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Working Title

Addressing Affordability in Seattle through Parking Policy

Project Abstract

While many people enjoy the luxury and convenience of on-site parking, most do not know that their parking spot is raising the cost of their housing. Many cities, including Seattle, have minimum parking requirements that regulate the amount of parking spaces built for new residential dwelling units. The average cost of building a parking space in Seattle is $35,000, so housing developers drive up costs to cover the expensive cost of parking. Given the high cost of housing in Seattle, how can we change our approach to parking policies to address affordability? My qualitative study examines current policies around minimum parking in Seattle and uses case studies from various international cities to explore alternative practices. This information is supplemented with feedback from local multi-family housing developers to grasp the financial implications of my recommendations. I recommend that Seattle look into maximum parking limits and parking caps as a change in direction that could decrease housing cost through construction savings and by freeing up existing parking lots for infill housing developments.

Introduction

The project aims to address the ongoing issue many growing cities like Seattle face: housing affordability. Like many metropolitan cities, Seattle is experiencing housing affordability issues following population and economic growth. In King County, the median "home value in Seattle is currently at $772,729" (Zillow) and the median rent price is $2,595. This is vastly different compared to our national average where the "median home value is at

$213,146" (Zillow) and the median rent price is $1,600. This shows that the housing value in Seattle is nearly 3.4 times more expensive compared to the country, as a whole, and rent is nearly 1.6 times more expensive than the country's average. In addition, it is also expected that "home values in Seattle will continue to rise up to 8.4% within the year, while home values nationwide are expected to rise up to 3% within the year" (Zillow). In other words, price growth in housing is making Seattle less affordable to more people throughout time. Given this growing issue with housing affordability, I wanted examine what are some of the factors that impact cost of housing.

While there are many factors that influence the cost of housing, most people are not aware that the existence of minimum parking requirements play an essential role in making housing less affordable. To mitigate parking shortages in the city, many cities often have policies in place that require developers to build parking spaces in addition to the building they are developing. One type of minimum parking requirements cities often have is "off-street parking requirements". Off-street parking requirements are intended to "minimize traffic congestion and hazards to motorists and pedestrians and provide safe and convenient vehicular access to all land uses, and make appearance of parking areas more compatible with surrounding land uses" (17 Placer County Ch.17.54.050). This parking minimums requires housing developers to build a certain amount of parking spots following a development of a new building. Despite the fact that off-street parking requirements provide a large supply of parking at no cost to the city, the "high costs of parking construction and maintenance drives up the cost of housing" (King County Metro, 2015). On average, "each parking spot in Seattle costs around $35,000" (Shoup 2014) to construct as expensive land, raw materials, and labor are used to build the parking structure. In addition, an average parking slot takes up "330 cubic ft. of space" (Chilton & Mackie, Mobility Lab). The amount of space parking consumes restricts developers from building more residential

units. As a result, the creation of these on-site parking spaces increases the sales price or rent price of homes, whether or not the resident uses the actual parking space. The goal of this project is to re-define policies around parking to address affordability. The product will be a qualitative study that examines best practices of parking management with affordability in mind. To determine feasibility of alternative parking policies, I will also combine input from interviews with multi-family housing developers from Seattle.

In this paper, I begin by providing a preliminary literature review on the context behind ideals of parking minimums. I discuss the history of parking requirements, parking requirements in context to Seattle, critiques on parking, importance of studying parking in relationship to housing, and the various quantitative researches performed on parking minimum requirements in major U.S cities. After speaking on studies conducted in other cities, I focus how parking minimums were studied in Seattle and describe the new parking reforms that were passed in the April 2018. Following this, I briefly describe the methodology I used to research my topic. After explaining my methodology, I provide a detailed literature review on the two best practices for parking management that Seattle has not attempted yet: parking maximums and parking caps. I also use two international cities, London and Zurich, as case studies to explore alternative policies around parking and how each city was able to successfully implement parking maximums and parking caps. Following this literature review, I provide a short analysis of what multi-family housing developers in Seattle had to say about their process of creating parking and their opinions on alternative approaches to parking requirements. Concluding the results to my research, I talk about the significance of my study and suggest two alternative recommendations to changing Seattle's policies around parking as next steps.

Preliminary Literature Review

Early History of Parking

In the early 20th century, as cars slowly started to dominate the country, many cities primarily used two different methods to manage parking. The first method cities used was installing parking meters. When parking meters were first introduced into cities in the 1930s, parking meter manufacturers provided it for free to cities. The manufacturers kept the revenues of these parking meters until the meter was paid for in 6 months (Chilton & Mackie, Mobility Lab), after that cities were able to collect all the revenue. Besides parking meters, cities also managed parking by creating "off-street parking requirements", also known as mandatory parking minimums. These off-street parking requirements particularly became very popular after the Second World War as suburbanization sprawled throughout the country. As car usage increased throughout the country, the demand for parking also rose and as a result, many local governments adopted the off-street parking requirement to mitigate issues related to shortages of parking spaces. Off-street parking requirement made it mandatory for developers to build a certain amount of parking spots alongside their new building. This policy provided a large supply of parking in the city without the government having to pay the expense of building the actual parking structure.

Municipal Codes: Off Street Parking in Seattle

Although parking policies have changed since the early 20th century, many cities still have minimum parking requirements in their city codes that help regulate and manage parking availability in the city. Like many cities in the country, Seattle also has off-street parking requirements in place. In Seattle, minimum parking requirements are based on "gross floor area

of a use within a structure and the square footage of a use when located outside of an enclosed structure, or as otherwise specified" (23 City of Seattle Ch.23.54.015). The minimum parking requirements differ based on the building's usage. For the purpose of this study, I will be focusing on minimum parking requirements, specifically off-street parking requirements, for multi-family housing. Minimum parking requirements for residential uses for multi-family housing is stated in Municipal code 23.52.015. While there are exceptions to this rule, the city generally requires developers to build 1 parking space/1 dwelling unit or 1 parking space/2 small efficient dwelling units for multi-family residential uses. In multi-family units within University of Washington parking impact area or the Alki area, the city has different requirements in place as the demography of home buyers and renters differ in these neighborhoods. City of Seattle also has different minimum parking requirements for multi-family residential use requirements with income criteria for low-income housing or affordable housing. In addition, the city also does not require any minimum parking requirements in the Station Area Overlay District, urban center, and urban villages located within 1,320 feet of a street with frequent transit service. Besides minimum off-street parking requirements, the city also has maximum parking requirements in place as well. In Municipal code 23.52.015, the city states that there are maximum parking requirements in the Stadium Transition Overlay District, in all commercial zones except c2 zone and commercial uses in multi-family zones. Although the city has maximum parking requirements in place, these policies are primarily focused in commercial areas.

Critiques on Parking

Parking issues have existed as long as cars have existed on roads. To resolve these issues, cities have created zoning ordinances and subdivision regulations requiring parking. Throughout

the years, there have been numerous of articles and books that have examined and critiqued parking policies in cities. One of the earlier articles that spoke on policy issues involving parking was written in 1995 by Donald Shoup, now considered one of the pioneers of parking reformation in the United States. In his article, "An Opportunity to Reduce Minimum Parking Requirement", Shoup addresses his frustration with commuters being able to park their auto vehicles for free. A survey from commuters in Southern California found that "93 % of automobile commuters park free" (Shoup 14). He explains that the essential reason commuters park free is due to the fact that many people have "employer-paid parking or decide to park free on the street" (14). In this article, he also spoke on the legislation that was passed in California that implemented a parking cash-out program for employees that would give up their subsidized employer-paid parking. Although he believes this legislation was a good attempt in trying to get employees to use public transit and other modes of transportation, the legislation failed as cash-out programs like these often caused "spillovers", where employees will take the cash and park for free on off-street parking. This article established that there were shortcomings to this cash-out program, as parking was still convenient and cheap for employees. Therefore, if another incentive program were to be implemented similar to that of the cash-out program, Shoup makes it clear that parking should not be easily accessible. In another article, "The High Cost of Free Parking", Shoup explained what local planners and politicians should do to resolve this issue where cars would be the primary modes for transportation. Shoup states three approaches to bettering parking reform. The first approach emphasized the need to implement a price for curb parking. Shoup stated that traffic is inevitably apparent when "curb parking is underpriced and overcrowded" (Shoup 20). The second approach mentioned was the idea of returning the parking revenue to pay for local public services. The third and foremost approach Shoup highlights is the

idea that cities should remove minimum parking requirements. Shoup explains that minimum parking requirements "force feed the city with parking spaces, and removing a parking requirement simply stops this force-feeding" (31). In other words, Shoup believes that the elimination of minimum parking requirements will help stop the excess production of parking spaces. Both articles provide great context to how parking policies and requirements have been challenged from various angles.

Previous Studies Conducted on Parking Requirements

Parking Minimums and Modal Choice

There have been multiple studies that have analyzed the relationship between how minimum parking requirements impact modal choice or car ownership. In 2012, Rachel Weinberger conducted a study to understand the effects of guaranteed parking at home on mode choice. For her research, Weinberger used three neighborhoods as part of her case study to determine the impact residential off-street parking had on an individual's choice to drive. Weinberger did this by studying the "Google Earth survey over 2000 properties paired with City's tax lot database and a generalized linear model using census tracts" (Weinberger 93). Results from her analysis showed that there was a clear relationship between guaranteed parking at home, off street parking, and a greater inclination for individuals to use automobiles for modes of transportation. This study demonstrated that there was a strong correlation to availability of off-street parking and individual's choice to drive. In other words, guaranteed off street parking often times encouraged people to drive their motor vehicles over taking public transportation. Guo Zhan, a researcher at New York University, conducted a similar study to that of Weinberger in 2013. While Weinberger studied the relationship of street parking and mode choice, Zhan

focused his research on studying the impact of residential parking supply on private car ownership. In his research, Zhan utilized an empirical study to answer whether "residential parking regulations could be used as a demand management strategy" (Zhan 18) to influence travel behavior. For the study, Zhan used Google Street views and Bing maps to analyze and model 770 random households and the households' "parking supply, including garage size, driveway spaces, and on-street parking" (19). Findings from the analysis and model displayed that that parking supply greatly influences household car ownership. The study also proved that while household income and demographic variables were essential indicators, parking supply proved to be the dominant indicator to understanding car ownership. Thus, Zhan suggests that planners and other stakeholders revisit residential parking policies in place and consider maximum off-street parking standards or resident parking permits as part of regulations to improve mobility in New York City. Although both these studies do not address how minimum parking requirements impact individual's mode choice and car ownership, these two studies provide context in understanding the relationship between parking availability and an individual's mode of transportation. If parking is readily and conveniently available, many people will choose to drive.

