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3 December 2009 **Project #: 7279**

TO: **Lynn Miranda and Nora Gierloff**
FROM: **Abe Farkas, Anne Fifield, and Susan Davis**
SUBJECT: **TECHNICAL MEMORANDUM: TUKWILA URBAN CENTER IMPLEMENTATION ANALYSIS—FINAL**

The City of Tukwila contracted with ECONorthwest (ECO) to evaluate the vision and development regulations (Books I and II) of the public review draft of the Southcenter Plan—the City's plan for their urban center. ECO evaluated the market for proposed redevelopment in the Tukwila Urban Center (TUC) and provided financial analysis to identify potential adjustments to the plan and development regulations to make redevelopment of the TUC more feasible in the short run, and to assure that the vision outlined in the draft plan is aligned with longer-run market realities.

This technical memorandum summarizes the research conducted by ECO. It has four sections:

- **Introduction and Background** provides an overview of the development vision for the draft Urban Center Plan and its purpose. It identifies the key issues of the development requirements that may negatively affect redevelopment. This section also includes an overview of the research methods used in this analysis.
- **Development Market Economics: The Long Run** describes the market and demographic forces that will influence the implementation of the TUC plan vision over the long term.
- **Development Market Economics: The Short Run** describes the results of ECO's pro forma analyses of four prototype developments to determine financial feasibility of the draft TUC development regulations in the short term.
- **Implications and Recommendations** summarizes the implications of the technical research and recommends strategies to support the implementation of the TUC plan.

Attached to this memorandum are two Appendices:

- **Focus Group Notes and Participants** provides detailed notes of focus group discussions and those who participated.
- **Details of Financial Pro Formas** provides the details of the technical analyses.

1 INTRODUCTION AND BACKGROUND

1.1 THE TUKWILA URBAN CENTER

The City's Comprehensive Plan identifies the Tukwila Urban Center (TUC) as one of King County's designated Urban Centers; as such, the plan's vision is consistent with the Countywide Planning Policies that require an average of 50 employees and 15 households per gross acre. The draft Plan describes a future development pattern that is more dense, pedestrian-oriented, and includes a broader mix of uses than is currently seen in the TUC. In February 2009, the City of Tukwila issued the public review draft of the Southcenter Plan (*the Plan)*, which presents the community's vision for growth and change for the TUC. The draft Plan also includes development regulations specific to the TUC that require development forms designed to achieve the community's vision for the area.

Existing development patterns in the Plan Area are primarily single-story, auto-oriented, commercial development. The northern portion is dominated by a super-regional shopping mall surrounded by parking lots and rings of associated smaller scale, surface-parked commercial buildings. The southern portion is primarily a warehouse and distribution center, with some retail outlets and office buildings. Some "big box" retailers have located in the western and southern portions of the Plan Area.

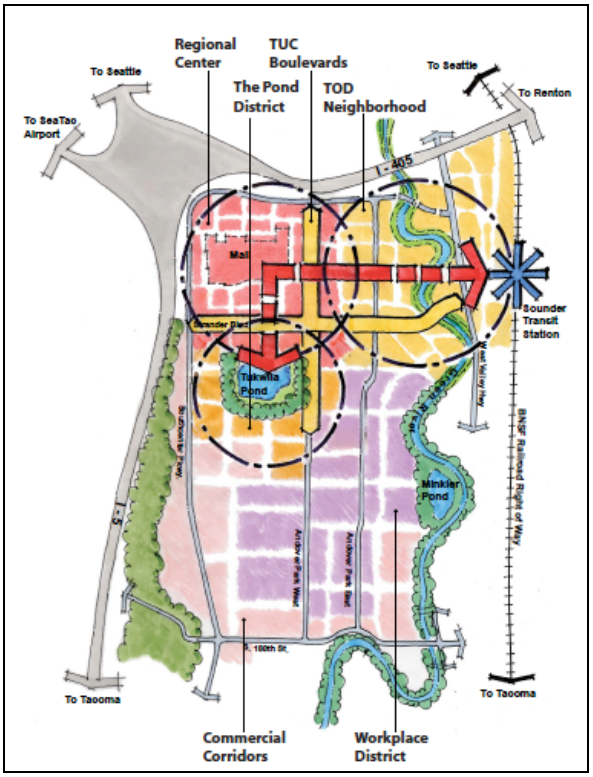
The community envisions growth in the northern part of the Plan Area taking on a more compact and differentiated form. Tukwila's new redevelopment strategies support the continued success of existing uses, with districts of more urban mixed-use development including residential, entertainment, restaurant, life-style retail, and office components. These districts are envisioned as active, mid-rise areas with pedestrian-oriented streets, connecting the expanding Westfield Southcenter Mall with the Sounder Commuter Rail/Amtrak Station, and including the area surrounding Tukwila Pond.

The draft Plan identified key characteristics envisioned for districts and corridors within the TUC, shown in Figure 1:

- **The Regional Center**. The area currently dominated by the Southcenter Mall will become denser and scaled for pedestrians. In the long-term, the draft Plan shows increased building height with offices, residences, or hotels on upper floors. Parking will continue to transition from surface lots to structured parking.
- **The Pond District.** The draft Plan calls upon new development to take advantage of the pond as a natural amenity, with new development oriented toward the pond, with active doors, windows, and public walkways facing the water.
- **The TOD Neighborhood.** The draft Plan calls for the area to intensify, with the taller buildings near the Transit Station and close to the Regional Center, and lower buildings along the river.

- **The Workplace District.** Much of the southern portion of the Plan Area has been and will continue to be devoted to warehousing and distribution uses. As in the other districts the draft Plan calls for a finer grid of new, smaller streets that interconnect existing large-scale blocks.
- **The Commercial Corridor District.** The draft Plan calls for the continuation of auto-oriented retail and services along Southcenter Parkway, including big box retail, super centers, and drive-up facilities.

Figure 1. Envisioned district structure



Source: Tukwila Urban Center draft Plan.

To achieve the desired forms across the TUC, the draft Plan proposes development regulations specific to the TUC. The proposed development code is a "form-based" code, which means it specifies allowed building form (e.g., height and setback). The code also has standards for use, scale, and form for the zones and corridors described above.

1.2 KEY ISSUES ADDRESSED IN THIS ANALYSIS

Several parties have expressed concerns that the draft TUC plan and the development regulations overreach market realities. Stakeholders have expressed concern that much of the draft TUC Plan is based on a market analysis conducted in 2002 that is now outdated. The stakeholders have indicated that the draft TUC Plan and development

code require types and densities of development that are not economically feasible in today's market.

The City extended an invitation with these stakeholders to participate in focus groups on the draft measures of the Plan. ECO conducted interviews and three focus groups with these stakeholders. The stakeholders identified some of the following key requirements of the development code as concerns:

- Height requirements. The development code requires a two-story (25 foot) minimum for structures (excluding anchor retail uses) in the Regional Center, the Pond District, and the TOD Neighborhood. For the short-term, stakeholders were concerned that the required building types may be more costly to build than current rents can support.
- Parking requirements. The code requires 6.0 spaces per 1,000 s.f. of restaurant space, 3.3 spaces for retail, 3.0 spaces for office, and 1.0 spaces per bedroom for each residential unit (with a maximum of 2.0 spaces per dwelling unit). The parking requirements are typical of suburban development. Providing minimum parking would likely require parking structures, increasing construction costs.
- Complexity of the Code. A few stakeholders felt that the proposed development code is complex. It includes code that regulates both form and use.
- Redevelopment and conformity to Code. Remodels or expensive tenant improvements could trigger requirements for conformity to the TUC Code. Stakeholders perceived that a relatively small change could force very difficult and costly improvements to the structure. Such a remodel could require a new building height minimum or bringing a building up to the street. A building owner may avoid making *any* improvement to a structure, in order to avoid improvements that are not economical at this time. The area could see disinvestment in existing structures.
- Fire code requirements for high-rises. The existing Tukwila Fire Code requires significant engineering for buildings over 40 feet tall. Those engineering requirements add significant costs—essentially making a mid-rise building have the same fire/life safety engineering requirements as a high-rise building. The stakeholders believe that these requirements make it unlikely that it would ever be cost-effective to build a mid-rise structure in the TUC. Many other jurisdictions in Washington and Oregon have adopted codes that enable mid-rise construction for buildings that are 65 feet which makes it possible to build five floors of residential or office over one story of retail. These buildings tend to be more economically viable in many markets and reinforce activated ground floor goals in these communities. This is a city-wide issue, though especially problematic to the TUC vision.
- The above issues have specific details that make them problematic but they all contribute to the same, broad concern voiced by stakeholders about the proposed TUC development code: The Code requires building types that are expensive.

> The market in Tukwila does not currently generate rents from tenants high enough to make it financially feasible to build required structure types. Improvements that *are* financially feasible trigger additional improvements that add prohibitive costs. This is likely to discourage *any* improvement to existing structures, unnecessarily causing disinvestment in a successful retail center. Some voiced concerns that existing, successful retail tenants may choose to relocate to neighboring jurisdictions, causing the City to experience a decline in sales tax revenue.

Part of ECO's aim in this analysis is to explore these concerns and provide information to the City about how realistic they are, and about how changes to the Code and the Plan might help to mitigate the outcomes.[1]

1.3 METHODS USED IN THIS ANALYSIS

To respond to stakeholders' concerns, ECO relied on a variety of analytical methods for this analysis:

- **Review of existing documents and studies.** ECO reviewed the documents that supported the development of the draft TUC Plan, including the public review draft of the Tukwila Urban Center Plan, its Development Code and Implementation Strategy, and the 2002 market analysis .
- **Demographics and market trends.** ECO reviewed long-run economic, demographic, and development trends to provide a sense of the TUC's comparative advantage and risks.
- **Pro Forma analysis.** To answer the concern that the required development types are not feasible, ECO created four financial pro formas for prototype developments to illustrate how they might work. The pro formas answer questions about how realistic development forms are in the short term, given current financial markets and also more historic patterns.
- **Focus groups**. ECO conducted three focus groups and follow-up interviews with TUC stakeholders and other office, retail, residential and mixed-use developers

[1] In addition, many of the stakeholders in the TUC have expressed concerns that the draft TUC Plan and development code require types and densities of development that are not economically feasible in today's market, and much of the draft TUC Plan is based on a market analysis conducted in 2002 that is now outdated. ECO agrees that the 2002 market analysis is not adequate now as a short-run analysis: the market has changed. However, given the uncertainty in the current market, it is not an effective use of City funds to do a new, detailed market analysis (like the one completed in 2002) at this time.

doing business in the region (but not in Tukwila) to determine specific concerns and identify potential solutions to problems.

2 DEVELOPMENT MARKET ECONOMICS: THE LONG-RUN

This section describes some of the market-based forces that will influence the implementation of the TUC Plan. It describes how broad trends in demographics, economic conditions, and development give Tukwila a competitive advantage or disadvantage for attracting the urban development form envisioned in the Plan.

2.1 FACTORS THAT FAVOR DEVELOPMENT

Summary: Comparative advantages for development in Tukwila:

Location and access
Large marketshed and regional retail draw
Regional employment center
Potential waterfront amenity
Large, unconfigured parcels

The TUC has a number of competitive advantages that will positively affect implementation of the proposed development plan.

The TUC's primary advantage is its location. It is centrally located between the major population centers of Seattle and Tacoma and has good transportation connections.

- It is about 20 minutes by car from downtown Seattle and about 25 minutes from Tacoma.
- It has good access to a variety of automobile transportation routes. The TUC is on the southeast corner of the I-5 and I-405 interchange.
- The temporary Amtrak Station will be replaced by the permanent Tukwila Sounder Commuter Rail/Amtrak Station, which is in the design phase with construction expected to begin 2010. It will be located on the eastern edge of the TUC.
- It is less than five miles from Sea-Tac, a major international airport.
- It is a 10-minute bus ride from the Light Rail stop on Tukwila International Blvd.

