

# Crossroads & Connections









2024

*Tracking Oregon's  
Progress*



# Crossroads & Connections

## Tracking Oregon's Progress

<b>Introduction</b>	2
 SECTION 1 <b>Social Connection &amp; Belonging</b>	10
 SECTION 2 <b>Economy</b>	20
 SECTION 3 <b>Education</b>	32
 SPOTLIGHT ON CONNECTIONS <b>Child Care</b>	46
 SECTION 4 <b>Health</b>	52
 SECTION 5 <b>Housing</b>	64
 SECTION 6 <b>Natural Environment</b>	76
 SECTION 7 <b>Built Environment</b>	90

**JEAN-MARIE CALLAN** Senior Research and Learning Officer, Oregon Community Foundation

**BECKY SEEL** Research and Learning Officer, Oregon Community Foundation

**KIMBERLEE SALMOND** Director of Research and Learning, Oregon Community Foundation

**MADELINE BRANDT** Former Research and Learning Officer, Oregon Community Foundation

Published May 2024. For more information about this report, please contact [research@oregoncf.org](mailto:research@oregoncf.org).



## ACKNOWLEDGMENTS

This research has been strengthened through feedback, insights and assistance from many OCF staff and external partners — too many to call out by name here. We thank you for sharing your time, talents and expertise! We are especially grateful for the contributions of the external experts who agreed to review portions of this report’s content. Among them were Marko Bey and Jana Gastellum (*Natural Environment*), Bruce Goldberg (*Health*), Kim Leonard (*Child Care*), Breann Preston (*Economy*), Mike Savara and Bill Van Vliet (*Housing*), and John Tapogna (*Economy and Education: School Funding*). Thank you!



## STYLE & LANGUAGE NOTE

The 2024 *Tracking Oregon’s Project* report follows recommendations from the *Associated Press Stylebook* for style and most terminology. However, this report includes research that relies on other style guides and writing approaches. In those instances, we defer to the terms used by the original authors of that research so that the descriptions here remain consistent and accurate.





TOP REPORT 2024

# Introduction

**There's nothing like a crisis (or two) to bring people together. We have seen this time and time again in Oregon, most recently during the COVID-19 pandemic and our devastating wildfires. Facing an emergency together reveals how our health and well-being are interconnected with each other's.**



In 2024, as we work toward rebuilding out of the lingering impacts of these crises, we find ourselves at a crossroads — a moment to examine what brought us to today so we can better understand our pathways to the future.

Since 2014, OCF has regularly published reports in our *Tracking Oregon's Progress* (TOP) research series, exploring social and economic trends across our state and drawing heavily on existing research and data. Our 2024 TOP report gives our community partners a baseline context to explore their own paths forward on their own terms. Our goal is to ground these discussions in solid research. The core question that frames this research is profound and multifaceted: *What makes Oregon communities healthy and thriving?*



# What makes Oregon communities healthy and thriving?

We do not claim to have the answers. In fact, as we have heard from our partners, there is no one answer — no magic formula — for defining the factors that create community well-being. And yet, we see patterns running through our communities that point to areas of consensus as well as shared challenges and goals.

One conclusion is clear: *We do not live single-issue lives.*

Insights into our progress appear in the complex intersections of health, education, economy, the natural and built environment, housing, social connection and belonging. Our research elevates these intersections so that we can better understand the strains we face and our opportunities to move forward.

Our report suggests that many systems and structures that shape the critical conditions for well-being are struggling and not working for Oregonians consistently. Of all the challenges, the broadest themes point to significant strains in our economic and social lives.

## STRAIN IN OUR ECONOMIC LIVES

The costs of Oregonians' daily lives are outpacing their income and other resources. This is true across multiple parts of our lives. For example:

- Today, 25% of Oregon renters use over half their income for housing, with particularly high rates in Corvallis (37%), some Portland suburbs (33–35%) and Southern Oregon cities like Grants Pass, Ashland and Klamath Falls (each at 32%).<sup>1</sup>

---

## One conclusion is clear: We do not live single-issue lives.



- The cost of child care in Oregon now rivals housing and college expenses, taking up 23% of annual household income on average.
- Even with insurance, out-of-pocket health care costs are rising disproportionately to income. Since 2010, average family premiums for employer-sponsored health insurance have increased 55% — at least twice as fast as wages (27%) and inflation (19%). In Oregon, per-person health care costs grew by 49% between 2013 and 2019 (an average of almost 7% annually).
- Nationally, the costs of pursuing a college education have been far outstripping household income, and Oregon is no exception. On average, the cost for which Oregon students are responsible has more than doubled since 1980.