Parking Minimums on Housing, Population, and Vehicle Densities

While there have been studies that analyzed parking in relation to modal choices, the effects of minimum parking requirements on housing densities have also been studied in New York and Los Angeles. In 2013, Michael Manville examined how "residential minimum parking requirements are associated to lower housing and population densities and higher vehicle densities" (Manville 350). Although Manville believes that minimum parking requirements help

manage traffic in a city, he argues that these parking requirements still encourage driving and congestion. In his study, Manville proves how differences in housing, vehicle, population densities within Los Angeles and New York are closely correlated with differences in the share of housing units that include parking. His research proved that parking requirements are associated with more vehicles. Results from the research show that compared with Los Angeles, New York shifts less in the cost of driving into its housing market. New York, a "10% increase in minimum parking requirements is associated with a 5% increase in vehicles per square mile, 4% increase in vehicles person, and a 6% reduction in both population density and housing density" (Manville 372). In other words, Manville's study shows that that there is a strong correlation between residential minimum parking requirements on population and vehicle densities. He states that residential parking requirements, like off-street parking, often times decrease population density but increase vehicle density.

Parking Minimums Impacting Cost of Housing

In addition to understanding the relationship parking requirements play on population and vehicle density, there have been studies that have analyzed how parking requirements directly impact cost of housing. Todd Littman conducted one of the earliest and important studies researching the link between minimum parking requirements and housing affordability in 1995. In his study, Littman studied how parking requirement impacts housing affordability by looking at British Columbia, Canada within his case study. Littman utilized "typical values of construction cost to determine the impact of parking requirements on housing costs, and studied the relationship between density and parking requirements" (Littman 1). The findings of the study showed that one parking unit represents 10% of the cost of housing and two parking spaces

represented 25% of the cost of housing (30). From his findings, Littman concluded that "minimum parking requirements are regressive" (30) because these requirements often forced residents to have to pay for parking facilities, regardless of whether the resident owns a vehicle. Not only that, Littman states that parking requirements raised issues related of equity as well. While parking at 10-20% of the cost of housing may not be much for middle-and upper income households, this price can be detrimental burden to lower-income families. This study has ultimately demonstrated that when making policy changes to parking requirements, equity should be taken into consideration.

In the United States, Jia and Wachs similarly studied how city code parking requirements could impact housing affordability in 1998. In their research, Jia and Wachs used six neighborhoods in San Francisco as a case study, focusing on single-family housing and condominium, to understand how minimum parking requirements influence price of housing. These two researchers utilized hedonic modeling to fit to real estate and census data describing housing and neighborhood characteristics in order to statistically explain the sales price of housing. Results from their study demonstrated that single-family housing and condominiums were 10% more costly if they included off-street parking than if they did not. Furthermore, their analysis on selling prices and income distribution of San Francisco residents revealed that "tens of thousands of additional households could qualify for home mortgages for units without off-street parking if those units could legally be provided under zoning and subdivision ordinances" (Jia, Wachs 1998). In other words, the research displayed that more San Francisco residents would be able to apply for mortgages for houses that did not provide off-street parking. This study again demonstrated that city codes on parking should be revisited to provide opportunities for individuals in different socio-economic backgrounds to own residential property.

Parking Studied in the Local Context

In Seattle, there also have been many initiatives taken by both students and planning professionals to study and address issues associated to parking. In January 2013, there was a study conducted by Ottosson using Seattle as a case study that investigated the sensitivity of on-street parking demand in response to price changes. This study was the first in its kind to calculate price elasticity "by time of day for on-street parking demand on a block level in the U.S" (Ottosson 222). Results from this study proved that price elasticity of the parking occupancy is indeed inelastic and varies by time of day and neighborhood characteristics. Ottosson's study also provided convincing evidence that "optimal parking rates can be calculated based on estimated elasticities of parking occupancy" (222). This study was highly influential in improving policies related to parking in Seattle as this study greatly examined on-street parking and price changes in greater detail.

Besides this academic study focused on on-street parking demand and price changes, a recent report by DPD and SDOT further demonstrated that in areas where parking was not required, "3/4 of new developments provided parking, that is 167 projects out of 219" (SDCI), where housing developers chose to provide parking. In other words, developers continued to build parking structures for residents even if it wasn't mandatory. City government in Seattle has taken the initiative to address challenges with parking as well through the Right Size Parking Project. In 2013, King County conducted a report known as the Right Size Parking (RSP), a data-driven research report aimed to help local jurisdictions and developers to balance parking supply and demand for multi-family buildings. They had three objectives in mind for this project. First, they wanted the project to provide context sensitive multi-family residential parking

demand information on a website to guide decisions about building new parking and management existing parking. They also wanted the project to offer incentives to jurisdictions and developers to test pricing and right sizing of parking supply in residential and commercial development. Lastly, they wanted the project to engage the community through forums to utilize new parking demand information and implement pricing and management techniques. Findings from this RSP project proved that parking was significantly over-supplied in Seattle. Data analysis from this report showed that "parking capacity exceeded utilization by an average of 0.4 spaces per housing unit- a 40% oversupply" (King Metro 2015). Ultimately, current parking requirements have created excess amounts of parking throughout areas zoned for many multi-family homes in Seattle. The results of this project played a monumental role in providing parking recommendations to the City of Seattle in 2015. The report recommended to the city to "remove city code barriers that promote shared parking of underutilized parking spaces, update city code to include bike parking, and review current residential parking conditions" (King Metro 2015). Not only that, from this project, King County Metro was able to create a parking size calculator tool which helped local jurisdictions and developers balance parking in multi-family and commercial buildings.

Seattle's New Parking Reforms

In addition to the RSP study conducted by King County Metro, the Seattle City Council recently passed a large package of parking reforms on April 2, 2018. This new package consisted of six different subcategories of parking reforms: expanding access to off-street parking, change in parking requirements, clarifying how frequent transit service is measured, bicycle parking, changes related to environmental policies, and other changes in parking. One of the more

progressive components to this package was expanding access to off-street parking. This change created a new commercial use category known as “flexible use parking”, where projects near frequent transit service would longer be required to build parking in order to encourage sharing of parking in certain zones. This change expanded the area in which projects would no longer have to build parking and also added a maximum parking limit for “flexible use parking”. Another crucial change to this legislation was requiring the unbundling of parking space rentals from multi-family housing greater than 10 units in size. The “unbundling” of parking space rentals would provide an easier route for property owners to rent out parking spaces to people that aren’t their tenants and eliminate parking vacancy. Other changes made in this legislation was updating and increasing bicycle-parking requirements in the city as well as car-share parking. There was also a parking reform that reduced parking requirements of rent/income-restricted housing and applied parking stall size requirements for parking.

Methods

Understanding that there’s a close relationship between affordable housing and parking policies, I took two different approaches to examine my research question. I first conducted research in a form of a literature review on current policies around minimum off-street parking focused on multi-family housing in Seattle. I also researched best practices of parking management from various cities. Then, I looked at two different cites, London and Zurich, as case studies to explore how alternative policies around parking has been implemented successfully. Upon research, I decided to assess and analyze the history and processes of two of the best practices of parking management: parking maximums and parking caps. In addition to conducting research on alternative practices on parking policies, I also conducted a number of interviews with multi-family housing developers in Seattle. I contacted and interviewed six

representatives from five different multi-family housing developers to obtain a concrete understanding of the process of creating parking in new housing projects in different neighborhoods throughout the city. From these interviews, I was obtained input from developers on whether they thought alternative-parking policies might be feasible. I successfully interviewed representatives from Revolve Development, Wolff Company, Vulcan Inc, Plymouth, and Barrientos + Ryan. The following questions I asked these representatives are shown in Appendix 3 and interview transcriptions are shown in Appendix 4.

Findings

Overview

From performing research on best practices of parking management and conducting interviews with multi-family housing developers, I came up with four main findings. First, I found that off-street parking does impact cost of housing. Second, I discovered that minimum parking requirements should be eliminated in Seattle. Third, I found that parking maximums need to be implemented beyond commercial areas in Seattle. Last, I learned that the city should work towards implementing parking caps.

Literature Review

Introduction

In 2010, Albert Saiz researched how predetermined geographical features can impact scarcity of developable land in several U.S metropolitan area by utilizing satellite-generated data to compare terrain elevation and water bodies. In other words, Saiz examined how geographical elements and regulatory constraints can determine a city's elasticity for supply in housing. He inferred that cities with greater geographical constraint would be more expensive, but also would "display lower housing supply elasticities" (Saiz, 1254). Results from his research showed that

Seattle ranked 18 on the top 95 U.S metropolitan cities that were land constrained. This finding depicts that Seattle, as a city, will be challenged to keep housing affordable due to the city's natural geographic features. While cities may not be able to control for geography, cities may be able to mitigate issues associated with affordable housing by creating policies that attract infill development to increase and maximize the percentage of buildable land within their city boundaries.

In a recent study conducted by Hillsborough County City-county Commission in 2016, they were able to examine some of the best practices for parking management to stimulate program development in their city. In their study, they went over some short-range solutions, medium range solutions, and long-range solutions for parking. In their short-range solutions for parking, they mentioned that creating a parking database was one of best practices, as "an inventory of spaces enables municipalities to accurately review parking supplies in order to meet current and future demands for growing neighborhoods" (Hillsborough 2016, 15). As a medium range solution, the study spoke on the idea of demand priced parking. This is a system where the city compares the "actual parking occupancy with the desired parking occupancy and prices rise or decline accordingly based on demand" (Hillsborough 2016, 24). As a long-range solution, the study mentions the notion of unbundled parking in which parking would be able to be rented or sold separately, "rather than automatically being included with building space" (34). While all these solutions to parking seem to be contentious and successful in resolving issues with parking, the City of Seattle already has all three of these parking policies in place.

Out of all of these strategies mentioned in the study, easing parking requirements was considered to be one of the more effective approaches for cities to bring in infill development. While many cities have taken the initiative to ease their parking regulations by reducing

minimum parking requirements, there have been very few cities that have taken progressive changes in their parking policies to encourage infill development. In this paper, I will discuss two alternative practices to "easing parking requirements" in a city: maximum parking standards and parking caps. Maximum parking is an "upper limit on parking supply, either at the site level or across an area" (Un 2010) and Parking caps are parking "limits imposed by a district or neighborhood" (Un 2010). From my research, I was able to find two different cities that were able to successfully implement stronger parking policies like maximum parking requirements or parking caps city-wide. In this paper, I will use two international cities, London and Zurich, as my case studies to examine alternative practices to parking management.

