



Bureau of Planning and Sustainability

Innovation. Collaboration. Practical Solutions.

January 20, 2017

MEMO O

TO: Planning and Sustainability Commission

FROM: Joe Zehnder, Chief Planner

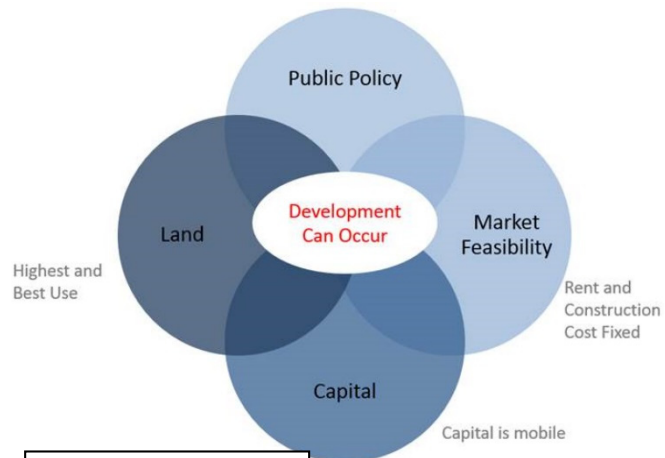
COPY: Susan Anderson, Tyler Bump, Rachael Hoy and Sallie Edmunds (BPS)
Lisa Abuaf and Sara Harpole (PDC)

SUBJECT: CC2035 Cost Analysis Summary

At the Planning and Sustainability Commission (PSC) hearings on Central City 2035 there was public testimony on new policies and requirements that could impact development. The Portland Development Commission (PDC) also provided testimony on the potential impacts on PDC/City sponsored projects. After the PSC hearings, PSC members requested an analysis of the cumulative cost that new policies and requirements could add to the cost of development. This was to allow the PSC to consider both the public benefits from these policies and how the combination of recent and potential new requirements could affect the feasibility, scale and pace of development in the Central City.

There are a number of factors that impact development feasibility. Market factors include things like material costs, labor costs, land costs, operations and maintenance costs, achievable revenue, interest rates, capitalization rates, and general demand for housing and commercial space. Regulatory factors include things like zoning, infrastructure requirements, impact fees and other fees.

While all of these factors affect project financials, they vary in relative size and volatility. Changes in the larger elements can quickly and significantly affect whether a project moves forward. Most of these elements are not significantly affected by local public policy.



Source: EcoNorthwest



PDC and BPS contracted with EcoNorthwest (EcoNW) to analyze the impact of the new policies on development costs and feasibility. PDC staff worked with EcoNW to understand the financial and market impact on projects where the City and PDC are investing tax increment and other public resources to realize public benefits. BPS staff compiled data about the benefits of these policies that warranted their inclusion in CC2035. This memo includes background on the study; a summary of the study findings; and a summary of the benefits of the proposed CC2035 policies.

1. Background on the Policy Impact Calculator study

EcoNorthwest undertook a study of the costs and potential impacts on development of the following four policies:

1. Changes to Parks System Development Charges (SDC)	Effective July 1, 2016.
2. New Construction Excise Tax (CET)	Effective August 1, 2016. ¹
3. Inclusionary Housing Program requirements (IHP)	Effective February 1, 2017.
4. New green building requirements	Proposed in the Central City 2035. Effective 2018

The assumptions in the study include the following:

- A. The development cost related assumptions used in the study are the same as those used in Portland Housing Bureau (PHB) studies of inclusionary zoning. These assumptions include residential unit mixes, unit sizes, hard costs, soft costs, contingencies, achievable rents, vacancy rates, operating costs, and investor return.
- B. Parks SDC and CET costs were set at the current adopted rates.
- C. Costs related to inclusionary housing includes both development cost for affordable housing requirements and financial incentive offsets available from the IHP program. The offsets include a 10-year property tax exemption on all or part of the project, SDC waivers, CET waivers and a density bonus.
 - The amount of IHP offsets varies by the base FAR of the site. For projects at 5:1 FAR and above, offsets include a 10-year property tax exemption on all residential units (market rate and affordable). For projects below 5:1 FAR, offsets include a 10-year property tax exemption only on the affordable residential units in the project.

