



Permit Data and Deconstruction Policy

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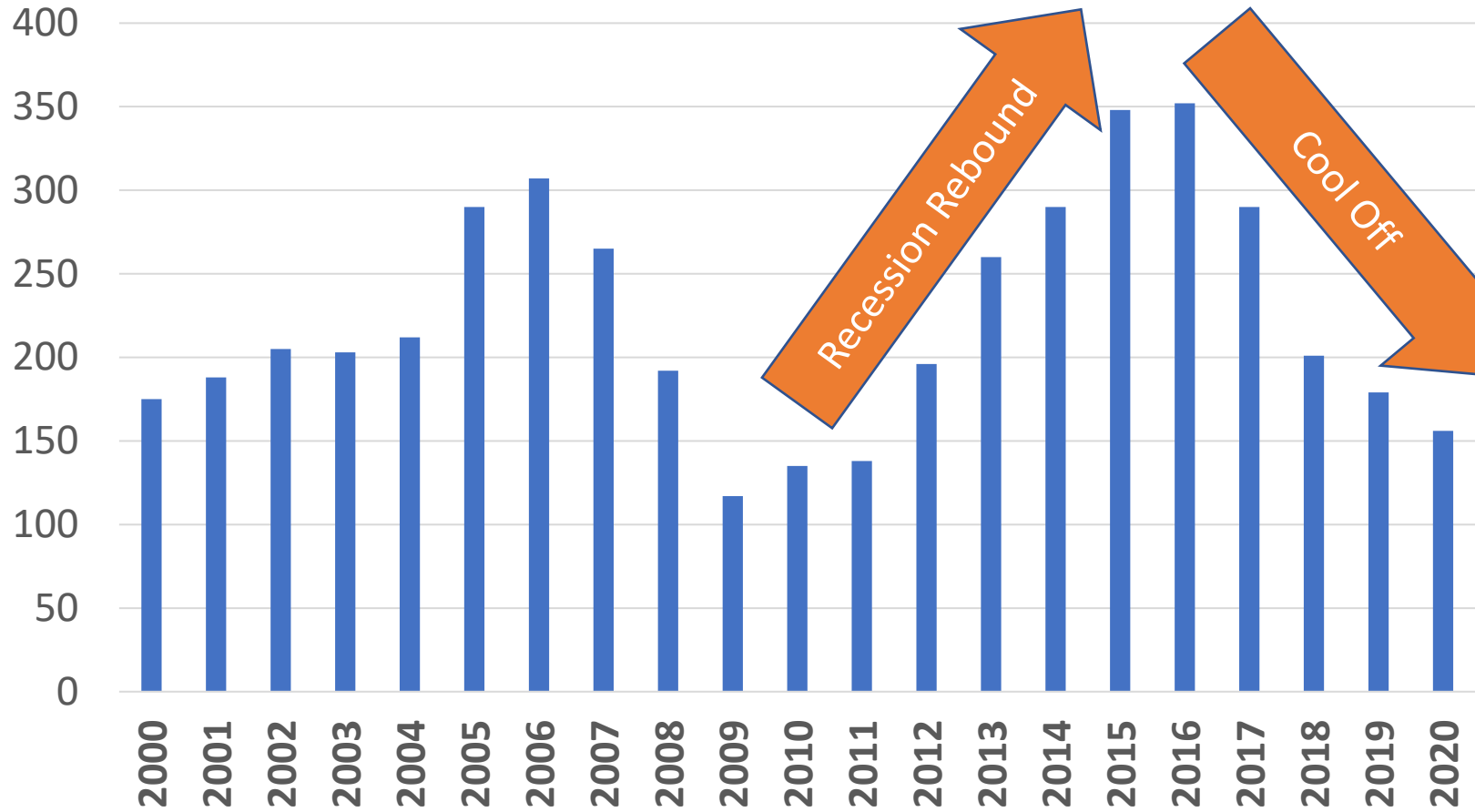