London

One of the first cities to take a radical approach to changing their parking policies from minimum parking to maximum parking standards was London. In March 2000, there was a parking reform that started in the United Kingdom in which the government published the *Planning Policy Guidance 3: Housing.* While the policy was aimed to steer away from large spatial development in the suburbs and towards high density housing in urban areas, the policy lowered their parking requirements to state "parking standards should not result in developments with more than an average of 1.5 off- street parking spaces per dwelling" (Guo 2013). However, in 2001, the UK government revised and updated their parking regulation stating that there will be no minimum parking requirement for development, other than parking for disabled people. Not only that, this new policy introduced the idea of maximum parking requirements standards to promote sustainable transportation choices. Following these national policies, the greater London Authority passed the London Plan in February 2004. This new plan implemented local

jurisdictions to replace minimum parking requirement by enacting maximum parking requirements.

In a study conducted by Zhan Guo and Shuai Ren, the two researchers studied the impact of parking standard reforms on residential parking supply in London from 2004-2010. They did this by comparing data on off-street parking in residential developments built between 1997 and 2000 and off-street parking in new residential developments between 2004 and 2010. They also examined the effects of density and transit accessibility, as both are integral factors to parking policy. From their research, they were able to conclude that since the 2004 parking reform, parking spaces supplied in London diminished by 40% in comparison to the number of parking spaces that would have been supplied prior to the parking reform.

Zurich, Switzerland

The very first city to take on the parking revolution was Zurich, Switzerland. Zurich was similar to that of Seattle in that the city implemented minimum parking requirements in the late 1960s as projected demand of parking to rise due to car ownership patterns. However, in the late 1980s, frustrations from the limited supply of parking in the urban center grew substantially amongst citizens in Zurich as the demand for parking spaces was significantly higher than the supply. Instead of implementing parking policies that supplied more parking in Zurich, the government took a radical approach and instead implemented parking maximums in the urban center. Following this decision, many citizens protested and were against these parking maximums at first. However, people started adapting to these policies and towards the end of the 1990s, more people became strong advocates for progressive parking policies. In 1996, Zurich citizens even passed a city decree in 1996 known as the "historic compromise" which placed a "parking cap at the 1990 level in the city center" (Garrick 2012). This meant that if "a new

parking space were built in the city, an equivalent number of spaces had to be eliminated elsewhere within the city limits" (Eckerson 2014). Since the enactment of the historic compromise, many of the historically parking dominated squares have been transformed into public areas following urban renewal.

In addition to their policy, the city also has an intricate technology system, also known as the computer aided traffic control strategy, put into place with more than 4,500 sensors. These sensors monitor and manage the number of motor vehicles entering and exiting the city. When the system visualizes that the number of vehicles exceeds the level the city can accommodate comfortably, all vehicles are restricted from entering the city until congestion is resolved.

Interviews

I was able to successfully interview six different representatives from five different multi-family housing developers in Seattle. I spoke to Eric Hadden from Revolve Development, McKenzie Darr and Andrew Hunt from the Wolff Company, Brandon Morgan from Vulcan Inc., Charlie Bauman from Barrientos+Ryan, and Rosey Atkins from Plymouth Housing Group. During the interview, I asked the representatives eleven different questions regarding their company's business model and their process and experiences of creating parking in the city. From my interviews, I was able to find that besides parking requirements, there were 7 other factors that played a role in the decision process for building parking amongst developers.

Aside from city codes, many developers stated that their company's business model and their project location site played a large role on the quantity of parking they built in the city. In the interview with the representative from Revolve, Eric stated that the company "tend to shy away" (Hadden) from sites where there are parking requirements. This is due to the fact that Revolve Development's mission is to "create quality, sustainable projects that enhance the

characteristics of neighborhoods in the urban core" (Revolve). In other words, the company actively chooses to stay away from areas where they would have to build mass quantities of parking because it does not align with their business model. As a result, the company mainly has projects in areas like Capitol Hill and downtown, where parking minimums do not exist. While Revolve's mission statement drives their attitude towards creating parking, Vulcan's goals of creating mixed-use neighborhoods focused on "sustainability and pedestrian and transit-friendly areas" (Morgan), seemed to play a role in wanting to build as little parking as possible. In addition, Vulcan's projects were concentrated primarily in areas where there were no parking minimums like South Lake Union, Yesler Terrace, and Belltown. Thus, the central location of their project sites could provide insight as to why they didn't favor building parking. On the other hand, Plymouth Housing believed that "not providing parking is key" (Atkins). Plymouth probably felt this way about parking because they are a non-profit affordable housing developer that has the mission of housing formerly homeless people in Seattle. As an affordable housing developer, their options were different to that of the other four market-rate housing developers where their residents don't demand on-site parking. Not only that, affordable housing projects don't have marking minimums in place in order to make it economically feasible.

In addition, developers also mentioned that competition played a role in the company's decision of building parking as well. In the interview with McKenzie from the Wolff Company, she stated that developers "look at what the competition is and look at how it will affect renters" (Darr). Similarly, the interview with Brandon from Vulcan also stated that they build as much as "other competitors are building" (Morgan). In other words, developers examine what other housing developers in the area are parked at with their parking ratios. They do this because they want to be able to determine whether or not the parking spaces would actually be utilized in a

given area. From looking at what competitors do, they are also able to find whether or not the demand for parking in an area is high or low. In addition, developers are able to determine whether or not they will be able to profit given that they will be building a certain amount of parking.

In addition to the competition, market demand for parking also played a crucial role in the process of creating parking. Charlie, the representative from Ryan+Barrientos, stated that the company only tried to build enough parking as market demand initiated. In projects near the central core like Pioneer Square, Capitol Hill, Eastlake, and Westlake, Charlie stated "there's a lower demand for parking" (Bauman). Thus, they tend to build little to no parking in core-urban areas. In project areas where minimum-parking requirements existed like South Beacon Hill, Charlie stated that residents' demand for parking is high because the neighborhood is less walkable. To keep their renting units competitive in the neighborhood, Ryan+Barrientos often times builds more parking to make their units competitive in the housing market. In other words, the company relied on market demand to determine project feasibility on creating off-street parking.

The other components that play a role in the parking creation process from a developer's point of view are buyer and lender criteria, costs associated to building parking, and alternative modes of transportation. Andrew Hunt from The Wolff Company claimed the decision process are influenced by a number of different things like buyer and lender criteria. He stated that developers often times have to determine and feel out what buyers, people or company purchasing the housing project, wants in terms of parking. He stated that customers may want to purchase property that contain off-street parking, as it's more profitable in rent. Thus, sometimes developers have to take that into consideration in the parking creation process. Not only that,

they also have to keep lenders in mind as well. Depending on whether or not your lender is a regional bank, national bank, or national life company, you have to cater your project to satisfy their wants in profiting from the project. Costs of creating parking take part in the conversation as well. If the cost of building parking is extremely high due to unfavorable soil conditions or other factors, housing developers are less willing to build the parking infrastructure. However, if the costs to build isn't as high and they think they would be willing to profit from the addition of having on-site parking, developers will be more willing to build parking. In addition to costs, Andrew from the Wolff Company stated that their company also looks into "what other transit options look like" (Hunt) in their project site. Developers utilize multimodal distributions to determine whether car users or public transit users dominate their project site area. They do this because they understand that more people are willing to drive less if there are alternative modes to travel and would have to build less parking to address this.

While there were differences between companies and their stance and process of creating parking, there were a lot of similarities amongst the representatives when it came to their thoughts on feasibility of maximum parking requirements and capping parking city-wide. Representatives from all five companies were skeptical around the idea of parking maximums and parking caps. While all the representatives stated that they thought the market demand for off-street parking has changed in Seattle over time, they think it has changed slowly. One of the main reasons why they are skeptical to the idea is due to the fact that many believe the demand for parking is still fairly high. Housing developers argued that parking maximums and caps would restrain them from meeting demand from their customers and wanted the flexibility to do whatever seemed fit. They also noted that they didn't think public transit wasn't developed to its full potential yet in Seattle. Thus, they argued that the market should dictate how much parking

would be needed. Another reason for their skepticism is that they were concerned about the resale value for their projects. Housing projects with parking are thought to perform better than those without any parking. Thus, from an economic-perspective, they would want to build parking if they would be able to profit from it better. Not only that, housing developers also stated that rents also do better when parking is available on-site. Developers have also pointed out that parking maximums and caps could create chaos in the city if it were to be implemented now, as demand still remains fairly high. They argued that if the city were to control and limit the supply of parking spaces in the city, the existing parking spaces would increase in value. Those that rely on cars as their main mode of transportation would either have to use an alternate mode of transportation or move out of the city and into the suburbs.

Significance

Importance of Studying Parking

Change in Home Buyer Demography

Although there are a number of reasons we should continue to study parking issues and review our parking policies, one of the main factors to continue to study parking and review regulations is due to the fact that our demography of home-buyers is rapidly changing. While there are still many people in the Baby Boomer Generation, Generation X, and Xennials currently in the real estate market, there are slowly more people from Generation Y or "the Millennials" that are looking to become potential homebuyers and renters in the housing market. In a recent report conducted by the National Association of Realtors in 2017, they found that "Millennials were the largest share of home buyers at 34% compared to that of Generation Xers at 28%". This shows that the trend for home buyers are changing.

The fact that more Millennials are entering the housing market is important as these group of individuals often times holds different values compared to those in the previous generations. One of the topics that have been well studied and analyzed, in the differences of Millennials and the previous generations above, is travel behavior. In a study conducted in 2014, Steven Polzin and his colleagues examined the impact Millennials' travel behavior may have on future personal vehicle travel. Polzin researches how "place of residence, race/ethnicity, labor force participation, education level, income, living arrangement, lifecycle status, licensure status, vehicle ownership/availability, values, and propensity to substitute technology for travel" (Polzin 59) shapes travel behavior amongst Millennials. Results from his study indicate that these variables highly correlate to the travel behaviors of declining trends in vehicle miles traveled. Polzin further states this declining trend in traveling explained by changing demographic characteristics: Many Millennials choose to live with parents longer, obtain drivers licenses at older ages, and delay marriage. In other words, this study displays that socio-demographic and economic changes of Millennials explain the decline of travel behavior. As a result, we should look into these socio-economic characteristics, in depth, to get a better understanding of what they potentially are looking for in a residential home.

In a study conducted by Norreen McDonald in 2015, McDonald investigates whether Millennials are different from earlier generation in their consumption and travel patterns. McDonald uses data from 1995, 2001, 2009 National Household Travel Surveys to perform a statistical analysis and create regression models to analyze different trends. Results from her study show that many Americans between 1995 and 2009 do not use automobile vehicles to travel. However, her analysis showed that the "auto mobility decline is higher amongst Millennials and younger members of Generation X, starting in the late 1990s" (McDonald 90).

