

Oregon EJ Mapping Decision Point 3

Welcome Package



Welcome!

By Environmental Justice Mapping Leadership Team:
Hoang-Van Nguyen & Eric Main

Welcome Environmental Justice Council to your Decision Point 3 information session with the Environmental Justice Mapping Tool Leadership Team!

We look forward to orienting you with the considerations influencing staff's recommendations for Decision Point 3a.

Let's learn together!

INSIDE

OBJECTIVES & OUTCOMES

How will this help with future EJC decisions?

BACKGROUND INFO

Where are we and how did we get here?

DECISION POINT #3

Briefing and considerations.

Objectives & Outcomes

We organized these information sessions with the following objectives and outcomes in mind.

Objectives:

1. Brief Oregon Environmental Justice Council members on upcoming mapping Decision Point #3.
2. Break down Decision Point #3 into two sub decision points: #3a (Community Designations) and #3b (Community Comparisons).
3. Provide context about how Decision Point #3 contributes to development of the Oregon Environmental Justice Mapping Tool.

Outcomes:

1. Empower EJC members to meaningfully discuss and deliberate on Decision Point #3.
2. Prepare the Council adopt recommendations on Decision Point #3.

Methodology Workgroup Membership

By Eric Main

The following agencies from State and Local government and academic institutions are participants in the Methodology Working Group

State:

Oregon Health Authority, Department of Environmental Quality, Department of Administrative Services, Department of Transportation, Department of Land Conservation and Development, Department of Forestry, Department of Agriculture, Department of Energy, Department of Human Services, Public Utilities Commission

Local:

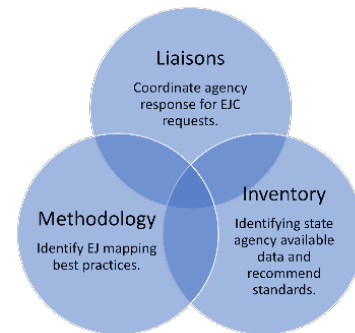
Portland Metro, Multnomah County Public Health

Academic:

Portland State University - Population Research Center and Oregon State University - Institute for Natural Resources

Working Group Roles

By Hoang-Van Nguyen, Eric Main, & Melissa Foltz



DEQ, OHA, DAS, OSU Institute for Natural Resources, and PSU Population Research Center form the Environmental Justice Mapping Tool Leadership team.

Liaison Team: These are liaisons to the EJC with representatives from 16 state agencies. They are led by Environmental Justice Council & Policy Coordinator, Hoang-Van Nguyen.

Methodology Team: This is a workgroup of technical experts from state and local agencies and academic partners led by OHA, Eric Main providing support regarding decision points.

Inventory Team: This is a workgroup of data experts from state agencies who will collect and analyze state agency data led by DAS, Melissa Foltz.

Adopted Decisions

By Hoang-Van Nguyen

April 2024

Decision Point #1 Indicator Domains: Place and People

Decision Point #2 Geographic Units: Census Tracts

EJ Mapping Decision Points Summary



By Eric Main

The 10 decision points for the Environmental Justice Council are based on best practices for building composite indices used to identify communities experiencing disproportionate environmental burdens, health and social disparities, and community benefits and opportunities.

The decision points include:

1. Domain selection
2. Geographic units
3. Geographic comparisons and community designations
4. Domain/indicator weighting
5. Domain aggregation
6. Data standardization
7. Indicator selection
8. Sensitivity analysis
9. EJ community threshold
10. Visualizations

Listening Session Connection

By Hoang-Van Nguyen & Eric Main

First listening Session: August 6, 2024 at Gold Beach, Oregon.

Listening sessions will be with hosted in Oregon communities and tribal communities to collect information about their lived experiences within their environment. The goal is to understand environmental burdens and benefits and their influences on human health and quality of life.

This information is essential to the Environmental Justice Mapping Tool project since it will guide how we identify environmental justice communities, so they have better opportunity to receive governmental funding to improve their lives.

Leadership Team Membership

By Hoang-Van Nguyen

The EJC is the sponsor and decision maker for the Oregon Environmental Justice Mapping tool.

The following state agencies and academic partners make up the Oregon Environmental Justice Mapping Tool the Leadership Team:

State Agencies:

Department of Environmental Quality, Oregon Health Authority, and Department of Administrative Services.

