

DATE: May 24, 2017

TO: Lucy Sloman and Keith Niven, City of Issaquah

FROM: Morgan Shook and Michelle Anderson, ECONorthwest

SUBJECT: Issaquah Structured Parking Analysis – Discussion Draft for the Land and Shore Committee

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## 1 Purpose

The City of Issaquah contracted ECONW to analyze the impact of potential structured parking requirements on development feasibility. This memorandum describes the analysis and resulting impact to both residential and commercial development. In addition to the analysis, ECONorthwest researched other cities that have implemented structured parking requirements or incentives.

### 1.1 Research Questions

As part of this study, ECONorthwest was asked to address the following questions related to parking and its impact on development feasibility in Issaquah with a specific focus on development projects that would be required to supply their parking in some type of structure (e.g. no surface parking). These questions are summarized below.

- How will relative requirements for structured parking impact development project financial performance?
- How will that impact vary by development product type (i.e. housing, retail, office)?
- What are the implications for regulating structured parking relative to broader city and community goals?
- What is the evidence and context for where other jurisdictions are implementing structured parking requirements?

### 1.2 Summary of Key Findings

Through the analysis, ECONorthwest made the following key findings:

Issaquah's "structured parking" rules are designed around form, not necessarily construction type.

To frame our analysis, we coordinated with City of Issaquah staff to create a consistent definition of structured parking. From this exercise, we discovered a couple critical takeaways:

- A preference for structured parking, and the various types of structured parking, are based on form and the relationship of the parking to the surrounding environment.
- The expected type of structured parking has implications for construction types and costs. Some definitions of structured parking can be achieved through drastically different construction types. The variety in construction types and methods available for

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satisfying the same definition of structured parking has an impact on overall cost and development feasibility. For instance, townhome developments, which are stick-built and lower density, are common in recent developments in Issaquah. This development type often includes structured parking in the form of an individual garage. Depending on the grade of the site, a townhome residential product can achieve structured parking that is defined as either “tuck under” or “underbuilding”. Structured parking that is provided “underbuilding” and built as a shared podium instead of individual garages can typically support much larger densities than “underbuilding” in the development form of townhomes.

- New development can easily meet the structured parking requirement by pursuing the lower cost option for providing the parking. However, the result from the lower cost option may or may not be in alignment with other community goals.

### Development projects in Issaquah are sensitive to the nuanced form of parking required.

Our analysis shows the basic features of how parking impacts development project feasibility in Issaquah.

- The market rate for parking (e.g. what parkers are willing to pay for parking, either explicitly or bundled with their rent) is lower than the cost to produce it in Issaquah. Therefore, cost-effective forms of meeting parking demand through surface parking perform better than structured parking.
- Development financial performance decreases with greater percentages of structured parking for almost all development prototypes. In other words, as the average cost to produce a unit of parking increases, the impact of project feasibility worsens correspondingly. This reflects a range of magnitude shift in parking construction costs as parking moves from surface to some form of structured.
- Certain development types experience a greater magnitude of change than others. This is due to the relative construction type of the project as well as the construction type of the associated structured parking. For instance, the development of structured parking for stand-alone retail and office is usually provided in a separate structure and not included as part of the building containing the primary use.

### Other cities do regulate parking form but typically target it to support specific community goals.

We conducted a brief examination of cities in the pacific northwest that require structured parking. This was by no means an exhaustive review but illustrates the way that cities regulate parking form. The following are a couple observations from this review:

- Cities generally don’t have different parking requirements for different construction types of structured parking.
- Cities do require some, if not all, parking to be contained within the building structure. These provisions typically reflect some community planning goals that target these structures as part of some subarea (i.e. business district, town center, etc.) or some

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specific type of use (i.e. multifamily residential, office, etc.). There are also variants of both of the instances above (i.e. multifamily residential in a targeted subarea).

- Cities grant either exemptions or incentives for providing structured parking reflecting the understanding that structured parking might not be the most market efficient. The exemption of floor area from the calculation of zoning rules (which Issaquah also exempts) or the use of density bonuses for the provision of structured parking are examples of a couple of ways structured parking can be differentially treated.

The differential regulation of parking can either encourage or discourage different land uses or be used to support broader public goals.

Parking rules have a profound impact on project feasibility. The differential treatment of both within and between land uses can make a project more or less attractive from a financial perspective. Given the current market for uses and parking, the city has choices on how it would like to regulate parking.

- First, requirements to provide all parking in the form of a structure will make development conditions challenging at varying degrees depending on the use.
- Second, in the short-run, requiring some form and level of structured parking (particularly higher-levels) will likely require parallel policies that consider exemptions, incentives, and other innovative treatment. The city currently employs such policies, such as exempting parking from floor area provisions. The city will have choices on how they choose to regulate structured parking regarding location and use and by construction type. By doing so, the city can impact the financial performance of different uses and preferred project elements.
- Third, in the longer-run, commercial rents are on a path (historically) where the land values and rents will be in a place where higher levels of structured parking can be financially supported.

Existing and future conditions could have different impact on the sensitivity to structured parking and resulting feasibility.