While the research doesn't prove an association between decrease in driving to increases in the use of other modes for travel, McDonald states that "life-related demographic shifts, including decreased employed, and millennial-specific factors such as changing attitudes and use of virtual mobility through online shopping (90)" play a role in the decrease in driving by Millennials. This study demonstrates that Millennials make very different travel choices compared to people in the past. Thus, it's important that we have parking policies that reflect these behavioral changes. Additionally, accounting for when it comes time for this group of individuals to purchase a home, they may not value on-site parking spots as much as the previous generation.

In a more recent study of Millennials and travel behavior, Klein examined whether Millennials' driving practices was influenced by "changing preference or economic circumstances" (Klein 20). In his research, Klein utilized data from the Panel Study of income Dynamics to analyze how car ownership has changed in US families over time, particularly focusing on Millennials. Findings from his research showed that overall, Millennials own fewer cars than previous cohorts. However, the research also demonstrated that compared to economically dependent Millennials, economically independent Millennials own more cars. The results were surprising in the sense that independent Millennials were expected less to own cars, given their low economic status. This study ultimately reiterates the importance of creating policies that cater towards values of future generations. If we understand that Millennials, overall, do not own that many cars, parking policies should change to match the choices of individuals. For example, it would not make sense for the city to have minimum parking requirements on new residential development if there is no demand for parking spaces.

Thus, all these studies establish that planners and other stakeholders should keep cultural and behavioral differences of Millennials and previous generations in mind when examining and reviewing any policy.

Shift to Multi-Modal transportation in Seattle

In addition to the fact that demography is quickly changing, modal choice is changing in Seattle. Early this year, Commute Seattle on behalf of Seattle Department of Transportation conducted a study on 2017 Center City Commuter Modal Split. The results from the study showed that "48 percent of commuters travelling to downtown Seattle were utilizing public transit during peak hours of 6AM-9PM" in comparison to just "25 percent of commuters driving alone to travel to work downtown" (Commute Seattle 2017). The findings from this modal split also proved that in just one year, there was a five percent reduction in drive-alone commuters in downtown Seattle. This study also demonstrated that more commuters relied on public transportation to get to downtown than driving their vehicles alone.

Out of all the public transportation options, bus and rail systems have grown rapidly in Seattle. In Federal Transit Administration's monthly statistical analysis, the analysis illustrated that "ridership for bus and rail in Seattle has risen up to 60 percent since 2002" (Levy 2017). Statistics from this model also exemplified that Seattle's ridership in bus and rail has increased more than any other major city in the country. In addition to the statistical analysis provided by the Federal Transit Administration, Seattle's traffic engineer, Dongho Chang, recently analyzed the change in population density, traffic volume, and bus ridership. The results from his analysis demonstrated that Seattle's population grew by "21.3% in the last 10 years while traffic volumes decreased by 3.3% and transit ridership increased by 41.8%" (Levy 2017. In other words, he

proved that while population continued to rise in the city, there were a growing number of transit users in the city and less people affecting traffic. This notion that that transit users have grown in Seattle is proven in the report from King County Metro's executive news. In February 2018, King County released information ridership performance from 2017. They stated that King County Metro carried a record of "122.2 million riders", Sound Transit Light Rail had 23.2 million riders, and Metro-operated Sound Transit Express services carried 9.6 million riders in 2017. The report also stated that Seattle, as a city, is leading the country with an increase of 4.7 million riders than the previous year than any other city. This comes to show that public transit ridership in Seattle has increased immensely following population density more than any other city in the country. All three of these studies demonstrate that Seattle is slowly becoming more of a multi-modal city instead of a car-dominated city.

Following these growing changes in both home buyer demography and modal choice amongst many Seattleites, I believe it's crucial to constantly revisit, revise, and examine policies around parking to cater towards these upcoming changes.

Next Steps

Overview

Upon conclusion, I was able to determine that parking maximums and parking caps aren't feasible right now in Seattle. Looking at London and Zurich's process of implementing parking maximums and parking caps, the two cities seemed to have had a long history of revisiting and revising their parking policies and Seattle has simply just started. The new set of parking reforms was just passed last month so it's a little too early to determine its' impact to the city yet. Not only that the findings from the interviews seem to suggest that if caps or maximums were brought in, there possibly may be a parking shortage in Seattle. This ultimately could backfire by

making existing parking supply immensely expensive. Not only that, developers also noted that the market demand for parking is still relatively high in Seattle and this has to do with the fact that public transit is still developing in Seattle. In a recent article, Get Used to those Crowded Metro buses: they won't get better quickly, the author argued that Seattle wasn't building transportation infrastructure fast enough to meet demand. The article exclaimed, "Metro says it can't hire and train drivers that fast…. SDOT can buy only 1/7 of the trips it wanted" (Lindblom 2018). This article demonstrates that while demand for public transit is increasing in Seattle, the city is still in the process of expanding their services. Another article explained that Seattle currently has a huge equity problem, as there are "transit deserts in places like Rainier Valley and parts of West Seattle" (Norimine 2017). In other words, the article illustrated that marginalized communities residing in outer areas of Seattle are currently faced with challenges of demanding transit more than it is supplied. Both articles demonstrate that while it is true ridership has increased in Seattle, Seattle is still in the process of improving and building transportation infrastructure to meet the growing population.

While it may not be feasible to have parking maximums and parking caps in place in Seattle this year, I recommend that the city look into revising their parking policies. If Seattle's long-term goal is to "maintain affordability and increase transportation choices" as stated in the 2035 Comprehensive Plan, I believe the implementation of parking maximums and parking caps are two best practices that align with the 2035 goals.

Recommendations

I think short term, Seattle should make a conscious effort to re-visit their parking reforms on an annual basis and make changes they deem is fit as the city continues to experience growth.

Long term, I recommend that Seattle implement parking maximums and parking caps are viable solutions to parking management beyond commercial zones in a Long-Range Plan. Although it may not be feasible or Seattle to introduce parking maximums and parking caps city-wide like Zurich and London, Seattle may want to consider starting to introduce these practices in the urban core, as the urban center is more transit-friendly and walkable than other parts of the city.

Reflection

Prior to choosing my topic for my senior project, I wanted my senior project topic to address an issue from a transportation planning realm. I initially thought I wanted to examine the process of how the city could take the initiative to provide incentives for housing developers to provide subsidized transit passes for their tenants to encourage sustainable transportation choices. After speaking with Kelly, it seemed like my interests circled around the notion of eliminating parking. Although I was skeptical at first to choose parking as my topic for my senior project, I'm glad that I decided to commit to this idea. I learned so much from the process of researching everything associated to parking and I don't think I would have been able to know the role parking had on both housing and modal choice.

While there was a small detour in my senior project in spring quarter where I had to change my project into a qualitative study, I learned a lot from the process of not being able to use the quantitative data. I learned that it was very difficult to get accurate data from the government. Not only that, I also learned that housing data was all over the place.

From researching current policies around parking in Seattle, I was surprised to find that Seattle was doing a lot more than most cities to address issues associated with parking impacting affordability. This research process further made me appreciate the work planners do in the "real world" of trying to come up solutions that would work best for their cities. I really liked being

able to read on all these different cities utilizing different strategies to solve the excess parking crisis and I've grown to understand how difficult it must have been for cities to get to where they are in the process.

I also really enjoyed being able to interview various different representatives from multi-family housing developers in Seattle. Most of them were very kind and willing to help, which I was not really expecting at all. From my interviews, I was able to find supporting evidence for my inference that market demand would influence the decision process of building parking. However, I was shocked by all the other factors that played a role in the decision process of parking. I was surprised to find that equity partners, lenders, and buyers had a say in a housing developer's decision in building a certain amount of parking in a project.

All in all, I'm very satisfied with my senior project. I'm proud that I was able to complete this project with ease in the given amount of time. I truly do believe that I acquired a lot of knowledge around land-use planning and housing which was not at all what I thought I would learn during my time in CEP.

Appendix 1
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Resource List:

Organizations:

- University of Washington, College of Built Environments
    - Community, Environment, and Planning
    - Urban Design and Planning
    - Real Estate
- City of Seattle

Individual Contacts:

- Kelly Hostleler (CEP Former Program Manager/CEP 490 Instructor)
  Kelly played an important role in the development of my senior project. I communicated with Kelly about my ideas for senior project and she's helped me narrow down my options. She also put me in contact with Lisa, and matched me with a mentor. She also helped edit my final abstract.
- Lisa Hembre (CEP 490 TA)
  Lisa was my go to person for my project. Lisa connected me to planning professionals and people in the Real Estate Department. I spoke to her about my plans for this project. I received feedback from her regarding my senior project proposal. She's helped me navigate through my methodology and provided studies that I could research to help develop my project. She's also helped me edit some parts of my literature review.
- Megan Herzog (CEP Program Manager)
  Megan helped me with the design component of my senior project. She provided wonderful feedback on my PowerPoint presentation. She also assisted me in creating my poster ad for Senior Project Night. Additionally, we also helped me edit my abstract as well.
- Louie Leva (CEP TA)
  Louie gave me amazing feedback after my practice presentation in Winter quarter. In addition to giving in critical feedback, he also helped me edit my preliminary literature review.
- Al Levine (UW Faculty)
  Al helped me develop my project. He also provided me my first contacts to interview various different developers.
- Shelley Bolser (Planner, City of Seattle)
  Shelley was a great resource to me in the process of developing this project. I contacted her, through the help of Lisa, and
- Steve DeWalt (Real Estate) she has helped me maneuver my way around the zoning codes in the city.
  Steve and I got matched during the mentor mingle match. He provided feedback for my final write up.
- Chris Campbell (Department Head)
  Chris spoke to me about how I could work around the issue that I had with trying to make my senior project into a quantitative one to a qualitative one. His guidance assisted to the right direction.