Academic Partners:

Oregon State University, Institute for Natural Resources and Portland State University, Population Research Center.

Decision Point 3a

Introduction

By Eric Main

Coastal

Oregon's coastal communities have begun to experience the effects climate change in the form of higher wave heights, more powerful winter storms, and major ocean shoreline erosion. Other phenomena are expected due to the Earth's changing climate such as rising sea level and tidal height, hypoxic nearshore ocean waters, seasonal temperature changes, more acidic ocean waters, and changes in forest cover.

Remote

Oregon's remote communities are sparsely populated areas traditionally underrepresented in public processes and have limited access to healthcare, government services, and high-speed internet. Responding to climate change hazards is more challenging for communities with limited resources.

Rural

Oregon's rural communities are disproportionately affected by drought, domestic well contamination, harmful algal blooms, and air pollution from wildfire smoke and uncertified wood stoves. Farm workers in rural communities are vulnerable to extreme heat events and pesticide exposures.

Urban

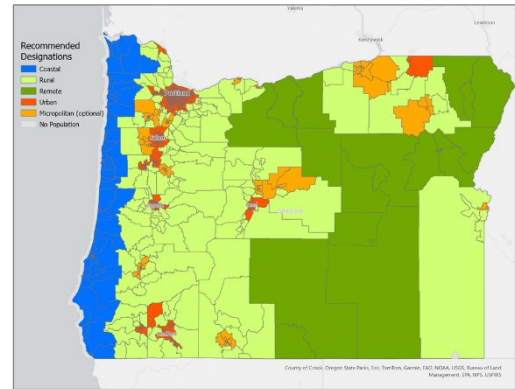
Oregon's urban communities experience heat island effects, high levels of air toxics from mobile and stationary sources, and soil contamination and impaired water bodies from industrial land uses.

Micropolitan Areas (Urban or Rural?)

Micropolitan Areas, defined by the USDA as Micropolitan Core Areas, have economic and built environment characteristics that overlap with rural and urban communities. Small cities include places like Klamath Falls, La Grande, Ontario, Roseburg, and The Dalles.

EJC June 2024 Decision Point 3a

By Eric Main



The Environmental Justice Mapping Tool Leadership Team will request the Environmental Justice Council to decide on the third decision point during their June 13, 2024 meeting.

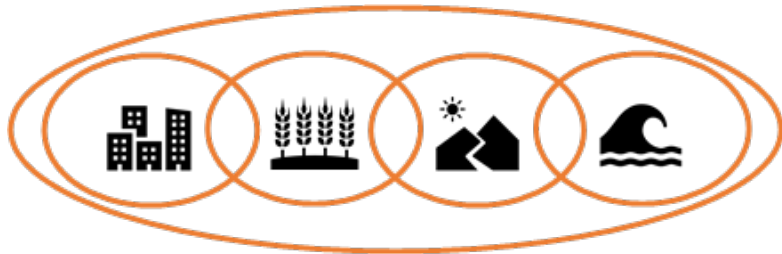
Decision point #3a: Community designations

Why are community designations important?

- Rural, coastal, and remote communities are specifically mentioned in the definition of “environmental justice community” in HB4077,
- Oregon does not have standard definitions for rural, remote, and urban communities.
- Including community designations in the EJ Mapping Tool will support consistency in how agencies use the tool.

Decision Point 3b

Introduction



By Eric Main

Oregon is an environmentally, climatologically, economically, and socially diverse state; and many decisions are influenced by those diversities. Environmental justice advocates have identified the importance of inner region cumulative impact assessments because industrial clusters and land-use planning decisions are often rooted within regions.¹ Statewide community comparisons are unable to account for regional differences which can result in diverting state funds away from EJ communities contributing to environmental injustices,²

Oregon state agencies use several types of regions to conduct their work including the Governor 's Regional Solutions, OEM 's emergency response regions, OHA's healthcare regions, and ODOT's transportation regions. None of the Oregon regions evaluated by the Methodology Workgroup are as environmentally uniform as the designations recommended in decision point 3a.

The Methodology Workgroup anticipates there may be the need for some state agencies to compare Oregon communities using a statewide index score in their rule making and infrastructure investment processes.

