



# Deconstruction Program

City of Portland, Oregon

Shawn Wood

*Construction Waste Specialist*

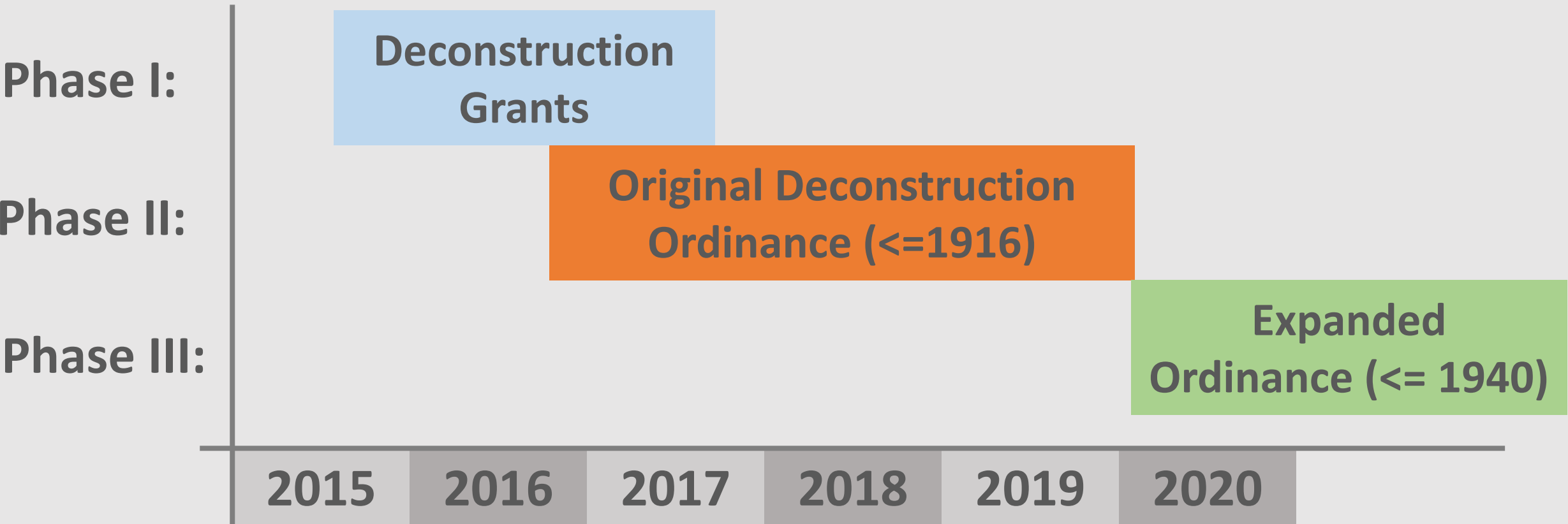


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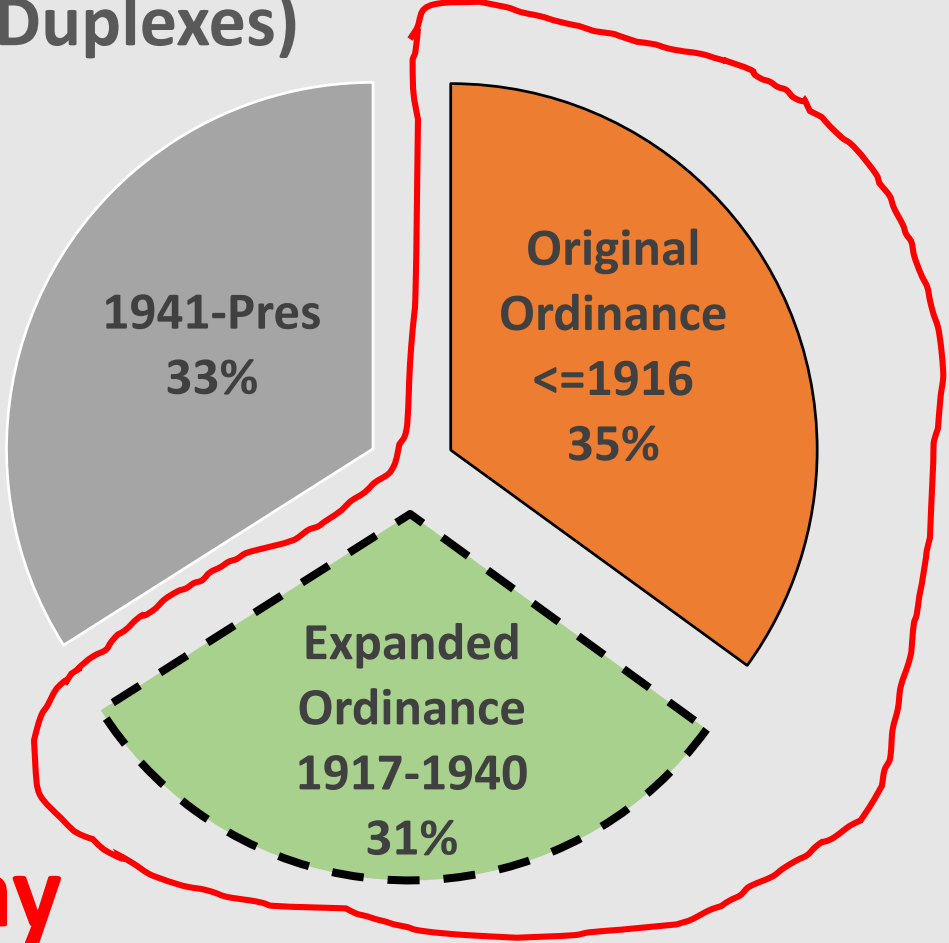
# Multi-Phased Approach to Deconstruction