Appendix 2
Project Timeline

Autumn Quarter

- **September**
  - Week 4
    - Think about three Senior project ideas
    - ***Task 1: Paragraph of Interests Due 9/27.***
- **October**
  - Week 1
    - Develop two Senior Project Questions by 10/3
    - Speak with Kelly about project ideas and choose one.
    - Start Initial Research on Parking
  - Week 2
    - Develop the senior project question
      - Make it concise and understandable
    - Start Literature Review:
      - Read 1 Article/Book about Parking by 10/10.
    - Speak with Lisa about Senior Project Idea and Feasibility on Study before 10/10.
    - ***Task 3: Senior Project Paragraph due 10/11***
  - Week 3
    - Define Project Scope
    - Write out "Significance portion" of Senior Project Proposal by 10/15
    - Contact City of Seattle about land use codes
      - Speak to Shelley Bolser on navigating codes by 10/22
    - Continue Literature Review:
      - Read 4 Academic sources by Donald Shoup on Parking.
      - Finish reading and annotating Jia and Wach's study on Parking Requirements and Housing Affordability by 10/21
  - Week 4
    - Write out the "Problem, Goal, and Product" portion of Senior Proposal by 10/22
    - Compile academic sources for Bibliography 10/22
    - Compile a list of people I could potentially contact for project by 10/23
    - ***Task 4: Senior Project Proposal Draft 1 Due 10/25***
- **November**
  - Week 1
    - Begin to develop literature review
      - Fix format of literature review
    - Conduct research on the history/context/background of the issue.
      - Find 2 sources related to minimum parking requirements
  - Week 2

        - Continue to work on literature review
            - Conduct statistical research of housing in Seattle by 11/10
        - Research Seattle's land use codes 11/10
        - ***Task 5: Human Resource List Due***
    - Week 3
        - Continue to work on Literature review
            - Watch two videos related to parking policy in America by 11/17
        - Synthesize how Shoup's ideas relate to project. 11/18
        - ***Task 6: Stakeholder Analysis Due***
    - Week 4
        - Contact Mentor
            - Inform mentor on the project
            - Set a date/time to meet next quarter
        - Continue to work on literature review
            - Read two articles on maximum parking requirements.
        - Finish another draft of proposal by 11/15
    - Week 5
        - Check-in with Lisa to examine the progression of the senior project proposal
        - Attempt at writing the "Abstract" portion of the proposal by 11/29
        - Continue literature review
            - Edit the Literature Review portion of proposal

- **December**
    - Week 1
        - Work on revising second draft of proposal
        - ***Revised Senior Proposal Due 12/6***
    - Week 2
        - Revise and incorporate feedback in to project proposal

<u>Winter/Spring Quarter:</u>

- **January**
    - Check in with Steve on Senior Project Proposal
    - ***Submit Mentor Contract by 1/10***
    - Check-in with Lisa
    - Contact a few housing developers by 1/24
        - See if I can interview them on their views on parking requirements
    - ***Literature Review Due by 1/31***
    - Meet with accountability group

- **February**
    - Check-in with Lisa about Project
    - Email two more housing developers to schedule interviews by 2/18
    - Start transcribing interviews
    - Finalize two best practices for parking management
    - Start Project Write Up.

    - ***Methodology draft due 2/21***

- **March**
    - Check-in with Lisa on status on Methodology by 3/1
    - Continue working on write-up
    - Finish picking two international case studies
    - Meet with accountability group
    - Transcribe the completed interviews
    - Schedule two more interviews
    - ***Updated Abstract and Part One Project write-up draft due 3/7***
    - ***6 in 5 presentation 3/9***
    - ***Revised Abstract and Part One Project write up due 3/28***
- **April**
    - ***Final Abstracts due in CEP 462 4/25***
    - Check-in with Lisa
    - Finish interviews with housing developer
    - Transcribe interviews
    - Read on New Parking reforms passed in Seattle
    - Start prepping for senior project night
    - Work on finalizing write-up, get revision and feedback from accountability group, writing center.
- **May**
    - Finalize my final PowerPoint presentation
    - Get peer feedback on presentation from two different people
    - Work on Senior Project Poster
    - Get Senior Project Poster Edited by Megan by 5/10
    - Present Senior Project
    - ***May 9th: 11x17 Poster Due in CEP 462***
    - ***May 17th: Senior Project Night***
- **June**
    - Finish Final-write Up for Senior Project
    - Add Write Up to E-Portfolio
    - ***June 3rd: Senior Project Due CEP 462***
    - ***June 6th: Senior Project Posters due to Gould 208Q***

				Autumn Quarter								
	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	Finals
Project Proposal												

Develop question/Project Scope	Brainstorm 3 Ideas: 9/27	Choose 2 ideas: 10/3	Focus on 1 question: 10/11	Define Project Scope 10/18		Edit Project Scope: 11/1	Get Project Scope Edited: 11/8					
Human Resources	Speak with Kelly	Speak with Lisa		Speak with Shelley Bolster			UW Real Estate: 11/8	Matched with Mentor		Contact Lisa: 11/29		
Write abstract										First Attempt :11/29	Edit: 12/6	Revised: 12/20
Literature Review												
Gather sources			Read 1 article: 10/10	Read 4 academic sources by Shoup: 10/20	Read on Jia and Wach's Parking Study	Fix Literature Review: 11/4	Research Seattle's land use codes: 11/10					
Annotated bibliograph					Compile all academ					Additional Academic		

y					ic sources 10/22					sources: 12/4		
Synthesize ideas									Synthesize how Shoup's ideals relate to Project:	Synthesize how Jia's study is relatable to min: 11/25	Edit/Finalize Synthesis of all academic sources: 12/6	
Methodology												
Identify investigation tools										Contact Lisa	Contact UW Real Estat/Steven	
Refine methods											Condense/Simplify Jia and Wach's study: 12/	

											6	
Test method ology												

Senior Project Paragraph: 10/11	Senior Project Proposal Draft 1:10/25	Mentor Match Party	Human Resource List: 11/15		Revised Senior Project Proposal: 12/6

Appendix 3
Interview Questions

- Tell me a little about your company's business model. (What is your mission as a multi-family developer?)
- Where are some places in Seattle your company has built/or are currently in the process of building multi-family housing?
- How many parking spaces do you typically build per unit? (What is your parking ratio? [stalls per unit])
- What influences your company's decisions to build parking spaces?
    - Minimum parking requirements in city codes?
    - Lender/buyer criteria for parking?
    - Market demand for parking?
    - Company's business model?
    - Other factors?
- Who are your main lenders for residential projects?
- What are the current construction code standards in regards to parking for loans in Seattle? (What is lender criteria for parking?)
- How have you seen the market change over time with parking requirements? (How has market demand for off-street parking changed?)
- Has your company received any pushback from zoning reviewers, local design review boards, or community members on parking before?
    - If so, what are some of their concerns?
- If a unit goes from 0-1 parking spaces, what would you estimate as the added value to housing? What about 1-2?
- What do you think about maximum parking or placing a cap on parking in the city? How do you think that would impact your business?

Appendix 4
Interview Transcriptions

Revolve Development (Eric Hadden)

- Tell me a little about your company's business model. (What is your mission as a multi-family developer?)

"Revolve is a company that is founded in 2011 by two partners, John Shack and Dougan Earl. They are guys that brought two separate backgrounds in real estate together. One comes from a design background. He does green architecture and practice doing multi-family projects, condos and a little bit of everything, but mainly multi-family housing. And then the other partner, Dougan comes from a background in acquisition so he's more on the finance/real estate side of things. Both are pretty knowledgeable in both sides of it. They focus on using their skill sets in the office. So Revolve is a multi-family developer that develops market-rate housing. We work on finding in-fill sites (underutilized in-fill sites) in the Seattle core. Because we have design in house, we are able to… on the first two projects we worked on… were designed in house and so we are able to keep the creative control. We started working with an architecture records that would produce all the documents (the construction documents for us), but we still do a lot of the conceptual design and have a heavy hand before handing it off to another architect to finish out the design. That differentiates us from most developers. Most developers may have individuals with architectural backgrounds in house, but typically don't have design in house. We do bring in architects again to produce all the documents, but we try to keep the major creatives moves, and keep them in house. That differentiates us a little bit, but it also means that when we are going through the design process, most developers set the program and the program off to an architect. As where we are more kind of like, more back and forth because we are serving as the architect before handing it off to the architect that does all the detailing. So, it's a little bit more of a fluid process for us since we learn more about the market we are working in and we may decide to…. as it pertains to parking...we may do more or less parking depending on the research we are doing on the market side.

- Where are some places in Seattle, your company has built/in the process of building multi-family housing?
    - Has your company worked on any projects in South Lake Union or Ballard?

"So we have a project here [Wallingford], on 45th and Stoneway, where we are working on entitling and going through the permitting process. We have a couple projects in Capitol Hill that we recently finished. We have a hotel downtown (adaptive re-use) that we are working on at 1st Avenue. We have a couple other projects in and around Capitol Hill that are in the pipeline. We have not done any projects in Capital Hill or Ballard yet"

- How many parking spaces do you typically build per unit?

"We usually try to build… it depends on the market… so for our Capitol Hill projects, we build less parking for them than what we would do for our projects here in Wallingford. But typically, we will provide 50… well anywhere from 40-50% parking ratio for the building. It's kind of… actually, we had anecdotally we had trouble filling in parking in our project on Jefferson. It's on Jefferson and 12th Avenue basically, so near Seattle University, it's a really dense area. We have some students that live in the building,

maybe about a third of it are tenants that are students that walk over to Seattle University. I think a lot of the… there's just not a lot of demand in that neighborhood as so much stuff is walkable there"

- What influences your company's decisions to build parking spaces?
    - Minimum parking requirements in city codes?
    - Lender criteria for parking?
    - Market demand for parking?
    - Company's business model?

"Yeah. So one of the things we are focused… we pride ourselves in is that we design sustainable projects. So looking at projects in a manner that reduces our need for parking is first and foremost. To be honest, that doesn't really dictate the number of spots that we do, as much as market fundamentals of the neighborhood. We try to develop in core-neighborhoods of Seattle. A lot of them have zero parking requirements so there's usually no minimum parking requirement in the sites we are looking at. In fact, when we do find sites that do have a parking requirement that does not have any sort of allowance for zero parking or minimal parking, we tend to shy away from those sites. It's kind of a function of those sites are not centrally located. But also, there's the reality that building one stall for every unit is something we don't see a whole of ally in right now. Lender criteria, that's an interesting one. So we haven't run into that issue with any of our lenders because we've provided a 50% parking ratio on our projects. We did propose one project that we didn't move forward on with no parking and that was up in Greenwood, so a little bit further north. Some of the feedback that we've got from, not the lenders, but our equity partners and investors was some skepticism that there wouldn't truly be a need for parking and that might have an impact on rents. Negative impacts on rents. So there was some hesitation and other reasons that we didn't move forward with that project. But that was some of the feedback that we received from our equity partners on that. But that was only in Greenwood and that was a project that provided no parking"

- Who are your main lenders for residential projects?

"We work with regional banks, they are our typical lenders. And the project we work on, again, is probably I should say they are smaller. We call them sub-institutional size. All our projects up to this point have been 30-40-unit range. We have one on capitol hill that will be a little bit larger than that. But, I think that probably also dictates our parking reform as we are not working with traditional institutional lenders. So when we are working with regional banks, they are a little bit more flexible than an institutional would be"

- What are the current construction code standards in regards to parking for loans in Seattle? (What is lender criteria for parking?)