EJC June 2024

Decision Point 3b

By Eric Main

The Environmental Justice Mapping Tool Leadership Team will request the Environmental Justice Council to decide on the third decision point during their June 13, 2024 meeting.

Decision point #3b: Community comparisons

Why are community comparisons important?

- Most state environmental justice mapping tools compare communities statewide because their intent is to identify communities with the highest levels of cumulative impacts relative to all other communities.
- A major concern expressed by communities where policies and state investments are influenced by an index score is; environmental burdens, climate change risks, and economic disparities can be very different depending on where you live in the state.
- HB4077 provides examples of environmental burdens and climate change risks specific to community designations (e.g., sea level rise, ocean acidification, water insecurity, etc.).

¹ Sadd, J. L., Pastor, M., Morello-Frosch, R., Scoggins, J., & Jesdale, B. (2011). Playing it safe: assessing cumulative impact and social vulnerability through an environmental justice screening method in the South Coast Air Basin, California. *International journal of environmental research and public health*, 8(5), 1441-1459. <https://doi.org/10.3390/ijerph8051441>

² Kost, Ryan. S.F. Loses Millions to Tool That Tracks Vulnerable Populations. San Francisco Chronicle, November 24, 2021.

REFERENCE

Decision Point #3a Recommendation

EJ Council decisions needed for the following for Decision Point 3a:

1. Community designation definitions/designations.
2. How to determine Micropolitan Core Area designation (urban or rural).

The Methodology Workgroup recommends Oregon communities be grouped using the following designations:

[Coastal](#)

Oregon Department of Land Conservation and Development Oregon coastal zone includes the state's coastal watersheds and extends seaward three nautical miles and inland to the crest of the coast range. Census tracts with population centers inside the coastal zone boundary will be designated as coastal.

[Remote](#)

USDA Frontier and Remote (FAR) areas are zip codes assigned levels that are determined by their population and distance from urban places. FAR Level III areas are:

- places up to 10,000 people,
- 30 minutes or more from an urban area of 10,000-24,999 people,
- 45 minutes or more from an urban area of 25,000-49,999 people,
- and 60 minutes or more from an urban area of 50,000 people or more.

FAR Level III areas do not include Micropolitan Core Areas with urban amenities like major hospital facilities and full-service supermarkets. Census tracts with population centers inside USDA FAR Level III areas will be designated as remote.

[Urban](#)

USDA Rural-Urban Commuting Area (RUCA) codes classify U.S. census tracts using measures of population density, urbanization, and daily commuting. Metropolitan Core Areas are urbanized areas (UAs) continuously built-up with a population of 50,000 or more and have a primary travel flow within the UA. Metropolitan Core Area tracts will be designated as urban.

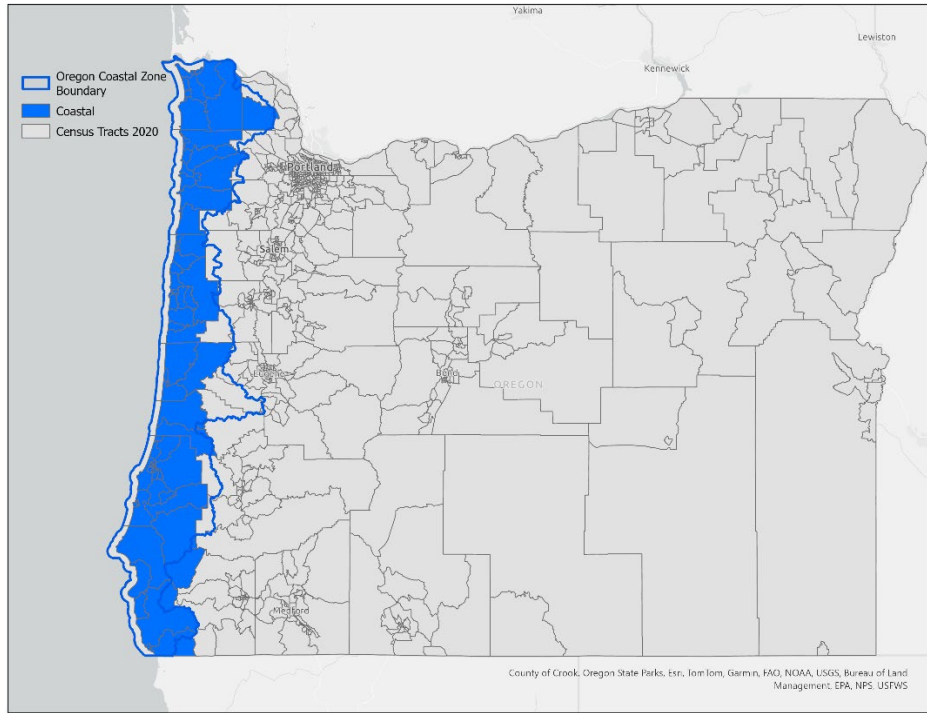
[Rural](#)