Additional research reinforces this sense of rising costs in Oregon. In a 2023 statewide survey, over half (54%) of Oregonians reported feeling left behind economically.<sup>2</sup>

### STRAIN IN OUR SOCIAL LIVES

Oregonians also face social divides that have been developing over decades, impeding our connections to each other and our collective well-being. In a 2023 statewide survey, nearly half (48%) of Oregonians reported feeling left out of or disconnected from their community.<sup>3</sup>

This feeling of disconnection has wide implications. We can see ways our connectedness — or lack thereof — ripples through this report with impacts for our well-being:

- At their extreme, the health effects of isolation and loneliness are comparable to smoking 15 cigarettes a day.
- During heat waves, isolated people often face more extreme consequences than connected ones.
- Cross-class connections have a major impact on economic mobility — more than other factors like racial segregation, economic inequality or education. Meanwhile, income inequality in Oregon is at an all-time high by several measures.

Importantly, the strain we see in our economic and social lives is connected to each of the issue areas explored in this report: *Education, Housing, Health, Natural Environment, Built Environment, Economy and Social Connection and Belonging.*

### OREGONIANS COMING TOGETHER

Throughout this report, we see powerful examples of Oregonians coming together to do hard things. They demonstrate what is possible when we work together, and what we may lose when our connections with each other are strained. They also add to the existing picture we developed from prior TOP research on how Oregonians work collaboratively with diverse groups and ideas to strengthen the building blocks of vibrant communities. That research demonstrates that community-led problem-solving delivers tangible results in Oregon.<sup>4</sup> This report highlights similar stories; here are two examples:

- **Project Turnkey**, a state-funded project for which OCF serves as lead administrator, has delivered a 30% total increase in the state's shelter supply. This was achieved through a public-private partnership between state government and philanthropy that focused on 32 properties across the state, as well as local collaboration that included nonprofits, local government agencies, tribes and other community members and organizations.



- **Building Resilience** formed in Oregon from various organizations working in public health, environmental justice, business, labor and other areas. New legislation advancing resilient, efficient buildings that draw on this coalition's work was included in the bipartisan Climate Resilience Package passed by the Oregon Legislature in June 2023.

In conducting research for this report, we learned about many similar examples. What we heard painted a picture of a promising path forward for Oregon — one we can all travel together.

## URGENCY & PROMISE

Research-backed opportunities cut across every area of our report. Here, we highlight some strategies relating to our broad theme of strain. We see urgency and promise in three choices.

### **We can choose to invest early for impact.**

Investments in child care and early childhood education pay off over time with a return of \$4–\$9 for each dollar spent. Infusions of cash (like through the earned income tax credit, child tax credit and baby bonds) can produce an array of benefits for children well into adulthood.

### **We can choose to ease specific pressure points.**

Our research points to intersecting areas of critical need contributing to the economic strain we see in our state, where we can choose to:

- Build workforce and affordable housing.
- Alleviate the financial risk of postsecondary education.
- Invest more in public and preventive health.

Our analysis suggests focusing on these places has potential to ease the costs of life for Oregonians.

### **We can choose to move forward together.**

Despite our divisions, 67% of Oregonians believe there is common ground we can stand on to make our state a better place.<sup>5</sup> We see many places where Oregon or Oregon communities are leading

---

**“In this time of COVID-19, a few basic truths have become plain to see: Our lives are interconnected, our collective physical and mental health is at the heart of a thriving society, and our responsibility to support and maintain the well-being of our entire community is shared.”**

■ FRAMEWORKS INSTITUTE  
FRAMEWORKSINSTITUTE.ORG

or pushing to chart a promising new path forward. We have hard work ahead, but Oregonians are up for the challenge, and we are all in this together.

