2008. Milwaukee also added that “most developers tend to provide more parking than what is required by code”.

Minneapolis responded, “The most dramatic changes have been those related to restaurants and coffee shops [who had difficulty] meeting the [higher] parking requirement. So these changes made it much easier to establish a new restaurant.” Milwaukee also expresses that bicycle use has also increased as a possible affect of MPR reduction and “have contributed to shifting the way people think about parking. Often there is more concern about situations where a development seems to be providing too much parking.”

Portland also expressed that parking reductions have been effective in changing the urban environment. Until recently, banks withheld loans if a development proposed little or no parking. This forced developments to construct a predetermined amount of parking that the bank deemed sufficient so that the loan held less risk. However, last year a developer was able to self-finance their project and opted to provide no parking. Since all fifty apartments in this development were leased within three weeks, "banks have been more willing to finance apartments with no parking. There are about twenty-two such apartments in various stages of design, permitting and construction right now."

Milwaukee's parking requirements are the same requirements for warehouses in Dallas, but Milwaukee also adopted a maximum to cap the number of spaces at retail and restaurant sites in 2008. Since its recent zoning rewrite in 2002, Milwaukee has not observed any impacts from passing their ordinances to essentially require no parking. Minneapolis also has significantly lower parking requirements than Dallas and their response is very interesting. Minneapolis notes the changes has been successful in changing how the public perceives parking. People in Minneapolis are now concerned that too much parking is provided. Portland has also brought up another important point in that lenders also have minimum parking requirements. Projects are unlikely to be approved for loans unless a project is likely to be profitable enough to pay its debts.

CHAPTER 5

DISCUSSION

This chapter offers suggestions for Dallas to consider when it decides to review its minimum parking requirements (MPRs) as its comprehensive plan prescribes. Dallas is located in a metropolitan region where car ownership is high and development is spread out, often without sidewalks, bike lanes, and in some areas, mass transit. However, it is also unique to Texas as it is the home to the one of the largest mass transit networks in Texas (American Public Transportation Association 2011), has pockets of dense urban development, and has recently adopted the 2011 Dallas Bike Plan. Based on these advantages, Dallas has an opportunity to join Chicago, Fort Worth, Milwaukee, Minneapolis, Philadelphia, Portland, San Diego, San Francisco, Seattle, and Washington, DC to encourage multi-modal transportation and reduce its MPRs. The following sections will discuss why Dallas should consider reducing or eliminating MPRs.

5.1 Incentivize Compact Car Parking

Shopping centers built after the 1960's in Dallas with a mix of retail and restaurant show that minimum parking requirements have created many excess and clumsy parking areas with compact parking located on the perimeter. Figures 5.1.1 through 5.1.5 show that shopping centers on Saturday afternoon have most of the parking near the door of the business are occupied while the parking on the fringe is available. Because Dallas requires high MPRs as demonstrated in the previous chapter and allows up to 35% of its required parking to be compact (§ 51A-4.301d1Cii) with no other design requirements for compact spaces, parking on the fringe becomes compact car parking but is often either filled with outside storage (Figure 5.1.1), the amount of parking spaces in compact car rows is often cut in half because drivers perceive that the spaces are too narrow to allow a car to park in the adjacent space (Figure