All tracts not designated as coastal, remote, or urban will be designated as rural.

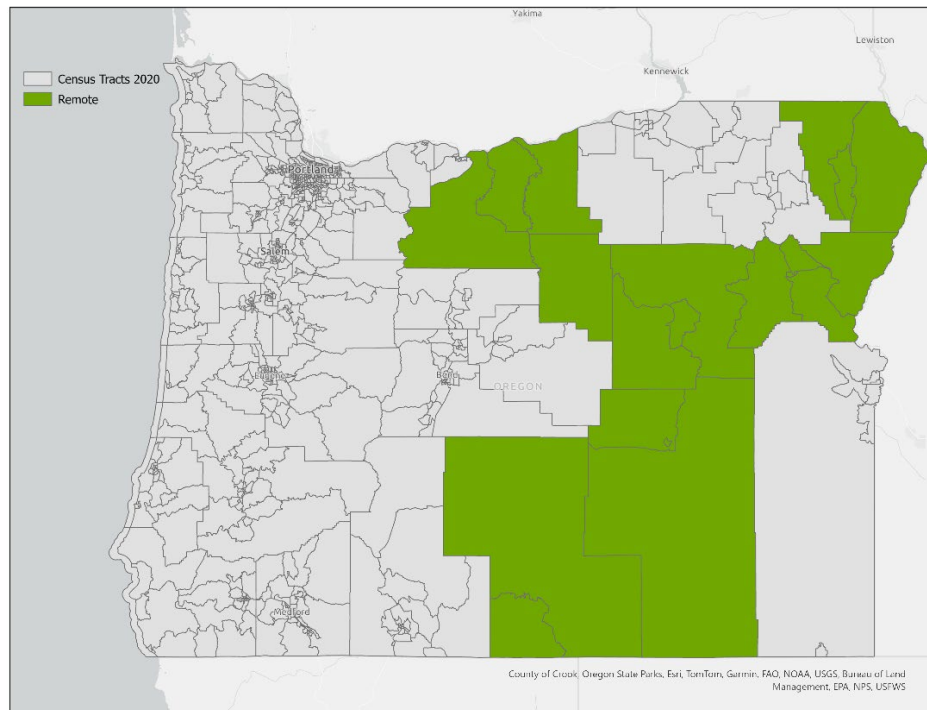
[Micropolitan Areas](#) (Urban or Rural?)

The Methodology Workgroup was not able to reach consensus on a recommendation for whether Micropolitan Core Areas should be designated as urban or rural. Micropolitan Core Areas tend to have similar infrastructure as Metropolitan Core Areas including access to hospital trauma centers, government services, shopping centers, highspeed internet, and higher education opportunities. However, Micropolitan Core economies tend to align more closely with rural communities. Micropolitan Core Areas are Rural-Urban Commute Areas with primary travel flows inside an urban cluster of 10,000 - 49,999 people.

