

**Cost of On-Site Parking and Impacts on Affordability (2012)**  
**Portland, Oregon Bureau of Planning and Sustainability.**  
 See <https://www.portlandoregon.gov/bps/article/420062>

A 2012 study for Portland, Oregon’s Bureau of Planning and Sustainability examined the relationship between parking, housing and rent costs. It compared construction costs and resulting effect on rents for mixed-use buildings with and without parking. This included a variety of parking styles both at and below ground level for a typical 10,000 square foot lot.<sup>1</sup>

The study found a significant added housing cost due to parking, and a reduced amount of housing that could be provided due to space consumed for parking.

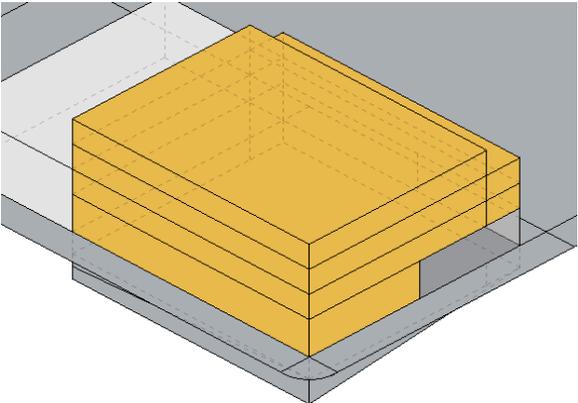
- Compared to an \$800/month rent per unit in an apartment building with no parking, a building with underground parking would require rent of \$1,300/month to cover development costs, including garage construction at an assumed \$55,000 per parking space.
- Compared to 50 dwelling units in the building with no parking, there would be space enough for only 44 dwelling units in the underground-parked building.
- For a building where parking is provided inside but not underground, the comparable rent would need to be \$950/month, with room for a total of 42 dwelling units.
- For a building with mechanical parking solutions that maximizes space efficiency (by stacking cars in lifts), the comparable rent to cover costs would need to be \$1,175/month, with room for a total of 46 dwelling units.

<b>Building Development Prototype</b>	<b>Number of units possible to fit in the structure</b>	<b>Number of parking Spaces</b>	<b>Parking spaces per unit</b>	<b>Monthly rent to meet 7% ROI* (lesser profit objective)</b>	<b>Monthly rent to meet 10% ROI* (greater profit objective)</b>
No Parking	50	0	0	\$800	\$1,150
Underground	44	33	0.75	\$1,300	\$1,900
Podium (at or above ground)	42	22	0.5	\$950	\$1,350
Mechanical	46	23	0.5	\$1,175	\$1,660
Surface	30	19	0.6	\$1,200	\$1,800

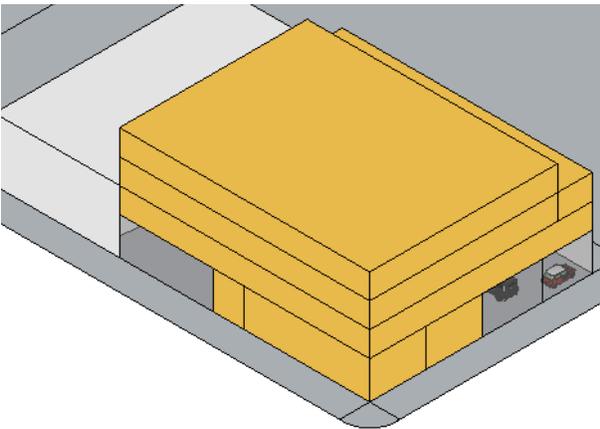
\*ROI = return on investment. The ROI factor is the assumed percent return that can be achieved from a development. This table illustrates that rents are sensitive to: how many dwellings can be fit into a given property, the developer’s “bottom line” profit expectations, and the costs of building parking as part of the total construction cost.

<sup>1</sup> Other development assumptions, such as unit size at 550 square feet/unit, and amount of area for internal hallways, etc., were standardized according to zoning that is comparable to Seattle’s NC zones. Construction costs were assumed at \$109 per square foot, or about \$60,000 construction cost per dwelling unit.

**Underground garage**



**Podium (above ground, enclosed)**



**No parking**