"When there aren't any requirements, we haven't run into any issues with the levels of parking we are providing. Not from lenders. And that could be because we are working with regional banks. And could be that these groups [regional banks] know the function of Seattle and know how it operates. So if there was a group coming in from New York or Dallas, there may be more hesitation there. That's our experience."

- How do you negotiate the amount of parking you need to build between city requirement/ lenders/ business ethics?

"Again. Our projects have been in areas where there are zero parking requirements and so there really haven't been negotiations"

- How have you seen the market change over time with parking requirements? (How has market demand for off-street parking changed?)

"So I've been in there [at Revolve] since 2013, so not an incredibly long amount of time. I don't think it's changed that much. I know the city has some changes in the works that may have some minor impacts on parking and they are so minor. What actually looked at for our project in Greenwood, when we were proposing for no parking… we looked at projects that were built in the last cycles (early 2000s) when they were building a lot of parking at higher parking requirements that haven't been using all that parking. One of the proposals that we would look into in the future is to lease parking... potentially. Whether it may be residential projects or office projects. We typically don't build around office buildings, but other neighboring properties if there was an excess of parking that might be something to look at"

- Recently, there have been a few neighborhoods that have challenged decision on parking. Has your company received any pushback from local design review boards, zoning reviewers, or community on parking before?
    - If so, what are some of their concerns?

"No. We haven't. So the project in the Greenwood neighborhood, we never went through the entitlement process. So we weren't really getting that kind of feedback. We did not take that far along down the road. For the design review boards, themselves, in the City of Seattle don't have the purview to speak on the number of parking spaces you have. So they don't ever comment on that. There is usually… you can tell there are usually interests from neighbors about how much parking is going to be in a project. And that is something that again, we feel like we are meeting what is market demand for parking from our tenants. So that's what largely drives that"

- If a unit goes from 0-1 parking spaces, what would you estimate as the added value? What about 1-2?

"So if we had the unit, an apartment that had 0 versus 1 parking stall… that's a good question. I don't know if I could put a numerical value on it. But, I will say… this is what we've heard from our property managers… so we own and develop properties. We work with a third-party group that is doing property management and what we've heard from them a lot of times is that there's a kind of certain price point… this is been in the case in our projects in Capitol Hill that are about 1800 dollars a month in rent, people are expecting to have the option of leasing a garage space. So if we have units that cross above that threshold, we would like to provide parking for that. If we didn't provide parking for that, that doesn't mean that we couldn't find a tenant for that unit, but it may be a little bit more difficult or they may request for a discount, minimal discount in the rent, as they are not having the opportunity to lease a parking space. So I think, above a certain threshold it does have an impact on rent if you didn't provide parking. Below a certain threshold, I don't think it has an impact. So I think, frankly, that is why you see a lot of projects that are micro-housing projects that are really small. There are a lot of tenants there that are trying to find housing at a low-cost. And finding a parking spot is not something they are interested in as it adds that extra cost in. So I think that's what you see in a lot of projects without parking because there isn't that demand from those tenants. So in neighborhoods, transit-rich neighborhoods, I think that is usually the case. I think, there is that reality that there are some neighborhoods in Seattle that have infill street parking. For a unit below 1800 and somebody… even if they had a car, they could

find street parking, they may not place a value on renting out a garage stall. So that's kind of what we hear from our property managers and what we've experienced. Again, our project on Capitol HIll or kind of in the central district is one where we haven't been able to fill up parking spaces. We have 18 stalls for 32 units and we couldn't fill them up. And I think, largely, that's because there's a lot of people that come to Seattle that live in Seattle without cars because they are in transit-rich neighborhoods and very walkable neighborhoods. And for us, from a business standpoint, we look for those sites first. We want to be in places where people can live without cars so that goes back to our desire to design and build sustainable projects. We want to be in neighborhoods where you could walk around, take a bus downtown, or take a bus to U-District. The site and the neighborhood is really important to us. And we place a lot of value in that"

Wolff Company (Mackenzie/Andrew)

- Tell me a little about your company's business model. (What is your mission as a multi-family developer?)

"We develop institutional quality and institutional size multifamily and senior housing. So our multifamily product is typically top of market (more high end target). We are working to develop a product that can hopefully compete with 20-30-year-old product and be a lower end new deliverable to be more affordable. But we haven't been able to find ways to pull enough costs out of development to make that feasible for us. So typically, we develop top-tier and our multi-family developments are usually 250 or more units. And our senior housing (and right now we are more focused on garden-style multifamily housing suburbs because we think that the suburbs have been underserved cycle compared to core urban in-fill. So while you have a ton of cranes in Seattle, more so than any other city in the US, you don't have as much competition in some of these suburban markets and you have more need in product so it's easier to come in top of market. With senior housing, we are building senior independent living. So that's for people where the target market is generally people who are 75 and older but are self-sufficient. So it's not state licensed and it does not have nursing care on staff that can really provide medical services like an assisted living facility, but it has a lot of the amenities. So it's for someone that may not be able to cook every day. There are restaurants, there is a meal service, and there is usually is a weekly laundry service for someone that can't change their bed very well anymore. So it's for an active alert senior, but someone who needs a little bit more assistance than when they were younger. And those developments are typically 130 or more units and they are heavily amenitized. Like I said, you have a commercial kitchen, bistro, lounge space, fitness, and all of that. Typically our multi-family product right now is going on anywhere from 10-14 acres and our target density is usually around 20-25 units an acre. And then for senior, we are building on 3-5 acres so your target density is significantly higher with senior. And generally we will build to higher height, so senior might be 5 stories or more. But we don't build high rise, we generally stick to mid-rise. So, 5 is the highest we build to or have" -Darr

- Where are some places in Seattle, your company has built/in the process of building multi-family housing?
    - Has your company worked on any projects in South Lake Union or Ballard?

"So our South Lake Union project we finished and sold. I can't remember the name, but I will look it up for you. We are building in Shoreline and Columbia City right now. But we are not building in Ballard or South Lake Union in the present moment" -Darr

- How many parking spaces do you typically build per unit?

"For multi-family, our target ratio is usually…. And obviously this depends on where it is but for the style of product we have now (which is not urban infill), we usually target for multi-family 1.3-1.8 stalls per unit. And that might depend on… for example in suburban Boise, you have larger units with more rooms so you have more people that drive. For senior, we are trying to target 0.8 stalls per unit and that would include visitor parking and includes staff-worker parking. And generally, for senior you have around 20 full time staff people. So Senior is parked at a lower ratio than multi-family. And then looking at a mid-rise project in Columbia city, the target ratio was about 0.8 units per stall so I would imagine that in South Lake Union or Ballard, we would target anywhere from like 0.6-0.8 stalls per unit" -Darr

- What influences your company's decisions to build parking spaces?
    - Minimum parking requirements in city codes?
    - Market demand for parking?
    - Company's business model?
    - Lender criteria for parking?

"A couple things we usually look at is what competitors are parked at and how significantly that space is utilized. So If we think that by providing too few stalls we are going lose renters, thats lost revenue so that matters. So every competitor in the market is parked at 2 stalls per unit and they are fully rented or utilized, then we are going to want to look at what the competition is and look at how it will affect our renters. We also look at site planning. So generally, with Ballard and South Lake Union, you will see structured parking now. So site planning is less of an issue. But you are going to have digging down… you need to have ramps, entrances and exits, loading spaces. To be able to dig down… you are bringing in huge costs. So looking at the costs and how that relates to the requirements… so say that you are required to build one and a fourth levels of underground parking, you may be willing to excavate further since you already have to dig up the rest of that space because the incremental costs of adding the extra stalls are worth it because of the revenue it would generates from having those stalls. So looking at how requirements play out in a site is important. With garden style, we look more at how that affects our open space and how our site plan circulation. But you are going to look at it from a cost-revenue perspective. It also matters how much you can rent those spaces for. I believe… in Hike Motorworks (our Capitol Hill space building), we lease parking stalls to tenants and also to the community at large and they are ridiculously expensive. So in this neighborhood[downtown] for example, the cheapest stall you can get is about $250/month so you can generate significant revenue from those stalls. So if you think that's going to be profitable over the long term, that matters. The last thing we look at is resale potential. So at the scale of development we build, generally you have institutional buyers so that's going to be a real estate investment trust, an insurance company, or something like that. Probably not a local buyer that knows the market. So, you have someone outside the market looking at your development and they say "this is unmarketable", you are going to be more conscious about how it looks outside of our

specific market because of that resale component. Our asset management team is in Phoenix, Scottsdale so their perspective is a little bit different than ours so real-estate isn't a local game which it used to be (which changes everything)" -Darr

- Who are your main lenders for residential projects?
- What are the current construction code standards in regards to parking for loans in Seattle? (What is lender criteria for parking?)
- How do you negotiate the amount of parking you need to build between city requirement/ lenders/ business ethics?

"So I'm not closely involved in our construction lending process. We have a team that does it for all of our projects. But to my knowledge, we've never had lender-push back on our parking ratios. Granted, we've tried to build a project like in downtown. In downtown, you don't need to build any parking at all. We've never tried to build a project like that. But, I don't think those provisions would come into play so much. Our company is a little unique in that we have fully discretionary capital so our executives will go out and raise a fund and we've raised over the course of our company's lifetime (more specifically while we've been working on funds in 20 years) .... we've raised about $3 billion in discretionary cover up. So, it's a lot easier for us to secure loans because we have more than we can guarantee against because we have other cash flow properties in our portfolio. And we don't have to go find a capital partner for a specific project. If you are trying to do a joint venture with someone, it would be more of an issue. But I haven't heard anything to indicate that our parking ratios would be problematic." -Darr

- How have you seen the market change over time with parking requirements? (How has market demand for off-street parking changed?)

"We think that generally over time, demand as lessened. But I don't believe that we would build a project without have any parking at this point, even with a great downtown location because you can rent it for so much and because if you are targeting a top tier client, they probably do have a car, at least some of them, and are going to want to get out of the city sometimes and things like that. We are looking more… in the ways that we site plan, we are looking at how we can create parking that can be reused later for different purposes. So with our garden-style development, that's looking at arms and parking and where you can replace those with open space or put a new building. With our senior housing, with structured parking, looking more at ways to daylight a garage. So you can theoretically make those into additional units or recreation space or something like that later. So while our parking hasn't changed too much in recent years yet, we are aware that it's going to be important as we development these properties and resell them that there be flexible parking space because it's not all going to be needed. And part of that is… for what we build and for mid-rise… from the time you get a piece of land to the time your building opens, you are looking at 3-5 years maybe of entitlements, design, construction, and all of that. So, with everything advancing with driverless cars and occurrences with Uber and Lyft, there are ways to accommodate that. One thing that we are doing more for sites is looking at particularly for senior residents… pick up and drop off, assuming that more people will use Uber and Lyft. So while we haven't significantly decreased our parking, we are looking at ways to make it flexible so we can accommodate changes" -Darr

- Recently, there have been a few neighborhoods that have challenged decision on parking. Has your company received any pushback from local design review boards, zoning reviewers, or community on parking before?
    - If so, what are some of their concerns?