2014 Neighborhood Pressure/Support

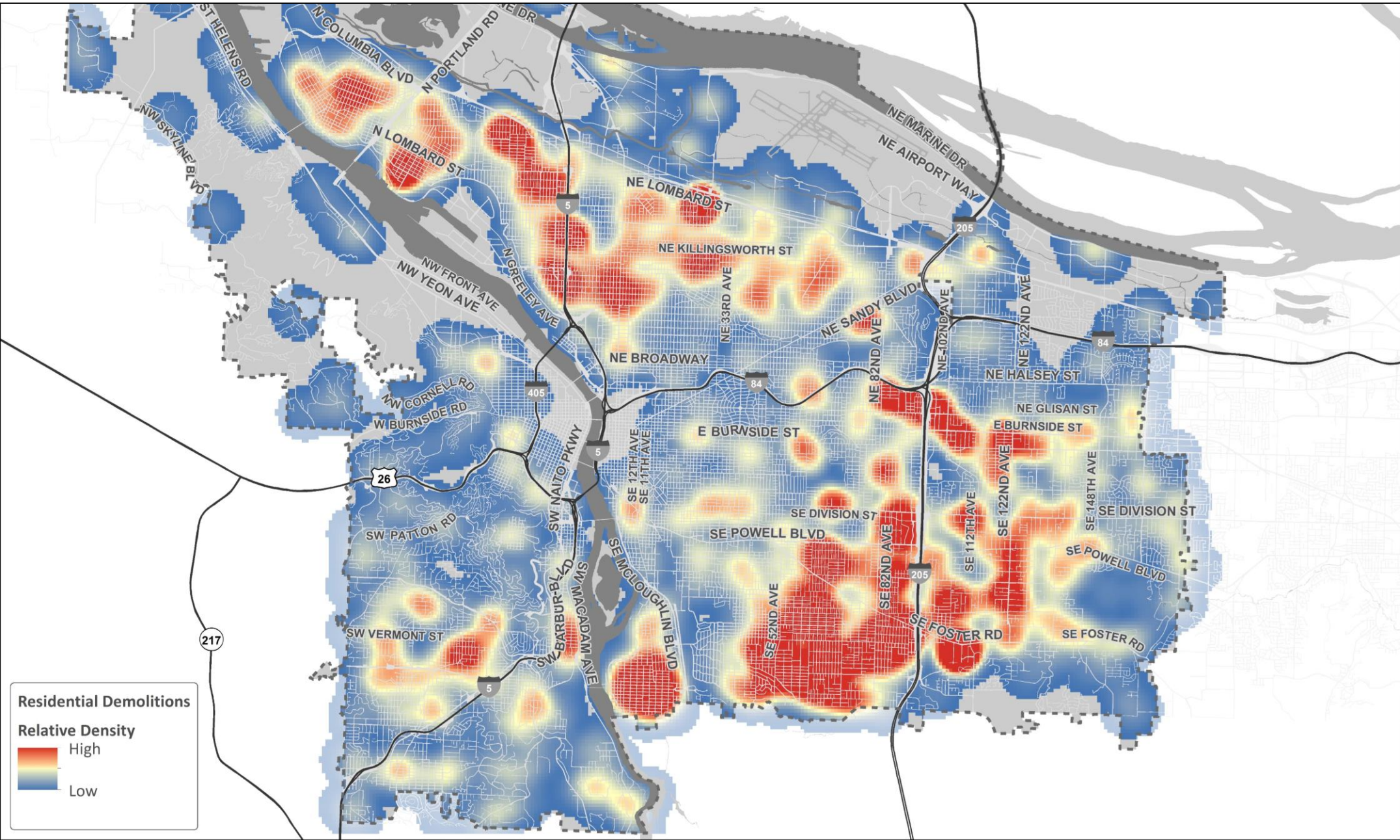


House Demo Permit Applications

(by application date)



Demo Permit Heat Map (1996 – 2014)



Residential Demolition Density

1996 to Present



The information on this map was derived from City of Portland GIS databases. Care was taken in the creation of this map but it is provided "as is". The City of Portland cannot accept any responsibility for error, omissions or positional accuracy.