Because it has good access to large employment centers, it has access to a large market for both retailers and employers. In a market-shed that is roughly equal to four miles around the TUC, there are about 214,000 households.

Its good access and strong retail base, largely stemming from the location of the Southcenter Mall, makes the TUC a reasonable location for employment for many in the labor force. About 16,000 individuals commute daily to the TUC, and those workers come from all over the Puget Sound region. Table 1 shows the residential location of the individuals employed in the TUC boundary.

Table 1. Residential location of TUC employees, 2006

Location	Workers	Percent
Seattle	2,049	13%
Kent	1,033	6%
Renton	850	5%
Tacoma	696	4%
Federal Way	680	4%
Cascade-Fairwood	648	4%
Tukwila	334	2%
All Other Cities	10,072	62%
King County	10,993	67%
Pierce County	2,198	13%
Snohomish County	1,178	7%
All Other Counties	1,993	12%
Total	**16,362**	**100%**

Source: U.S. Census OnTheMap 2006.

The firms employing the largest number of people are major retailers, including Nordstrom, Macy's, Costco, J.C. Penny, and Red Dot Corporation (truck air conditioning equipment). Carlyle, Inc., another major employer, manufacturers and distributes wire, cable, and connector products.

Figure 2. Waterfront amenities

Source: Tukwila Urban Center draft Plan.

The TUC area has two significant water features: the Tukwila Pond and the Green River. Existing development has not used the features as an amenity, and they are an obvious opportunity for attractive and appealing development. Figure 2 shows the location of the water features.

Existing land ownership patterns in the TUC are an advantage for redevelopment. The parcels are large, meaning that redevelopment can take many forms. Future land division has flexible options. Figure 3 shows existing land development patterns and the proposed development pattern.

Figure 3.Existing and proposed parcel division

Existing **Proposed**

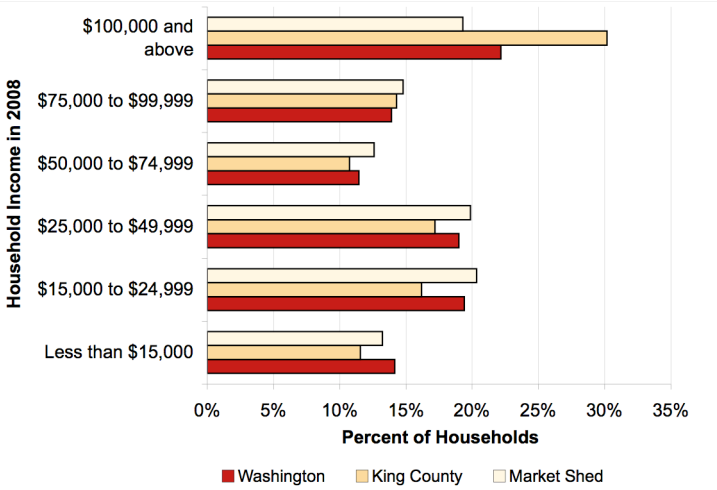
2.2 FACTORS THAT CONSTRAIN DEVELOPMENT

Summary: Comparative disadvantages for development in the TUC:

Relatively lower-income market
Need to create a residential community in an auto-oriented retail center
Lack of publicly-owned land limits options for open space and catalyst projects
Declining strength of retail market
Large, unconfigured parcels

Figure 4 shows household incomes in the approximate market shed for the TUC relative to statewide incomes and incomes in King County. The data show that households in the TUC's market shed have average incomes lower than households in just King County. King County's average higher income is influenced by the higher incomes in Seattle. This affects potential development types in the TUC because Seattle, immediately to the north, is more likely to capture the highest income households, for both residences and retail sales. Higher end residential development and higher retail rents are more easily obtained in Seattle, and the TUC will have to compete with well-established mixed-use areas in Seattle and other King County locations.

Figure 4. Household incomes in market shed, King County, and Washington State, 2008



Source: Claritas, Inc. and WashingtonProspector.com.

The existing development pattern is very different than the proposed vision for the TUC. There are currently no residential uses in the area, and there is very little pedestrian traffic for neighborhood-serving retail. These factors make it challenging to create an urban neighborhood.

The existing land ownership pattern is primarily made up of large parcels, discussed above in the factors that favor development. The downside of the existing land ownership patterns is that parcel division is costly. New roads to access the parcels may need to be constructed. The cost of the new urban infrastructure is not trivial. Outside of urban centers it is normal for the private sector to pick up many key infrastructure off-sites—however land and construction are less costly. In urban centers land is a greater part of development costs, and since development is taller and there is often a need for structured parking, development costs are higher. Adding off-sites, such as parking, to the equation could further disinterest developers since current rents will be even less able to make their projects profitable. However, greater economic benefits can be achieved by breaking up larger parcels with new streets, gaining more locations at intersections and increased street frontage for businesses which translates into higher rents, better access and visibility, and increased pedestrian and vehicular traffic.

Some cities require developers to build off-site infrastructure, some do not, while others share offsite costs with developers. If the City does require developers to fund all the off-site infrastructure, it may discourage developers from considering the TUC. To avoid adding yet another layer of development costs in a highly competitive market it may be worth exploring how the City of Tukwila can effectively share some of the off-site burden so that it can achieve the larger goal of securing envisioned development.

Another constraint is that all the large parcels appear to be privately owned which can impede the ability to initiate redevelopment through a demonstration project. This

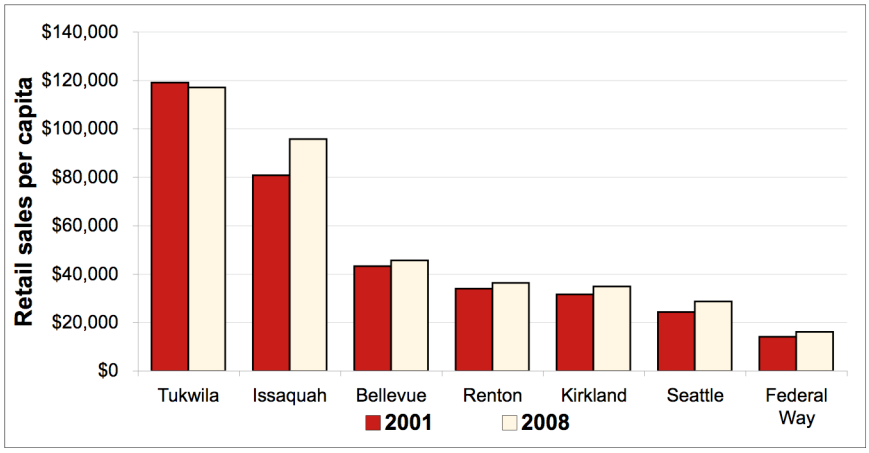
ownership pattern limits the City's ability to direct and support redevelopment. The City has no land it can offer for sale—a tool a City can use to its advantage to require specific development types. This also limits the City's ability to create attractive open space without first acquiring land. The lack of publicly held land limits the City's tools to encourage redevelopment—it cannot use its own site for a catalytic project.

Figure 5 shows retail sales per capita in Tukwila and other nearby cities. Tukwila's per capita retail sales have greatly exceeded nearby cities for many years; in 2001 it captured 9.3% of all sales in the cities shown in the figure.

The state of Washington's tax structure makes retail development a revenue generator for local governments. In years past, the City's coffers have benefited from the substantial retail development in the TUC. But other cities have worked to increase their share of retail sales. Tukwila's share of retail sales of the cities in Figure 5 fell to 7.8% in 2008.[2]

Tukwila does not impose a local B&O tax, as a result, the City is very dependent on its sales tax revenue.

Figure 5. Retail sales per capita, 2001 and 2008



Source: Washington State Department of Revenue, City-Data.com.

The long-term economic and demographic conditions create competitive advantages and disadvantages for the TUC Plan. Its primary advantage is the central location with good transportation access. Also, the existing retail base is strong with healthy brands which tend to promote synergy among retailers. The primary challenge to achieve the vision in the draft TUC Plan is to create a residential-friendly area. The complete

[2] Some of the drop may be attributable to a change in Washington state's sales tax distribution system. The tax is now applied to the community a purchased item is delivered. If someone purchases a good in Tukwila and takes that good at the time of sale, Tukwila receives the sales tax. But if the individual has the item delivered to a different jurisdiction, that different jurisdiction receives the sales tax. The change is expected to affect furniture and large appliance sales.

absence of any residential development means that it must start from scratch, and redefine the existing perception of the TUC. This requires public investment in the potential amenities of the area, so that developers considering the TUC can see the advantages outweigh the disadvantages.

3 DEVELOPMENT MARKET ECONOMICS: THE SHORT-RUN

The current economy has negatively affected development and redevelopment in almost any form. This economic downturn is particularly difficult for new development. Not only is demand depressed with overall economic conditions, but the financial sector has been greatly affected. The financial sector is unwilling to make loans for development—equity in a project must be very high, prohibitively high for most developers. Financing terms are not only more onerous than there were during the boom of 2006 and 2007, they are more onerous than they have been for a long time before that. Most development projects are simply unable to get financing in 2009. Financing terms are expected to remain tight throughout 2010, and there is a lot of uncertainty about when and how conditions will change.

The depressed economy and curtailed consumer spending have hurt the retail sector. Retail vacancies are increasing as some retailers exit the market. Remaining retailers are typically generating lower revenues, which in turn negatively affects the rents those firms are willing to pay. Some retailers have been able to negotiate lower rents. If retail rents decline or stagnate, the expensive development types envisioned for the TUC (i.e., taller, mixed-use structures, and facilities that require structured parking) become less viable.

The property and business owners in the TUC have expressed concerns that the draft TUC Plan and development code require types and densities of development that are not economically feasible in today's market, and much of the draft Plan is based on a market analysis conducted in 2002 that is now outdated.

3.1 DEVELOPMENT PROTOTYPES AND PRO FORMAS

A new look at the market, however, is certainly warranted within the context of attempts to understand how the proposed code will affect property owners and developers as they work to improve their properties. To understand how existing market conditions (construction costs, rents, financing terms) affect the potential development in the TUC, ECONorthwest created four prototype developments with accompanying financial pro-formas that comply with the Code outlined in the draft Plan to illustrate how those developments might work both physically and financially.

A pro forma is an essential tool to a developer to determine if a proposed project "pencils out". If costs exceed revenues, the project will not receive financing, and will not get built without some subsidy. The pro formas use expected development cost and revenue data for building and use type to determine cash flow.

The pro formas in this section are based on prototype buildings. ECO worked with the City to determine prototype developments that were most indicative of the vision for the future of the area and we then applied the proposed development code to the buildings, to determine how the code affected structure type and cost. The prototype buildings are hypothetical—they are not real or proposed structures.

In this section, we discuss the pro formas for four building prototypes:

1. Mixed-use mid-rise building
2. Office tower
3. Residential tower
4. Adaptive re-use of big box retail

For each prototype, we analyze four financing scenarios:

- The current, constrained market, with the lender loaning 65% of the project costs at an 8% interest rate.
- A "normal" market, based on financing terms typically available before the mid-2000s. This scenario has the lender loaning 80% of the project costs at a 6% interest rate.
- Current market conditions supported with a second loan from a public agency. The bank lends 65% of the cost at 8% interest. A second public loan covers 25% of the cost at 1% interest.
- A "normal" market, based on financing terms typically available before the mid-2000s with a second loan from a public agency. The bank lends 80% of the cost 6% interest. A second public loan covers 10% of the cost at 1% interest.