- Incentives (deconstruction grants)
- Requirements that could grow over time



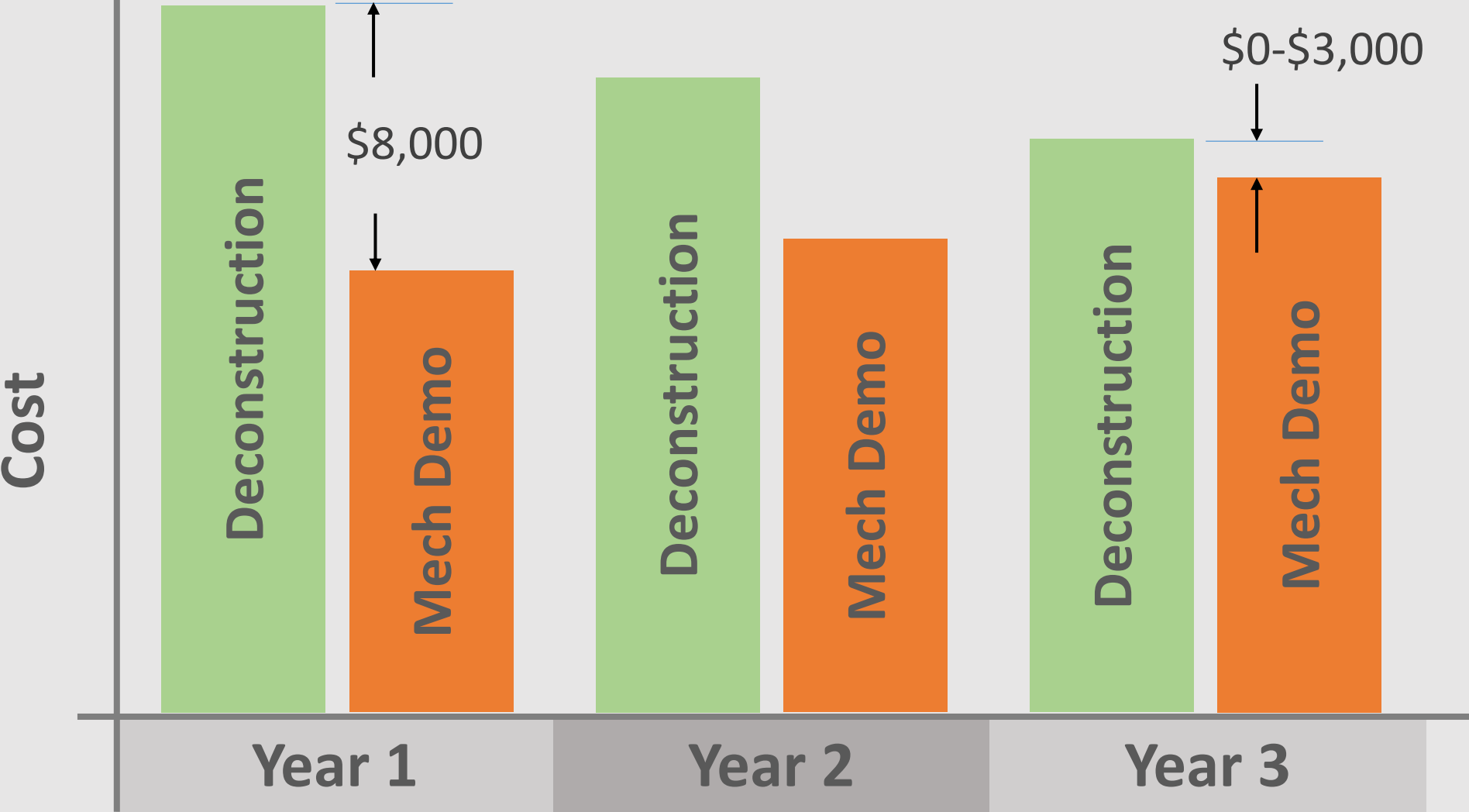
# Ordinance Expansion

Demolition Permits  
(Houses/Duplexes)



Today

# Cost of Decon vs Mechanical Demo