## A CALL TO ATTENTION

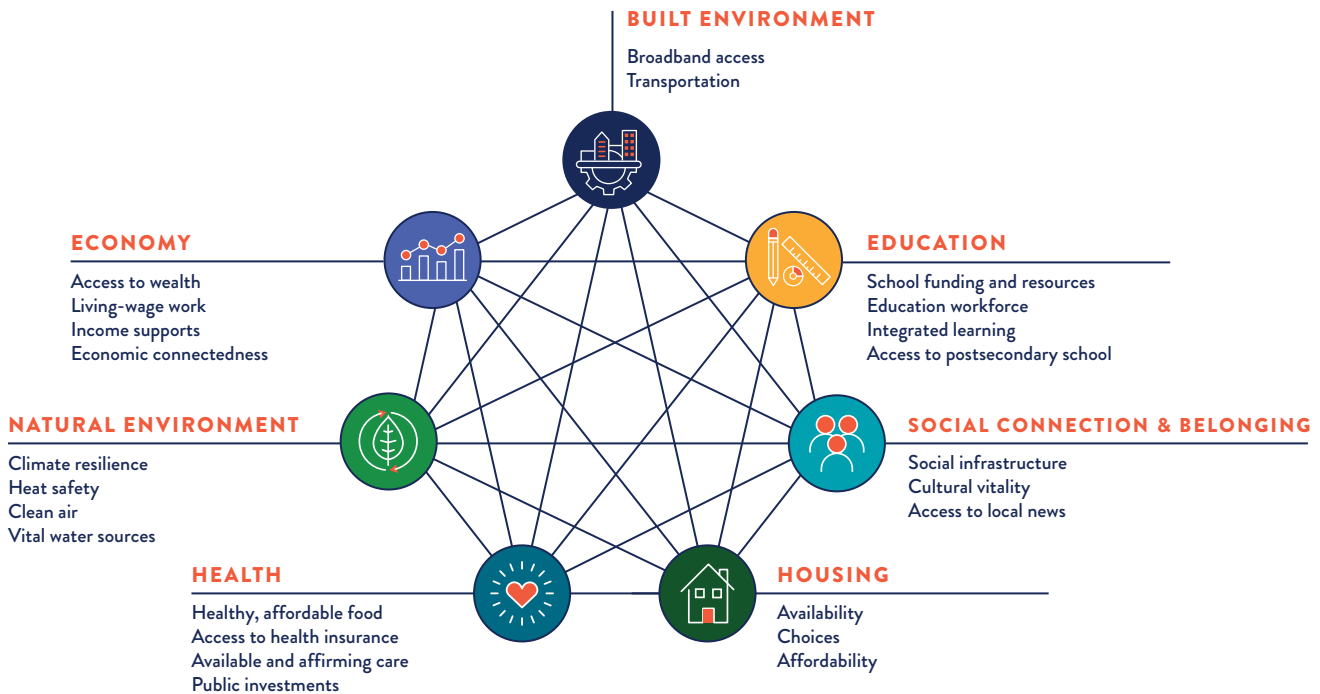
TOP 2024 is a call to attention that highlights the critical crossroads we see in our analysis and, more broadly, the conditions that support or hinder the health of our communities.

Rather than focusing on the characteristics or outcomes of individual people (such as income levels or graduation rates), we are shifting our attention to conditions that drive our well-being — the characteristics of our communities, environments and systems.

Just as our communities are unique, so are assessments of community well-being. This is reflected in the rich body of research from beyond Oregon that grounded our work in this report. We have many promising models for thinking about well-being, spanning the spaces of academia, government, philanthropy and many other fields. They underscore both the diverse factors that matter and how they will differ for specific communities. They also point to some consensus around key areas for consideration, which has guided the development of the seven issue areas that structure this report and the conditions we examine within each.

**FIGURE 1. Our seven focus areas.**

*This report examines conditions that contribute to community well-being across seven interconnected focus areas. Further illustrating this web of connections, we also explore child care in a special spotlight section.*



## ABOUT THIS REPORT

As we set out on this research project, we asked ourselves and others versions of this question: “What makes a healthy, thriving community?” We heard responses that touched on each of the focus areas we explore in this report, including things like good schools, healthy food, affordable housing, transportation, living-wage jobs, fresh air, and vibrant arts and culture. And we heard a lot about the characteristics of the networks of people who make up our communities (for example, how neighbors connect with and show up for each other). Notably, some responses spanned multiple focus areas, encompassing basic rights, supportive networks and accessible resources for all Oregonians.

We also heard these ideas echoed in other research on our state. Oregon Voices — a project of The Ford Family Foundation — focuses on understanding Oregonians’ experiences, essentially asking “what’s it like in your corner of the state?”<sup>6</sup>

Responses cover similarly wide-ranging ground, again touching on each of this report’s focus areas to reveal both our commonalities and the ways our communities are unique.

Informed by these responses, we used a broad range of data and research to dig deeper into these crucial factors for community well-being. In doing so, our goal was to shift mental models that place the burden for success on the individual and consider instead the conditions that contribute to that individual’s success. We assess how well Oregon is promoting and nurturing these conditions, as well as how specific needs may vary for people, communities and places across our state.