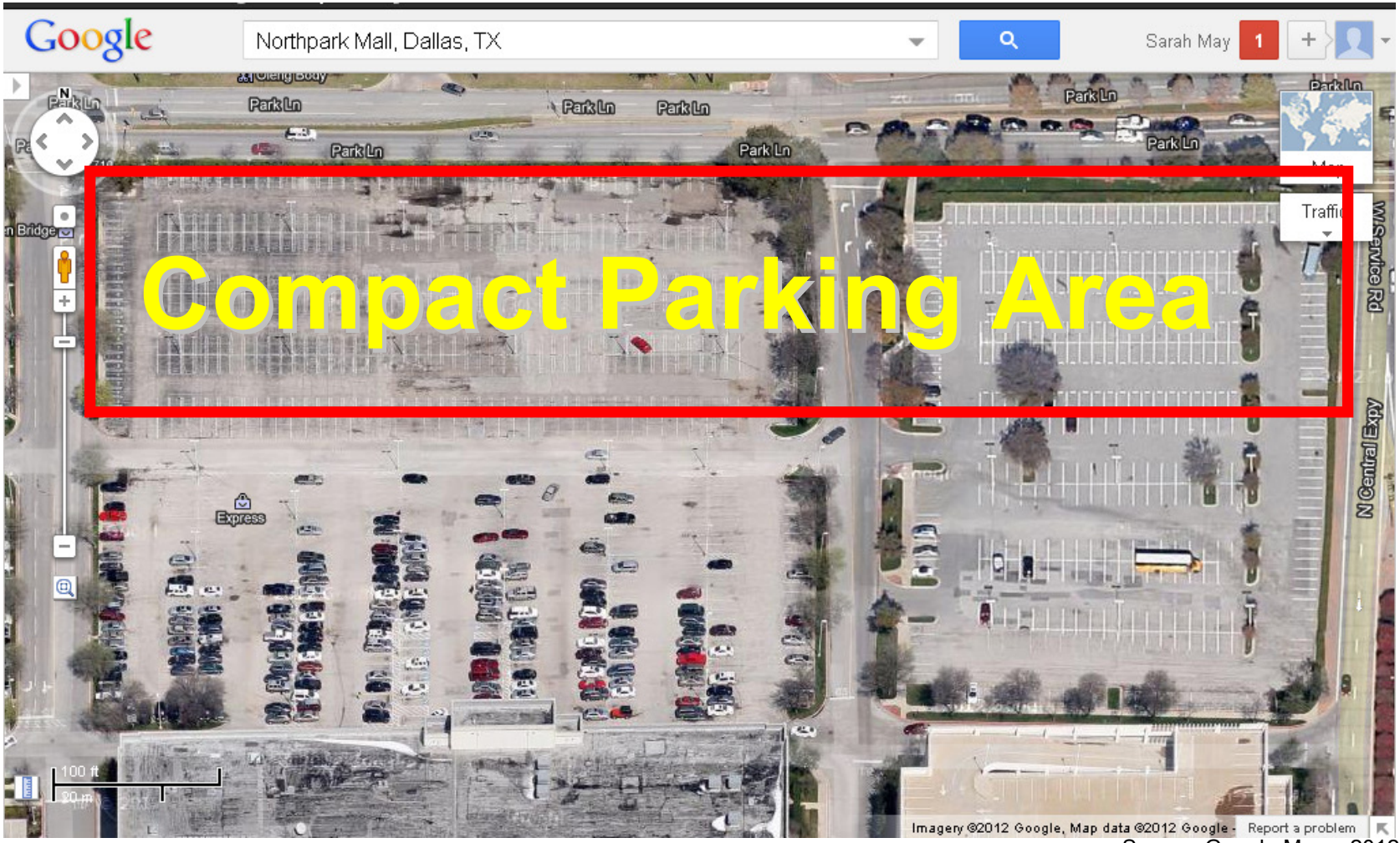
5.1.2), oversized vehicles intentionally use two spaces (Figure 5.1.3), or large developments choose to alienate 35% of their provided parking just to meet the MPRs of Dallas (Figure 5.1.4 and Figure 5.1.5). These figures show that developments with retail and restaurant are over parked by a factor of 35% or more and if compact car parking is provided, it shall be located closer to primary public entrances as regular parking spaces.

Figure 5.1.1. Compact car spaces located on the perimeter with outside storage on the left.

Figure 5.1.2. Compact spaces often decrease the amount of available parking because drivers perceive their vehicles are either too large or that a large vehicle will park too close to them in compact car rows.

Figure 5.1.3. Large vehicles intentionally occupy two compact car parking spaces.


