Permit Data and Deconstruction Policy

Shawn Wood
City of Portland
Construction Waste Specialist
2014 Neighborhood Pressure/Support

United Neighborhoods for Reform

Working toward development that benefits all Portlanders
House Demo Permit Applications

(by application date)
Multi-Phased Approach

- Incentives – 24 small deconstruction grants ($2,500-$3,000/project)
- Requirements that could grow over time

<table>
<thead>
<tr>
<th>Phase I:</th>
<th>Deconstruction Grants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase II:</td>
<td>Initial Ordinance</td>
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<tr>
<td>Phase III:</td>
<td>Current Ordinance</td>
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</table>

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Initial Ordinance</td>
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<tr>
<td>Current Ordinance</td>
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</table>
Required Deconstruction for Which Houses?

- **All** = Too much material for market and too many projects for decon contractors
- **Oldest** = Best lumber (old growth), easy to disassemble
- **Newest** = Worst lumber (2\textsuperscript{nd} growth, engineered), adhesives make it harder to disassemble
- **What is a bold, but balanced number of projects?**
• Require based on year built?
• What can the market and contractors handle?

### Demo Permits and Assessor Info (Year Built)

#### Totals for 2014 and 2015

<table>
<thead>
<tr>
<th>Year Built</th>
<th>Count</th>
<th>Percent</th>
<th>Year Built</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1854-1911</td>
<td>193</td>
<td>27.41%</td>
<td>1854-1915</td>
<td>241</td>
<td>34.23%</td>
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<tr>
<td>1912-1937</td>
<td>254</td>
<td>36.08%</td>
<td>1917-1940</td>
<td>235</td>
<td>33.28%</td>
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<tr>
<td>1938-1964</td>
<td>218</td>
<td>30.97%</td>
<td>1941-1964</td>
<td>189</td>
<td>26.85%</td>
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<tr>
<td>1965-2015</td>
<td>39</td>
<td>5.54%</td>
<td>1965-2015</td>
<td>39</td>
<td>5.54%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>704</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>Total</strong></td>
<td><strong>704</strong></td>
<td><strong>100.00%</strong></td>
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</table>

#### Totals for 2015 only

<table>
<thead>
<tr>
<th>Year Built</th>
<th>Count</th>
<th>Percent</th>
<th>Year Built</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1864-1911</td>
<td>105</td>
<td>28.61%</td>
<td>1864-1916</td>
<td>128</td>
<td>34.88%</td>
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<tr>
<td>1912-1937</td>
<td>136</td>
<td>37.06%</td>
<td>1917-1940</td>
<td>128</td>
<td>34.88%</td>
</tr>
<tr>
<td>1938-1964</td>
<td>103</td>
<td>28.07%</td>
<td>1941-1964</td>
<td>88</td>
<td>23.98%</td>
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<tr>
<td>1965-2015</td>
<td>23</td>
<td>6.27%</td>
<td>1965-2015</td>
<td>23</td>
<td>6.27%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>367</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>Total</strong></td>
<td><strong>367</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

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**Demo Permits for 2014 and 2015 by Year Built**
Initial Ordinance (2016)

- Deconstruction required for houses/duplexes:
  - Built in 1916 or earlier; or
  - Designated as historic
- Goal of including houses/duplexes built before 1941 by 2019
Annual House Demo Permit Applications by Year

Number of Permits

- 2016: 121
- 2017: 102
- 2018: 69
- 2019: 58

 Existing

Proposed (116/Year)

Note: 2019 permits projected based on first 9 months of permit activity

Downward trend in demos

Permit Year

# of Permits

0 50 100 150 200 250 300 350 400

<=1916

1917-1940

>1940
Current Ordinance (2020)

- Expand to houses and duplexes built in 1940 or earlier
- Effective date of January 20, 2020
- Applies to two-thirds of demolition permits
- Avoid losing contractors and/or retailers because of less projects
Cost Per Unit