"Yeah, so not in Seattle. We have always passed our design review board, we are proud of that. But we have a project right now in Alderwood where we are under contract on and we would be building garden-style development, but this project is within half a mile of the Lynnwood light rail stop and will be very well served by transit. And we requested a 20% deviation from their parking code, their parking code requires 1.8 stalls per unit, which is really high in a city that basically bleeds into Seattle on a site that's right next to the Alderwood Mall and will be within biking and walking distance of the light rail station. And the city denied our request for a deviation for parking in 20% deduction because they said that there weren't unique site conditions that warranted it. And maybe it meant that the code should have been re-written. But at the point in time where we were requesting it, the code had not been written and was not under revision, so basically, they said maybe the codes are wrong but we are not fixing it. So you have to adhere to it, which personally speaking (not professionally), I think it is pretty stupid. I think there are unique site conditions so we've seen inflexibility. We see it more so in suburban markets where there are more single-family homes where people are more concerned about people driving through their neighborhoods and added traffic and difficult to park in front of their houses. Parking and traffic tend to be most contentious public comment items generally" -Darr

- If a unit goes from 0-1 parking spaces, what would you estimate as the added value? What about 1-2?

"I think that is pretty measurable. In most places, they will charge separately for parking and it's been around $225. So generally, structured underground parking, the general rule of thumb is 350 gross sq. ft. per stall at $90 gross sq. ft. And that's effectively what it costs to build one parking stall" -Hunt

- What do you think about maximum parking or placing a cap on parking in the city?

"I personally think that people should be able to allowed to build parking at whatever rate or rate the market demands. But I'm also a supply/demand capitalist. I think there are a number of ways to influence how much parking is built. Effectively, you are trying to influence mobility, is probably the end goal to any new regulation that limit parking. But the reality is that you can go rent out a unit without parking if you want. If you start limiting parking, now all of a sudden you are artificially limiting supply and unless the other transportation options are adequate, people will start to make decisions that are unintended. Like moving to Bellevue or Shoreline if I can't live in Ballard and effectively get around the way I want, then I'm not going to live there. Parking stalls might also start going up in price as demand is still high and the supply is low" -Hunt

Plymouth (Rosey)

- Tell me a little about your company's business model. (What is your mission as a multi-family developer?)

"So we are a non-profit affordable housing developer that primarily works on providing housing for formerly homeless individual. Our motto is "Housing First". We've housed

many “chronically homeless” individuals and have housed some disabled people as well. Our company is unique in that we provide additional services to housing. We usually build around 100 units per project. And our units are almost always studios”

- Where are some places in Seattle, your company has built/in the process of building multi-family housing?

“We have a lot of places in Belltown, First Hill… we have one building there. We are about to get two more there. We also have one in the international district. In the downtown, CBD area, we have a couple there”

- How many parking spaces do you typically build per unit?

“Before the new regulation most of our buildings, we don’t build any parking. Any parking we do build, is only for staff. So we have live-in staff so sometimes we have parking for them and sometimes for our maintenance. So, I would say on any given project, we would have anywhere from 0-maybe a max of 7 parking spaces. And maybe in certain places we might have a bit more. Generally, though, we don't have any. No don’t provide parking so tenants”

- What influences your company’s decisions to build parking spaces?
    - Minimum parking requirements in city codes?
    - Market demand for parking?
    - Company’s business model?
    - Lender criteria for parking?

“I would say it’s a big mixture of lender criteria and our business model. So our model is housing first as we are housing those who were formerly homeless. A lot of them don’t have vehicles so we don’t really need to provide parking. Lender criteria… as one of our biggest public funders, City of Seattle, does not want parking. And they don’t like to see that in the buildings so they look for us to not include any parking. And their alternatives that they have help along with that. Like 30-minute load zones, commercial load zones that they have and those types of things that they would be okay… so drop off and pick up as well as delivery and maintenance that doesn’t need to be there for an extended period of time. There are other creative ways that we have gotten around it.”

- Who are your main lenders for residential projects?

“So. it’s an interesting word… lenders. Because we do not carry permanent debt on our buildings. But our main funders are City of Seattle, Washington State-Housing Trust Fund, King County, and then investors through 9% Litec credit.”

- How do you negotiate the amount of parking you need to build between city requirement/ lenders/ business ethics?

“Usually it’s… not providing parking is always the key. Or limiting the parking we have whether or not you are like Plymouth at a permanent supporting housing or you are a market rate developer or somewhere in between, because parking is expensive to provide. So if at all possible, you want to avoid it. So you want to do the bare minimum and if you can get away with it, doing less than that… I think that developers may be able to prove that the space won't be utilized so they can provide less. I think that in market rate, market rate developers will actually provide more than the minimum. Affordable housing developers will almost always provide the minimum or less especially if it’s along a transit hub or transit line or something like that”

- How have you seen the market change over time with parking requirements? (How has market demand for off-street parking changed?)

"I think it's definitely decreased over time. Less and less people are using their cars or vehicles. It's gotten a lot easier to get around the city. What I will say to that is that it really applies to people who are either single or individuals or have very small families. The reason why we can really get away with not providing parking is because of our population and because we don't house families. I think as soon as you start housing people with bigger family sizes, then you have to consider parking. Like when you have a two-three-bedroom apartment in a development, you need to consider that."

- Recently, there have been a few neighborhoods that have challenged decision on parking. Has your company received any pushback from local design review boards, zoning reviewers, or community on parking before?
    - If so, what are some of their concerns?

"We haven't really received too much of a pushback. But what I will say about that is that people are concerned with pressure on street parking and what that means for them. I don't think that is a bad thing, but it is a public right-of-way. No one has the right to park and I think the city is mitigating that with passes… parking passes… that they give people in the neighborhood so they can park on the street more than the two hours. They also have a few zones around.. Several zones around different neighborhoods around Seattle. So I think they are trying to mitigate it. But, I think as we move towards less and less parking, I think that might go away. However, we are still in that window"

- If a unit goes from 0-1 parking spaces, what would you estimate as the added value?

"That is interesting. I don't really know if I have an answer to that. Yeah, I don't think I have an answer to that"

- What do you think about maximum parking or placing a cap on parking in the city?

"This might be a little bit different of an answer. But I'm of the mindset of letting the market decide how much parking is needed. Because development takes so long to respond to demand, there might be a lag. But I do think that with less regulations being put on how a development leases out their parking, that might open up some stuff. Now… well before they had to have… when a building went up, you had to have a ratio. And you couldn't sell those parking spots if they weren't used. Someone outside your development or building, but now you can. So if someone wants to park in x building that is three blocks away, they can contract with that building. But before [the new parking reform], that wasn't a possibility. So I think that the market might figure itself out… Especially with the empty stalls. I would like to see a little bit less on that. And now the city is really focused on bicycle parking"

Barrientos&Ryan (Charlie)

- Tell me a little about your company's business model. (What is your mission as a multi-family developer?)

"We have two primary savings that we operate in and that comes down to the two partners: Maria and Kristen. They joint up about a year ago and that's when they brought me on because they had a couple projects that they needed to spear head. The general mission statement is… we are a multi-family Seattle infill developer. We work on primarily on multi-family buildings between 50-300 units in the close core

neighborhoods in Seattle so Queen Anne, Eastlake, Capitol Hill, Pioneer Square, SE Seattle. There are two primary focuses. One is an owner's rep where we work with equity clients to actually implement development projects and that's the full range of development from identifying the land, from acquiring it and working through, doing diligence feasibility and entitlements. All the way through construction. The second aspect of the business is really more Kristen's world in working more with the public and nonprofit entities. Either helping them to develop their land and generate income for these entities or to help non-profit entities deliver on some community vision. As an example, the main project that I work with Kristen is the Othello light rail station, a site which is currently owned by the housing authority. But the non-profit developer owns the land and we are their representatives implementing their whole project, which include mixed income housing, community center, health clinic, a charter high school. So it's a mix of that private development and the work with the non-profits. The product type is definitely multi-family"

- Where are some places in Seattle, your company has built/in the process of building multi-family housing?

"So Maria has built all over the city. Queen Anne, Capitol Hill, Eastlake/Westlake, Pioneer Square, those are some of the main ones. Currently where we are building is… we have a 300-unit project going directly north of the Seattle Center that's all multi-family with a big public plaza. We are working on early stage feasibility for project in Eastlake for the Swedish Club. We have potential high-rise project we are working on for the U-District. And then the big project that I mentioned earlier… down next to the Othello Station. That's going to be a 5000-sq. ft. community center about 150 units of housing and a charter high school. And also rehab project that Kristen is working on in the International District. And maybe a couple of others that pop in. We only work on projects in Seattle. We all determined that we don't want to spend too much time commuting over to Renton or Bellevue. We decided that we know Seattle and the land use code here, so it's where we have our advantage. So, this is where we are focused"

- How many parking spaces do you typically build per unit?

"Yeah. That completely depends on location. Generally speaking, I would have to see what the average is. If it's code required, its' unlikely that we will do more than the code required minimum. Mainly because the neighborhoods we focus on are very accessible neighborhoods to transit. They are very accessible neighborhoods to bus routes or walking to downtown to where the job centers are. So, in that case, there isn't much of a high demand for parking as opposed to building somewhere in the suburbs. The most we would ever build is a 1 to 1 ratio. In the recent projects that we are doing that are focused on light rail stations, there are no parking required at all. But we do build some parking for two reasons. One, you are already excavating anyways if there is an environmental remediation that needs to be done like remediating the soil. If you have already dug out the site, then there is a huge advantage to building parking as well. The other reason is that some units, especially the bigger units, do rent much better if you have parking available. So if you are trying to attract family to a two or three bedroom unit, even if it's next to light rail, it's very likely that they still own at least one vehicle. Because they can use light rail to most places but if their kid or someone is going to soccer practice, you can't take the light rail so they still own a car. So probably 0.5stalls/unit around the light rail. There are projects that Maria has done that has provided no parking. So it varies"

- What influences your company's decisions to build parking spaces?
    - Minimum parking requirements in city codes?
    - Market demand for parking?
    - Company's business model?
    - Lender criteria for parking?