Figure 5.1.4. Compact car parking island of approximately 130 compact spaces.



Source: Google Maps, 2012

Figure 5.1.5. Google image of Figure 5.1.4 shows that less than 50% of this parking area is occupied.

5.2 Reduce or Eliminate MPRs near Transit

As shown in the previous chapter, Dallas has significantly higher parking requirements than Chicago, Fort Worth, Milwaukee, Minneapolis, Philadelphia, Portland, San Diego, San Francisco, Seattle, and Washington, DC for office, retail, and restaurant, especially when compared to those cities in dense areas served by transit. Chicago, Milwaukee, Portland, San Diego, and Seattle all have provisions to significantly reduce or eliminate, their already much lower MPRs for sites near transit. This allows those cities to create walkable, mixed use areas that the *forward*Dallas! comprehensive plan encourages.

Dallas has an opportunity to take advantage of its mass transit system, Dallas Area Rapid Transit (DART), which has the longest light rail system in the country (Yonah Freemark, The Transport Politic, entry posted December 5, 2010) and create an environment that encourages transit oriented development (TOD). TODs are designed to encourage walkable communities by encouraging alternative forms of transportation for the development and surrounding areas. Therefore, MPRs should be significantly reduced, similar to Fort Worth who has a much smaller transit system, or eliminate MPRs altogether near transit stations, which all of the selected US cities allow. As shown in Figures 5.2.1 through 5.2.3, a quarter mile radius from light rail stations take up a small amount of land but would encourage denser, multi-nucleated development with less parking surfaces and therefore alleviate traffic congestion in the surrounding areas.