- This analysis assumes existing conditions remain for determining supply and demand for parking. The actual amount of parking supplied is sensitive to the other surrounding uses as well as the on-street supply. Future conditions could therefore impact demand differently than expected – for instance, if all surrounding uses minimize parking, if on-street parking is managed, or if an alternative mode of travel successfully substitutes driving.

## 2 Existing Conditions for Structured Parking

The City of Issaquah already encourages the construction of structured parking in multiple locations in the code. Chapter 4 of the Central Issaquah Development and Design Standards indicates that “structured, underbuilding, and surface parking is not included in the Gross Floor Area calculation”. Additionally, Chapter 8 identifies various parking credits, reductions,

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and waivers to allow for flexibility in new developments so they can contribute to the decrease in reliance on automobiles and diminish the percentage of land dedicated to surface parking. For instance, new developments close to transit (a primary entrance within 1,300 feet of the Issaquah transit center) can reduce the required on-site parking by 20% and parking is waived for businesses that are less than or equal to 3,000 square feet of net square feet.

In addition to parking incentives, the Central Issaquah Development and Design requires certain auto-oriented commercial uses to meet Design Criteria or Design Standards. For instance, vehicle maintenance and service activities must be “enclosed within a Building and comply with Design Standards including, but not limited to, ground floor storefront orientation to the sidewalk and street, parking and outdoor storage, including vehicle storage, located to the rear or side of the site and screened from Circulation Facility view”.

ECONorthwest reviewed recent developments in Issaquah to understand the potential for structured parking. Multiple new, residential developments (both recently constructed and proposed) include some form of structured parking. For the purposes of our analysis, we coordinated with the City of Issaquah to define the classifications of structured parking. These definitions consider the appearance of the structure, as well as the relevant construction types. A table with precedent photos is included in Attachment A of this memorandum.

- **Tuck-under:** This form of structured parking takes advantage of changes in site grade to provide parking at a level partially beneath the residential use. This allows for the primary residential entrance to be at grade, or slightly above grade, and better engage with the street. This type of parking is provided primarily as individual garages. Depending on the development market, this term could refer to structured parking that is shared and within a partial podium construction. For our analysis, we assumed individual garages built within a stick-frame residential unit.
- **Underbuilding:** This form of parking has the greatest variety of appearance in existing Issaquah developments. It occurs mostly above ground, but underneath the primary building, and it can occur when the site is level, or when the site experiences a grade change. If the site is level, both the parking and residential entrance are on the same level (hopefully with the parking behind an active, ground floor use). When the site is sloped, the underbuilding parking is typically built to allow the residential use to face onto the street. In most circumstances, this type of parking is shared, however, there are some instances where it is built as individual garages (often side-by-side disrupting the pedestrian experience with multiple driveway entrances). If the structure is shared parking, it can be constructed with concrete or steel and can be entirely enclosed, or it can occur without walls and only supporting pillars to allow more flexibility with parking stall placement (e.g. to extend slightly beyond the primary building line). If the structure is individual garages, beneath residential units, the entire structure is likely made of wood. In other development markets, shared underbuilding parking is usually referred to as podium construction. We modeled underbuilding as shared parking with full walls and constructed of concrete.

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- **Underground:** This form occurs completely below the surrounding grades. It is typically shared and built of concrete or steel. This type of structured parking is less common in Issaquah due to the higher cost of construction. We did not model this type of development due to the high cost of construction and limited precedent examples.

### 3 Overview of Analysis

ECONorthwest was asked to assess the development feasibility of multiple residential and commercial development types with a variety of parking requirements. As a result, we created the following development prototypes to help us explore the questions confronted by the city.

#### Stick-built multifamily townhomes with surface parking.

This is a development type that includes:

- 3 floors of residential development in a townhome arrangement (side-by-side, internal staircase to unit, and slightly larger units) with a 30,000 square-foot floorplate, resulting in a density of 100 dwelling units per acre and approximately 70 parking stalls.
- Construction costs associated with stick apartments (assumed \$160 per square foot) and surface parking (assumed \$7,000 per stall).
- Blended apartment rent of \$2.38 per square foot, unbundled from parking rents which, for surface parking, were free.

#### Stick-built multifamily townhomes with tuck under parking at a variety of percentages.

This is a development that was modeled four different times with various amounts of parking, as a percentage of total on-site supply, in individual tuck under garages – 25 percent, 50 percent, 75 percent, and 100 percent. The remainder of the parking was modeled as surface parking.

- 3 floors of residential development in a townhome arrangement (side-by-side, internal staircase to unit, and slightly larger units) with a 30,000 square-foot floorplate, resulting in a density of 100 dwelling units per acre and approximately 70 parking stalls.
- Construction costs associated with stick apartments (assumed \$160 per square foot) with tuck under parking (assumed \$24,000 per garage) and surface parking (assumed \$7,000 per stall).
- Blended apartment rent of \$2.38 per square foot, unbundled from parking rents which, for surface parking and tuck under, were free.

#### Stick-built residential with surface parking

This is a development that includes:

- 4 floors of residential with a 30,000 square-foot floorplate, resulting in a density of 190 dwelling units per acre and approximately 130 parking stalls.

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- Construction costs associated with stick apartments (assumed \$160 per square foot) and surface parking (assumed \$7,000 per stall).
  - Blended apartment rent of \$2.60 per square foot, unbundled from parking rents which, for surface parking, were free.