## Roots in OCF’s opportunity gap research

In 2018, OCF embarked on what would be a three-part *Tracking Oregon’s Progress* (TOP) series examining the opportunity gap in Oregon. Informed by the work of Robert Putnam, the series:

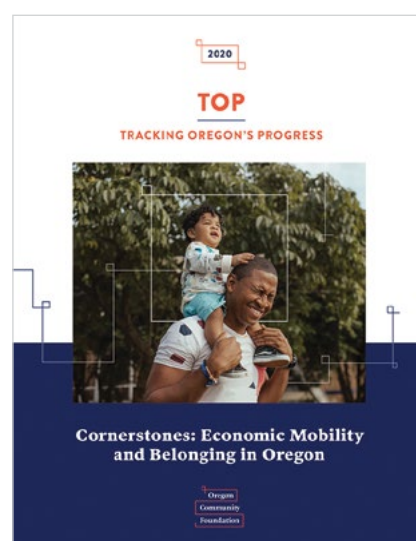
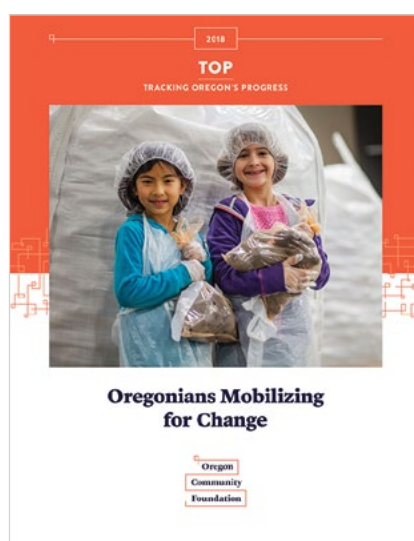


- Documents how Oregon’s low-income children, children of color and rural children are not on an equal playing field with their higher-income peers (2018).
- Highlights community-led efforts to identify and mobilize local solutions to address the opportunity gap (2019).
- Examines the role of ZIP codes in determining which Oregon children are getting ahead and where opportunity gaps persist (2020, in collaboration with Harvard-based Opportunity Insights).
- **We are broadening how we think about well-being.** Yes, economic opportunity still matters. At the same time, when Oregonians are asked what makes a community healthy, their answers tend to extend beyond economics. That’s why we’re also considering aspects of well-being like health and happiness, among others.
- **We are further shifting our attention to conditions for success.** Previous TOP research underscored how neighborhood-level factors—like school quality—matter for our economic well-being. Here, we continue to focus on the conditions in our communities or state rather than on individual characteristics or outcomes.

These reports contribute to a growing body of national research exploring connections between economic mobility and place (or the geographic communities that shape us). Research like this makes the case that economic success is largely determined by our conditions — the neighborhood where we grew up, our educational experiences, and the impacts of institutional, historical and structural discrimination — rather than on individual or family characteristics alone. It shows that *the conditions around us matter*.

This TOP report builds on these foundations, acknowledging both the insights we gained from prior research *and* the details it left out. It fills in more of the picture in three important ways:

- **We are developing a deeply rooted understanding of the complexity of our communities.** As we dug into the quantitative data on economic mobility, we found that it can be difficult to draw conclusions about why we see certain trends from that data alone. Accordingly, we used the numbers as a starting point — an invitation to ask more questions through additional, complementary qualitative research. We’re continuing to do something similar with this TOP report: We use data not as an “answer” but as a jumping-off place for exploration and an opportunity to dig deeper into what matters for our communities.



## Our research approach

For the purposes of this report, we do not try to define “community well-being” for all Oregon communities. Instead, we hold multiple definitions at the same time, spanning everything from economic opportunity to health and happiness. Similarly, we hold multiple definitions for “community,” which encompass geographic places like neighborhoods as well as other forms of connected networks or affinity groups.

We grounded our work in a scan of research relating to community well-being. In order to manageably examine the conditions that support community well-being, we took guidance from the existing literature and broke our analysis into a set of interrelated and overlapping focus areas. Although our research uncovered a variety of models for doing so, we chose a specific framework from the U.S. Department of Health and Human Services as our starting point.<sup>7</sup> We then adapted this framework to the needs of our analysis, streamlining it where possible for digestibility. This provided us with our structure of

seven focus areas: *Health, Housing, Education, Economy, Built Environment, Natural Environment, and Social Connection and Belonging.*

Other models we investigated tended to cover similar ground (including, for example, the Seven Vital Conditions for Health and Well-Being—a national collaborative project with over 100 contributors researching similar questions to those we explore here).<sup>8</sup>

Within each focus area, we identified relevant data and Oregon-specific research. This entailed an iterative process of scanning the literature, tapping into internal expertise from across OCF and consulting external experts. We tried to cast a wide net while doing this but also recognized that we were more likely to pick up sources related to OCF’s work.

