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## MEMO

**DATE:** March 12, 2018

**TO:** Mayor Wheeler  
Commissioner Eudaly  
Commissioner Fish  
Commissioner Fritz  
Commissioner Saltzman

**FROM:** Susan Anderson, Director 

**SUBJECT:** Portland's Deconstruction Program 12-month Status Report

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It's been a little over a year since City Council unanimously adopted the Deconstruction Ordinance and it's already producing notable results. The Deconstruction Ordinance requires full deconstruction, versus mechanical demolition, for houses and duplexes that were built in 1916 or earlier, or designated historic regardless of age. Table 1 below captures the number of homes that were required to deconstruct in the first year of the Ordinance.

**Table 1: Permit Activity October 31, 2016 – October 30, 2017**

| Activity  | Quantity                            |
|---|-------------------------------------|
| Total Demolition Permits (House/Duplex)               | 318                                 |
| Total permits covered by Deconstruction Ordinance     | 80 ( <i>reflects 5 exemptions</i> ) |
| Percentage of Demolition Permits Subject to Ordinance | 25%                                 |

Before the Ordinance, there were an average of 20 homes deconstructed every year. The new requirement directly resulted in the creation of new jobs in the deconstruction industry, and new and expanded business opportunities to retail salvaged materials. This memo describes an overview of the Ordinance's first years' outcomes and provides a short list of recommendations and next steps.



## Outcomes of the Deconstruction Ordinance

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### 1. Diverting building materials to reuse as opposed to disposal or recycling.

The typical mechanical demolition of a single-family house generates between 40 and 50 tons of debris (excluding concrete). Most of this material is destined for the landfill with a smaller percentage burned for energy recovery or recycled. BPS' analysis of completed projects found the average deconstruction is currently directing approximately 70 percent of building materials (by weight and excluding concrete) to reuse. Using this percentage, for projects permitted in the first year of the Ordinance, the estimated total first-year diversion is 2,500 tons.

Salvaging materials for reuse reduces the carbon emissions associated with landfilling and extraction of virgin materials. BPS is working with the Oregon Department of Environmental Quality (DEQ) to quantify the carbon and energy benefits of the Deconstruction Ordinance. A summary of the estimated environmental impacts of deconstruction versus mechanical demolition is expected by June 2018.

### 2. Creating new jobs in the deconstruction industry and retail outlets.

Prior to the Ordinance, there were three firms in Portland that solely focused on deconstruction and there were no special certification requirements for these firms. Now there are 17 Certified Deconstruction Contractors, of which about half specialize in deconstruction, while others focus on new construction and remodeling.

In addition, two of these new companies opened showrooms to sell salvaged materials directly to buyers. Existing used building material outlets, such as Habitat for Humanity, are opening several new stores in the metro area.

To support workforce expansion and advance the program's equity priorities, BPS partnered with local pre-apprenticeship programs to recruit students for a free 12-day training in March 2017. Fifteen students, more than half women, worked at a series of active deconstruction sites to gain hands-on experience in the field. Thirteen of these students secured positions with deconstruction firms and are playing a key role in expansion of the industry.

### 3. Reducing the hazards of traditional demolition, particularly related to lead and asbestos.

City Council recently adopted Ordinance 188802, which requires best practices for limiting lead paint dust dispersion from residential demolitions. Full deconstruction is considered one of the best practices. A possible outcome of these new requirements may be more full house deconstructions (outside of those required) as well as additional work for existing deconstruction contractors to remove lead-contaminated material preceding mechanical demolitions.



#### 4. Demonstrating Portland's leadership in sustainability.

Since implementing the nation's first Deconstruction Ordinance, Portland's leadership is having impacts locally and nationally. *DECON + REUSE '17*, a national deconstruction and building material reuse conference, selected Portland to host the event so other cities could learn more about our Deconstruction Ordinance. Subsequently, the City of Milwaukee, Wisconsin became the second city in the nation to approve a Deconstruction Ordinance. And now jurisdictions including San Francisco, Denver, Pittsburgh and San Antonio are seeking information and technical assistance from BPS to better understand how deconstruction requirements might work in their communities.

## Program Evaluation

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To evaluate the Ordinance's impacts and opportunities for expansion, BPS partnered with Portland State University's Institute for Sustainable Solutions (ISS) to research and report on program activity. Based on ISS' interviews with Certified Deconstruction Contractors, three key findings emerged.

#### 1. Contractors noted difficulty in accurately bidding on new jobs.

Since this is a relatively new industry, contractors expressed challenges developing bids that accurately reflected their costs. Competition amongst contractors and the interest in building relationships with developers also resulted in lower and loss-leading bids. It is likely as the industry matures, this issue will resolve itself.

#### 2. Firms need more trained workers.

Deconstruction contractors hired most of the students from the March 2017 workforce training. However, there is still a need to fill approximately 13 new positions over the next six months.

#### 3. Demand for materials is strong, but the market may be approaching saturation.

When determining the year-built threshold in the Ordinance, the Deconstruction Advisory Group (DAG) selected 1916 because it translated to around 100 deconstruction projects over the course of a year. The DAG believed the amount of salvaged materials from that number of houses was something the industry and the market could absorb. The study noted that while demand for salvaged material (particularly lumber) remains steady, the supply created by the Deconstruction Ordinance is growing and may soon approach what the market can absorb without finding new retail opportunities.



## Recommendations and Next Steps

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BPS is very pleased with the environmental and job creation benefits of this policy and program and remains committed to raising the Ordinance's year-built threshold to at least 1940 by 2019. However, before expanding the regulation, BPS needs to ensure that there is a sizeable market for salvaged materials and that the contracting community can support this growth. In addition, BPS wants to evaluate the impact on the deconstruction industry after the Bureau of Development Services implements the lead dust requirements in July 2018. **Therefore, BPS will not consider raising the Ordinance's year-built threshold until October 2018 or later.**

In the interim, BPS will focus on the following priorities to ensure the continued success of the Deconstruction Ordinance:

1. Supporting additional workforce training opportunities.
2. Ensuring existing contractors have the appropriate certifications/training to meet new lead paint and asbestos regulations.
3. Reviewing and enhancing contractor certification requirements.
4. Identifying market expansion opportunities.

BPS is eager to build on the achievements of the program's first year. We look forward to working with the community to increase market demand for salvaged materials and expand workforce training. By mid-summer, BPS will provide City Council offices with recommendations for raising the year-built threshold beyond homes built in 1916.

I hope this update was useful. Please contact me if you would like additional information. Thank you.