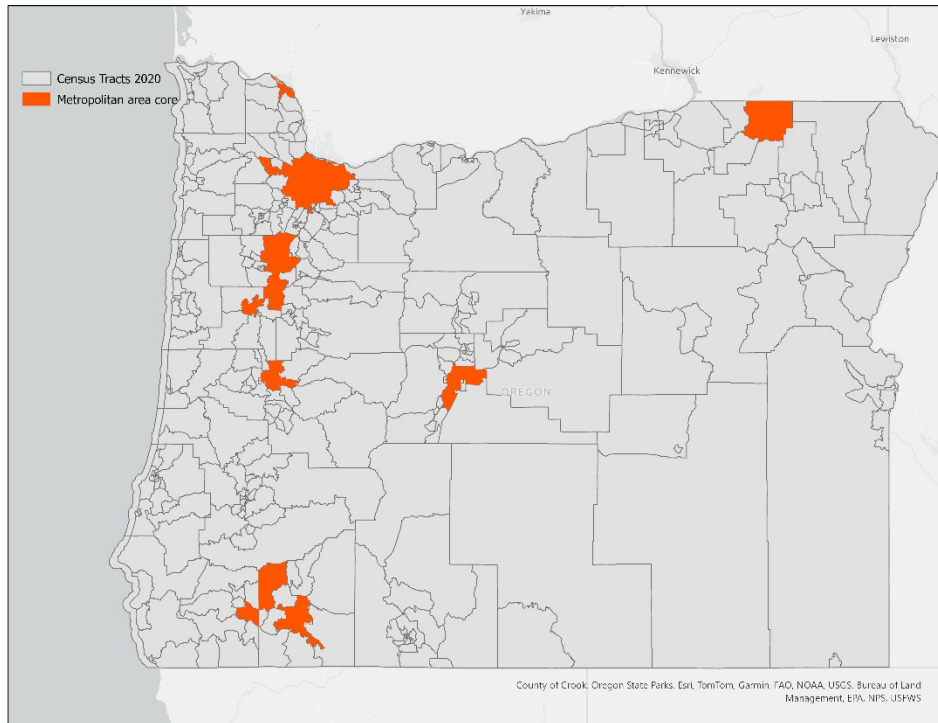
Note: USDA Frontier and Remote Areas and Rural-Urban Commute Areas for 2020 Census tracts are scheduled for release in fall 2020. Census tract distributions will change with the USDA 2020 Census tract data.