### Podium construction residential with structured parking underbuilding at a variety of percentages

This is a development that was modeled four different times with various amounts of parking, as a percentage of total on-site supply, in a podium structure under the residential building – 25 percent, 50 percent, 75 percent, and 100 percent. The remainder of the parking was modeled as surface parking.

- 4 floors of residential with a 30,000 square-foot floorplate, resulting in a density of 190 dwelling units per acre and approximately 130 parking stalls.
- Construction costs associated with stick apartments on top of a podium (assumed \$180 per square foot) with structured podium parking (assumed \$30,000 per stall) and surface parking (assumed \$7,000 per stall).
- Blended apartment rent of \$2.60 per square foot, unbundled from parking rents which, for surface parking were free and for structured parking were \$75 per stall.

### Retail with surface parking

This is a development type that includes:

- 1 floor of retail with a 30,000 square-foot floorplate, resulting in 25,000 square feet of leasable area and approximately 50 parking stalls
- Construction costs associated with single-story retail (assumed \$135 per square foot) and surface parking (assumed \$7,000 per stall).
- Triple net retail rent of \$20 per square foot, with operating costs passed through to the tenant. Assumed free parking.

### Retail with structured parking at a variety of percentages

This is a development that was modeled four different times with various amounts of parking, as a percentage of total of on-site supply, in a separate structured parking deck – 25 percent, 50 percent, 75 percent, and 100 percent. The remainder of the parking was modeled as surface parking.

- 1 floor of retail with a 30,000 square-foot floorplate, resulting in 25,000 square feet of leasable area and approximately 50 parking stalls
- Construction costs associated with single-story retail (assumed \$135 per square foot) with a structured parking deck (assumed \$20,000 per stall) and surface parking (assumed \$7,000 per stall).



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- Triple net retail rent of \$20 per square foot, with operating costs passed through to the tenant. Assumed free parking.

#### Mid-rise office with surface parking

This is a development type that includes:

- 4 floors of office with a 30,000 square-foot floorplate, resulting in 100,000 square feet of leasable area and approximately 200 parking stalls.
- Construction costs associated with mid-rise office (assumed \$190 per square foot) and surface parking (assumed \$7,000 per stall).
- Triple net office rent of \$27 per square foot, with operating costs passed through to the tenant. Assumed free parking.

#### Mid-rise office with structured parking at a variety of percentages

This is a development that was modeled four different times with various amounts of parking, as a percentage of total of on-site supply, in a separate structured parking deck – 25 percent, 50 percent, 75 percent, and 100 percent. The remainder of the parking was modeled as surface parking.

- 4 floors of office with a 30,000 square-foot floorplate, resulting in 100,000 square feet of leasable area and approximately 200 parking stalls.
- Construction costs associated with mid-rise office (assumed \$190 per square foot) with a structured parking deck (assumed \$20,000 per stall) and surface parking (assumed \$7,000 per stall).
- Triple net office rent of \$27 per square foot, with operating costs passed through to the tenant. Assumed free parking.

A more detailed set of assumptions are included in Attachment B of this memorandum.

We used a pro forma model to assess the feasibility of each of these development prototypes. This model employed the return on cost approach on a per unit basis. This approach has multiple advantages: a return on cost model does not require the creation of hypothetical assumptions about the sources and uses of funds for each development (e.g. where the funds are coming from, with what interest rates, for how long of a term, etc.) and the per unit basis of analysis allows the results to be scaled based on the density of units. It is important to note that the per unit analysis assumes the development is physically feasible. Exhibit 1 shows the equation for calculating the residual land value.

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## Exhibit 1. Development Equation – Understanding Residual Land Values

**+ Project Value** (Sale price when finished)

**- Project Costs**

- Site Preparation
- Design, Permits, etc.
- Construction
- Parking
- Infrastructure (road, stormwater, etc.)
- Operation & Maintenance
- Profit (return on cost)

**= Residual Land Value**

(Amount can pay for land and achieve expected financial return)

Source: ECONorthwest

If the residual land value is close to the current market price for the property, the project is likely feasible. If the residual land value is negative, the project does not generate enough income to turn a profit and is not feasible. For this analysis, residual land values (RLV) were indexed and compared to the base scenario of surface parking. This way we could normalize the changes to evaluate how a development performs between the different scenarios. Relative increases and decreases in RLV are viewed as changes in financial performance and not absolute determinations of project feasibility. It is difficult to model all the idiosyncratic characteristics of owners, investors, and developers from property to property and there are instances of different financial gains. For example, a property owner might have a very low basis in the land and be able to carry a lower return on investment.

### 3.1 Key Findings

The objective of the analysis was to model the relative impacts to development from a structured parking component. To accomplish this, we created prototypes that were similar in almost every aspect except for the parking (and the associated rent and cost structure of said parking). We then compared the relevant scenarios with structured parking to the baseline of 100 percent surface parking.