We narrowed our analysis within each focus area to include just two to four discussions of key conditions for community well-being. This was based on a combination of considerations: maintaining our focus on *community-level* or





*systems-level* indicators rather than *people-level* indicators; applying the things we learned from expert consultations and the existing literature; ensuring broad relevance for communities across our state; and aiming for a diversity of topics and analyses across our report. Given this approach, the discussions included in each focus area are not necessarily the most important ones (though they *are* all important!). And it's worth noting that there are gaps in our analysis as well.

The focus areas we used to organize the report overlap. Conditions for community well-being do not always fit neatly inside one subject area versus another. We intentionally explored this in our report by examining connection points between focus areas at the end of each chapter; exploring child care availability and affordability as examples of conditions that cross focus area boundaries; and thinking broadly about where discussions could fit within our overall framework.

Each discussion unpacks a condition for community well-being using available research and data. We bring in myriad data sources beyond the U.S. census and have tried to include qualitative data as possible. As it was outside the scope of this report to collect any original data, our analysis is guided by what data was available to us.

We have also sought to interrogate what this research landscape leaves out. We can see across our report that data limitations frequently made it impossible to include analysis for underrepresented population groups with the level of specificity or granularity that is most meaningful for people's lives. In some places, we compensated for these limitations by tapping into deep wells of community knowledge from community-led research projects.

We bring no single lens to these analyses. Instead, we consider different ways of assessing how we are doing as a state. We also consider how experiences and trends vary by factors like population, race and place. From beginning to end, the expertise of our colleagues inside and outside of OCF was invaluable in shaping this report. Any mistakes in these pages, however, we claim as our own.

In addition to conducting analysis within each subject area, we identified patterns that run across our full report. Here, we identified a small set of cross-focus area themes with broad relevance for Oregon communities.

Because the results of our thematic analysis are grounded in the approach described here, they do not represent a comprehensive picture (though they too are important themes for the health and well-being of our communities). As you explore in the pages of this report and beyond, you may find additional statewide patterns and conditions that matter for the communities you belong to. ■

## ■ INTRODUCTION ENDNOTES

- 1 Research discussed in this introduction largely draws from sources cited in the chapters that follow. To learn more about these topics, please turn to the focus area sections.
- 2 Oregon Values and Beliefs Center. (2023, October 10). *Oregon's social and political trends*. <https://oregonvbc.org/oregons-social-and-political-trends/>
- 3 Ibid.
- 4 Ruffenach, C., & Worcel, S. (2018). *Oregonians mobilizing for change*. Oregon Community Foundation. <https://oregoncf.org/community-impact/research/top-report-2018/>
- 5 Oregon Values and Beliefs Center. (2023, October 10). *Oregon's social and political trends*.
- 6 The Ford Family Foundation. (2023). *Oregon voices: Interactive data explorer*. [www.orvoices.org](http://www.orvoices.org)
- 7 U.S. Department of Health and Human Services. (2017). *Measuring health at the community level: Data gaps and opportunities*. <https://ncvhs.hhs.gov/wp-content/uploads/2018/03/Measuring-Health-at-the-Community-Level-Data-Gaps-and-Opportunities.pdf>
- 8 Community Commons. (n.d.). *Seven vital conditions for health and well-being*. <https://www.communitycommons.org/collections/Seven-Vital-Conditions-for-Health-and-Well-Being>



## SECTION 1

# Social connection & belonging

### *In this chapter*

- Social infrastructure
- Cultural vitality
- Access to local news
- Connection points

#### **Culture. Connection. Inclusion.**

**Mutual support.** As we started out on this research project, we asked ourselves and others a question: “What makes a healthy, thriving community?” These are just a few examples of what people most often named. Human connections and experiences of belonging were top of mind for many Oregonians.



These themes reflect the fact that we belong to diverse communities, even where our backgrounds and experiences are shared.