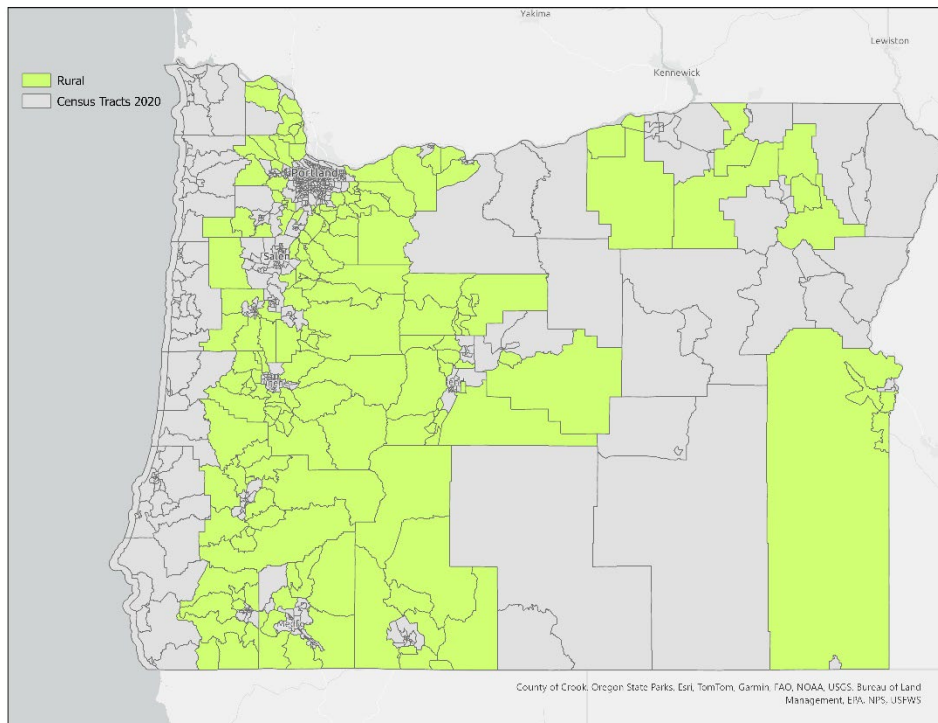
Coastal Designation Map



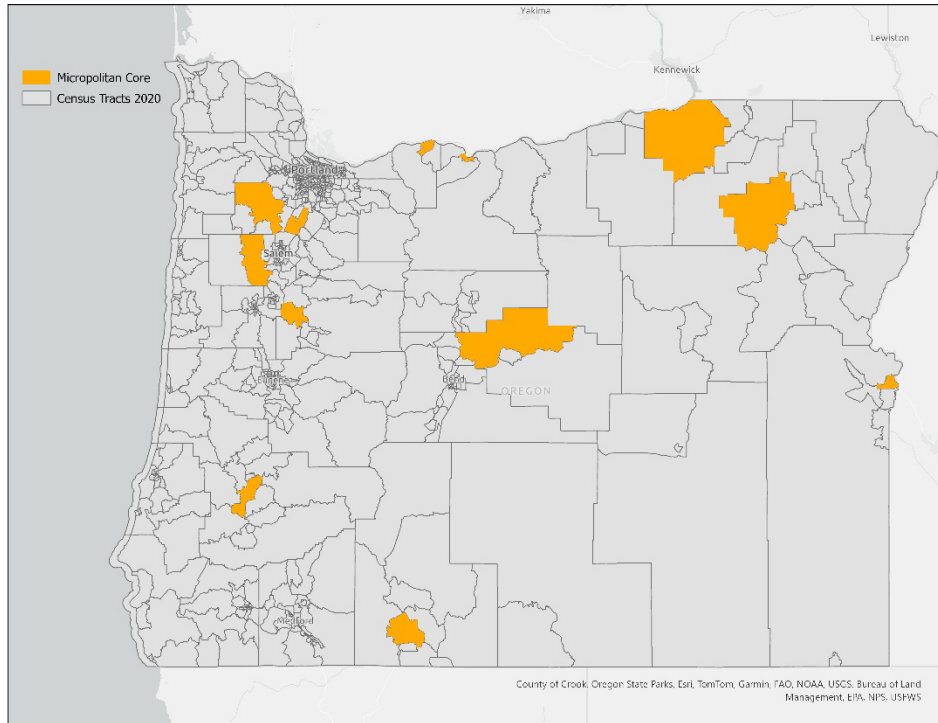
Remote Designation Map



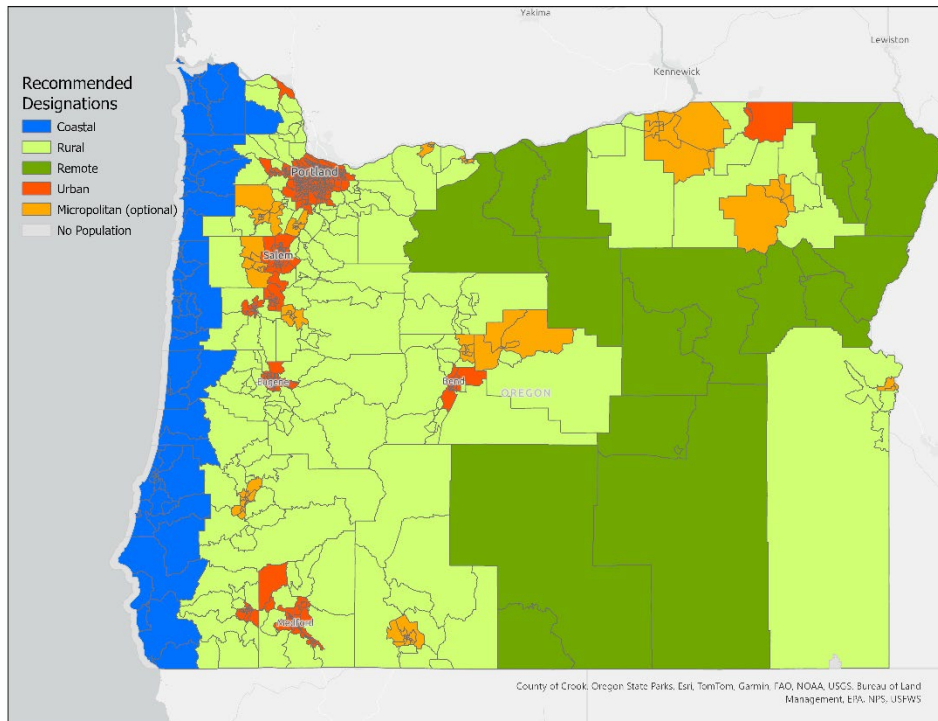
Urban Designation Map



Rural Designation Map



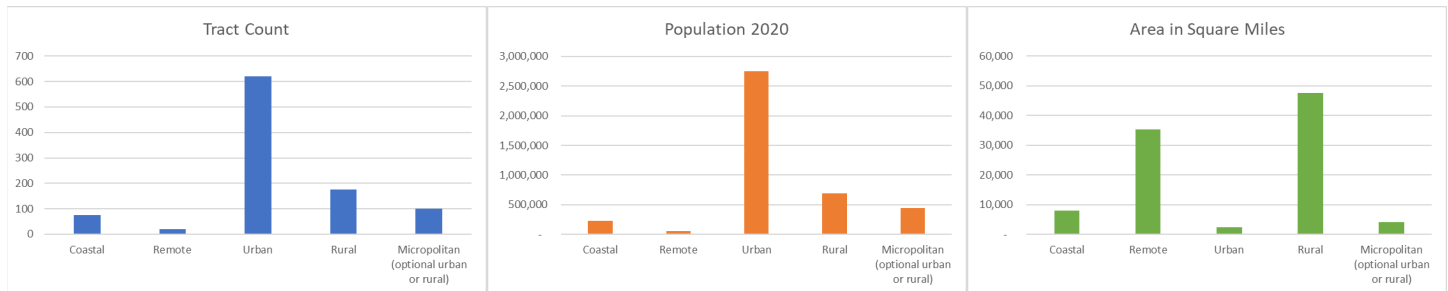
Micropolitan Area Map



All Designations Map

Oregon Population Characteristics by Designation

Designation	Tract Count	Population 2020	Area in Square Miles
Coastal	76	230,134	7,889
Remote	21	55,047	35,257
Urban	621C	2,749,784	2,438
Rural	175	697,836	47,628
Micropolitan (optional urban or rural)	100	443,545	4,012
No Population	8	-	1,155
Total	1001	4,176,346	98,378



Note: USDA Frontier and Remote Areas and Rural-Urban Commute Areas for 2020 Census tracts are scheduled for release in fall 2020. Census tract distributions will change with the USDA 2020 Census tract data.

CDC Environmental Justice Index Oregon Scores Applied to 2010 Census Tract Community Designations

Designation	Total 2010 tracts by designation	Top 20% of worst EJI scores statewide	Percent of tracts in top 20% by designation	Mean EJI score in top 20%	Overall mean EJI score
Coastal	63	13	21%	0.77	0.58
Remote	19	5	26%	0.79	0.63
Urban	508	90	18%	0.80	0.45
Rural	158	27	17%	0.80	0.50
Micropolitan	77	30	39%	0.84	0.64
Total	825	165			

Note: CDC Environmental Justice Index 2020 Census tracts have not been released as of May 23, 2024.

Climate Vulnerability Index Scores Applied to 2010 Census Tract Community Designations