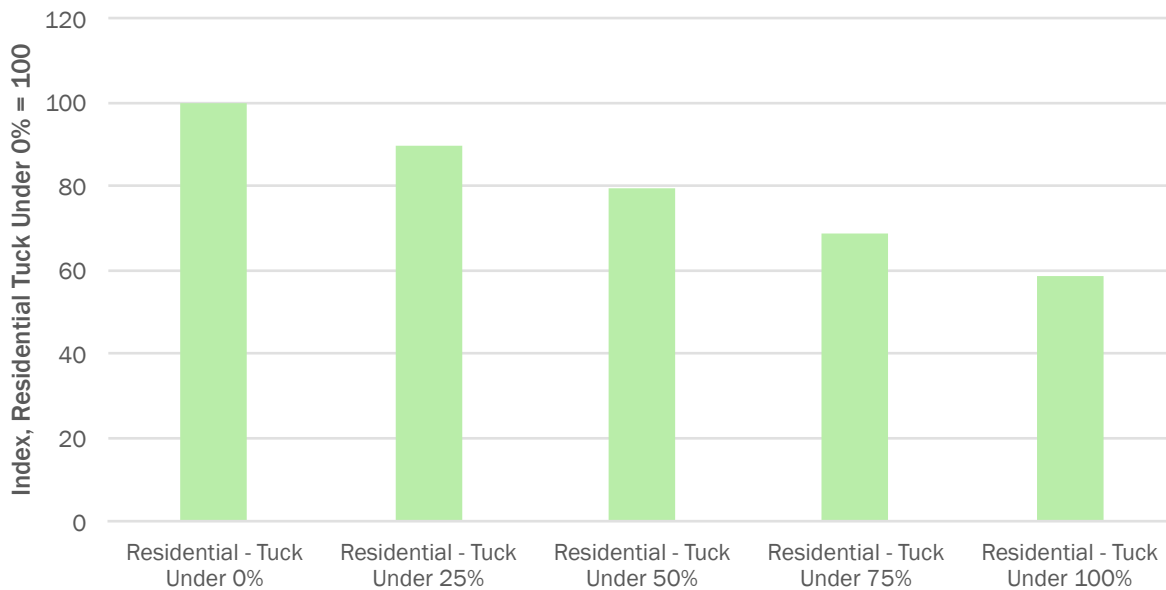
The metric used to assess development feasibility in this return on cost model is a resulting index related to the baseline, 100 percent surface parking scenario which was set to 100. By using an index, we can compare the relative impacts from structured parking requirements.

The following charts show these same numbers grouped by primary use-type. Although the relationship between percent of structured parking and the relative feasibility appears linear, it is important to note this is because the metric of evaluation is per unit. Additionally, this model assumes that the structured parking is physically feasible at smaller percentages. However, if a developer must build structured parking it will be built to the optimum construction size taking into account the uniqueness of site characteristics.



For instance, one full floor of concrete podium construction (accommodating underbuilding parking beneath an optimum residential floorplate above) will likely not meet an exact requirement for parking contained within a structure. Therefore, even if a structured parking requirement is only 25 percent, a full floor of concrete podium construction might accommodate something like 48 percent of the parking requirement, which is a substantially greater cost. The relevant thresholds for requiring a percentage of structured parking are directly related to not only the total square footage of the use or the dwelling units per acre, but to the proposed construction type.

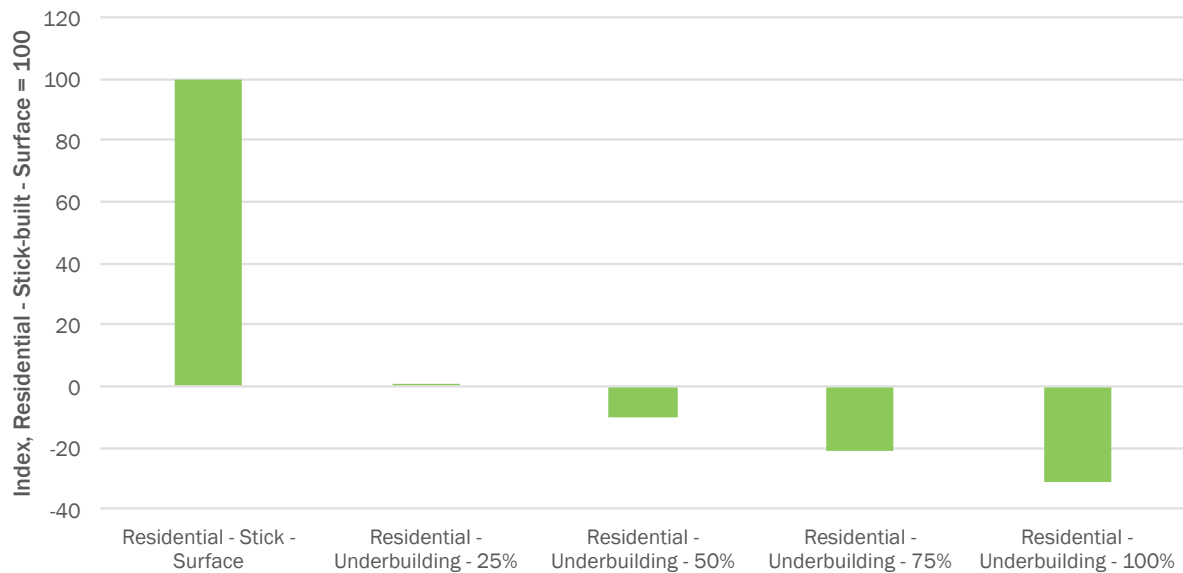
**Exhibit 2. Residual Land Values – Tuck-Under Parking For Stick-built Townhomes**