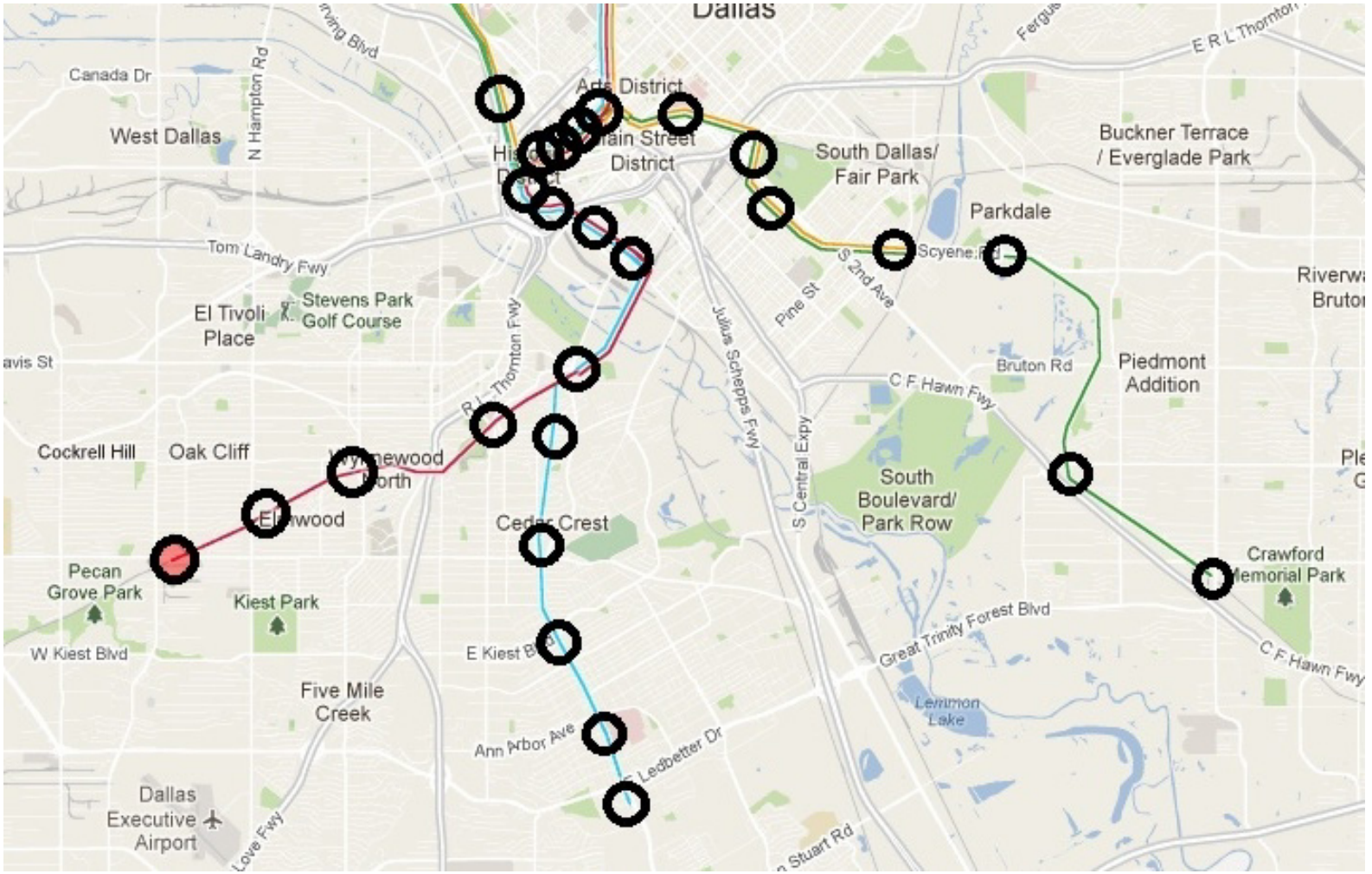


Figure 5.2.1. Areas in the southern half of Dallas that would benefit from these parking requirement reductions with a quarter-mile radius around light rail stations.