¹ Portland Housing Bureau Construction Excise Tax Effective August 1, 2016.
<https://www.portlandoregon.gov/bds/article/582410>



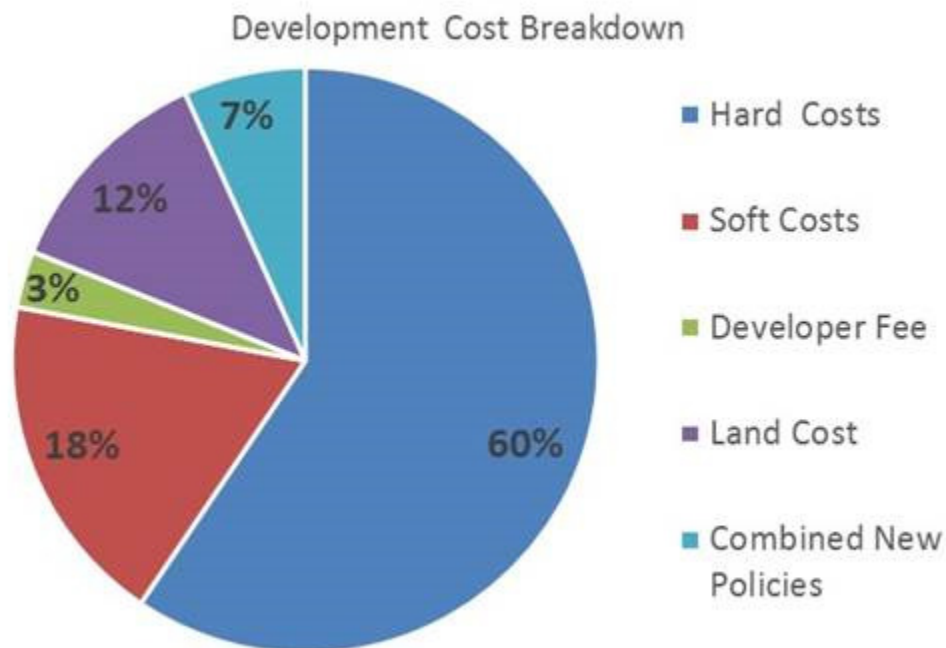
- D. Green building requirements were estimated by BPS staff to be 1.5-3.5% of total construction costs given that costs vary by building size, mix of uses and level of certification. It also reflects that a significant proportion of Central City projects already include green building features. Green Building requirements include low carbon, ecoroofs and bird safe:
- a. Low carbon building registration costs approximately \$900-2,500 (depending on the certifying organization and the level of certification). While actual certification is not required by CC2035, it is encouraged. There are many options to reach full certification which is why it is important to show green building costs as a range from 1.5-3.5%.
 - b. Adding an ecoroof is estimated to result in \$6/sq. ft. of hard costs and structural costs equal to 0.5% increase in total project costs.
 - c. Including bird safe glazing on average could add an additional 0.33% of hard costs. Depending on glazing treatment chosen, costs could vary.
- E. The prototype projects used in the study were based on development program assumptions (number and mix of uses, density, parking) for potential PDC supported projects. The assumptions in these projects reflect policy objectives of PDC that differ from what has been recently seen in private sector projects. PDC projects are expected to include public benefits such as delivering higher density development or a development program that is higher than current markets may support at particular locations.
- For example, one prototype is based on high-density housing in Lents where such development is currently financially infeasible but needed to meet public goals for Lents.
 - Other prototypes, based on PDC development objectives, include very high-density, mixed-use projects with shared parking in Central City locations where the current market supports lower density, single-use development.

2. Findings from the Policy Impact Calculator study

- A. Many of the projects in the Policy Impact Calculator were found to be already financially infeasible under today's conditions.
- Current market conditions are challenging for development in spite of rising rents and sale prices. These conditions include relatively high construction costs, high land prices, and retracting capital markets even compared with a year when we did the Bonus and Transfer Study.
 - Still, development projects continue to occur in the Central City. These projects may have locked in entitlement, design, and financing before the recent changes in cost



- factors. Some projects that are moving forward are either smaller in scale to take advantage of the lower construction costs for that development type or are able to absorb higher costs since the land was acquired when prices were lower.
- B. The calculator shows that adding the costs related to IHP, new SDCs, CET and green building requirements further reduce the development feasibility of the prototypes.
- This may result in fewer locations where development is feasible and a reduction in the density of projects that are feasible to develop. This, in turn, may result in a reduction in the production of housing units and office space; and/or a need for higher rents.
- C. Overall, the new policies could result in as much as 7% increase construction and associated costs (soft, contingency, tax, and fees).
- The pie chart below provides a comparison of total project cost and the proportion of costs allocated to the new policies.



- D. Costs related to the new Inclusionary Housing Program could add 3% to development costs after cost offsets.
- For projects in higher density Central City zones, offsets include a 10-year property tax exemption on all residential units (market rate and affordable). EcoNorthwest's model results indicate this benefit exceeds the additional cost of IHP requirements. This is even more so for projects providing 10% of units at 60% of Area Median