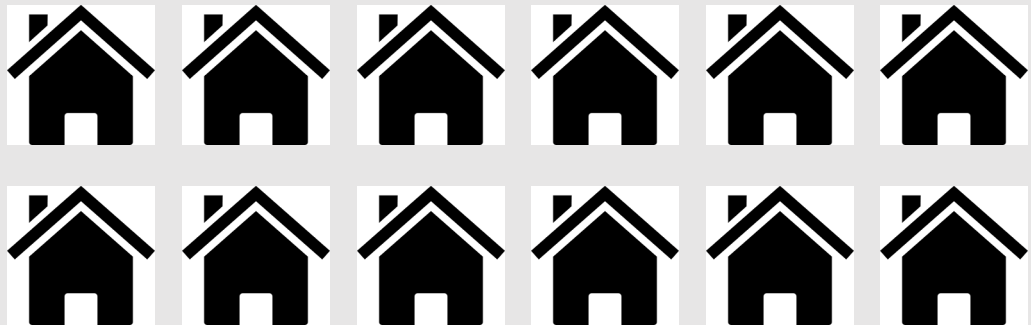
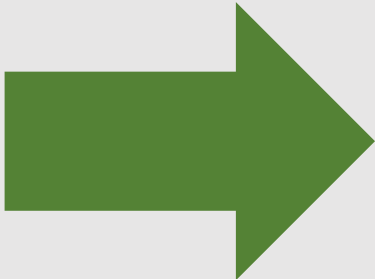


# Cost Per Unit

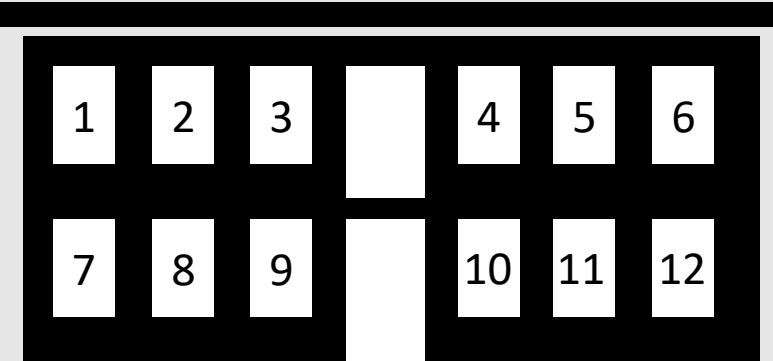
- Assuming \$3,000 more for decon
- 12 units created for each decon (\$250 additional per unit)



