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SOCAN comments supporting SB1542

Chair Gorsek and members of the Senate Committee on Transportation:

I write as cofacilitator of Southern Oregon Climate Action Now (SOCAN). As I have noted previously, SOCAN is the oldest grassroots climate organization in the Rogue Valley and represents some 2,000 Southern Oregonians who are concerned about the climate crisis and seek federal, state and local action to address it. We are rural and coastal Southern Oregonians who live on the frontlines of the warming, reducing snowpack, heatwaves, drought, rising sea level and the increasing wildfire risk that these trends conspire to impose on us. Because of our concern, we pay close attention to efforts nationally, statewide, and locally that impact our collective efforts to address the climate crisis. As our logo above indicates, the focus of SOCAN is to promote action through science while encouraging that this be undertaken through a social justice lens.

First, I'd like to note that we (SOCAN) acknowledge the funding plight faced by ODOT in relation to transportation and, especially highway maintenance. We recognize that the financial crunch is driven by a combination of (i) the static state of the gasoline tax, (ii) the inflationary trend in road maintenance and construction costs, (iii) the increasing efficiency of the internal combustion engine vehicle resulting in less gasoline being purchased, and (iv) the succeeding encouragement to Oregonians to go hybrid or fully electric with their vehicle purchases and thus cease buying gasoline. Inevitably, the combined result of these trends is, and will continue to be, a substantial shortfall in funding for statewide transportation needs.

Where is the Climate Crisis?

As Le Page (2025) reported: "Current policies of governments around the world are likely to result in Earth warming by anywhere between 1.9°C and 3.7°C by 2100, with potentially more to come in the 22nd century." This is entirely consistent with the projections identified by the United States Geological Survey for Oregon (USGS 2026), as depicted in Figure 1, which reveals an anticipated warming of some 10 degrees Fahrenheit by 2100 compared to the 1981-2010 average (USGS 2026). In this graph, the red line represents the mean projection for the Shared Socioeconomic Pathway (SSP) 585 that was initially identified as the 'worst case scenario' (Hausfather 2018) but has come to be described often as the 'business as usual scenario' (e.g., Hausfather 2019) because it's the trajectory we seem to be following. The other trajectories

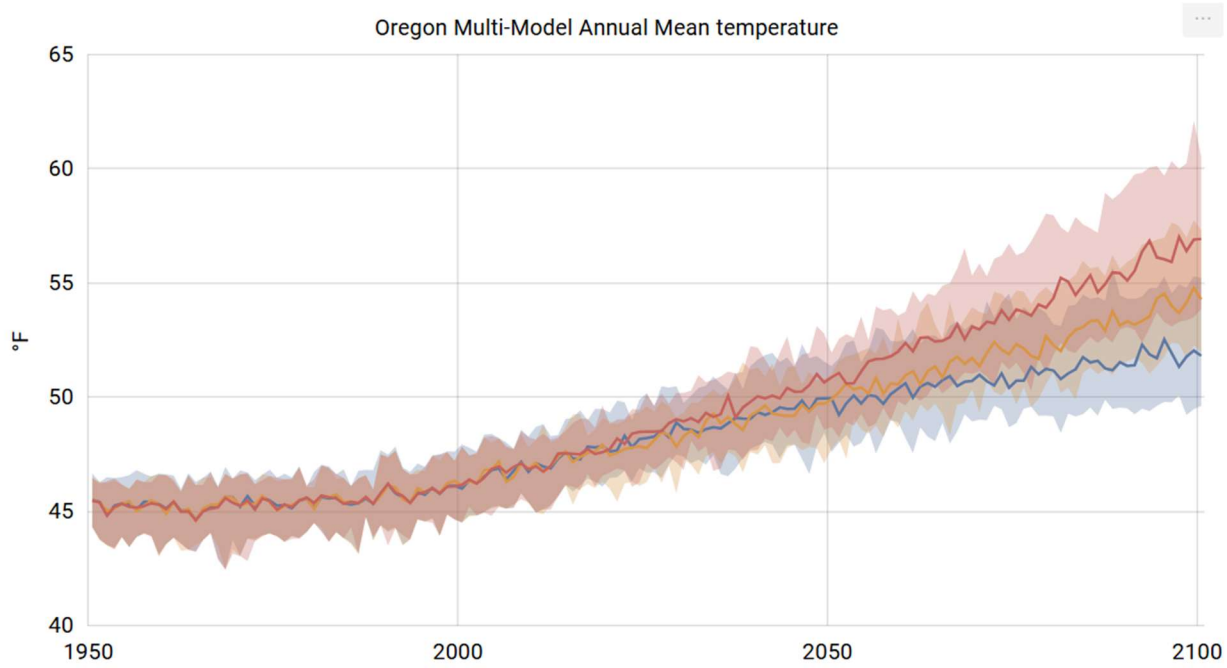

Figure 1 Oregon projected temperature change to 2100 from the 1981-2010 average. (USGS 2026)

*Ce*depicted in Figure 1 indicate possible trajectories that we could follow if we committed to reducing or eliminating completely the behaviors that contribute to greenhouse gas emissions such as the accelerating use of fossil fuels and the conversion of land to managed uses serving humans. As a measure of the progress we are making towards ecosystem devastation, NOAA (2026) reported 2025 as the third warmest year on record (i.e., since 1850).