They also begin to paint a picture of what we’re talking about in terms of well-being, which is perhaps the most difficult focus area to define across this report. In essence, how do we celebrate culture and build self-determination? When and where do we come together to dream and work toward healthier communities and a healthier future? Where do people relax and hang out, play, intersect with each other and contribute to one another’s lives? How do we build an inclusive culture?



# People rooted in their identity and connected to their community are more likely to feel a sense of power, influence, voice and self-determination.



Our social landscape and relationships are integral to our experiences of community well-being. When asked what the phrase “sense of community” means, most Oregonians describe care for one another and a shared sense of values and interests.<sup>1</sup> Research shows this kind of connectedness or cohesion makes individuals and entire communities more resilient. Strong social ties help individuals and families access the support they need, from emergency funds to child care and job leads. Feeling connected also increases our sense of safety and makes it easier for communities to mobilize around local issues or natural disasters. Social connections and inclusion have tangible and lifesaving benefits for disaster preparedness and recovery, as neighbors are often the first to respond to local emergencies.<sup>2,3</sup>

The ways in which we are connected matter both as outcomes in themselves and as contributors to other outcomes like work satisfaction, local government, political representation, and opportunity. *Harvard Business Review* found that employees who feel a sense of belonging at work generally have better performance, about 50% less turnover, and save costs as a result.<sup>4</sup> They also work harder for collective gains.

People rooted in their identity and community are more likely to feel a sense of power, influence, voice and self-determination.<sup>5</sup> When community members have strong ties to people in power — perhaps through shared networks or backgrounds — their voices are more likely to be heard and their community needs are more likely to be met.<sup>6,7</sup> Like exclusion, belonging has ripple effects.

Social and cultural connections are not experienced in the same way by all Oregonians, nor do they look the same for every community. The cultural threads of Oregon communities form a vibrant tapestry of social ties, traditions and creativity that enriches our lives by providing structure, meaning and enjoyment.

The Othering & Belonging Institute at the University of California, Berkeley names “arts and culture” as one of its primary change and inclusion strategies.<sup>8</sup> Research also reinforces how arts and culture support our learning, physical health and mental well-being.<sup>9,10,11</sup> Collectively, arts and culture bridge divides and act as an engine of our economy.<sup>12,13</sup> These rich creative channels also give us space to imagine new possibilities, including for community systems and structures.

In past TOP research, we examined social capital — one aspect of our social and cultural environment — by looking at measures like voter turnout, census response rates, volunteer rates and church attendance. But what happens if we shift our attention and stay focused on the community or systems level? What elements foster a sense of connection and belonging both to our place and to one another?

A few signs of our collective well-being include the number of civic and community-based organizations in our region; the strength of our arts and culture ecosystem; and the survival of local, place-based news.

We often attribute social connections to individual interest or capacity, but infrastructure and

opportunities for interaction may be even more important. These entry points to engagement and democracy are reinforced or undermined by community-level factors — ones that encourage mingling, relationship-building, a sense of community cohesion and belonging, and the understanding that our lives are interconnected.



## Discussion of Key Indicators

### SOCIAL INFRASTRUCTURE

Noting the “profound consequences of loneliness and isolation” for individual and societal health, U.S. Surgeon General Vivek H. Murthy urges the country to prioritize social connection in settings and systems.<sup>14</sup> In health terms, the difference between a very connected person and one who is

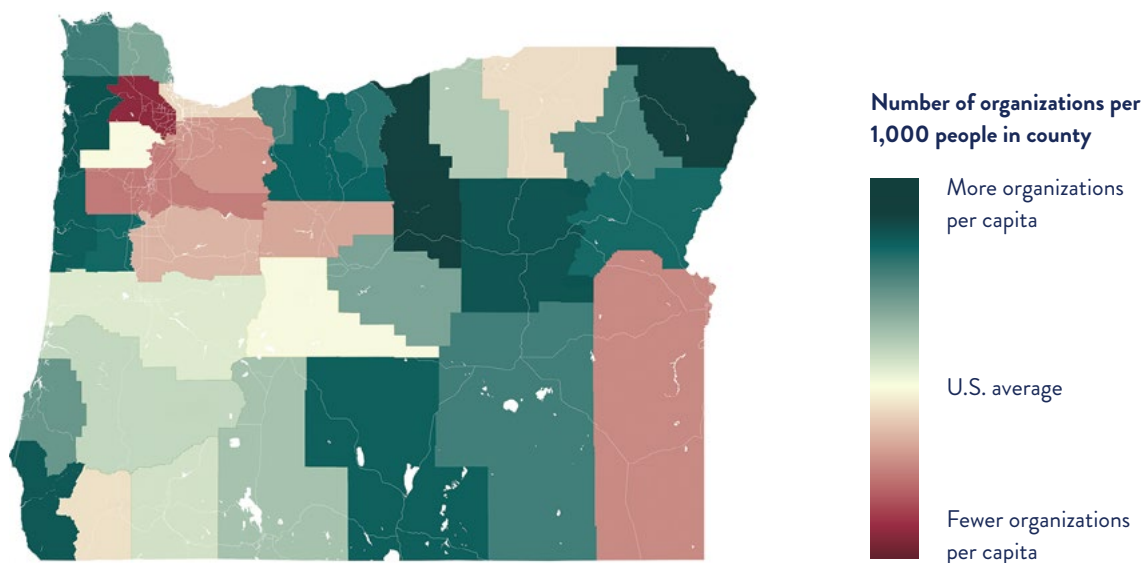
isolated long-term is the same as that between a nonsmoker and someone who smokes 15 cigarettes a day.<sup>15</sup>