Source: ECONorthwest

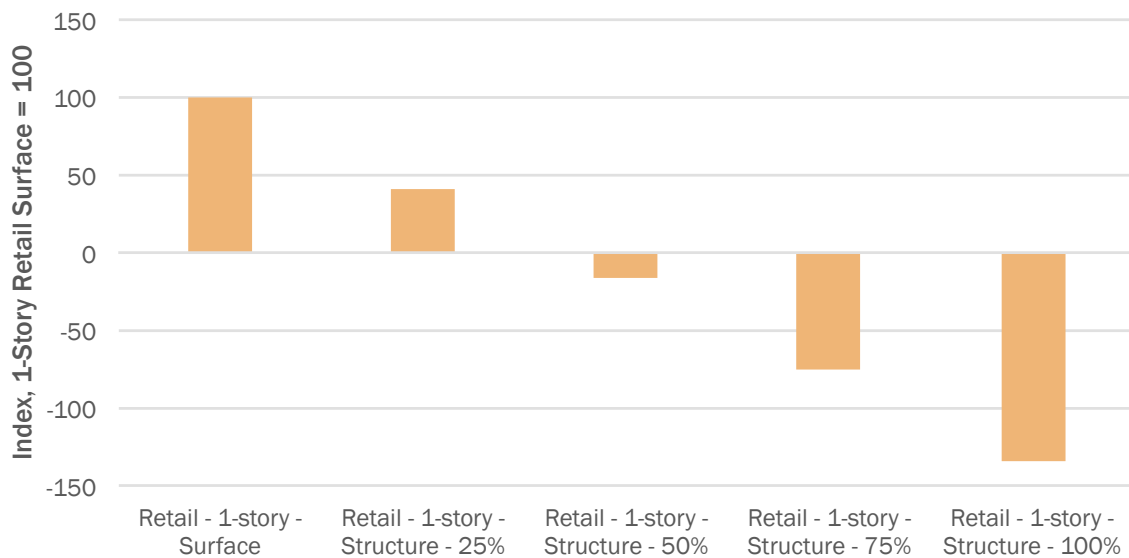
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### Exhibit 3. Residual Land Values – Underbuilding Structured Parking for Residential Podium Construction



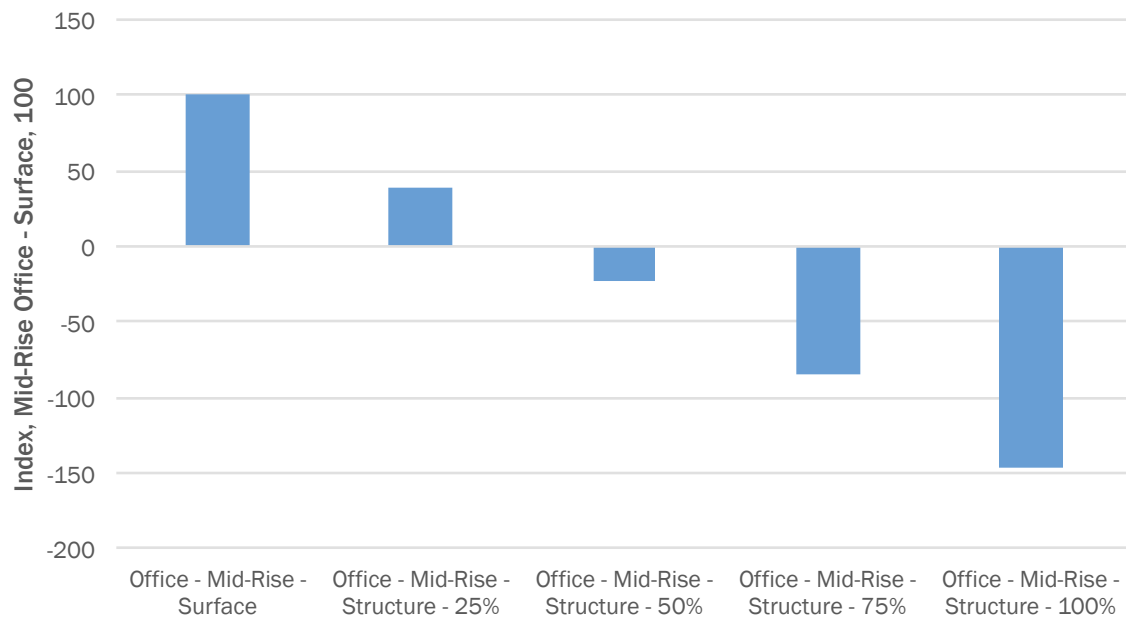
Source: ECONorthwest

### Exhibit 4. Residual Land Values – Retail with Structured Parking in Separate Structure



Source: ECONorthwest

**Exhibit 5. Residual Land Values – Office with Structured Parking in Separate Structure**



Source: ECONorthwest

## 3.2 Key Implications

### Structured Parking Costs Dramatically Impact Project Financial Performance

The analysis assumes a specific type of structured parking for each of the prototypes. The assumptions include construction type, associated costs, and relevant monthly lease rate for the individual parking space. Each of the existing development examples has a slight difference in the physical supply of structured parking due to individual site topography and characteristics. For the residential prototypes we modeled, we show that structured parking is feasible, specifically for the tuck-under townhome developments. This reflects what we see on the ground for new development in Issaquah as multiple of the existing new multi-family developments contain a portion of townhome-style development.