Since my background is in biology, with a focus on ecology and conservation biology, I relate the Oregon and global future temperatures to the main factors influencing the distribution of global natural ecosystems (known as biomes). How these biomes are distributed across the planet in relation to average annual temperature and precipitation is depicted in Figure 2 (modified from Whittaker 1975). As can be seen, a shift in temperature of just a few degrees Centigrade can be enough to adjust temperature out of the range that supports current ecosystems where they now are and eliminate many biomes from their current locations across the globe. While range shifts are possible for flora and fauna when climatic changes are slow, as they have been through geologic time, the rate at which human-imposed temperature shifts are occurring is faster than the range shift potential of global biomes. The result of global temperature projections as depicted in Figure 1 will likely be that the ongoing viability of most, if not all of, both Oregon's and Earth's biomes will be severely compromised, along with the biodiversity of the flora and fauna that they comprise. Climate change, along with our unsustainable use of land, water and energy are the major contributing factors to our causing the current sixth extinction (WWF undated). Since our agriculture, forestry and fisheries are dependent also on these two variables, the 'business as usual' projections pose a serious threat

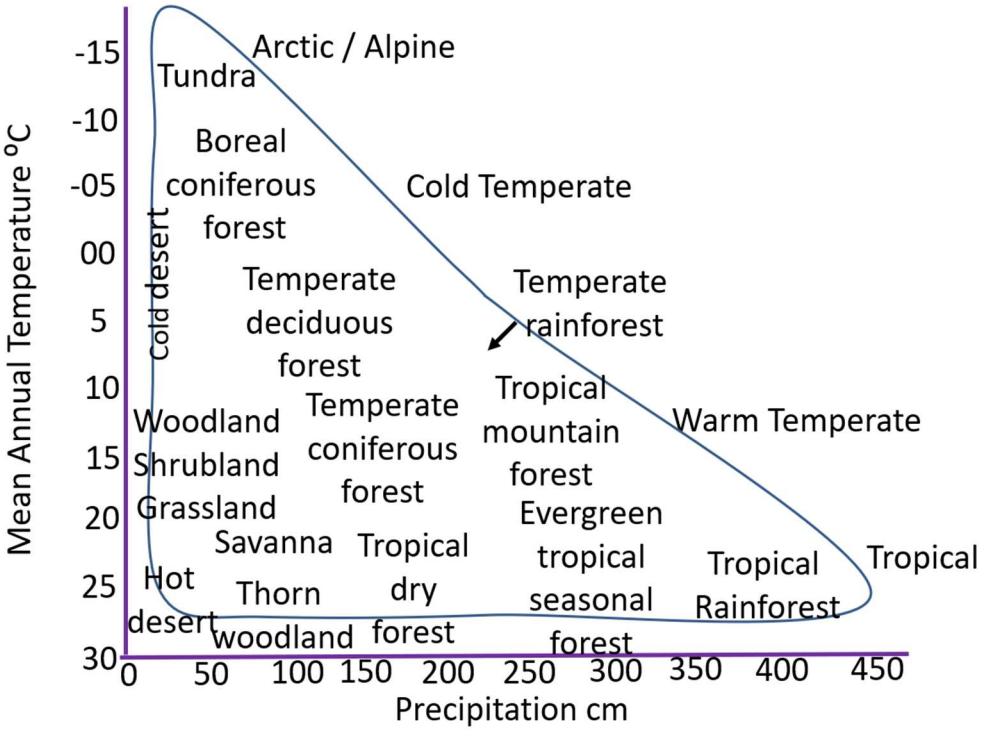

Figure 2 Distributions of natural ecosystem (biomes) in relation to average annual temperature and precipitation. (Modified from Whittaker 1975)

to these critical human endeavors and the survival of humanity. From a global, national or state perspective, we are confronted with a climate catastrophe to which it will be impossible to adapt. We are in a clear 'all-hands-on-deck' moment where we must both collectively and individually (in our personal, professional and legislative lives) do whatever we can to avert the current global trajectory. If we are to achieve the adjustment in climate trend that is needed, we cannot, in anything we do, ignore the climate crisis.

We note that transportation is listed consistently by DEQ as the leading contributor statewide to our emissions of regulated greenhouse gases (DEQ undated). Thus, I submit, it is incumbent upon the legislature to include in any transportation proposal provisions that address both the ongoing emissions of greenhouse gases from this sector and the pollution that transportation imposes, especially on low-income Oregonians.

What is disappointing is to see ODOT funds allocated on an ongoing basis to construction activities that stimulate greenhouse gas emissions rather than reduce them and continue to do so without sufficient consistent review and justification. We support SB1542 because it imposes on ODOT the need to review and incorporates some accountability for projects that seemingly blossom out of financial control and reason and thus undermine ODOT's ability to behave responsibly from a transportation emissions perspective.

Respectfully Submitted

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