ECO made a variety of assumptions to develop the prototypes and the pro formas. It is important to remember that the assumptions are preliminary and incomplete. A real development would conduct a much more detailed analysis based on known conditions and costs of development forms. But the analyses reveal important information about TUC development code. All the pro formas made these assumptions:

- We assumed land division was necessary for all prototypes.
- No off-site costs were included. As discussed above, these costs can be significant.
- The parking spaces do not produce revenue. The analysis assumes parking (structured and surface) is free.
- All residential units are rental apartments. We did not consider any condominiums in the analysis.
- Other assumptions (e.g., construction costs, unit sizes, etc.) were based on interviews with industry professionals and our experience in the field. The assumptions vary by prototype.

- ECO understands that the ground under the TUC is not composed of stable soils. To meet building standards, piles had to be driven into the ground for a recent construction project. Tall structures can be built in the TUC, but the local geology increases the costs. ECO has probably underestimated the cost of construction, given the geology of the area.
- ECO calculated the fair market value of the structure by dividing the net operating income (NOI) by a capitalization rate of 8.5%.[3]
- To determine the 'created value', we subtracted the development costs from the fair market value.

Table 2 shows the rents (triple net[4]) and parking ratios ECO used in the pro formas for the four development types. The parking ratios are based on Code requirements. To determine appropriate rents, we interviewed local commercial real estate brokers.

Table 2. Rent and parking requirements used in pro formas

Use	Rent per SF per Year (NNN)	Parking Requirements
Office	$18.00	3.0 spaces/1,000 sf
Retail	$20.00	3.3 spaces/1,000 sf
Restaurant	$17.00	6.0 spaces/1,000 sf
Residential	$20.40	1.0 spaces per bedroom w/ max of 2.0 spaces per d.u.

Source: ECONorthwest.

Based on the assumed square footage in the prototypes and the rent per square foot, the residential rents are:

- 1-bedroom—$1,360 per month
- 2-bedroom—$2,040 per month
- 3-bedroom—$2,550 per month

The residential rents are higher than current rents in Tukwila, and more similar to rents seen in Redmond and central Seattle. An example project in the metropolitan area achieving these rents is the Union Bay Loft Apartments on East Lake Avenue in Seattle. Tukwila will require significant rebranding to achieve these residential rents. We used them as a starting point in the pro formas because no market for residential development currently exists in the TUC, and it is unlikely that any significant

[3] ECO interviewed local real estate professionals to determine local capitalization rates. We were told that the market is in such a state of flux at this time that there is no consensus on capitalization rates. The 8.5% cap rate is an estimate of current cap rates.

[4] A triple net (NNN) lease is a lease agreement where the lessee pays rent as well as taxes, insurance, and maintenance expenses.

residential development would be constructed without at least some rebranding and very active marketing occurring.

3.2 RESULTS OF PRO FORMAS

This section summarizes the results of the pro forma analyses. Appendix B of this memorandum shows detailed information about the building description and the pro-forma analysis.

Table 3 shows basic data about the size and uses for each of the four prototypes. It also shows the estimated cost of development and ECO's calculated fair market value. The cost estimates (detailed in Appendix B) include the cost of land, based on average price per acre in the Urban Center, from the Tukwila Assessor's database. Construction costs are based on estimates provided by Ankrom Moison Architects and Howard S. Wright Constructors, in September 2009. The cost estimates do not include the cost of any off-site infrastructure improvements, which, as stated previously, could be fairly significant.

ECO calculated the fair market value of the structure by dividing the net operating income (NOI) by a capitalization rate[5] of 8.5%. To estimate the NOI, ECO used the rents described above, assumed vacancies over times, and a management fee. To determine the 'created value', we subtracted the development costs by the fair market value.

Table 3. Size and calculated value for prototypes

	Prototype			
	Mixed-use Mid-rise	**Office Tower**	**Residential tower**	**Adaptive Re-Use**
Total floors	6	6	11	2
Gross SF (excluding parking)	80,000	157,000	161,000	90,000
Useable SF	68,000	133,450	136,850	76,500
Uses	Residential Ground floor retail Parking	Office Ground floor retail Parking	Residential Ground floor retail Parking	Office Ground floor retail Restaurant Parking
Development Cost	$22,088,572	$37,614,700	$52,777,129	$11,196,188
Fair Market Value	$14,388,640	$27,017,463	$30,831,914	$15,532,688
Created Value (Cost-Value)	($7,699,932)	($10,597,237)	($21,945,215)	$4,336,500

Source: ECONorthwest.

The first three prototypes yield a building that is more expensive to build than it would be worth. The pro forma analyses show that, even with fairly optimistic

[5] The capitalization rate (cap rate) is the ratio between the NOI produced by an asset and its market value. A market cap rate is determined by evaluating the financial data of similar properties which have recently sold in a specific market. ECO interviewed local real estate professionals to determine local capitalization rates. We were told that the market is in such a state of flux at this time that there is no consensus on capitalization rates. The 8.5% cap rate is an estimate of current cap rates.

residential rents, not including off-site costs, and possible underestimating construction costs given geologic issues in the area, the taller buildings do not pencil out.

The pro formas also calculated rates of return, under the four financing scenarios described above. Detailed results are in Appendix B. The pro formas show that the first three prototypes—the multiple story buildings—could not get bank financing in any market, nor with some subsidized loan. *For the three taller buildings*, the following is true:

- The Loan-to-Value ratio is too high. In typical market conditions (i.e., not the current constrained financial market), lenders can require a ratio of 0.80. Under any market conditions, lenders will not finance a commercial project if the loan exceeds the value of the project, yielding a loan-to-value ratio greater than 1.0. The three taller buildings all have loan-to-value ratios of 1.0 and higher.
- The debt coverage ratio (DCR)[6] is too low. Lenders typically want the DCR to be at least 1.20, to ensure there is a cushion so that if the NOI becomes less than anticipated, the borrower will still be able to make the mortgage payments. The three taller buildings have a DCR less than 1.0, and the Residential Tower has a DCR of about 0.8.
- The internal rate of return (IRR)[7] on equity is negative. For the three taller buildings, the equity investor (the developer or other private investors) would lose money on the project.

The fourth prototype, an adaptive re-use of an existing structure, is the only prototype that pencils out. For that prototype, the cost of parking was very low. ECO assumed that most of the required parking could be accommodated by the existing extensive surface parking. The construction costs per square foot were significantly lower than for the other, taller, prototypes. The one cost that exceeded the other prototypes was for the land, which was more expensive because it was a larger parcel.

The adaptive re-use prototype yielded a structure whose fair market value exceeded the cost of construction. The pro forma calculation showed that the prototype could get financing, even in today's difficult markets. The loan-to-value ratio is low, well under the ratio of 0.80 that lenders require. The DCR is high, well in excess of the 1.20 DCR that lenders prefer. The IRR is low in the financial scenario that represents today's difficult financing terms. Under more normal markets, the IRR is a healthy 19%.

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[6] The debt coverage ratio (DCR) is the ratio of NOI to the mortgage payment. If the NOI is $120,000 and the mortgage payment is $100,000, the DCR is 1.2.

[7] The internal rate of return (IRR) measures the return on an investment, expressed as a compound rate of interest, over the investment period. It is the interest rate at which the costs of the investment lead to the benefits of the investment.

4 IMPLICATIONS AND RECOMMENDATIONS

Based on the analysis and input from stakeholders, we conclude that the draft TUC Plan's vision of a more urban, mixed-use neighborhood is a desired outcome for most stakeholders with whom we talked. But the draft Plan and its development code require a type of development that is not financially viable at this time because of uncertainty in the financial market, and is more likely to be viable even upon the market's return with significant public investment in amenity and infrastructure. In short, ECO found that many of the code-related concerns expressed by the stakeholders were realistic, and that some changes to the City's draft Plan and accompanying Code could be helpful.

At the same time, however, almost all of the stakeholders agreed that the vision described in the draft Plan is the right long-term goal for development in the TUC. Given the comparative advantages of the TUC, ECO feels that the vision is achievable, but in phases and over a period of time and only with significant, targeted public investments to catalyze and support development of the type that the City would like to see.

ECO recommends the City take the following steps to ensure that the long-term vision can be gradually implemented. We have divided the recommendations into two general categories: (1) change the development code, and (2) catalyze development.

4.1 CONSIDER AMENDMENTS TO THE DRAFT SOUTHCENTER PLAN DEVELOPMENT CODE (CHAPTER 18.28)

The draft TUC development standards are intended to implement the City's long-term vision for continued growth in the urban center. As noted earlier in this report, stakeholders have expressed concerns that the draft TUC plan development regulations may be overly complex and/or may conflict with interim market realities. ECO reviewed the Code in conjunction with potential prototypes included in this report, conducted interviews (focus groups) with key stakeholders, reviewed written comment from property owners and developers, and generated the recommendations in this section.

- **Organization and complexity.** Some of the stakeholders noted that the code seemed to be overly complex. A certain level of unfamiliarity is expected when a City implements a new code or code section. In this case, the TUC code section also represents a shift towards form-based code, which is by nature less familiar to developers and property owners than a more traditional code. The code may appear to be more complex than it actually is: while it may appear to be confusing to a casual reader, it is designed to provide certainty by prescribing detailed and objective standards for a property owners and developers--while minimizing discretionary and interpretive decisions that can erode certainty about what the code will and will not allow.

- **Thresholds that trigger compliance with TUC standards.** Some stakeholders noted that the thresholds that trigger compliance with TUC standards may disproportionally limit or discourage interim investment in existing structures. Any new or revised development code must be accompanied by clear thresholds for compliance, as this draft contains. The thresholds are intended to ensure that major investment within the TUC aligns with the vision set forth in the plan, while allowing continued operation and maintenance of existing businesses and structures. Thus, it is typical to require new construction, expansions, alterations and changes in use to comply with a new or revised code. The actual thresholds for what constitutes an alteration, however, must be defined locally. It is our understanding that the City derived the thresholds through a careful review and analysis of building permits from prior years and therefore represent levels of investment--both in absolute dollars and percent relative to total value—that are appropriate for Tukwila.
- **Parking requirements.** Stakeholders who participated in the focus groups discussed the possibility of eliminating parking minimums and maximums. Our analysis shows that the costs associated with constructing parking to meet the TUC code's minimum parking requirements is the single biggest factor affecting the financial performance of the prototypes analyzed in this report. On one hand, the suburban-level parking requirements in the TUC conflict with the City's vision of higher intensity, urban development. (That is, a vibrant, pedestrian-oriented urban center, requires a shift away from large surface parking areas while the minimum parking requirements in the TUC are set at levels more appropriate for surface level parking). On the other hand, a lack of sufficient parking during the interim may have negative consequences on new and existing businesses.

  We recommend that the City consider a phased approach that first reduces, and then eliminates, parking minimum requirements in close coordination with ongoing transportation demand management (TDM) strategies and efforts to increase on-street (metered) and shared parking. The City would first establish benchmarks for developing on-street parking spaces and shared parking arrangements --and consider phasing in reduced parking minimums for new development as these benchmarks are met. It would be necessary to coordinate with other ongoing TDM strategies that can help alleviate the demand for parking over the long-term, such as increasing use of alternative modes, carpool/vanpool, and parking pricing, which are outlined in the City's Growth and Transportation Efficiency Center Program (GTEC).[8]

[8] The GETC plan includes a comprehensive strategy for transit, carpool/vanpool, marketing, bicycle/pedestrian opportunities, telecommuting, and rideshare. It recommends that the City work with employment sites to encourage them to implement parking management strategies, such as reducing parking capacity and implementing preferential parking for carpools and vanpools.

