

To: Chair Rep. Nathanson, Vic-Chair Rep. Findley and members of the Committee
From: Anne Nesse, Director <http://SustainableEconomiesNW.com>



I am testifying in favor of HB 2663 for several reasons. The primary one being that we need much more affordable housing in the cities of Oregon. And also primarily scientists agree that if we are to meet the demands of climate change, we must house our families in smaller square foot dwellings, near mass transit, and near renewable power grids. Living more sustainably has many aspects, and I include many scientists and professionals on my team, for references, one of whom I will share his information, with you today.

The following submission was originally presented to a public hearing on HB 2001, on the conversion of single family dwellings, through my organization, by Garlynn Woodsong, an architect, contractor, realtor, and climate science mathematics expert. I believe Rep. Keny-Guyer might have already seen this submission, at that public hearing, but I am resubmitting this quality testimony.

We can build more affordable housing, while still assuring quality of workmanship. Garlynn builds this type of unit in the Portland area, as a part of his architectural firm, and I know he always considers affordability in his choices, because he has to sell these units. Some choices are more expensive than others, but these expenses could be reimbursed as part of the tax credit you are considering here today. Allowing such expenditures, as affordable elevators, for example make these units more useful to disabled and elderly clients.

Due to the emergency of our housing crisis in Oregon, December 31, 2021 is not an unrealistic date for completion of this state building code, in my opinion:

Fire:

Allow Type 13D fire sprinklers to meet fire sprinkler requirement for all structures within residential zones including four or fewer dwelling units. Specifically, allow these fire sprinkler systems to be flushed by draining the far end of each circuit to a toilet, so that it can be flushed a little bit at a time with each flush. Also, eliminate the requirement for a commercial-grade fire

alarm system, as would be required in a high-rise. Focus on life safety, which a Type 13D system will protect.

Elevator:

Allow residential-grade elevators to be used for all structures including four or fewer dwelling units; specifically, do not require commercial elevators in this context. Commercial elevators can easily be \$100,000 to install, plus thousands more each year for ongoing inspection regimes. Residential elevators, despite also being safe enough to move small numbers of people routinely, are closer to \$27 to \$40,000, with much-reduced annual inspection costs. I think that allowing them on structures including fourplexes or with less than four units will allow more developers and building owners to add elevators to provide adaptability and accessibility for our aging population. Security of access will allow more people to age in place and age in community without worrying that they're always going to be living just one injury away from being able to carry the groceries up the stairs to their home.

Greywater:

Allow for all structures within residential zones including four or fewer dwelling units to install greywater systems under the state's Tier 1 residential SFR/duplex program, which having to meet the stricter and more onerous requirements of the multifamily-focused Tier 2 system. This will allow people to grow sustainable oases in their yards, food forests that will remain lush and green throughout the year, providing food for humans and animals while reducing the urban heat island effect.

Area of openings allowed on walls within a certain distance of other buildings:

This section of the building code is written as if having more than 15% of a building's wall area within 5 feet of a property line has scientifically been proven

to kill babies. It's just not the case. I would recommend that, for buildings where a fire sprinkler system of any sort is provided, including of type 13D or 13R, that unlimited openings be allowed on walls within any distance of neighboring properties. A fallback solution would be to require dry stand-head sprinkler heads to cover exterior walls within the fire separation distance that contained more than the threshold number of openings. The issue is that old homes often violate this rule freely, because, you know, humans like having windows because they let in natural light. Forcing people to board up windows because the modern fire code likes to have soccer fields between buildings for fire separation reasons, even when those buildings are protected by fire sprinklers, is obviously needless overkill. There are multiple potential solutions that would be better than the current code.

The following suggestions are simply worth considering discussing with regards to the building codes concerning existing structures being converted from single family to four or less total dwelling units:

Sound Transmission Code:

While certainly nobody wants to hear every noise their upstairs, downstairs, or next door neighbor makes, how much is it worth making people pay for this? It can be very expensive to install a brand new floor above the existing floor in an existing house; this could easily add \$20 per square foot to the rehabilitation cost for such a project. While relationships between construction cost increase and rent are not easily stated in a cut-and-dry manner, this could easily add \$200 to the monthly rent of a unit, or more. For rehab projects, is this something that needs to be legislated via the building code (Portland's STC/IIC Sound Transmission Code mandates)? Or, should waivers be granted for rehab projects regarding the sound transmission code, in order to allow all of those beautiful hardwood floors in old homes to be preserved rather than destroyed in the aim of less sound transmission? This is a question, not a recommendation: I simply raise the point because I see it as an area where construction costs on rehabs could be reduced without reducing