Designation	Total 2010 tracts by designation	Top 20% of worst CVI scores statewide	Percent of tracts in top 20% by designation	Mean CVI score in top 20%	Overall mean CVI score
Coastal	63	3	5%	0.47	0.40
Remote	19	16	84%	0.49	0.48
Urban	508	65	13%	0.48	0.38
Rural	158	41	26%	0.50	0.41
Micropolitan	77	40	52%	0.51	0.46
Total	825	165			

Note: Climate Vulnerability Index 2020 Census tracts have not been released as of May 23, 2024.

Decision Point #3b Recommendation

EJC Council decisions needed to determine:

1. How communities will be compared.

The Methodology Workgroup recommends the EJ Mapping Tool include the following two options:

1. The ability to compare communities by designation (urban, rural, coastal, and remote).
 - a. Urban vs Urban
 - b. Rural vs Rural
 - c. Coastal vs Coastal
 - d. Remote vs Remote
2. Optional ability to compare communities across the state with a standard statewide index score using the same indicators if needed by state agencies.
 - The designation indices can vary either by using different indicators for the designations OR by adjusting the weights of indicators or indicator subdomains.
 - The Methodology Workgroup is concerned that providing a statewide index score along with a designation index score may be confusing for users.
 - The EJ Mapping Tool Leadership Team, Methodology Workgroup, and Liaison Workgroup will work with the EJ Council to provide guidance on when the different options should be used and how they should be applied.