- **Minimum height requirements.** The minimum height requirements prescribed by the Scale Standards 18.28.031 require a 25-foot tall structure for anchors, pharmacies, and groceries. For other uses, a second floor is also required. This requirement is triggered by any expansion and substantial alterations to a building. A building owner who wishes to expand an existing use will be required to build a second floor. This may or may not be feasible, depending on the age and type of existing building, parking requirements, etc. While this may be the intent of the Code, it may have the effect of discouraging interim investment in existing buildings. We recommend that the City consider reducing or eliminating minimum height requirements for upgrades to or adaptive re-use of existing single story buildings.
- **Tower bulk and minimum frontage requirements.** The minimum frontage requirements (in conjunction with tower bulk requirements) appear to anticipate smaller sites than those that exist now in the TUC, which may result in conflicts depending on the size of the site and how site is defined. For instance, a one-acre, square site (as defined by property lines) on an urban corridor would have roughly 208 feet of frontage. A building on that site would be required to cover at least 90% of the frontage on an urban corridor, which would equate to a building that is 187 feet in length. Likewise, a two-acre site could easily have 300 or 400 feet of frontage, which would require a 270 feet to 360 feet building. A square (or L-shaped) building of this dimension would likely exceed the tower bulk requirements. We recommend that the City consider revising tower bulk requirements or allowing flexibility to ensure that frontage requirements can be met, particularly in the short- and medium-term
- **Open space requirements**. Stakeholders noted that the open space requirements may be too prescriptive. We note that the amount and type of pedestrian space required in section 18.28.060 is consistent with other cities in the northwest. The requirements allow flexibility in the type of pedestrian space required (linear green, square, plaza, courtyard, etc), the location, and configuration as long as certain requirements are met (e.g., access to sidewalks and visible from sidewalks etc). Further, the code allows flexibility at the discretion of the Director in situations where small or awkwardly shaped properties limit options for on-site pedestrian space, and in situations where common open space may be more appropriately provided off-site as part of a larger open space area provided by one or more developments.
- **Fire code**. In order to make the Plan more economically viable and competitive with other cities, it is recommended that the fire code be revised to enable mid-rise construction for buildings that are up to 65 feet. This would make it possible to build five floors of residential or office over one story of retail. These buildings tend to be more economically viable in many markets and reinforce activated ground floor goals in these communities.

4.2 PLAN TO CATALYZE DEVELOPMENT

Inspired plans, progressive land use regulations, and development codes cannot alone actualize a vision in most markets. Given current uncertainties in the financial markets, the repositioning occurring in various real estate asset classes, and limited public programs and funds to assist development, the City should assess the potential to catalyze development over an intermediate and longer term. This section provides sample actions and tools the City could use to form and implement a redevelopment strategy for the TUC. Some of these actions can be initiated immediately to help the City and TUC prepare for the economic rebound while others will take more preparation and time enabling the TUC to benefit during future investment cycles.

4.2.1 Short-term actions (one to two years)

Get the facts

The City should gather additional information and data about the area that will be needed for prudent development decisions. City planners and development staff should be familiar with market and construction issues for the TUC and track these items over time. Some of the data are:

- land and building values;
- rents for all asset classes;
- construction costs for desired building types;
- land ownerships and status;
- dynamics of the real estate lending market
- a clear understanding of water, soils, and other environmental challenges;
- projected needs and targets for various uses, with particular attention on workforce and affordable housing goals

Establish a lead redevelopment entity

Identify or establish a lead redevelopment entity on the public side to coordinate implementation of a TUC redevelopment strategy and provide it with resources (people and tools) to succeed. The City could make this function the responsibility of an existing department or create a new entity.

Consider rebranding Tukwila

The City appears to have two images—one acknowledges it as a strong regional retail shopping center while a second plays on less positive perceptions and realities around public safety and socio-economic issues. For the TUC to succeed, the image of Tukwila will need to be more reinforcing of mixed-use development for customers, tenants and developers. Part of that repositioning can be done through development of a fresh

brand for Tukwila. Taking advantage of assets such as waterfront amenities, central location, affordability and quality, etc. to develop the brand could be advantageous.

Ensure that light rail, bus transit, and commuter rail are effectively linked

An integrated and dependable system can foster growing and repeat ridership . This will make the area more viable for office and residential uses.

Create a public sector redevelopment tool kit

Identify existing public resources/tools that can be used to partner on implementing a redevelopment strategy. Adopt, adapt and/or create new tools if existing programs are insufficient.

In the short and long-term, the City will have to offer developers some assistance in order to achieve the community's goals for the TUC. The City should determine what incentives it is willing to offer and the criteria for using them so that informed redevelopment decisions for strategic investments can be made when opportunities arise. Some incentives can be applied administratively while others may require action by elected officials. Incentives that might be available to the City include:

- Low-interest loans to leverage private development investments for adaptive reuse or expansion of existing buildings as well as for creation of new developments. Possible fund sources include: HUD Section 108, Federal Stimulus program funds, SBA 504 program, federal Economic Development Administration loans.[9]
- Purchase or option land and re-sell it at below-market prices to qualified developers.
- Utilize revenue bonds (e.g., 501(c)(3), and 63-20 bonds to support public and non-profit projects that enhance the mix of uses in the TUC.
- Fund pedestrian and other mobility improvements.
- Acquire and develop open space areas in strategic locations.
- Construct or participate in financing a parking garage to support catalytic development.
- Focus impact fees from the TUC to uses that benefit development in the center or reduce these fees for qualifying projects.

[9] Any lending program will need to be evaluated to ensure it is within Washington State's lending of credit provisions.

4.2.2 Intermediate and long-term actions (two years and beyond)

Prepare a Collaborative Redevelopment Strategy for the TUC

Collaborate with area property owners, businesses, and community members to capitalize on the TUC vision and plan by crafting a redevelopment strategy that clarifies and secures buy-in for actions that will move redevelopment forward. The stakeholders know the area well and will be able to provide helpful insight into developing an effective strategy. The strategy should identify key projects, responsible entities on the public and private sides, and potential funding approaches. Elements that could be incorporated into the strategy are:

- Secure agreement on where critical new streets would be. These will be major streets that begin to create new development parcels and will provide important community connectivity and development predictability.
- Identify the number, type and potential locations for the most important open spaces.
- Identify desired priorities for public improvements (e.g., open space, structured parking, pedestrian amenities) and how these could be funded. Link their implementation timing to private investment in significant development.
- Identify alternative starting areas for redevelopment. Use the stakeholders' knowledge to identify the areas most likely to be catalytic and that will build momentum. Look for proximity to existing active areas, or potential to redevelop key intersections.

Choose approach(es) to initiate redevelopment

Based on the data and input from stakeholders, choose among alternatives approaches (one or more) to initiate redevelopment:

- Purchase or secure options on site(s), have the tool kit ready and solicit developers, preferably through a request for qualifications (RFQ).
- Partner with private sector owners who control strategic sites to refine a development concept on their property. Identify the amount of risk the private owner is willing to assume in the property's redevelopment. Memorialize property owner's position and the City's in an agreement between the City and property owner. Then have a tool kit ready and solicit developers.
- Offer public assistance and tool kit programs on a first-come/first-serve basis. (This is often a less focused approach than either of the above and will require guidelines such as: site needs to be consistent with City vision and plans for area; development concept needs to be viable with reasonable employment of public tool kit, etc.) It is also an approach that can assist in retaining those existing businesses, particularly local operations or one-of-a-kind market entities,

that want to upgrade or are interested expanding within the TUC and that would enhance to use mix.

Implement the Redevelopment Strategy

While the City is preparing the strategy it should continue to work with stakeholders to advance goals of the TUC plan. It should also take advantage of opportunities that present themselves to acquire key land parcels through options or in response to a property owner/developer presenting a viable project consistent with the draft plan's objectives for redevelopment.

Once the redevelopment strategy has been vetted and approved, and the public implementing entity is operational with staff and a redevelopment took kit, the strategic actions identified above can be more effectively initiated. The City can assemble key parcels (through options or outright purchases) or collaborate with willing property owners to solicit qualified developers preferably through a RFQ process.

Upon developer selection the City can enter into pre-development agreements which, while non-binding, establish a good-faith path for the participating parties to flesh out a development project and clarify expectations of each party to the agreement (e.g., timing for various development steps from due diligence on a site to anticipated construction completion, projected uses, desired public amenities, potential financing sources, etc.). Predevelopment agreements provide the groundwork for eventual development agreements that legally bind public and private parties by committing resources to complete a project.

While larger-scale catalytic projects are eagerly sought by most cities, a more realistic approach usually involves starting with smaller scale but important momentum-generating projects. Gaining momentum with a series of successful smaller and mid-sized projects can bring greater confidence to the investment community that the larger-scale projects can be viable. This is particularly valid when those early projects are of high quality and in close proximity enough to create a sense of place in an emerging area.

APPENDIX A: FOCUS GROUP PARTICIPANTS AND NOTES

Focus group participants and interviewees

The following individuals participated in the focus groups or were interviewed by ECONorthwest:

Developers

- Don Milliken, Milliken Development
- Pat Callahan, Urban Renaissance Group
- Bruce Lorig, Lorig Associates
- Kristin Jensen, Tarragon Development

Brokers

- Don Moody, CBRE

Local Business & Property Owners

- Mon Wig, Wig Associates LLC
- Tom DeZutter, Double Tree Hotel
- Robert & Christian Schofield, RHS Enterprises
- Randy Bannecker, Bannecker & Associates (representing Sears)
- Dawna Holloway, Eastbay Sculpture & Lighting
- Brandon Lee, Target Corporation
- Mark Hancock, Segale Properties

Westfield Corporation

- Nicholas Lee, Development Manager
- John Goodwin, VP of Development
- Antony Ritch, Senior VP
- Andy Ciarrochi, Senior General Manager
- Brent Carson, Gordon Derr (representing Westfield)

City of Tukwila

- George Malina, Planning Commission Chair
- Jack Pace, DCD Director
- Nora Gierloff, DCD Deputy Director

- Lynn Miranda, Senior Planner
- Derek Speck, Economic Development Administrator

Focus group and interview notes

The following summarizes the comments received during the focus groups and interviews:

Office space

- Explore opportunity for Class A office market in proximity to the airport. Is there market potential? What building types (heights, sq ftg, costs) would be needed? Does plan support this? Where? What else can be done to capture benefits of airport (ie, for hotel development).
- To make the UC more viable for office, need to ensure that light rail, bus transit & commuter rail are effectively linked.
- To kick start office development, need a "signature" office development – large. Ground breaking building may be 100k sf – ultimately need something larger.
- Need more office/biotech type of uses. These are the people that will live here.
- Labor, housing & availability of 'ground' are decision points for major corporations to locate in UC. Tax breaks (including lack of B&O) that Tukwila offers are not significant attractors. High end office needs amenities - parks are important. Corps look for large, contiguous parcels and the ability to grow in place.
- Office development around the mall would be good.
- Office, rather than housing, should be built around the Sounder Station since people will walk farther (1/2 mile) from their homes than their place of work.

Proposed Standards

- Need more flexible approach towards complying with standards for adaptive re-use projects.
- Horizontal mix of uses is "coming back".
- Incentives / code changes / implementation steps suggested:
  - Impact fee waivers (or sole source use areas if they are collected)
  - Sign code modification
  - No parking minimums or maximums are really needed -- the market will drive this. Think about setting a maximum for on-street parking.
  - Parking costs make new development of any real density untenable. Consider a public parking garage.

  - Consider phased implementation of code. Concerns about short-term impacts of prescriptive code until the market is there to better support the development types envisioned.
  - Complete a development study to identify key opportunity sites, market those sites, or consider acquiring them to incent development (through options if necessary or more feasible)
  - Consider developing a public park next to a proposed office site.
  - Non-binding pre-development agreements with owners of key sites
  - Consider eliminating height restrictions.
  - Revisit building/fire code's definition of high rise. 40' threshold is a problem. 70' is typical. Must allow 5/1 configuration for residential development to occur.
  - Ground level retail spaces need 18-24' in height.
- Tukwila is not right for street fronting retail yet.
- The TUC Plan is too specific. Give developers flexibility so they come up with creative solutions. Don't be too prescriptive.
- Mixed-use development is complicated. The parking, lay out, and exhaust systems are complicated. And to be successful, it must be done right. For example, residents don't want to hear beeping truck. Every development has its own unique solution, cookie-cutter development will not work for something this complicated.