The underbuilding prototypes become less feasible, relative to the baseline of 100 percent surface parking, with increasing percentages of underbuilding parking. As previously mentioned, underbuilding parking can be accommodated in multiple ways. We modeled a full podium structure, but multiple of the precedent examples have exposed walls which allows flexibility for the parking stall arrangement. This difference in a full podium (with all walls and associated ventilation requirements) versus a podium that is less enclosed, is an important nuance for understanding the cost implications.

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## Higher Rates of Structured Parking Impact Development Types in Different Ways

The strongest impact to the development is related to the construction type for the structured parking. The developments with individual garages can accommodate the structured parking within a townhome style development which usually a stick frame construction type and is subsequently cheaper than building a product with underbuilding parking. This means that if a higher structured parking is set, it is possible more development will occur in the townhome form (with parking structured either as tuck under or as underbuilding) instead of the higher density, and more expensive, podium construction.

Stand-alone single-story retail can support a small percentage of structured parking. However, as the percentage of structured parking increases, the product performs significantly worse than the baseline of 100 percent surface parking. It is important to consider the threshold for requiring structured parking for retail. Our model assumed a 25,000 net leasable retail space, which requires 50 parking stalls per code. Smaller retail developments, if built as a stand-alone product, would not be able to provide a physical structure to accommodate the smaller total number of required stalls. For instance, if a retail space was only 5,000 net leasable square feet, that would necessitate only 10 parking stalls. There are economies of scale when producing structured parking and optimum sizes and dimensions that can be achieved when the supply is large enough. Requirements for structured parking for retail should occur in either brand new retail destination developments (with multiple planned retail tenants) or for larger stand-alone retail stores.

We also looked at structured parking for office developments to ensure a robust analysis of all real estate product types in the Issaquah market. Although office is not an active use, the provision of parking is still experienced by users of the site as well as passerby and it is clear from the results that office can support a small percentage of structured parking.

## Case Studies

ECONorthwest reviewed similar policy approaches that were implemented by other cities with the objective of spurring structured parking in new development. A full survey of cities and their parking policies are beyond the scope of this analysis. There are a variety of approaches available, ranging from incentives to explicit requirements.

### City of Portland, Oregon

Through the Mixed Use Zones Project (a zoning code project currently awaiting implementation), the City of Portland created zoning code revisions to incentivize and accommodate new development types. Two of these revisions are directed at parking: one revision allows for additional overall height increases to accommodate higher ground floor ceilings for both retail and mechanized stacked parking; a second revision is a parking exception for affordable bonus units, where affordable units allowed in the bonus floor area would not be counted in required parking calculations.

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## **City of Redmond, Washington**

The City of Redmond has multiple zoning code requirements that help incentivize structured parking. Within the Northeast Design District, an incentive program allows one additional story for the construction of structured parking. The Downtown area has a couple regulations directed at structured parking for residential uses. One of the regulations permits curbside parking along the site to count toward up to 25 percent of the required off-street parking while another allows certain residential uses on smaller sites to receive a density bonus (in terms of dwelling units per acre) of 10 percent for building either semi-subterranean or fully subterranean parking. The Overlake Incentive Program allows for a floor area ratio bonus of 1.5 for residential uses that include subterranean parking for at least 60 percent of the off-street parking.

## **City of Federal Way, Washington**

The City of Federal Way is currently considering passing an ordinance that will amend the zoning code to require structured parking for larger, multifamily developments (developments containing more than 100 units) in specific zones. Among multiple changes to the zoning code, the draft ordinance approves the requirement for new, multifamily developments to provide 25 percent of on-site parking in an underground structure or on the first floor within the building footprint.

## **Additional Solutions**

Although the case studies above provide examples of potential zoning code changes, there are other options for achieving structured parking. Below is a selected list of additional incentives and programs aimed at spurring structured parking.

### **Parking and Business Improvement Areas and Local Improvement Districts**

The State of Washington allows for the creation of Parking and Business Improvement Areas (PBIA) and Local Improvement Districts (LID). These two tools allow for the creation of a subset geography in which to assess a group of properties to help collectively pay for improvements and maintenance of the area. Based on the analysis, the burden on any one individual developer to build structured parking is too high, but splitting the cost could be an option.

PBIAs are formed through either an initiation petition, submitted by the owners within the proposed boundary to the legislative authority of the local government, or by that legislative authority passing an initiation resolution to create the improvement area. These improvement areas are general economic development tools that allow the business and property owners, within a defined area, to establish a special assessment district.

The special assessments, which are imposed on businesses, multifamily residential developments, and mixed-use developments, can be used to finance a variety of activities and improvements in the district. The list of potential items can include the decoration of public

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areas, provision of maintenance and security of common places, and most importantly the construction, acquisition, or maintenance of parking facilities in the area.

LIDs can be formed by the legislative body of the municipality or through a petition initiated by the property owners. An LID is only a financing tool – it finances the infrastructure improvements doesn't construct them. The financing is achieved through the sale of bonds to investors and the retirement of those bonds through annual assessments on the property owners within the district.