Not only do human connections add to belonging and well-being for youth and adults, but their impacts range from preventing heart disease and strokes to increased voting.<sup>16,17</sup> In settings that are representative and inclusive, the increase in civic engagement is even greater.<sup>18</sup> Accordingly, the surgeon general’s report calls for more attention to community and ideas to foster connection.

Many of the places where we interact with familiar faces and unknown neighbors are public: public schools, playgrounds, green spaces, community centers, pools and libraries. Still, opportunities to socialize are not broadly accessible; less than half of Oregonians (43%) said they have “places to sit and chat in their neighborhoods.”<sup>19</sup> Informal gathering places provide a foundation that invites interaction and becomes

**FIGURE 2. Compared to the U.S. average, most Oregon counties are strong when it comes to civic organizations.**

*Darker green areas indicate more civic organizations per capita in the county and suggest stronger social and civic connections. Light colors show that a county is close to the average U.S. county, and dark red areas are lower in the number of civic organizations relative to residents. Civic organizations are identified via Facebook and compared to Facebook users.*



**Source:** Opportunity Insights. (2022). *Social capital atlas*.  
<https://socialcapital.org/>



even more relevant and vibrant when combined with policies and programs that facilitate connection. When places like libraries or YMCAs are paired with programming, relationships are more durable and longer-lasting, and interactions have more structure and purpose.<sup>20</sup> Public spaces and organizations invite interaction beyond immediate our friends and family, growing social connections and capital.

More than individuals, civic organizations have the capacity to create welcoming spaces and mobilize people around a community purpose or challenge. Many nonprofits, faith-based institutions, advocacy groups and clubs are engines of collective problem-solving, providing an additional layer of engagement within and across communities.

The number of organizations in our communities is itself a sign of social capital, potentially linking

people across backgrounds, cultures and socioeconomic classes.

The *Social Capital Atlas* includes civic organizations per capita as one pillar of social capital alongside clustering/cohesiveness and mixing of families from different economic backgrounds.<sup>21</sup> (See Figure 2, page 12.)

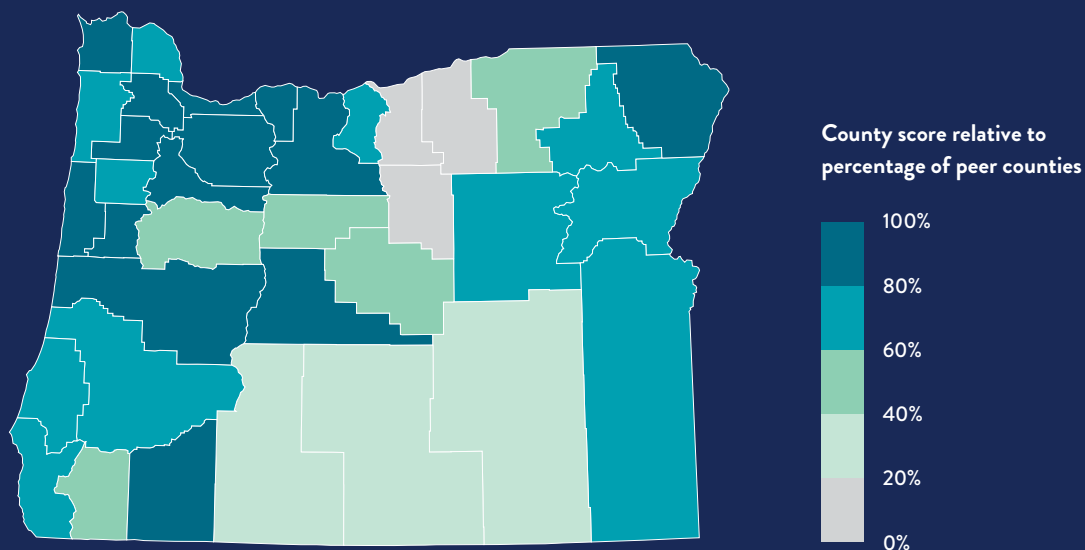
Across the nation, the presence of civic organizations is highest in the Northwest, and our region also stands out in terms of people volunteering with these organizations.<sup>22</sup> The 2021 census estimated that 1 in 3 Oregonians belonged to an organization;<sup>23</sup> many more volunteer formally or help out families, friends or neighbors informally.