Strategies to Consider

- Current tax & permit policy supports the types of development (single story retail) that is here today. Policies need to change if city wants to achieve the vision.
- Consider a new strategy / revenue sources to support development. Low taxes might work for business recruitment, but don't do much for business.
- A shift in employment base is needed -- current retail employment won't attract residents in demographics needed to support the development costs associated with new mixed-use residential developments
- Audience matters in marketing efforts: developers will be interested in different factors than residents or shoppers. A single-pronged strategy probably won't be effective.
- Explore models that work in or may be adaptable from other communities (Sanctuary at Renton Landing)
- City needs to make strategic choices about where to invest and how to best leverage its limited resources.

- Branding or rebranding Tukwila -- how do developers, customers, others become more positively associated with Tukwila
- To do nothing in the UC is not OK; good developments will bypass the city and go elsewhere.
- Look at Americana at Brand, Caruso project in CA. Good models.
- City should do a study of specific properties to determine vulnerability/how much it would take to relocate them.
- High quality development can cost a lot, maybe $200 to $300 a foot. But it is done well and new, appealing place is created with a real town center, the area could command rents as high as $30 a foot (per square foot per year).
- Tukwila has a good location, it's a good opportunity. There is no reason a core cannot be created in Tukwila .

Catalyst Project/Investments

- Major infrastructure investments are needed to achieve the pedestrian-friendly finer street grid in the vision. The costs probably can't be born by developers, or they'll just choose to go elsewhere.
- City should plan to capture development two cycles from now. Catch revenues on the next upswing, and invest that in infrastructure and amenities that will make development attractive in the upswing that follows. Need to find the political will to make these investments, or the plan won't happen.
- Development has to attract institutional capital to pencil out. Need to have 'evidence on the ground' to convince investors. Plan alone will not work. Need a significant public investment first; provides a 'story to tell'. Pick a place/project.
- Make significant public investment, then develop a marketing center for plan on Baker Blvd (similar to that for S. Lake Union project in Seattle).
- Lack of publicly owned land in UC presents challenges.
- Parking structures are expensive because of soils/geology. Subterranean parking is HUGE cost. Parking agreements make reductions in parking spaces impossible. Many other malls have transportation alternatives up and running before parking reductions occur.

Land Use

- Focus on improving the quality of retail versus increasing the quantity.
- Coming changes at the mall:
  - # of national tenants reinventing themselves
  - Anchor tenants may move
  - new types of tenants coming into the mall.

- To enhance the appeal of residential development, the area needs a grocery store. It's a necessity for people who want to live in an urban area. Residential rents increase with proximity to a grocer—but it can't be a tired looking old kind of grocery. It has to look good.

'Transportation' - related

- Heard at several focus groups: Access issues (including changes to mode split) is key to making the vision happen. Need better auto circulation, access from freeways, signage (especially for retail).
- Mall doesn't see that transit is important to the Mall. Most shoppers come from east/west, not north/south. However, employees take transit.

APPENDIX B: FINANCIAL PRO FORMA ANALYSES

This appendix provides detailed data and discussion for the four prototypes

B.1 MIXED-USE MID-RISE BUILDING

The mixed-use mid-rise building is six stories high, with one floor of ground-floor retail, two floors of parking, and three floors of residential units and 20,000 s.f. footprint. Table 4 summarizes floor space by use type and Figure 6 shows the prototype.

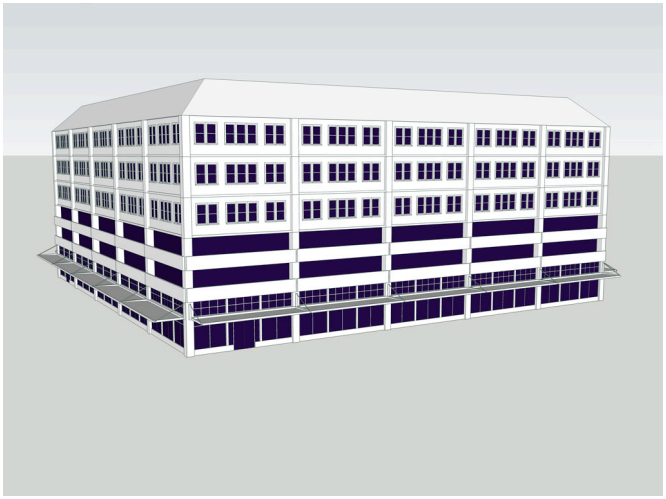
Table 4. Mixed-use mid-rise building: uses, floors, and square feet

Use	Stories	Gross SF	Useable SF
Residential	3	60,000	51,000
Ground floor retail	1	20,000	17,000
Parking	2	44,135	n/a
Total (w/o parking)	**6**	**80,000**	**68,000**

Source: ECONorthwest.

To determine the amount of parking that would be required, ECO relied on the TUC's development code: for retail, 3.3 spaces per 1,000 useable s.f.; for residential, 1.0 spaces per bedroom with a maximum of 2.0 spaces per dwelling units. Based on our assumed mix of unit sizes, the retail and residential units require 126 parking spaces. At 350 s.f. per space, parking requirements equal 44,135 s.f., which is 4,135 s.f. larger than the two floors of parking incorporated into the building. The prototype would require an additional 11.8 parking spaces to meet the development code requirements.

Figure 6. Mixed-use mid-rise prototype



Source: ECONorthwest.

The frontage requirements in the development code conflict with building length maximums for this prototype. The minimum linear frontage coverage is 90%, but the

maximum building length is 120 feet. This prototype has a footprint of 140' x 140', and 90% of 140 feet is 126 feet, six feet longer than the maximum building length.

The pro formas compare the cost of construction to a stabilized net operating income (NOI) based on estimated net rents. For this prototype, we assumed the following rents:

- Retail—$20 per s.f. per year, based comparable retail properties for lease in the south Puget Sound
- Residential—$1.70 per s.f. per month, or
  - 1-bedroom—$1,360 per month
  - 2-bedroom—$2,040 per month
  - 3-bedroom—$2,550 per month

The residential rents are higher than current rents in Tukwila, and more similar to rents seen in Redmond and central Seattle. An example project in the metropolitan area achieving these rent is the Union Bay Loft Apartments on East Lake Avenue in Seattle. Tukwila will require significant rebranding to achieve these residential rents

Our cost estimates (detailed in Appendix B) include the cost of land, based on average price per acre in the Urban Center, from the Tukwila Assessor's database. Construction costs are based on estimates provided by Ankrom Moison Architects and Howard S. Wright Constructors, in September 2009. The cost estimates do not include the cost of any off-site infrastructure improvements, which, as stated previously, could be fairly significant.

ECO calculated the fair market value of the structure by dividing the NOI by a capitalization rate of 8.5% (see Table 5).[10]

Table 5. Mixed-use mid-rise building: development costs and value

	$2009
Total Development Costs	$22,088,572
Fair Market Value	$14,388,640
Created Value (Cost - Value)	**-$7,699,932**

Source: ECONorthwest.

The pro forma shows that, even at optimistic residential rents, the mixed-use mid-rise building would cost $7.7 million more to build than it would be worth.

[10] ECO interviewed local real estate professionals to determine local capitalization rates. We were told that the market is in such a state of flux at this time that there is no consensus on capitalization rates. The 8.5% cap rate is an estimate of current cap rates.

The pro forma also calculates rates of return, under the four financing scenarios described above. Table 6 summarizes the results. The analysis shows that it would be difficult for any developer to get financing on the mixed-use mid-rise prototype:

- The Loan-to-Value ratio is high. In typical market conditions (i.e., not the current constrained financial market), lenders can require a ratio of 0.80. Under any market conditions, lenders will not finance a commercial project if the loan exceeds the value of the project, yielding a loan-to-value ratio greater than 1.0.
- The debt coverage ratio (DCR) is low. Lenders typically want the DCR to be at least 1.20, to ensure there is a cushion so that if the NOI becomes less than anticipated, the borrower will still be able to make the mortgage payments.
- The internal rate of return (IRR) on equity is negative. The equity investor (the developer or other private investors) would lose money on the project.

Table 6. Mixed-use mid-rise building: financing assumptions and return equity

Financial Scenario	Bank Loan	Public Assistance Loan	Loan/Value Ratio	Debt Coeverage Ratio	Equity Repayment Gap	IRR on Equity
1	65%	-	1.00	0.96	-$15,030,073	-38%
2	80%	-	1.23	0.95	-$8,654,736	-33%
3	65%	25%	1.00	0.96	-$5,040,575	-13%
4	80%	10%	1.23	0.95	-$4,793,470	-11%

B.2 OFFICE TOWER

The office tower is nine stories high, with one floor of ground-floor retail, two floors of parking (partially submerged), and six floors of office space and 22,000 s.f. footprint. Table 7 summarizes floor space by use type and Figure 7shows the prototype.

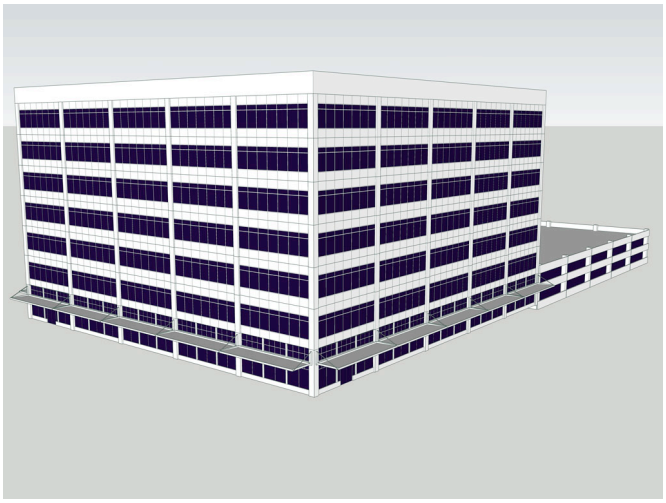
Table 7. Office tower: uses, floors, and square feet

Use	Stories	Gross SF	Useable SF
Office	6	135,000	114,750
Ground floor retail	1	22,000	18,700
Parking	2	70,000	n/a
Total (w/o parking)	**9**	**157,000**	**133,450**

Source: ECONorthwest.

To determine parking, ECO relied on the TUC's development code: for retail, 3.3 spaces per 1,000 useable s.f.; for office space, 3.0 spaces per 1,000 useable s.f. The retail and office space combined require 406 parking spaces, or 142,000 s.f. In this prototype, the parking was accommodated by placing the office tower on a larger podium of parking, because stacking the parking between the ground floor use and office use on the same footprint size would result in a building that is too tall to meet height requirements. The prototype leaves a deficit of 206 parking spaces, just over 72,000 s.f., to meet the TUC's development code requirements.

Figure 7. Office tower prototype



Source: ECONorthwest.

The pro formas compare the cost of construction to a stabilized net operating income (NOI) based on estimated net rents. For this prototype, we assumed the following rents:

- Retail—$20 per s.f. per year, based comparable retail properties for lease in the south Puget Sound
- Office—$18 per s.f. per year, the high end of office rents in the south Seattle market.

Our cost estimates include the cost of land, based on average price per acre in the Urban Center, from the Tukwila Assessor's database. Construction costs are based on estimates provided by Ankrom Moison Architects and Howard S. Wright Constructors, in September 2009. The cost estimates do not include the cost of any off-site infrastructure improvements.