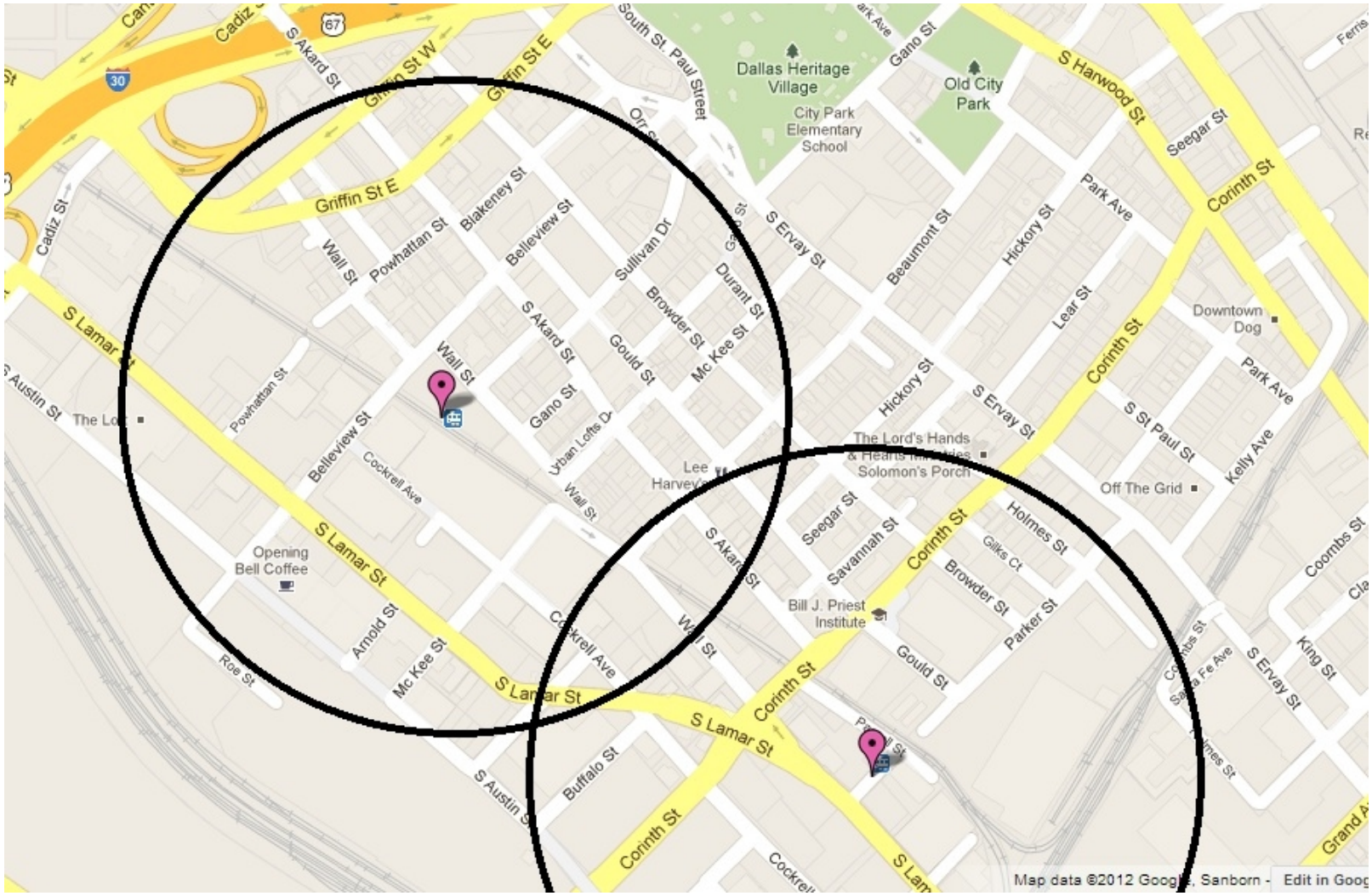


Figure 5.2.2. Some areas of light rail have stations within a half mile.

Although Dallas has an extensive light rail system, bus service should also be considered for parking reductions. Portland designates transit streets which are streets that have transit service, including bus routes that run on a twenty minute interval or less. In Portland, any site that is within five hundred feet of a transit street is not required to provide parking.

5.3 Reduce or Eliminate MPRs in Mixed Use Districts

Areas with office, retail, and residential are important to Dallas' comprehensive plan. Walkable mixed use building blocks are a priority to residents to enable them to live, work, shop, and play in the same community. Realizing the advantages of mixed use areas Fort Worth has allowed an automatic 25% reduction of MPRs for all uses (see Table 4.2.4), no parking requirements for historically significant buildings, on-street parking credits, and parking caps in their Mixed Use Districts. Dallas has many vibrant mixed areas that utilize shared parking, parking special exceptions, or have gone through zoning changes so that they could reduce their parking requirements. However, each of those options take time and effort and therefore can be haphazard, cumbersome, and discouraging to economic development of mixed use areas. Automatic parking reductions, similar to Fort Worth, would allow a mix of uses and create "walkable, mixed use building blocks" that the *forward*Dallas! prescribes.

5.4 Low Density Residential Fears

One major concern of citizens when parking requirements are reduced or eliminated is how it would affect traffic in residential areas. One easy way Fort Worth has dealt with these fears is to create a 250 buffer around one or two family zoning districts where MPRs would remain in effect for districts that are not mixed use and outside of this buffer, there are no MPRs. This reassures low density residents that spillover parking would not occur in their neighborhoods.

5.5 Reduce or Eliminate MPRs for Small Businesses

Job growth is a core value in Dallas's comprehensive plan. One way to incentivize small businesses is to allow businesses under a certain size to be excluded from MPRs. Seattle allows restaurants under five thousand square feet and retail uses under fifteen hundred square feet in pedestrian zones to be exempt from MPRs. Similarly, Chicago also exempts businesses from MPRs for the first four thousand, ten thousand or 35,000 square feet or twice the lot area, whichever is greater, depending on the district. Similar regulations have been adopted in some areas of Dallas, such as Deep Ellum but this was done through a planned development district.