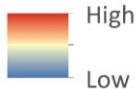
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City of Portland, Oregon
Charlie Hales, Mayor • Susan Anderson, Director

Residential Demolitions

Relative Density



Multi-Phased Approach

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



Site signage at a grant-funded site

Phase I:

Deconstruction Grants

Phase II:

Initial Ordinance

Phase III:

Current Ordinance

2015

2016

2017

2018

2019

2020

2021

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 (2nd growth, engineered), adhesives make it harder to disassemble
- What is a bold, but balanced number of projects?

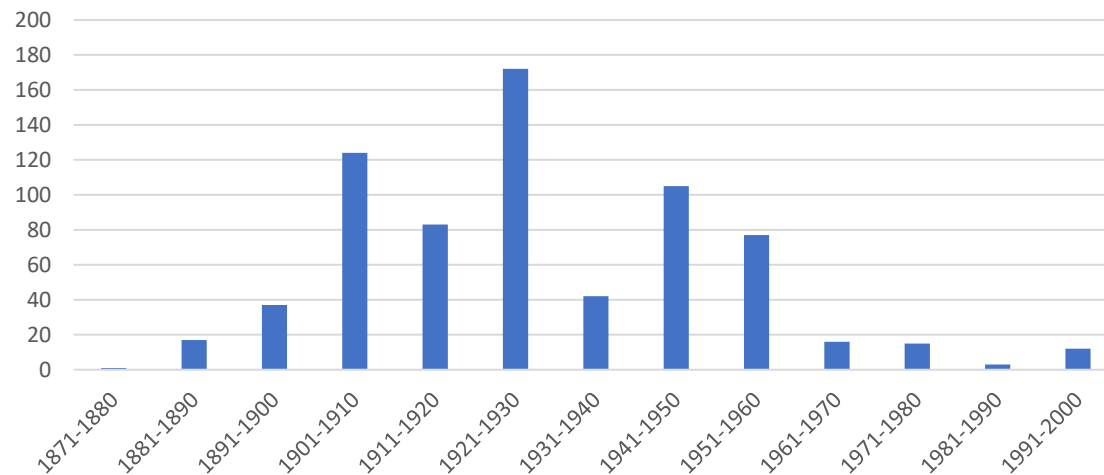
Demo Permits and Assessor Info (Year Built)

- Require based on year built?
- What can the market and contractors handle?

Totals for 2014 and 2015								
Year Built	Count	Percent	Year Built	Count	Percent	Year Built	Count	Percent
1864-1911	193	27.41%	1864-1916	241	34.23%	1864-1920	262	37.22%
1912-1937	254	36.08%	1917-1940	235	33.38%	1921-1940	214	30.40%
1938-1964	218	30.97%	1941-1964	189	26.85%	1941-1964	189	26.85%
1965-2015	39	5.54%	1965-2015	39	5.54%	1965-2015	39	5.54%
Total	704	100.00%	Total	704	100.00%	Total	704	100.00%

Totals for 2015 only								
Year Built	Count	Percent	Year Built	Count	Percent	Year Built	Count	Percent
1864-1911	105	28.61%	1864-1916	128	34.88%	1864-1920	141	38.42%
1912-1937	136	37.06%	1917-1940	128	34.88%	1921-1940	115	31.34%
1938-1964	103	28.07%	1941-1964	88	23.98%	1941-1964	88	23.98%
1965-2015	23	6.27%	1965-2015	23	6.27%	1965-2015	23	6.27%
Total	367	100.00%	Total	367	100.00%	Total	367	100.00%