ECO calculated the fair market value of the structure by dividing the NOI by a capitalization rate of 8.0%. To determine the 'created value', we subtracted the development costs by the fair market value (see Table 8).

Table 8. Mixed-use mid-rise building: development costs and value

	$2009
Total Development Costs	$37,614,700
Fair Market Value	$27,017,463
Created Value (Cost - Value)	**-$10,597,238**

Source: ECONorthwest.

The pro forma shows that, even at top-of-the-market office rents, the office tower would cost $10.6 million more to build than it would be worth.

The pro forma also calculates rates of return, under the four financing scenarios described above. Table 9 summarizes the results. The analysis shows that it would be difficult for any developer to get financing on the office tower prototype:

- The Loan-to-Value ratio is high. In typical market conditions (i.e., not the current constrained financial market), lenders can require a ratio of 0.80. Under any market conditions, lenders will not finance a commercial project if the loan exceeds the value of the project, yielding a loan-to-value ratio greater than 1.0.
- The debt coverage ratio (DCR) is low. Lenders typically want the DCR to be at least 1.20, to ensure there is a cushion so that if the NOI becomes less than anticipated, the borrower will still be able to make the mortgage payments.
- The internal rate of return (IRR) on equity is negative. The equity investor (the developer or other private investors) would lose money on the project under any financing scenario.

Table 9. Office tower: financing assumptions and return equity

Financial Scenario	Bank Loan	Public Assistance Loan	Loan/Value Ratio	Debt Coverage Ratio	Equity Repayment Gap	IRR on Equity
1	65%	-	0.90	1.00	-$25,021,461	-34%
2	80%	-	1.11	0.99	-$14,164,879	-29%
3	65%	25%	0.90	1.00	-$7,712,877	-9%
4	80%	10%	1.11	0.94	-$7,951,045	-33%

Source: ECONorthwest.

B.3 RESIDENTIAL TOWER

The residential towering is 11 stories high, with one floor of ground-floor retail, four floors of parking, and six floors of residential units and 23,000 s.f. footprint. Table 10 summarizes floor space by use type and Figure 8 shows the prototype.

Table 10. Residential tower: uses, floors, and square feet

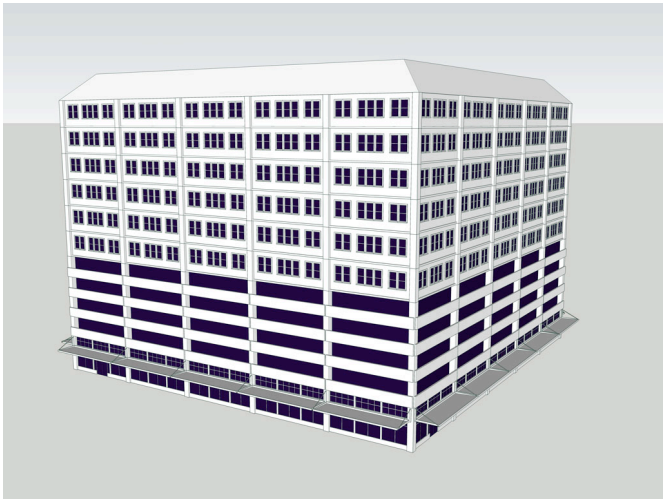
Use	Stories	Gross SF	Useable SF
Residential	6	138,000	117,300
Ground floor retail	1	23,000	19,550
Parking	4	80,680	n/a
Total (w/o parking)	**11**	**161,000**	**136,850**

Source: ECONorthwest.

To determine parking, ECO relied on the TUC's development code: for retail, 3.3 spaces per 1,000 useable s.f.; for residential, 1.0 spaces per bedroom with a maximum of 2.0 spaces per dwelling units. Based on our assumed mix of unit sizes (see Appendix B for details), the retail and residential units require 231 parking spaces. At 350 s.f. per space, parking requirements equal 80,680 s.f., which can be incorporated into four floors of this structure. This building type is limited to the Regional Center zone because of its

height. The parking requirements forced the height of the prototype, thereby limiting the zone in the TUC where this building could be built.

Figure 8. Residential tower prototype



Source: ECONorthwest.

The pro formas compare the cost of construction to a stabilized net operating income (NOI) based on estimated net rents. For this prototype, we assumed the following rents:

- Retail—$20 per s.f. per year, based comparable retail properties for lease in the south Puget Sound
- Residential—$1.70 per s.f. per month, or
  - 1-bedroom—$1,360 per month
  - 2-bedroom—$2,040 per month
  - 3-bedroom—$2,550 per month

Our cost estimates include the cost of land, based on average price per acre in the Urban Center, from the Tukwila Assessor's database. Construction costs are based on estimates provided by Ankrom Moison Architects and Howard S Wright Constructors, in September 2009. The cost estimates do not include the cost of any off-site infrastructure improvements.

ECO calculated the fair market value of the structure by dividing the NOI by a capitalization rate of 8.0%. To determine the 'created value', we subtracted the development costs by the fair market value (see Table 11).

Table 11. Residential tower: development costs and value

	$2009
Total Development Costs	$52,777,129
Fair Market Value	$30,831,914
Created Value (Cost - Value)	**-$21,945,215**

Source: ECONorthwest.

The pro forma shows that, even at optimistic residential rents, the residential tower would cost $21.9 million more to build than it would be worth.

The pro forma also calculates rates of return, under the four financing scenarios described above. Table 9 summarizes the results. The analysis shows that it would be difficult for any developer to get financing on the office tower prototype:

- The Loan-to-Value ratio exceeds 1.0 for all financing scenarios. In typical market conditions (i.e., not the current constrained financial market), lenders can require a ratio of 0.80. Under any market conditions, lenders will not finance a commercial project if the loan exceeds the value of the project, yielding a loan-to-value ratio greater than 1.0.
- The debt coverage ratio (DCR) is low. Lenders typically want the DCR to be at least 1.20, to ensure there is a cushion so that if the NOI becomes less than anticipated, the borrower will still be able to make the mortgage payments.
- The internal rate of return (IRR) on equity is negative. For this prototype, the cash flow is *never* positive. In the absence of any positive cash, the spreadsheet model was unable to calculate an IRR.. The equity investor (the developer or other private investors) would lose money on the project under any financing scenario.

Table 12. Residential tower: financing assumptions and return equity

Financial Scenario	Bank Loan	Public Assistance Loan	Loan/Value Ratio	Debt Coverage Ratio	Equity Repayment Gap	IRR on Equity
1	65%	-	1.11	0.81	-$39,232,026	n/a
2	80%	-	1.37	0.80	-$23,999,172	n/a
3	65%	25%	1.11	0.81	-$17,086,214	n/a
4	80%	10%	1.37	0.76	-$18,154,488	n/a

Source: ECONorthwest.

B.4 ADAPTIVE RE-USE OF BIG BOX RETAIL

The adaptive re-use prototype is two stories high, with one floor of ground-floor retail that includes 10,000 s.f. of restaurant space, one floor of office space, and covered surface parking. The prototype assumes the structure is an existing big box store, with a 100,000 s.f. footprint. Table 13 summarizes floor space by use type and Figure 9 Figure 7shows the prototype.

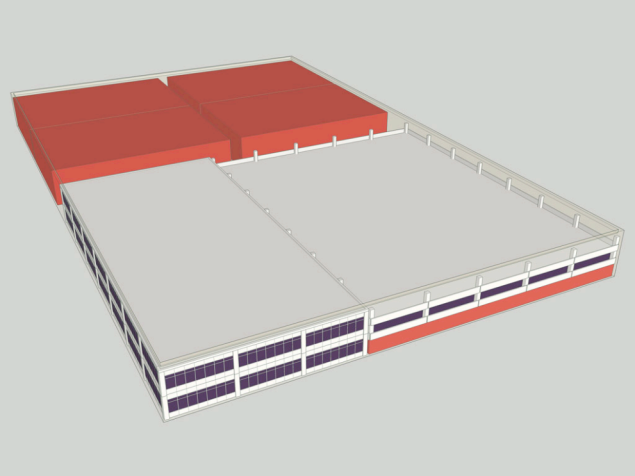
Table 13. Adaptive re-use of big box retail: uses, floors, and square feet

Use	Stories	Gross SF	Useable SF
Office	1	40,000	34,000
Retail	1	50,000	42,500
Covered Parking	0	30,000	n/a
Total (w/o parking)	**2**	**90,000**	**76,500**

Source: ECONorthwest.

To determine parking, ECO relied on the TUC's development code: for restaurant space, 6.0 per 1,000 useable s.f., for other retail, 3.3 spaces per 1,000 useable s.f.; and for office space, 3.0 spaces per 1,000 useable s.f. ECO assumed that most of the required parking could be accommodated by the existing extensive surface parking.

Figure 9. Adaptive re-use of big box retail prototype



Source: ECONorthwest.

The pro formas compare the cost of construction to a stabilized net operating income (NOI) based on estimated net rents. For this prototype, we assumed the following rents:

- Restaurant—$17 per s.f. per year, in the middle of the range of retail properties for lease in the south Puget Sound.
- Retail—$20 per s.f. per year, based comparable retail properties for lease in the south Puget Sound
- Office—$18 per s.f. per year, the high end of office rents in the south Seattle market.

Our cost estimates include the cost of land, based on average price per acre in the Urban Center, from the Tukwila Assessor's database. The one cost that exceeded the other prototypes was for the land, which was more expensive because it was a larger parcel. Construction costs are based on estimates provided by Ankrom Moison Architects and Howard S. Wright Constructors, in September 2009. The construction costs per square foot were significantly lower than for the other, taller, prototypes. The cost estimates do not include the cost of any off-site infrastructure improvements.

ECO calculated the fair market value of the structure by dividing the NOI by a capitalization rate of 8.0%. To determine the 'created value', we subtracted the development costs by the fair market value (see Table 14).

Table 14. Adaptive re-use of big box retail: development costs and value

	$2009
Total Development Costs	$11,196,188
Fair Market Value	$15,532,688
Created Value (Cost - Value)	**$4,336,500**

Source: ECONorthwest.

This is the only prototype in the analysis where the fair market value exceed the total development costs. The created value is roughly $4.3 million.

The pro forma also calculates rates of return, under the four financing scenarios described above. Table 15 summarizes the results. The analysis shows that this project could get financing, even in today's difficult markets:

- The Loan-to-Value ratio is low, well under the ratio of 0.80 that lenders require.
- The debt coverage ratio (DCR) is high. It is well in excess of the 1.20 DCR lenders typically want.
- The internal rate of return (IRR) on equity is low for the first finacial scenario (today's difficult markets), but would be considered strong in a more normal market.
- This prototype is able to stand on its own, and the second public loan scenario (Scenario 4) is not needed.

Table 15. Adaptive re-use of big box retail: financing assumptions and return equity

Financial Scenario	Bank Loan	Public Assistance Loan	Loan/Value Ratio	Debt Coverage Ratio	Equity Repayment Gap	IRR on Equity
1	65%	-	0.46	1.97	-$2,862,190	4%
2	80%	-	0.56	1.96	$369,321	19%
3	65%	7%	0.46	1.97	$63,408	17%
4	n/a	n/a	n/a	n/a	n/a	n/a

Source: ECONorthwest.