"So we always have to comply with code. That is the ultimate driver. But from the project feasibility standpoint, it all comes down to market demand. Is it going to be easier to rent out the units if we have parking available? And then cost ultimately. So regardless, the highest you will ever get for parking for a prime location in Seattle is may $200-225 per stall per month. I'm sure there are other projects out there that are charging more than that. For multi-family, that's probably the maximum you will hit and even at that rate, in those locations the only parking you can build is underground parking. And if you are building one level below grade, that's about $40,000/stall, if you do two levels below… it's around $50,000/stall. A lot of units deliver to market"

- Who are your main lenders for residential projects?

"So we work with several different banks. We work with Washington federal, we work with US Bank. Those are our two main lenders we work with. We work with national banks primarily because the clients we represent are often times bigger institutional clients or high-net worth individuals which are very sophisticated. And we are building to scale. If we are building a 200-unit property, that's going to attract that national lender"

- What are the current construction code standards in regards to parking for loans in Seattle? (What is lender criteria for parking?)

"That's an interesting question. We don't run into that problem in the locations that we build in. We have an advantage because we are only building in prime walkable light rail locations. I can imagine that they probably will have more of a say when you are building in the suburbs. They aren't going to want to lend on a project if they aren't going to build parking. So normally, as long as you are building to code, that usually lags to what the market does… like it would be slower to adjust. Trends are changing to a lot lower of a demand, it takes time for that to be recognized. So normally, if you are building to code, that is going to satisfy a lender"

- How have you seen the market change over time with parking requirements? (How has market demand for off-street parking changed?)

"It's an interesting question. It definitely has changed. There is lower demand for parking in the locations that we work in. Demand has definitely gone down. There is an asymmetry between what a developer would ideally build and what is demanded. It's never going to align perfectly. So in some developments where they aren't required to build parking and they chose not to build any parking, there's still clearly going to be a demand for someone that wants parking. So the only place for tenants to go to then is surface-street parking or find a monthly stall garage. So for those developments, they often get scorned for inevitably pushing parking into the streets"

- Recently, there have been a few neighborhoods that have challenged decision on parking. Has your company received any pushback from local design review boards, zoning reviewers, or community on parking before?
    - If so, what are some of their concerns?

"Yes for sure. Parking is the number one issue that the community will talk about. And it completely varies. I have two polar opposite examples. So before I was here, I was at

Bento Kennedy and I was working on the Capitol Hill light rail station project, which is yet undeveloped. There we were going through the whole design process and had the first meeting. Overwhelming feedback from that meeting was that we were building far too much parking. And their stance was that… this is Capitol Hill and you are on top of light rail… this is the project you should be proving out the model of building very little parking. I think we were building at the 0.8 ration and it was 2-3 levels below grade, which is a lot more than what most developers would build. But, the owner group had a preference for building more parking. But the community… they were like "you should incentivize people to not use their cars" and there's going to be more traffic. So they kind of took the viewpoint that more parking meant there was a reason for more people to have cars, which would increase traffic in the neighborhood. So they didn't like that. Whereas the Othello light rail station, it's a different neighborhood. There, the advocacy among the community has stated that "you need to build as much parking". Because what they are seeing is a complete lack of surface parking and people from other neighborhoods coming and parking in the free surface spots. So they viewed that the actual people living in the neighborhood are feeling the burden of not having enough available parking. So it completely depends on the neighborhood"

- If a unit goes from 0-1 parking spaces, what would you estimate as the added value?

"Depending on the location, but we would try to get around $150-200 in the prime locations as an included basis. If it was an add on, in some locations, we might try to get up to $200-220 and on average I would say $175"

- What do you think about maximum parking or placing a cap on parking in the city? And how would it impact your business?

"I feel like we are already there. What I think about is what if the rideshare economy takes off more. If we really do live in a place where we can get by in the same transportation access with a third of the cars… what do you do with all these parking garages? That's ultimately going to be a drag on projects that build a lot of parking so they have to think of ways to repurpose that as there are costs that are associated to maintaining and keeping their project. A large part of their resale value is tied to the amount of parking they have so if the value of parking drops to zero, the value of the building would drop significantly. In terms of a cap, I think it would be tough to have a fixed number"

Vulcan Inc. (Brandon)

- Tell me a little about your company's business model. (What is your mission as a multi-family developer?)

"We are primarily concentrated in SLU but we are now starting to move into other neighborhoods around the region now like Bellevue, Yesler Terrace, U-district. So we aren't all SLU all the time anymore. Most our development has been around SLU. We have around 60 acres of property in SLU, which is about a third of the property in the neighborhood. So we are a major player there. When we were setting up to develop, we created an in-house team around 2002-2004 whereas before the folks here who had acquired all the properties in SLU were a very small group and had venture partners to join the group. We did partnerships with other developers, like a developer who specialized in housing projects or a developer who is doing life science projects, and we

realized that joining all these venture relationships was inefficient. Maybe we would be better off if we did this in house and just have a staff… or team of our own to see the developments through without partners. So that's what we did around 2004. We branched out of our joint ventures and started doing it ourselves. What we did do was set up goals that we wanted to be… we wanted the neighborhood to… not just from our own developments but other development that would happen as well over time. We wanted the projects to be to be created with every economic inch… that was somewhat of an underutilized neighborhood and generate cash revenue through all these developments. We wanted a mixed-use neighborhood. We wanted to have a careful balance between working, living, and playing. We wanted to make sure that even though the zoning at the time primarily favored commercial development, there wasn't a lot of housing in SLU and practicing none was the norm at the time except for one small apartment building I think. We wanted to make sure that the zoning could allow residential and commercial to work. So the zoning was changed to allow us more flexibility and make a better balance between housing and office. And the planning part was investing in the already existing structure that was in the neighborhood like the parks. We funded improvements in all three parks. We also wanted a pedestrian and transit friendly neighborhood. So in addition to the parking improvements, we created better play areas for kids and better public artwork. The we have streetcars. All the properties in SLU decided to tax themselves to basically pay for half the cost of that and the rest was from federal and state funding. And lastly, a focus in sustainability. Making sure that we challenge ourselves to make better efficient building, materially better not just a lip service. We really tried to structure ourselves for our water and energy usage would follow sustainable development practices. We also cleaned up about $3 billion worth of dirt in the neighborhood thus far with our developments since it was a 100-year-old industrial neighborhood so there's a lot of contamination in the ground and around SLU. So we are doing our part to help clean up. So those are some of the goals we set for ourselves during the early stages of development that we are still very proud of"

- Where are some places in Seattle, your company has built/in the process of building multi-family housing?

"We built so far… SLU of course. U-district, we have one there at the University Bridge. We have three in the works at Yesler Terrace: one already built, one being built, one being designed to be built. We have one on 23rd and Jackson in the Central District that is under construction now that is rather a large project. In Bellevue we have some land holding in Bellevue but those aren't designed. So we haven't actually built anything, we are currently in the process of that. But we do see a similar philosophy being carried over to Bellevue and we are using the same goals we had to our practices in SLU to transfer that area of Bellevue as well. There's also one being built and one in the planning process of being built in Belltown"

- How many parking spaces do you typically build per unit?

"In terms of parking, we have… it depends. There's sort of a range between… I'm generalizing here. Anywhere from the U-District to the urban core. Now in Bellevue is completely different. But in the city of Seattle for all the areas that I've mentioned that we are in… they are anywhere from 0.6-0.75 parking space per unit usually"

- What influences your company's decisions to build parking spaces?
    - Minimum parking requirements in city codes?

- Market demand for parking?
- Company's business model?
- Lender criteria for parking?

"The lenders don't really prescribe that. They trust us to build as much as we think we need. They rarely have questions about that. They have experience in other assets as well and can see what is actually being used so when we say it's "0.7/unit", they think it's reasonable after doing market surveys of comparable properties and that is pretty typical usage. And because we don't have those parking minimums in Seattle anymore, that's what all our other competitors are building. So we are simply just building what we think we need and not much more as it's expensive to build parking. And we don't want to do that if we don't have to. But we want our residents to be happy so if you do have a renter profile that tends to have cars at that rate, you want to make sure you can accommodate them because...there's a lot of legacy apartments that have excess parking. So if you don't have parking, you will be at a disadvantage and I will say that Lenders will pay attention to property that is proposed that has less than 0.5/unit. They will question that and ask what is the renter profile you are going for. If it's a higher-end property. they are going to say higher-income people tend to have cars so how are you going to remain competitive. If it's a workforce housing project, they tend to use cars less. Putting yourself in a reasonable range at around 0.5-0.8/unit, you won't get too many questions about it. The average for market demand in the areas that we build are around 0.7/unit, so 70% of renters will have cars. Bellevue is completely different though"

- Who are your main lenders for residential projects?

"We typically do business with some of the larger banks. Bank of America, Wells Fargo, Key Bank, U.S Bank, Union Bank of California. We've also worked with some life companies like State Farm and NW Mutual as well"

- How have you seen the market change over time with parking requirements? (How has market demand for off-street parking changed?)

"It's held pretty steady, but it is dropping slightly. Not dropping as quickly as I think most people think it would with the rise of Uber and car sharing companies. We thought we might see a drop over time…. Or when transit improvements are being made and the city is being better inspected. We've seen a little bit, but hasn't been a lot yet. Driverless cars might be a new thing, but these cars will be stored somewhere so I don't know how that is going to work but it hasn't really impacted us yet. I do think that some of this… when we have more people coming from other places as they are employed in the tech companies here, they are going to think that they need their car. And they aren't used to a dense environment. However, some of them end up ditching their car. So we've seen residents drop their parking as they realize that lifestyle-wise they don't need it. They would rather pay for a car when they need it or some other service. But so much that it has really dropped our ratio"

- Recently, there have been a few neighborhoods that have challenged decision on parking. Has your company received any pushback from local design review boards, zoning reviewers, or community on parking before?
  - If so, what are some of their concerns?

"No. They [local design board] don't really get involved in the count of parking. And no as well to from the community At least not from what I remember. That's why I think parking minimums are a bad idea"

- If a unit goes from 0-1 parking spaces, what would you estimate as the added value?

"So what is the market charge for renting then…. I'll tell you this. I think we are around (SLU/urban core area) ... we are probably around $175/month"

- What do you think about maximum parking or placing a cap on parking in the city? And how would it impact your business?

"Well I think it depends on what the requirement is. If they say it's a 1-1 ratio, then I would say sure since we are never going to hit that. But if they get too close to what we actually think we need and we had no flexibility to go a little bit over, then I would get a little worried there"