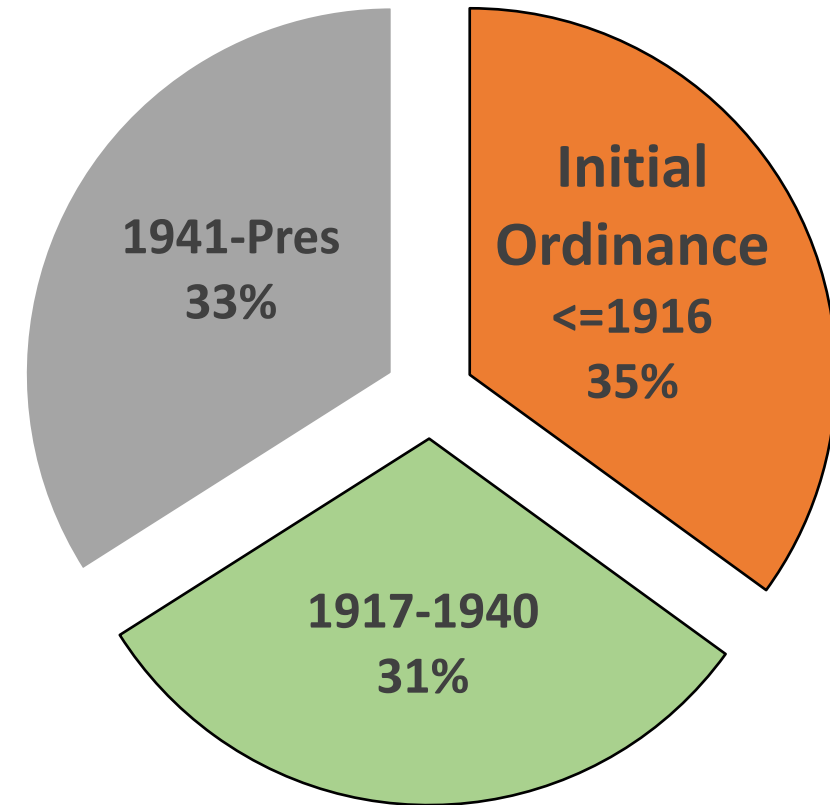
Demo Permits for 2014 and 2015 by Year Built



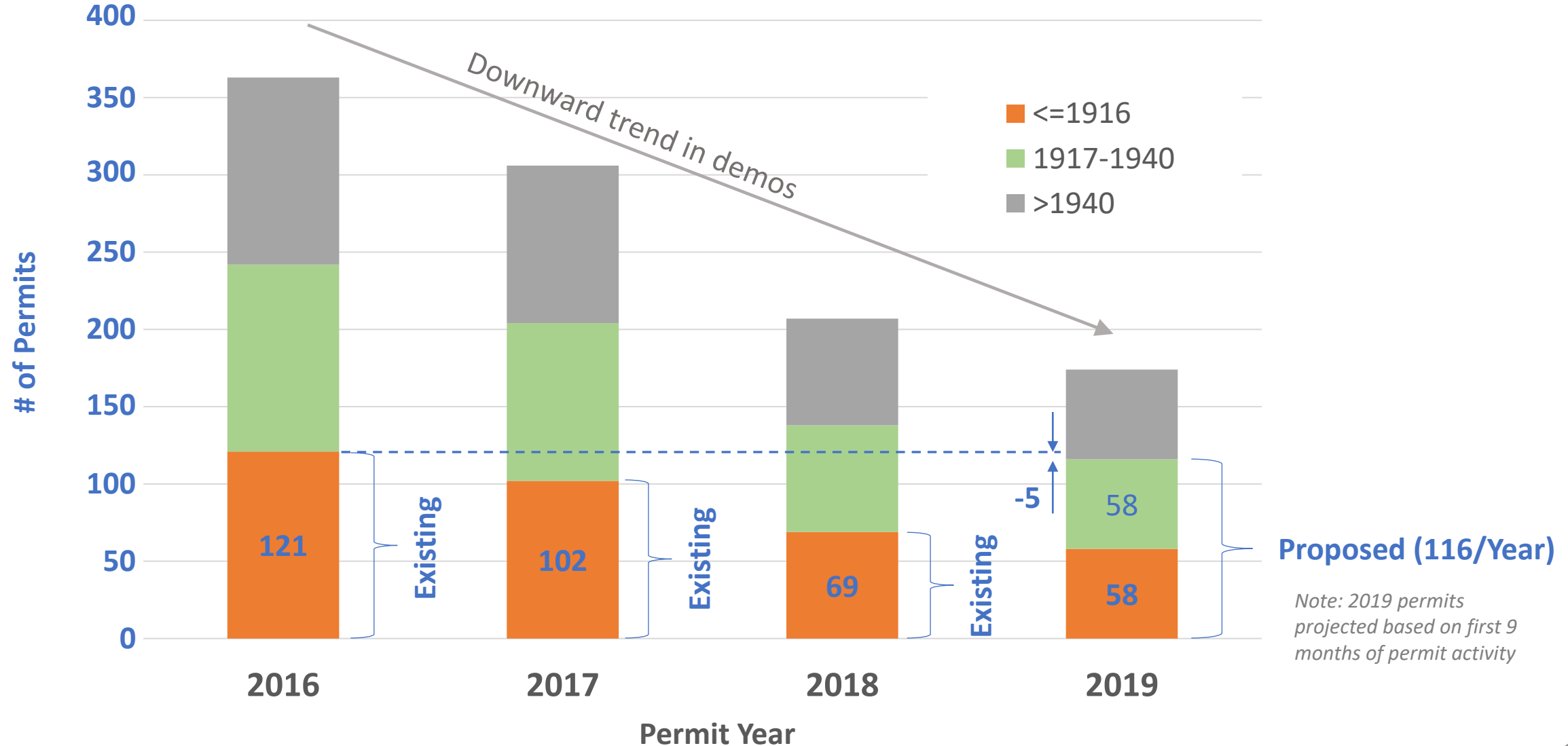
Initial Ordinance (2016)