This tool allows private owners, and any potential new developers, to share the off-site improvement cost with adjoining property owners who are similarly benefited. It also allows them to spread that cost over a longer term at a relatively lower interest rate than a construction or permanent loan. Additionally, an LID is approved through an ordinance, which makes it public record and noted by title companies.

### Shared Parking Arrangements

Off-site parking is the provision of some, or all, of the parking for a use on a different site from the principal use. Cities have authorized and approved these arrangements ranging on whether the parking in question is required or excess parking. Shared parking is parking which is used by more than one business at different times of the day, week, or year. Generally, it is intended for developments (mostly mixed uses) which have different peak periods or hours of operation. Additionally, off-site parking may either be shared between different uses or reserved exclusively for a specific use.





## Attachment A: Precedent Examples of Structured Parking


### Assumptions

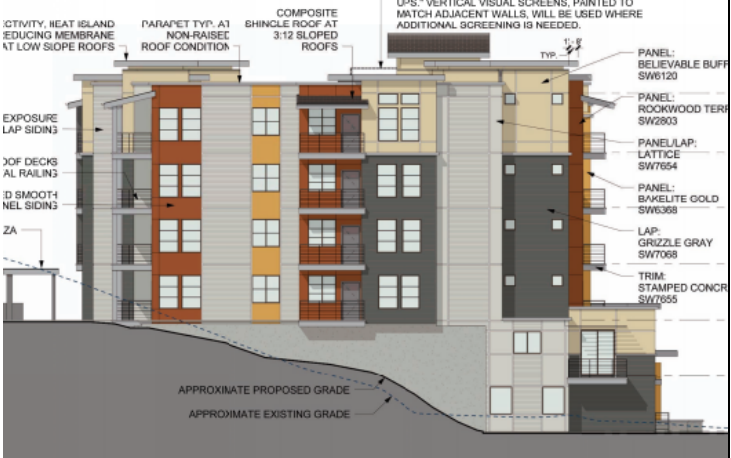
We coordinated with the City of Issaquah to develop a sample list of structured parking examples for residential development. Most of these examples are either existing, or proposed, in Issaquah. Table 2 provides the example photos. Items with an asterisk indicate the specific version of structured parking that was modeled in our analysis.

**Table 1. Precedent Examples of Structured Parking**

Project	Parking type	Image
Riva	*Tuck Under, individual garages	 <p>The image contains two architectural drawings for the Riva project. On the left is a 'SIDE ELEVATION' at a scale of 3/16" = 1'-0", showing a three-story building with a gabled roof and integrated parking spaces. On the right is a 'REAR ELEVATION' at a scale of 3/16" = 1'-0", showing the rear of the building with a balcony and integrated parking. A central label reads 'TYPICAL TUCK UNDER CONDITION'.</p>
Gateway Senior	Tuck Under, shared	 <p>The image is a detailed architectural cross-section drawing of the Gateway Senior project. It shows a multi-story building with a grid of units. The ground floor is labeled 'GARAGE' and shows a shared parking structure. The upper floors are labeled 'UNIT A1a' through 'UNIT A1g'. The drawing includes structural details, floor levels, and a red dashed line indicating a specific section cut.</p>

<p>Gateway, Bldg D</p>	<p>*Underbuilding, shared</p>	
<p>Gateway Bldgs A, B, &amp; C types</p>	<p>Underbuilding, individual garages</p>	

Riva	Underbuilding, individual garages	 <p><b>SIDE ELEVATION</b> 3/16" = 1'-0"</p> <p>TYPICAL ALLEY LOADED CONDITION</p> <p><b>REAR ELEVATION</b> 3/16" = 1'-0"</p>
Vale	Underbuilding, shared	 <p><b>RESID OVERL PLAZA, VIEWS,</b></p>
Atlas	Underground	

<p>Inneswood</p>	<p>Underground</p>	 <p>ACTIVITY: HEAT ISLAND REDUCING MEMBRANE AT LOW SLOPE ROOFS</p> <p>PARAPET TYP. A1 NON-RAISED ROOF CONDITION</p> <p>COMPOSITE SHINGLE ROOF AT 3:12 SLOPED ROOFS</p> <p>HVAC EQUIPMENT TO BE RECESSED BEHIND "POP-UPS." VERTICAL VISUAL SCREENS, PAINTED TO MATCH ADJACENT WALLS, WILL BE USED WHERE ADDITIONAL SCREENING IS NEEDED.</p> <p>TYP. 1'-3"</p> <p>PANEL: BELIEVABLE BUFF SW6120</p> <p>PANEL: ROCKWOOD TERR SW2803</p> <p>PANEL/LAP: LATTICE SW7654</p> <p>PANEL: BAKELITE GOLD SW6368</p> <p>LAP: GRIZZLE GRAY SW7068</p> <p>TRIM: STAMPED CONCR SW7655</p> <p>EXPOSURE LAP SIDING</p> <p>JOE DECKS AL RAILING</p> <p>ID SMOOTH NEL SIDING</p> <p>ZA</p> <p>APPROXIMATE PROPOSED GRADE</p> <p>APPROXIMATE EXISTING GRADE</p>
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## Attachment B: Development Feasibility Assumptions