Deconstruction

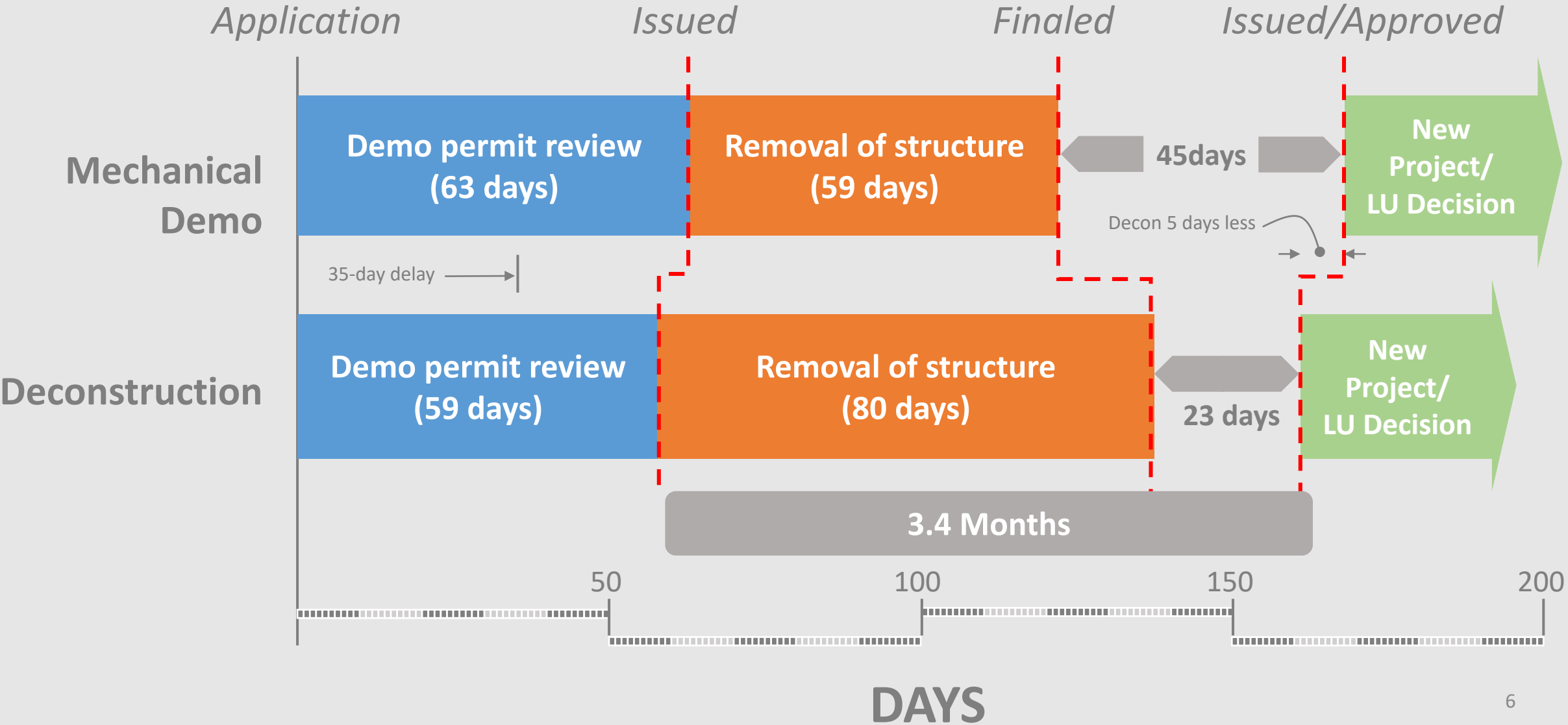


OR



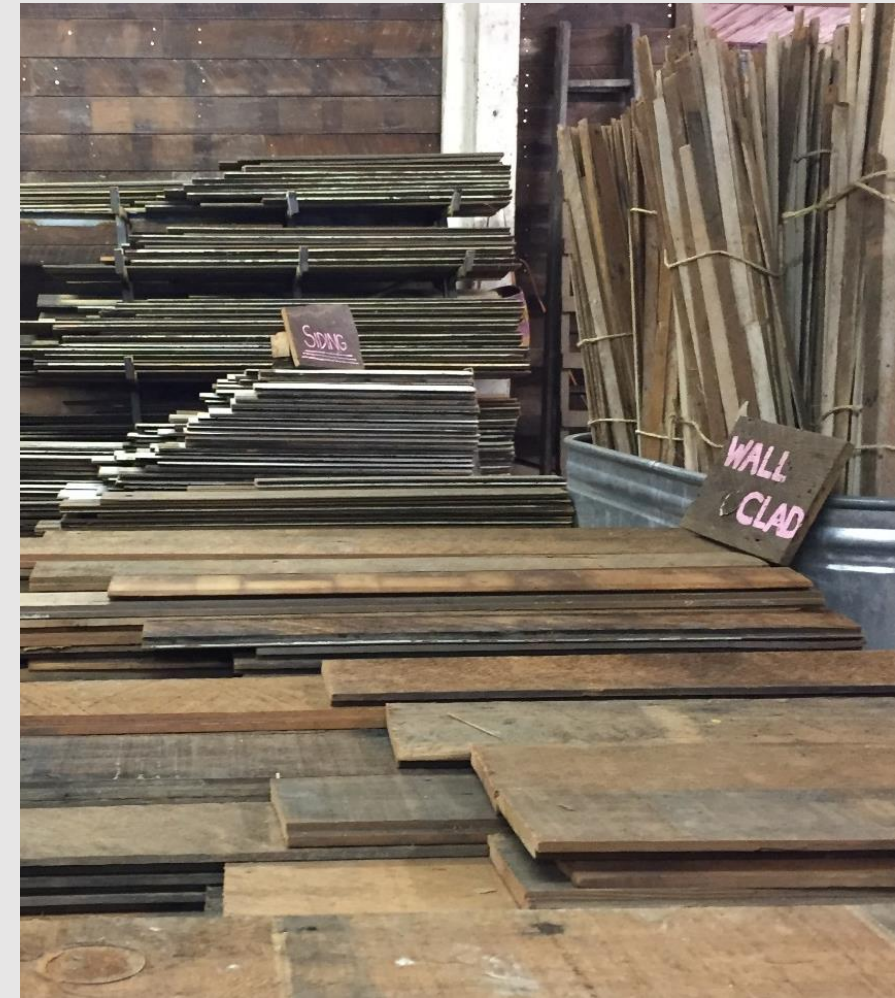
New Development - Replacement Units

# Carrying Costs – Average Development Timeline



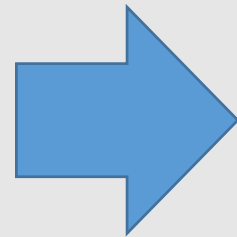
# How Has Deconstruction Cost Come Down?

- Competition
  - 2 Deconstruction Contractors prior to ordinance companies
  - 12 Certified Deconstruction Contractors currently
- Most successful contractors have complementary salvage retail stores
- Contractors offering additional services associated with building removal
  - Excavation – foundation/basement removal; backfilling; utility trenching
  - Asbestos testing/abatement
- Material donations/tax benefits not a major part of ecosystem



# What is true cost of removing a building?

- Loss of embodied carbon
- Hazmat
  - Air Quality
  - Soil
- Decon starts to address these true costs
- New requirements for mech demos (2018)
  - Hand removal of all exterior painted (non-structural) materials prior to mech demo (includes siding, trim, windows, doors, porch flooring)
  - Watering prior to and during removal, and loading (wet, wet, wet)
  - Plastic on ground during exterior removal
  - 3 new inspections



**Increased cost for  
mech demo**



# Ecosystem

## Policy

Deconstruction Ordinance (Supply)

~125 houses/year

Lumber (10,000 lbs/house)

Others to boost demand?

## People

12 Certified Deconstruction Contractors

Good Wood

NW Decon Specialists

Lovett Decon

9 Additional

## Places

Retail/ Wholesale/ Donation

Good Wood

Reclaim NW  
*Some consignment*

Salvage Works  
*Buys lumber*

ReBuilding Ctr  
*Non-profit*

Site Sales/Internet

Other(s)?

## Things

Projects/ Demand

Furniture

Cladding (Int/Ext)

Art

Tiny Houses/ Structures

More of above?  
Others?