- $3,000 more for decon
- 12 units created for each decon ($250 additional per unit)
Carrying Costs – Average Development Timeline

**Mechanical Demo**

- Demo permit review (63 days)
- 35-day delay

**Deconstruction**

- Demo permit review (59 days)

 Issued:

- Removal of structure (59 days)

 Finaled:

- Removal of structure (80 days)
- 23 days

 Issued/Approved:

- 45 days
- Decon 5 days less

- New Project/Land Use Decision

- New Project/Land Use Decision

- 3.4 Months

- 100
- 150
- 200

- 50
Demo Permits and Deconstructions Since 2015

Chart showing demo permits and deconstructions from 2015 to 2020. The percentages for deconstructions are as follows:
- 2015: 28%
- 2016: 34%
- 2017: 42%
- 2018: 67%

The bar chart indicates a decrease in the number of total demos and an increase in deconstructions over the years.
### Example Salvage Wood Post-Decon Form

**Part of Demo Permit Final**

<table>
<thead>
<tr>
<th>Material</th>
<th>Cut</th>
<th>Type</th>
<th>Nominal Dimensions</th>
<th>Thickness</th>
<th>Width</th>
<th>Length</th>
<th>FT²</th>
<th>Kilograms</th>
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</thead>
<tbody>
<tr>
<td>Custom Lumber</td>
<td>Custom</td>
<td>Softwood</td>
<td>atypical</td>
<td>1</td>
<td>3</td>
<td>670</td>
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<td>209.762</td>
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<td>Lumber</td>
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<td>Softwood</td>
<td>1x6</td>
<td>1</td>
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<tr>
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<tr>
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<td>Softwood</td>
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<td>4</td>
<td>769</td>
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<tr>
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<td>Softwood</td>
<td>2x6</td>
<td>2</td>
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<td>913</td>
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<td>1,143.36</td>
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<td>Lumber</td>
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<td>Softwood</td>
<td>2x8</td>
<td>2</td>
<td>8</td>
<td>486</td>
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<td>811.498</td>
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<td>2</td>
<td>10</td>
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<tr>
<td>Flooring</td>
<td>Softwood</td>
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<td></td>
<td>0.75</td>
<td>3.25</td>
<td>20</td>
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<td>53.165</td>
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<tr>
<td>Flooring</td>
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<td>0.75</td>
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<td>Lumber</td>
<td>Rough cut</td>
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<td>17</td>
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<td>63.868</td>
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<tr>
<td>Lumber</td>
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<td>Softwood</td>
<td>6x8</td>
<td>6</td>
<td>8</td>
<td>25</td>
<td></td>
<td>125.231</td>
</tr>
</tbody>
</table>

Board Feet: 6,595.286  
Kilograms: 8,259.362  
Pounds: 18,208.749  

Tons: salvaged - 9.104 | disposed - 18.96
Benefits and Outcomes

• Waste diversion
  • Over 330 house deconstructions to date
  • Over 3.3 million pounds of material recovered for reuse

• Net carbon benefit
  • Per house - 7.6 metric tons of CO2eq
  • To date - Equivalent to removal of 542 cars from the road for a year
Links

- Portland Demolition/Deconstruction Permit Application

- Deconstruction ordinance, administrative rules and FAQ Permitting Questions – Ordinance
  originally adopted in 2016/expanded in 2019
  https://www.portland.gov/bps/decon/deconstruction-requirements

- Deconstruction Ordinance Expansion
  City Council Hearing, November 2019 - Unanimous approval of expanding the ordinance to cover 2/3 of the City’s residential housing.)
  Video: https://youtu.be/2NpsOWE0k10?t=2016

- Oregon Department of Environmental Quality Materials Management Grant Deconstruction
  Grant Program Final Report

- Deconstruction vs. Demolition: An evaluation of carbon and energy impacts from deconstructed
  homes in the City of Portland