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Planning and Sustainability Commission
Chair Schultz and Commissioners:

Before you today is an ordinance extending the expiration of the Title 11 Large Trees Amendment. Certainly there are many reasons to save existing large trees, and to plant more trees in our city that will grow to be large trees. But the Planning and Sustainability Commission exists to take on the hard questions of how we balance competing goals.

The Climate Crisis is obviously the top priority today. And as we learned recently, the largest contributor to carbon emissions in Portland is transportation emissions. The website <https://coolclimate.berkeley.edu/maps> shows average carbon emissions per household per year, by zip code, and emissions are broken down by segment (Transportation, Housing, Food, etc.) I have redrawn their map to show the household transportation carbon emissions per year (with total emissions in parentheses).

You can see that these transportation emissions are lowest for downtown residents, at 4 to 6 tons, 10 tons for inner neighborhoods, and east of Chavez, they are 13 or 14 tons per year.

Suppose there is a parcel at 25th and Division in RM2, with a large tree on it. The ordinance encourages saving that tree and building around it. But what if the size of the building was reduced by, say 10 units, to do that, and those 10 would-be households instead moved into a building at 60th and Division?

Each household would then emit ~3 tons more of carbon per year for transportation alone, for a total of 30 more tons (3 x 10). The large tree that remains would sequester carbon, but only about 200-300 pounds per year (best guess w/limited research. An "average" tree sequesters about 48 pounds/year). So, in order to save that tree, we would be adding 59,970 pounds carbon per year (60,000 minus 300), or almost 30 tons, to the atmosphere.

There are other benefits to large trees, including heat island reduction, oxygen production, wildlife habitat and stormwater retention. But that extra 30 tons of carbon emissions is significant.

The ordinance seeks to extend the date to further study the effects of the current ordinance. Apparently the only data collected is how many trees were saved. It would be useful if they also could count how many housing projects were modified to save a tree (and how many units lost), as well as how many projects did not happen because of this extra cost. PSC could recommend this idea to the Forestry Commission.

One way to get tree benefits without the detrimental effects of reducing climate-friendly housing, is planting large trees in the right-of-way, where they can share space with walking, biking and even driving infrastructure, as my last photo illustrates (SE Gladstone and 28th Pl.). Worth thinking about.