5.6 Require Travel Demand Management Plans

For municipalities who have eliminated MPRs, they have adopted creative solutions to ensure traffic does not become problematic for large developments. Portland requires large institutions such as universities and hospitals to submit a travel demand management plan. Similarly, Seattle requires a transportation management program if a large institution exceeds 135% its MPR, which is also be much lower than the current MPRs of Dallas. Baylor University Medical Center, one of Dallas's large regional hospitals, has a planned development that includes a traffic management plan and allows for any existing "Baylor-related use" as of 2006 to use the parking already provided for the area (§ 51P-298). This allows medical offices, clinics, laboratories, child and adult day care facilities, and other medically oriented facilities to be avoid having to demonstrate their ability to provide off-street parking in this area. Travel demand management plans could also be utilized for areas with existing parking woes like Lower Greenville and Henderson Avenue where spillover parking into nearby low density residential areas creates political turmoil.

5.7 Parking Maximums and Locational Standards

Although Dallas has a very different climate than that of Portland and Seattle, it has much in common with Fort Worth. Each has set parking maximums to reduce storm water runoff to varying degrees but Fort Worth has allowed parking to exceed the set maximum if additional

landscaping requirements are met. Dallas could benefit from setting parking maximums and locational standards so that urban design principles would be encouraged. The Fair Park planned development has parking locational standards because it requires a parking setback of thirty feet in certain subareas (§ 51P-595). Requirements to locate parking towards the rear of the property allow for a street-wall presence and a pedestrian friendly environment adjacent to the street.

CHAPTER 6

CONCLUSION

"The only person who likes change is a wet baby." Mark Twain

This professional report has reviewed nine US cities who have adopted alternatives to minimum parking requirements (MPRs) and how those alternatives compare to the MPRs of the City of Dallas. Second, it has reviewed how Dallas compares with other large cities in Texas and found that Fort Worth has taken the lead to reduce parking requirements. Additionally, this professional report has reviewed responses from Milwaukee, Minneapolis, and Portland as to the effectiveness of the ordinance that refocused their parking requirements to vastly reduce the amount of parking required or, in certain cases, eliminating MPR. Finally, this professional report has compiled a set of suggestions for planners at the City of Dallas to evaluate in order to proceed with the comprehensive plan implementation measures discussed in the introduction.

The minimum parking requirement regulations that have had their origins in Dallas since the late 1940's have seen their intended purpose fulfilled. New development and adaptive reuse is destined to fail if patronage is prevented by lack of parking or connectivity. The time has arrived for Dallas to rethink minimum parking requirement regulations, their impact on society and the environment, and how this antiquated method can be altered to produce a walkable and multi-modal urban environment as prescribed in its comprehensive plan. With cities like Chicago, Fort Worth, Milwaukee, Minneapolis, Philadelphia, Portland, San Diego, San Francisco, Seattle, and Washington, DC who have altered their parking regulations and are successfully implementing them, the City of Dallas has many opportunities to glean what degree of change is best for its population. One thing is clear, maintaining our current minimum parking regulations will leave Dallas in the past and irrelevant with Planned Developments continuing to spiral out of control.

APPENDIX A

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(Appendices are not required. This is how to properly format appendices if you have any.)

Appendix A content goes on this page.

APPENDIX B

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BIOGRAPHICAL INFORMATION

Sarah May has lived and worked in or near Dallas for all but a few years of her life. She graduated from Texas A&M University, College Station with a B.S. in Construction Science. After graduation, she was employed by the City of Dallas as a zoning senior plans examiner to review construction documents for zoning compliance for four years and was promoted to Senior Planner for the Building Inspections Office. This experience has offered insight into Dallas' parking policies and history and has inspired her to further research alternatives to Dallas' current parking policies. She is currently enrolled at the University of Arlington for her M.S. in City and Regional Planning with the hopes of becoming a city planner in the future. Particular interest of hers is urban design, transit oriented development, mixed use projects, and sustainable development.