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

Demolition Permits



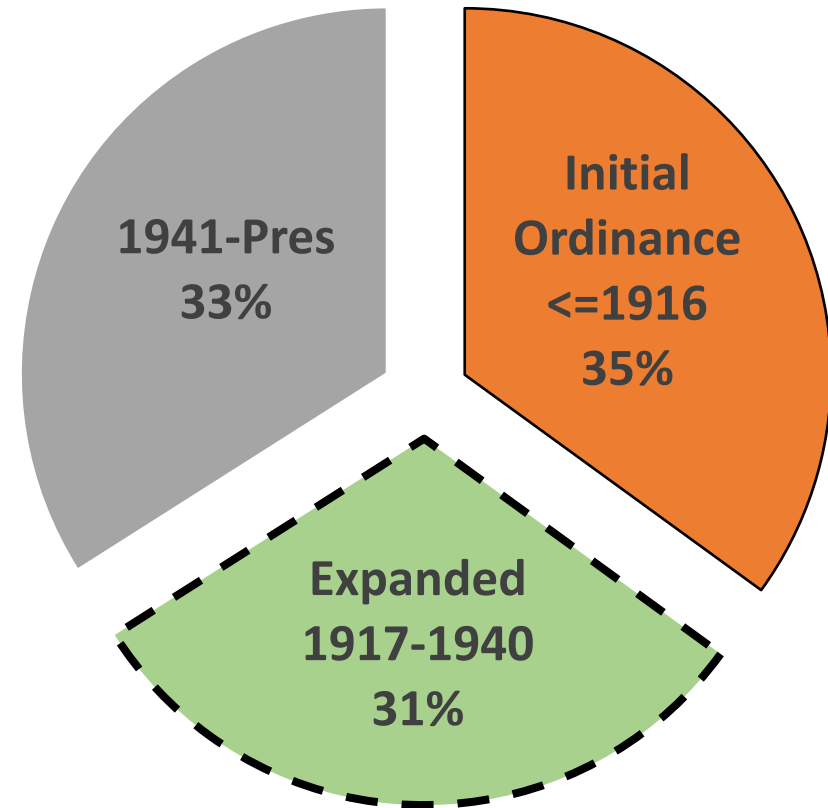
Annual House Demo Permit Applications by Year