Development Desciption

Prototype: Mixed-use mid-rise building
Applicable sites: All

Use	Units	Stories	Gross SF	Usable SF	Cost Per SF	Total	TI / SF
Residential		3	60,000	51,000	150	9,000,000	
Ground Floor retail		1	20,000	17,000	115	2,300,000	$25
Parking		2	44,135	-	70	3,089,450	
TOTAL (w/o parking)	-	6	80,000	68,000		14,389,450	14,889,450

Use Zones: TOD Urban, Pond District & Regional Center
Scale zone: General Urban, Urban Core
Corridor Zone: Urban Corridor
Max height: 98 feet (8 stories)
Max diagonal: 250' -300' (length of diagonal connecting fartherst corners of the footprint)
Min Parking: Residential: 1/bedroom max of 2/du, Office: 3/1,000 ufa, Retail: 3.3/1,000 ufa

Footprint: 20,000 sf (about 140 x 140)
Diagonal: About 140'
Parking lot efficiency: assumes 350 square feet per stall
Usable SF: assumes 85% of gross SF

LAND

size of parcel (acres)	0.6
price per acre	$1,700,000
Total acquisition cost	$1,020,000

PARKING

Use	Min parking	Sq ft.
Residential	70	24,500
Retail	56	19,635
Total	126	44,135

Unaccomodated parking spaces: 11.81
Required square footage for parking 4,135.00

SOURCES:
building construction costs: Ankrom Moison Architects; Howard Write Constructors, Sept 2009
TI estimates: ECONorthwest, Sept 2009
land estimates: from Tukwila assessor's database, based on an average price per acre in the Urban Center.

RESIDENTIAL BREAKDOWN

	unit size	units	Total sf	Parking spaces
1 bd	800	42	33600	42
2 bd	1200	10	12000	20
3 bd	1500	4	6000	8
Total		56	51600	70

NOTE: None of the prototypes meet frontage requirements, due to site size
On Urban Corridors: Frontage coverage requirements will probably conflict with Building length maximums
This pro forma assumes that some parking (about 12 spaces) will be accommodated by variance or in some shared arrangement. Land costs do not include this space.

Min linear frontage coverage: 90%
Maximum building length: 120 feet

On sites that are 200 x 200, the minimum frontage coverage is 180 feet, but the maximum building length is 120 feet

Retail rates from C.B. Richard Ellis (pulled 9/23/09)

$18.00	
$10.00	
$25.00	
$14.00	
$25.00	
$30.00	
$20.33	average

Comparable retail properties for lease in the South Puget Sound; USD/SF/YR

Financial Pro Forma
Prototype: Mixed-use mid-rise building

Assumptions / Building value bottome line

About the development

use	*gross sq feet*
Apartments	60,000
Ground floor retail	20,000
Structured and surface parking	44,135
TOTAL (w/o parking)	*80,000*

Development costs

item	*% assumption*	*dollars*
Site acquisition		$1,020,000
New construction		$14,889,450
Developer fee (as % of construction)	5%	$744,473
Soft costs (as % of construction)	30%	$4,466,835
Contingency (as % of soft & hard costs)	5%	$967,814
Off-site costs	0%	$0
TOTAL		*$22,088,572*

Revenues and expenses

source of income/expense	*$/SF assumption*	*annual income*
Residential rent (per month)	1.7	$1,040,400
Retail rent (per year)	20	$340,000
total revenue		*$1,380,400*
Management fee (as % of revenue)	5%	$69,020
STABILIZED NOI		*$1,223,034*

Other assumptions

Rent increase per year	3%
Operating cost increase	3%
Vacancy, Yr 1	30%
Vacancy, Yr 2	10%
Vacancy, Yr 3 and stabilization	5%
Cap rate	8.5%

Bottom line

Fair Market Value	$14,388,640
Created value (FMV - costs)	($7,699,932)

Scenario 1 (35/65)

Equity

	assumption	*dollars*
Equity required	35%	$7,731,000
Equity terms		
term (yrs)	7	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$15,013,351

Bank loan

	assumption	*dollars*
Bank loan required	65%	$14,357,572
Bank loan terms:		
term (yrs)	30	
interest rate	8.0%	
Annual payment		$1,275,346

Bottom line

Loan to value ratio	1.00
Debt coverage ratio	0.96
Financing gap	$0
Equity repayment gap (or surplus)	-$15,030,073
IRR on equity	-38%

This sheet allows the user to manipulate four development and financing scenarios by changing the variables that are highlighted in BLUE. All scenarios reference the same development program. All scenarios reference the same revenue and cost assumptions, but these assumptions can be changed on this page. The key difference in the scenarios is the structure of the financing.

Scenario 2 (20/80)

Equity

	assumption	*dollars*
Equity required	20%	$4,417,714
Equity terms		
term (yrs)	7	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$8,579,058

Bank loan

	assumption	*dollars*
Bank loan required	80%	$17,670,857
Bank loan terms:		
term (yrs)	30	
interest rate	6.0%	
Annual payment		$1,283,769

Bottom line

Loan to value ratio	1.23
Debt coverage ratio	0.95
Financing gap	$0
Equity repayment gap (or surplus)	-$8,654,736
IRR on equity	-33%

Scenario 3 (35/65 with public)

Equity

	assumption	*dollars*
Equity required	10%	$2,208,857
Equity terms		
term (yrs)	10	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$5,268,627

Bank loan

	assumption	*dollars*
Bank loan required	65%	$14,357,572
Bank loan terms:		
term (yrs)	30	
interest rate	8%	
Annual payment		$1,275,346

Second loan

	assumption	*dollars*
Required loan amount	25%	$5,522,143
Second loan terms		
term (yrs)	30	
interest	1%	
Annual payment (interest only payments for 10 yrs)		$213,973

Bottom line

Loan to value ratio	1.00
Debt coverage ratio	0.96
Financing gap	$0
Equity repayment gap (or surplus)	-$5,040,575
IRR on equity	-13%

Scenario 4 (20/80 with public)

Equity

	assumption	*dollars*
Equity required	10%	$2,208,857
Equity terms		
term (yrs)	10	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$5,268,627

Bank loan

	assumption	*dollars*
Bank loan required	80%	$17,670,857
Bank loan terms:		
term (yrs)	30	
interest rate	6.0%	
Annual payment		$1,283,769

Second loan

	assumption	*dollars*
Required loan amount	10%	$2,208,857
Second loan terms		
term (yrs)	30	
interest	1%	
Annual payment (interest only payments for 10 yrs)		$85,589

Bottom line

Loan to value ratio	1.23
Debt coverage ratio	0.95
Financing gap	($0)
Equity repayment gap (or surplus)	-$4,793,470
IRR on equity	-11%

Development Desciption

Prototype: Office tower
Applicable sites: All

Use	Units	Stories	Gross SF	Usable SF	Cost Per SF	Total	TI / SF
Office		6	135,000	114,750	120	16,200,000	
Ground Floor retail		1	22,000	18,700	115	2,530,000	$25
Structured Parking		2	70,000	-	70	4,900,000	
TOTAL (w/o parking)	-	9	157,000	133,450		23,630,000	24,180,000

LAND

size of parcel (acres)	2
price per acre	$1,700,000
Total acquisition cost	$3,400,000

Unaccomodated parking:
206 (spaces)
72086 (sq ft)

PARKING

Use	Min parking	Sq ft.
Office	344	120,488
Retail	62	21,599
Total	406	142,086

Use Zones: TOD Urban, Pond District & Regional Center
Scale zone: General Urban, Urban Core
Corridor Zone: Urban Corridor
Max height: 98 feet (8 stories)
Max diagonal: 250' length of diagonal connecting fartherst corners of the footprint)
Min Parking: Office: 3/1,000 ufa, Retail: 3.3/1,000 ufa

Footprint: 22,000 sf
Diagonal: 210'
Parking lot efficiency: assumes 350 square feet per stall (from Gerding Edlen)
Usable SF: assumes 85% of gross SF

SOURCES:
building construction costs: Ankrom Moison Architects; Howard Write Constructors, Sept 2009
TI estimates: ECONorthwest, Sept 2009
land estimates: from Tukwila assessor's database, based on an average price per acre in the Urban Center.

Comparable office rents ($/sf/yr)

17.5
12
15
15
15
14.9

Office rents pulled from C.B. Richard Ellis 9/23/09; comparable units for rent in the South Seattle market.

Financial Pro Forma

Prototype: Office tower

Assumptions / Building value bottome line

About the development

use	*gross sq feet*
Office	135,000
Ground Floor retail	22,000
Structured parking	70,000
TOTAL (w/o parking)	*157,000*

Development costs

item	*% assumption*	*dollars*
Site acquisition		$3,400,000
New construction		$24,180,000
Developer fee (as % of construction)	5%	$1,209,000
Soft costs (as % of construction)	30%	$7,254,000
Contingency (as % of soft & hard costs)	5%	$1,571,700
TOTAL		*$37,614,700*

Revenues and expenses

source of income/expense	*$/SF assumption*	*annual income*
Office rent (per year)	18	$2,065,500
Retail rent (per year)	20	$374,000
total revenue		*$2,439,500*
Management fee (as % of revenue)	5%	$121,975
STABILIZED NOI		*$2,161,397*

Other assumptions

Rent increase per year	3%
Operating cost increase	3%
Vacancy, Yr 1	30%
Vacancy, Yr 2	10%
Vacancy, Yr 3 and stabilization	5%
Cap rate	8.0%

Bottom line

Fair Market Value	$27,017,463
Created value (FMV - costs)	($10,597,238)

Scenario 1 (35/65)

Equity

	assumption	*dollars*
Equity required	35%	$13,165,145
Equity terms		
term (yrs)	7	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$25,566,284

Bank loan

	assumption	*dollars*
Bank loan required	65%	$24,449,555
Bank loan terms:		
term (yrs)	30	
interest rate	8%	
Annual payment		$2,171,791

Bottom line

Loan to value ratio	0.90
Debt coverage ratio	1.00
Financing gap	$0
Equity repayment gap (or surplus)	-$25,021,461
IRR on equity	-34%

This sheet allows the user to manipulate four development and financing scenarios by changing the variables that are highlighted in BLUE. All scenarios reference the same development program. All scenarios reference the same revenue and cost assumptions, but these assumptions can be changed on this page. The key difference in the scenarios is the structure of the financing.

Scenario 2 (20/80)

Equity

	assumption	*dollars*
Equity required	20%	$7,522,940
Equity terms		
term (yrs)	7	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$14,609,305

Bank loan

	assumption	*dollars*
Bank loan required	80%	$30,091,760
Bank loan terms:		
term (yrs)	30	
interest rate	6%	
Annual payment		$2,186,134

Bottom line

Loan to value ratio	1.11
Debt coverage ratio	0.99
Financing gap	$0
Equity repayment gap (or surplus)	-$14,164,879
IRR on equity	-29%

Scenario 3 (35/65 with public)

Equity

	assumption	*dollars*
Equity required	10%	$3,761,470
Equity terms		
term (yrs)	10	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$8,971,962

Bank loan

	assumption	*dollars*
Bank loan required	65%	$24,449,555
Bank loan terms:		
term (yrs)	30	
interest rate	8%	
Annual payment		$2,171,791

Second loan

	assumption	*dollars*
Required loan amount	25%	$9,403,675
Second loan terms		
term (yrs)	30	
interest	1%	
Annual payment (interest only payments for 10 yrs)		$364,375

Bottom line

Loan to value ratio	0.90
Debt coverage ratio	1.00
Financing gap	$0
Equity repayment gap (or surplus)	-$7,712,877
IRR on equity	-9%

Scenario 4 (20/80 with public)

Equity

	assumption	*dollars*
Equity required	10%	$3,761,470
Equity terms		
term (yrs)	7	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$7,304,652

Bank loan

	assumption	*dollars*
Bank loan required	80%	$30,091,760
Bank loan terms:		
term (yrs)	30	
interest rate	6.5%	
Annual payment		$2,304,350

Second loan

	assumption	*dollars*
Required loan amount	10%	$3,761,470
Second loan terms		
term (yrs)	30	
interest	1%	
Annual payment (interest only payments for 10 yrs)		$145,750

Bottom line

Loan to value ratio	1.11
Debt coverage ratio	0.94
Financing gap	$0
Equity repayment gap (or surplus)	-$7,951,045
IRR on equity	-33%

Development Desciption

Prototype: Residential tower

Applicable sites: Regional Center zone

Use	Units	Stories	Gross SF	Usable SF	Cost Per SF	Total	TI / SF
Residential		6	138,000	117,300	200	27,600,000	
Ground Floor retail		1	23,000	19,550	125	2,875,000	$25
Parking		4	80,680	-	70	5,647,618	
TOTAL (w/o parking)	-	11	161,000	136,850		36,122,618	36,697,618

LAND

size of parcel (acres)	0.5
price per acre	$1,700,000
Total acquisition cost	$850,000

PARKING

Use	Min parking	Sq ft.
Residential	166	58,100
Retail	65	22,580
Total	231	80,680

RESIDENTIAL BREAKDOWN

	unit size	units	Total sf	Parking spaces
1 bd	800	60	48000	60
2 bd	1400	35	49000	70
3 bd	1800	18	32400	36
Total		113	129,400	166

NOTE: Can only be in this zone b/c parking requires increased height of building.