### Assumptions

We used data from previous research in Issaquah and collected relevant new data from CoStar (for variables demonstrating market demand) and RS Means (for variables related to construction costs). Table 2 provides a summary of our assumptions:

**Table 2. Development Assumptions used in Pro Forma Model**

Operating Revenue and Cost Assumptions					
Variable	Multi Forma		Assumption	Unit of Measure	
	Low	High	Modeling Assumption		
<u>Rent</u>					
Studio Apartment	\$ 2.90	\$ 3.20	\$ 2.90	Per square foot, monthly	
1-br Apartment	\$ 2.50	\$ 2.90	\$ 2.60	Per square foot, monthly	
2-br Apartment	\$ 2.40	\$ 2.60	\$ 2.30	Per square foot, monthly	
3-br Apartment	\$ 2.40	\$ 2.60	\$ 2.35	Per square foot, monthly	
1-story Retail	18	32	\$ 20.00	Per square foot, annualized (Triple Net)	
Office	23	30	\$ 27.00	Per square foot, annualized (Triple Net)	
<u>Vacancy Rate</u>					
Apartment	5	7	5%	Percent	
Retail	5	10	10%	Percent	
Office	5	10	10%	Percent	
<u>Operating Expenses</u>					
Apartment	6000	6500	\$ 5,500.00	Per Unit/Year	
Retail	23	28	25%	Of gross revenue (passed through for Triple Net)	
Office	23	28	25%	Of gross revenue (passed through for Triple Net)	
Property tax - residential			\$ 2,000.00	per Unit/Year	
<u>Residential Parking Revenue</u>					
Structure	75	125	\$ 75.00	Per stall, monthly	
Surface	0	65	\$ -	Per stall, monthly	
<u>Office Parking Revenue</u>					
Freestanding Deck			\$ -	Per stall, monthly	
Surface			\$ -	Per stall, monthly	
<u>CAP Rate</u>					
Apartment			5.0%	Percent	
Mixed Use, Multi-Family			5.50%	Percent	
Retail			6.0%	Percent	
Office			6.0%	Percent	
<u>Return on Cost</u>					
	5.80%	6.50%	6.00%	percent	

Source: CoStar, RS Means, and previous ECONorthwest research

**Table 1 (continued). Development Assumptions used in Pro Forma Model**

<b>Construction Costs</b>					
<b>Variable</b>			<b>Assumption</b>		<b>Unit of Measure</b>
<u>Hard Construction Costs</u> (including 9.5% sales tax)					
<b>5 over 1 Podium</b>					
<b>(Type V construction; up to 90')</b>					
Upper Floor Apartment (stick)	180	220	\$ 180.00		Per square foot
Ground Floor Retail	180	240	\$ 180.00		Per square foot
Retail TI	75	100	\$ 75.00		Per square foot
Residential Lobby			\$ 165.00		Per square foot
Gross to Net ratio			83%		
<b>Stick apartments</b>					
Apartments (stick)	160	190	\$ 160.00		Per square foot
Gross to Net Ratio			85%		
<b>Stand Alone Office</b>					
Mid-rise office	165	194	\$ 190.00		Per square foot
Low-rise office			\$ 180.00		Per square foot
Gross to Net Ratio			83%		
<b>Stand Alone Retail</b>					
1-story retail	115	160	\$ 135.00		Per square foot
Gross to Net Ratio			83%		
<b>Parking</b>					
Surface parking	5000	8000	\$ 7,000.00		Per stall
Tuck Under			\$ 24,000.00		
Underbuilding Parking	25000	30000	\$ 28,000.00		Per stall
Underground			\$ 35,000.00		
Free-standing Deck parking	18000	26000	\$ 20,000.00		Per stall
Soft Costs (excluding property tax)			33%		Percent of Hard Costs
Developer Fee			4.0%		Percent total development cost
Contingency fee			5.0%		Percent of Hard + Soft Costs
<b>Apartment/Unit Assumptions</b>					
<u>Unit Mix (stick and podium)</u>					
Studio	20	60	30%		percent of all units
1 Bedroom	40	60	40%		percent of all units
2 Bedroom	25	35	30%		percent of all units
3 Bedroom			0%		percent of all units
			100%		
<u>Unit Mix (tuck under)</u>					
Studio	20	60	5%		percent of all units
1 Bedroom	40	60	10%		percent of all units
2 Bedroom	25	35	45%		percent of all units
3 Bedroom			40%		
			100%		
<u>Unit Size</u>					
Studio	495	592	550		Net/Rentable Square Feet
1 Bedroom	640	847	730		Net/Rentable Square Feet
2 Bedroom	957	1132	1,050		Net/Rentable Square Feet
3 Bedroom	1180	1380	1,280		Net/Rentable Square Feet
<u>Retail "unit" size</u>					
			1,000		Net/Rentable Square Feet
<u>Office "unit" size</u>					
			1,000		Net/Rentable Square Feet
<u>Parking Requirements</u>					
Studio			0.75		per unit
1 bedroom			1		per unit
2 bedroom			1		per unit
3 bedroom			1		per unit
General office			2		per 1,000 NSF
Retail			2		per 1,000 NSF

Source: CoStar, RS Means, and previous ECONorthwest research