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

Demolition Permits

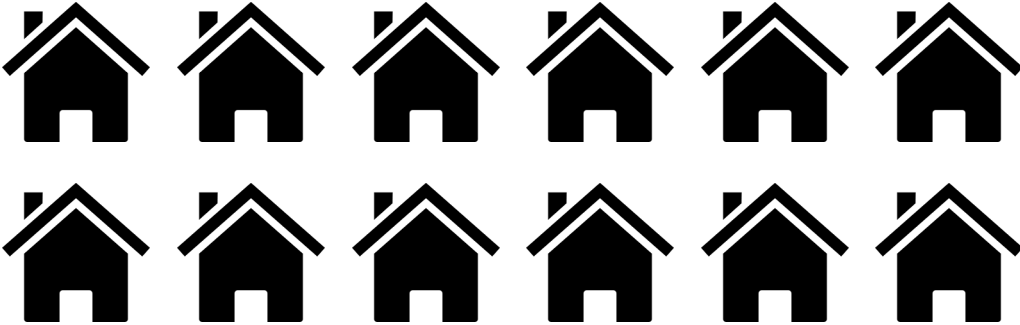
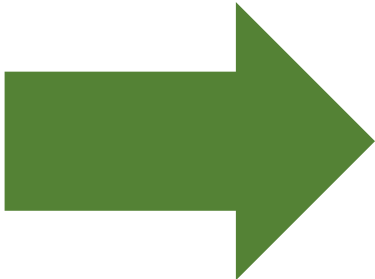


Cost Per Unit

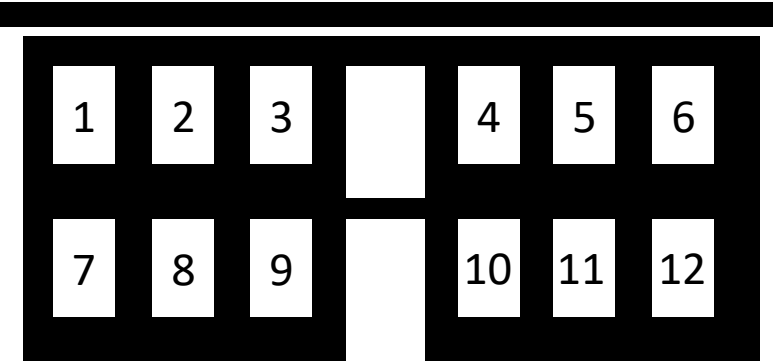
- \$3,000 more for decon
- 12 units created for each decon (\$250 additional per unit)