Use Zones: TOD Urban, Pond District & Regional Center
Scale zone: General Urban, Urban Core
Corridor Zone: Urban Corridor
Max height: 142 feet (12 stories)
Max diagonal: 250' length of diagonal connecting fartherst corners of the footprint)
Min Parking: Office: 3/1,000 ufa, Retail: 3.3/1,000 ufa, Residential: 1/bd with 2/du max

Footprint: 23,000 sf
Diagonal: 210'
Parking lot efficiency: assumes 350 square feet per stall
Usable SF: assumes 85% of gross SF

SOURCES:
building construction costs: Ankrom Moison Architects; Howard Write Constructors, Sept 2009
TI estimates: ECONorthwest, Sept 2009
land estimates: from Tukwila assessor's database, based on an average price per acre in the Urban Center.

NOTE:
On Urban Corridors: Frontage coverage requirements will probably conflict with Building length maximums

Min linear frontage coverage: 90%
Maximum building length: 120 feet

On sites that are 200 x 200, the minimum frontage coverage is 180 feet, but the maximum building length is 120 feet

Frontage requirements are usually based on a linear percentage of the total building facade, rather than a percentage of the length of the site

Financial Pro Forma

Prototype: Residential tower

Assumptions / Building value bottome line

About the development

use	*square feet*
Apartments	138,000
Ground Floor retail	23,000
Surface parking	80,680
TOTAL (w/o parking)	*161,000*

Development costs

item	*% assumption*	*dollars*
Site acquisition		$850,000
New construction		$36,697,618
Developer fee (as % of construction)	5%	$1,834,881
Soft costs (as % of construction)	30%	$11,009,285
Contingency (as % of soft & hard costs)	5%	$2,385,345
TOTAL		*$52,777,129*

Revenues and expenses

source of income/expense	*$/SF assumption*	*annual income*
Residential rent (per month)	1.7	$2,392,920
Retail rent (per year)	20	$391,000
total revenue		*$2,783,920*
Management fee (as % of revenue)	5%	$139,196
STABILIZED NOI		*$2,466,553*

Other assumptions

Rent increase per year	3%
Operating cost increase	3%
Vacancy, Yr 1	30%
Vacancy, Yr 2	10%
Vacancy, Yr 3 and stabilization	5%
Cap rate	8.0%

Bottom line

Fair Market Value	$30,831,914
Created value (FMV - costs)	($21,945,215)

Scenario 1 (35/65)

Equity

	assumption	*dollars*
Equity required	35%	$18,471,995
Equity terms		
term (yrs)	7	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$35,872,014

Bank loan

	assumption	*dollars*
Bank loan required	65%	$34,305,134
Bank loan terms:		
term (yrs)	30	
interest rate	8%	
Annual payment		$3,047,237

Bottom line

Loan to value ratio	1.11
Debt coverage ratio	0.81
Financing gap	$0
Equity repayment gap (or surplus)	-$39,232,026
IRR on equity	#NUM!

This sheet allows the user to manipulate four development and financing scenarios by changing the variables that are highlighted in BLUE. All scenarios reference the same development program. All scenarios reference the same revenue and cost assumptions, but these assumptions can be changed on this page. The key difference in the scenarios is the structure of the financing.

Scenario 2 (20/80)

Equity

	assumption	*dollars*
Equity required	20%	$10,555,426
Equity terms		
term (yrs)	7	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$20,498,294

Bank loan

	assumption	*dollars*
Bank loan required	80%	$42,221,703
Bank loan terms:		
term (yrs)	30	
interest rate	6%	
Annual payment		$3,067,361

Bottom line

Loan to value ratio	1.37
Debt coverage ratio	0.80
Financing gap	$0
Equity repayment gap (or surplus)	-$23,999,172
IRR on equity	#NUM!

Scenario 3 (35/65 with public)

Equity

	assumption	*dollars*
Equity required	10%	$5,277,713
Equity terms		
term (yrs)	10	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$12,588,546

Bank loan

	assumption	*dollars*
Bank loan required	65%	$34,305,134
Bank loan terms:		
term (yrs)	30	
interest rate	8%	
Annual payment		$3,047,237

Second loan

	assumption	*dollars*
Required loan amount	25%	$13,194,282
Second loan terms		
term (yrs)	30	
interest	1%	
Annual payment (interest only payments for 10 yrs)		$511,254

Bottom line

Loan to value ratio	1.11
Debt coverage ratio	0.81
Financing gap	$0
Equity repayment gap (or surplus)	-$17,086,214
IRR on equity	#DIV/0!

Scenario 4 (20/80 with public)

Equity

	assumption	*dollars*
Equity required	10%	$5,277,713
Equity terms		
term (yrs)	10	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$12,588,546

Bank loan

	assumption	*dollars*
Bank loan required	80%	$42,221,703
Bank loan terms:		
term (yrs)	30	
interest rate	6.5%	
Annual payment		$3,233,230

Second loan

	assumption	*dollars*
Required loan amount	10%	$5,277,713
Second loan terms		
term (yrs)	30	
interest	1%	
Annual payment (interest only payments for 10 yrs)		$204,501

Bottom line

Loan to value ratio	1.37
Debt coverage ratio	0.76
Financing gap	$0
Equity repayment gap (or surplus)	-$18,154,488
IRR on equity	#DIV/0!

Development Desciption

Prototype: Adaptive re-use of big box retail
Applicable sites: Pond District

Use	Units	Stories	Gross SF	Usable SF	Cost Per SF	Total	TI / SF
Office		1	40,000	34,000	95	3,800,000	$25
Retail		1	40,000	34,000	30	1,200,000	$25
Brew pub	1		10,000	8,500	40	400,000	$25
Covered Parking	163	-	30,000	-	20	600,000	
TOTAL (w/o parking)	164	2	90,000	76,500		6,000,000	7,912,500

LAND

size of parcel (acres)	2.3
price per acre	$1,700,000
Total acquisition cost	$3,910,000

Spaces in surface lots
77.4857143
square footage of surface lots:
27,120

PARKING

Use	Min parking	Sq ft.
Brew pub	51	17,850
Retail	112	39,270
Office	102	35,700
Total	163	57,120

Use Zones: Pond District
Scale zone: General Urban, Urban Core
Corridor Zone: Urban Corridor
Max height: 98 feet (8 stories)
Min height: 2-stories & 25-feet [does not say whether 2nd floor has to be active]
Max diagonal: does not apply to buildings less than 58'
Min Parking: Restaurant: 6/1,000 ufa, Residential: 1/bedroom max of 2/du, Office: 3/1,000 ufa, Retail: 3.3/1,000 ufa

Footprint: 100,000 (assumes one-story big box)
Diagonal: n/a
Parking lot efficiency: assumes 350 square feet per stall
Usable SF: assumes 85% of gross SF

Assumptions / Building value bottome lin

About the development

use	*gross sq feet*
Retail	40,000
Restaurant	10,000
Surface parking	30,000
TOTAL (w/o parking)	*50,000*

Development costs

item	*% assumption*	*dollars*
Site acquisition		$3,910,000
New construction		$7,912,500
Developer fee (as % of construction)	5%	$395,625
Soft costs (as % of construction)	30%	$2,373,750
Contingency (as % of soft & hard costs)	5%	$514,313
Off-sites (as % of construction)	0%	$0
TOTAL		*$11,196,188*

Revenues and expenses

source of income/expense	*$/SF assumption*	*annual income*
Brew pub rent (per year)	17	$144,500
Retail rent (per year)	20	$680,000
Office rent (per year)	18	$612,000
total revenue		*$1,436,500*
Management fee (as % of revenue)	5%	$71,825
STABILIZED NOI		*$1,272,739*

Other assumptions

Rent increase per year	3%
Operating cost increase	3%
Vacancy, Yr 1	30%
Vacancy, Yr 2	10%
Vacancy, Yr 3 and stabilization	5%
Cap rate	8.0%

Bottom line

Fair Market Value	$15,909,238
Created value (FMV - costs)	$4,713,050

Scenario 1 (35/65)

Equity

	assumption	*dollars*
Equity required	35%	$3,918,666
Equity terms		
term (yrs)	7	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$7,609,921

Bank loan

	assumption	*dollars*
Bank loan required	65%	$7,277,522
Bank loan terms:		
term (yrs)	30	
interest rate	8%	
Annual payment		$646,444

Bottom line

Loan to value ratio	0.46
Debt coverage ratio	1.97
Financing gap	$0
Equity repayment gap (or surplus)	-$2,862,190
IRR on equity	4%

This sheet allows the user to manipulate four development and financing scenarios by changing the variables that are highlighted in BLUE. All scenarios reference the same development program. All scenarios reference the same revenue and cost assumptions, but these assumptions can be changed on this page. The key difference in the scenarios is the structure of the financing.

Scenario 2 (20/80)

Equity

	assumption	*dollars*
Equity required	20%	$2,239,238
Equity terms		
term (yrs)	7	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$4,348,526

Bank loan

	assumption	*dollars*
Bank loan required	80%	$8,956,950
Bank loan terms:		
term (yrs)	30	
interest rate	6%	
Annual payment		$650,713

Bottom line

Loan to value ratio	0.56
Debt coverage ratio	1.96
Financing gap	$0
Equity repayment gap (or surplus)	$369,321
IRR on equity	19%

Scenario 3 (35/65 with public)

Equity

	assumption	*dollars*
Equity required	28%	$3,134,933
Equity terms		
term (yrs)	10	
interest rate	20%	
Total equity repayment (balloon payment at end of term)		$7,477,527

Bank loan

	assumption	*dollars*
Bank loan required	65%	$7,277,522
Bank loan terms:		
term (yrs)	30	
interest rate	8%	
Annual payment		$646,444

Second loan

	assumption	*dollars*
Required loan amount	7%	$783,733
Second loan terms		
term (yrs)	30	
interest	1%	
Annual payment (interest only payments for 10 yrs)		$30,368

Bottom line

Loan to value ratio	0.46
Debt coverage ratio	1.97
Financing gap	$0
Equity repayment gap (or surplus)	$63,408
IRR on equity	17%

Scenario 4 (20/80 with public)

Equity

This scenario is not needed for this prototype.

	assumption	*dollars*
Equ		619
Equ		
te		
in		
Tota		
payı		263

Bar

	assumption	*dollars*
Ban		950
Ban		
te		
in		
Ann		713

Sec

	assumption	*dollars*
Req		619
Sec		
term (yrs)	30	
interest	1%	
Annual payment (interest only payments for 10 yrs)		$43,383

Bottom line

Loan to value ratio	0.56
Debt coverage ratio	1.96
Financing gap	$0
Equity repayment gap (or surplus)	$2,465,211
IRR on equity	44%