- Income (AMI) as SDC Waivers for affordable units are provided in the 60% MFI voluntary option.
- For projects in lower density Central City Zones, offsets include a 10-year property tax exemption only on the affordable residential units in the project. Under current market conditions, this benefit at best matches the cost of IHP requirements.
 - Commercial and industrial projects are not eligible for the cost offsets and will have to absorb the financial impact into their lease rates, if feasible.
- E. Costs related to changes to Parks and Recreation SDCs and the new Construction Excise Tax could add 0.97% and 0.01% respectively to development costs, based on the calculator.
- These costs, while new, have already been added to projects and should be considered part of the base cost. When City Council adopted these changes they made findings that the increase was justified by the public need and benefit.
- F. Green building requirements could add 1.5-3.5% to development costs, based on the calculator.
- The amount of additional cost depends on whether the project was already planning on including green building features or LEED certification. Ecoroof and bird-safe components can be counted toward LEED certification increasing cost savings. Between 2008-2015, most new commercial and multifamily buildings in the Central City 50,000 sf and larger achieved LEED certification.
 - However as new development firms invest in Portland, they are not necessarily as committed to or aware of our achievements in green building. By requiring registration with a third-party green building certification programs, the Low Carbon Building Standard encourages developers to examine the benefits of certification (as outlined below). In addition, these certification programs provide valuable technical assistance and access to resources that can help developers construct high performing buildings.

3. Summary of the green building benefits from the proposed CC2035 policies.

A. What CC2035 would require:

- Low Carbon buildings: Buildings over 50,000 sq. feet in net building area are required to register with a third-party program.



- **Ecoroof:** Buildings over 20,000 square feet in net building area are required to have an ecoroof that covers 60% of the roof area (minus mechanical equipment and other exempt elements).
- **Bird-Safe glazing:** All new development or major remodels are required to use bird-safe glazing - films, etching, UV coatings, etc. – on the first four floors of building facades with greater than 30% glazing.

B. Benefits of low carbon buildings:

- Improving building performance is essential for reaching our long-term carbon emission reduction goals - building sector emission reductions of 33% by 2030 and 80% by 2050. Buildings are the single largest contributor to carbon emissions in Multnomah County, accounting for nearly half of all sector-based carbon emissions.
- Buildings that have pursued green building certification are more valuable, with an average expected increase in value of 4 percent (US Green Building Council- <http://www.usgbc.org/>).
- Buildings that have attained green building certification cost less to maintain and operate. For example, LEED buildings report almost 20 percent lower maintenance costs than typical commercial buildings.
- Buildings that have attained green building certification use less energy and water and produce less waste – saving money and reducing carbon emissions.
- The best time to begin addressing building efficiency is in the initial building design stage. Buildings that have been designed and built with performance as a primary goal are capable of significantly outperforming similar previously built buildings that have been retrofitted for efficiency.
- Ecoroof and bird-safe building components can be counted toward LEED certification increasing cost savings.

C. Benefits of ecoroofs:

- Development projects earn stormwater fee credits for an ecoroof and in some cases an ecoroof can satisfy a development's total Stormwater Management Manual requirements.
- Research shows that ecoroofs can help decrease the urban heat island effect and its impacts on vulnerable households (houseless, older adults, people with underlying medical conditions). This is a goal in the Climate Action Plan (CAP).



- An ecoroof performs better than many other stormwater management approaches. It retains more water than planters but does not reduce the site area available for development as would a ground level planter.
- An ecoroof has longer lifetime and therefore lower lifetime operation and maintenance costs compared to a conventional roof. There is a 10% cost difference after 40 years between conventional and eco roofs.
- An ecoroof may increase property values by up to 5.5% (2012 study Willingness to pay for Ecoroofs in Portland Oregon Condominium Market)
- Other environmental benefits include improving air quality, energy savings and providing habitat for birds and pollinators.

D. Benefits of bird-safe glazing:

- Protects and helps restore native and migratory bird populations that are currently in decline. Window strikes are a leading cause of bird mortality nationwide, second only to habitat destruction.
- May work as a strategy for controlling interior building climate passively through the use of films, frit, and acid etch.
- Reduces solar glare and infiltration that can help reduce operational costs.

4. Conclusion

The suite of green building policies recommended with CC2035 is estimated to increase development costs by 1.5-3.5% (the EcoNW study calculated costs at 3.5%). However, there are many options to reach certification which is why it is important to show green building costs as a range from 1.5 – 3%. For example, green building costs for a podium, mixed use building in the Central City would range between \$380,000 – 879,000 on top of the base \$27,000,000 development cost (excludes land cost).

While significant, this is not the most significant or influential cost changes that affect the viability of new development. The study estimated that all of the new policies (Green Buildings, Inclusionary Housing, Construction Excise Tax, System Development Charge), would represent approximately 7% of total costs. Today, studies estimate that many projects are not financially feasible. To reach feasibility with these regulatory changes, the most influential changes will be lower construction costs, higher lease rates, lower land values and market supportive financial costs.



To the extent that the other cost and revenue variables cannot absorb the additional cost of these policies, these requirements could contribute to reducing the pace and scale of development. However, the market may be able to absorb this impact and the public benefits behind these policies are significant, long-range, and best accomplished by the changes they would bring to development practices.