Deconstruction

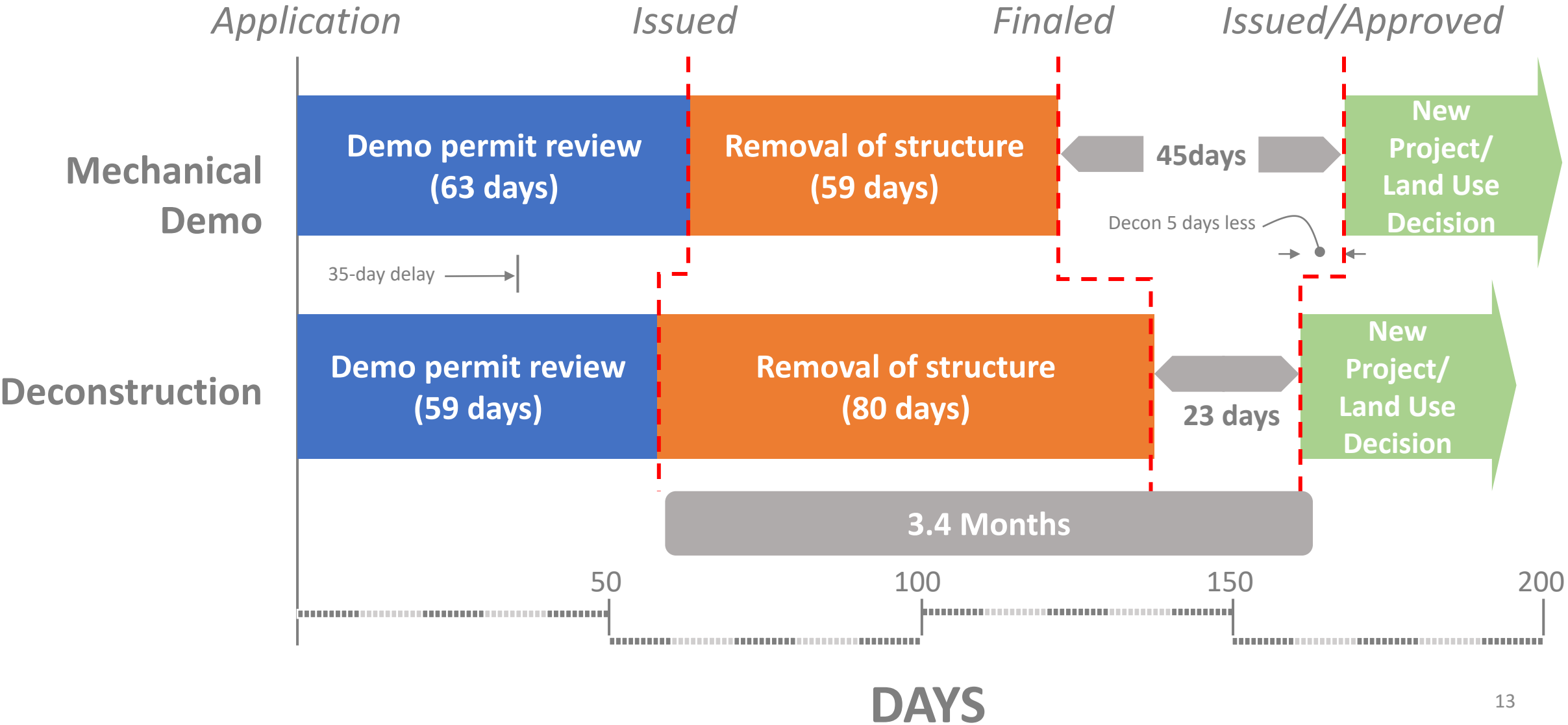


OR

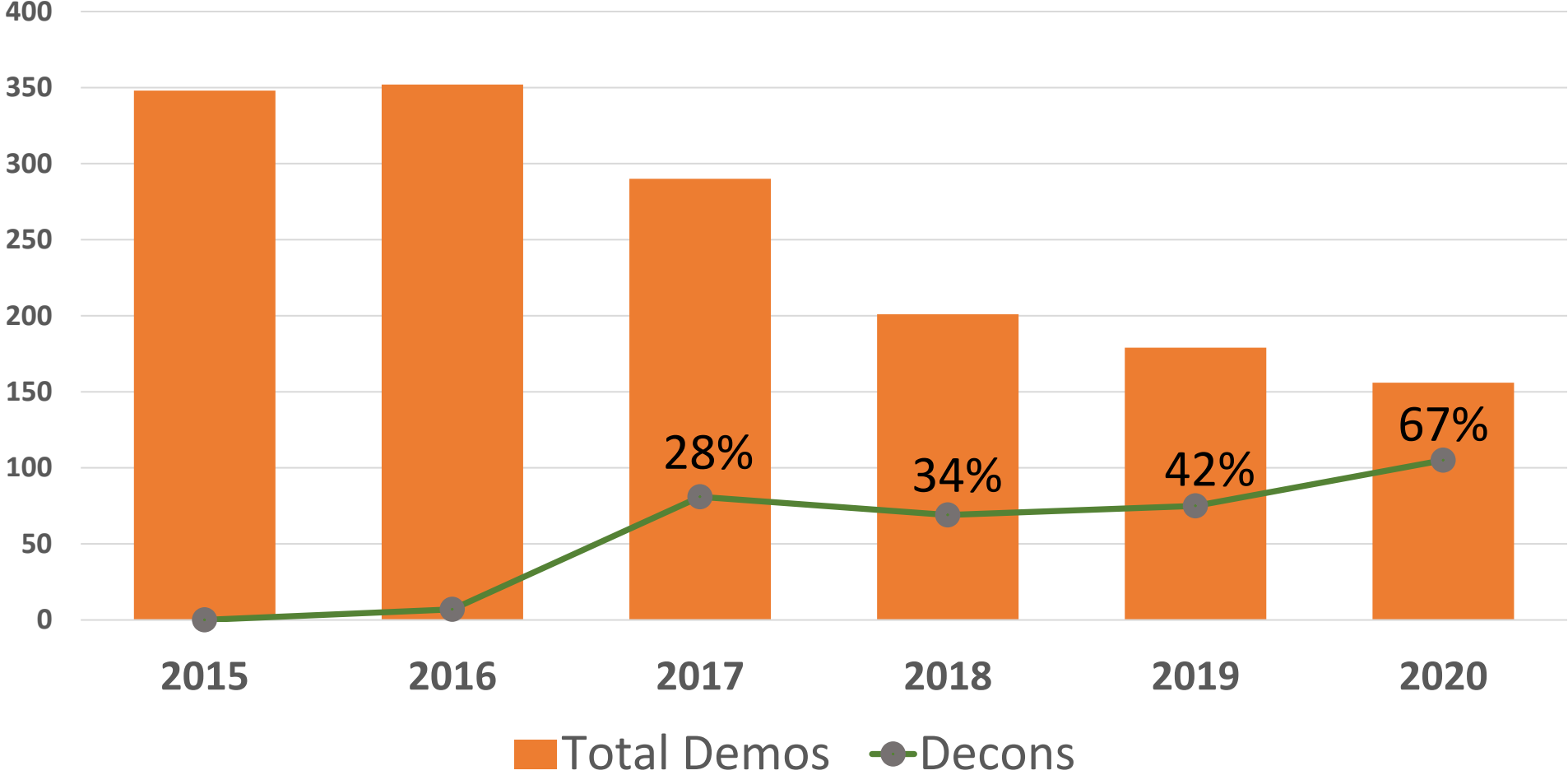


New Development - Replacement Units

Carrying Costs – Average Development Timeline



Demo Permits and Deconstructions Since 2015



Example Salvage Wood Post-Decon Form

Part of Demo Permit Final

Salvage Materials

Salvage Inventory

Material	Cut	Type	Nominal Dimensions	Thickness	Width	Length	FT ²	Kilograms
Custom Lumber	Custom	Softwood	atypical	1	3	670'		209.762
Lumber	Rough cut	Softwood	1x4	1	4	476'		198.7
Lumber	Rough cut	Softwood	1x6	1	6	1,536'		961.775
Custom Lumber	Custom	Softwood	atypical	1	8	210'		175.324
Custom Lumber	Custom	Softwood	atypical	1	12	1,140'		1,427.635
Lumber	Rough cut	Softwood	2x4	2	4	769'		642.018
Lumber	Rough cut	Softwood	2x6	2	6	913'		1,143.36
Lumber	Rough cut	Softwood	2x8	2	8	486'		811.498
Lumber	Rough cut	Softwood	2x10	2	10	960'		2,003.698
Flooring		Softwood		0.75	3.25	209'		53.165
Flooring		Softwood		0.75	6	944'		443.318
Lumber	Rough cut	Softwood	6x6	6	6	17'		63.868
Lumber	Rough cut	Softwood	6x8	6	8	25'		125.231

Board Feet: 6,595.286

Kilograms: 8,259.352

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**
<https://www.portland.gov/sites/default/files/2020-09/demo-packet-w-door-hanger-1.pdf>
- **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**
<https://www.oregon.gov/deq/mm/Documents/DeconstructionGrantReport.pdf>
- **Deconstruction vs. Demolition: An evaluation of carbon and energy impacts from deconstructed homes in the City of Portland**
<https://www.oregon.gov/deq/FilterDocs/DeconstructionReport.pdf>