## CULTURAL VITALITY

The arts play a vital role in convening neighbors and enlivening neighborhoods. They elevate

### FIGURE 3. Arts vibrancy in Oregon.

Many Oregon counties have a more vibrant arts sector compared to their similarly sized peers across the nation. The Arts Vibrancy Index includes scores for arts providers, arts dollars and public support. The darker the color, the higher the county ranking. For example, a county with a ranking of 85 scored higher than 85% of similarly sized counties nationally.



Source: SMU DataArts. (2023). Arts vibrancy index.  
<https://dataarts.smu.edu/ArtsVibrancyMap/>

community assets and issues, amplify voices and provide a sense of place and shared history.

“Cultural vitality” is defined in research as the “evidence of creating, disseminating, validating, and supporting arts and culture as a dimension of everyday life in communities.”<sup>24</sup> Once expressed, the presence of arts and culture helps us envision



new possibilities for our communities by sparking ideas, hope and connections.<sup>25</sup>

Currently, no dataset is available to measure cultural vitality, but SMU DataArts’ *Arts Vibrancy Index Report and Map* comes close. It details how arts and culture are embedded into jobs and communities across the state. It includes estimates of the number of artists and arts/culture organizations, dollars spent on arts and culture (revenue, expenses and compensation), plus government grants and dedicated dollars in each county — all adjusted for local cost of living.<sup>26</sup>

The index also reveals undercurrents that influence arts and culture, like the socioeconomic background of residents and the presence of hotels, restaurants and sports. Although social and economic demographics aren’t included when calculating and ranking the nation’s arts

and culture hotspots, those elements add valuable context about the resources and entertainment options available within a county.

Since it began in 2016, the *Arts Vibrancy Index Report and Map* has showcased the top 20 arts and culture hotspots in large metro areas and another 20 in small and medium-sized communities. (See *Figure 3, page 13.*) Portland consistently makes the list, and Hood River and Medford have also been included over the years. High scores reflect communities that have a strong arts presence with financial support that can be seen in big data sets.

Overall, Oregon’s art and culture sector is a \$9.5 billion industry with 61,593 jobs.<sup>27</sup> Its economic footprint is larger than that of the agriculture and forestry industry (\$5.5 billion) and comparable to transportation (\$9.8 billion).<sup>28</sup>

Even as it reveals an underlying arts ecosystem, the Arts Vibrancy Index is limited in its ability to recognize quality over quantity. Looking at the map of Oregon, many of the highest-scoring counties have large urban centers, reinforcing the idea that a higher population leads to more arts and culture. Setting aside the most populated counties, we can see more subtle differences: Baker, Clatsop, Lincoln, Hood River, Polk, Sherman, Wallowa and Wasco counties also stand out as having relatively high scores.

In smaller communities, the convening power of arts and cultural events can be especially potent. The arts can also be a tool for placemaking, storytelling, organizing, and amplifying marginalized voices. Large data indexes are unlikely to convey the value of the arts to a particular community, like a student music recital bringing a remote town together for a spring outdoor concert or a historical monument reimagined to be more inclusive with widespread community participation.

Another challenge in portraying the arts ecosystem is that “arts” data consistently undercounts the artistic and cultural wealth of Native communities and tribes. Often, Native Americans do not see themselves as “artists” or “performers” or categorize their organizations as arts-related, so they



aren't included or acknowledged.<sup>29</sup> In many tribal cultures, this work is seen as part of cultural or collective endeavors or embedded in routines and rituals rather than as "art." Such cultural traditions are anchors of creativity and connections for many Oregon communities.

Measuring the arts ecosystem illuminates whether a community has spaces to gather, witness and create together. This element of opportunity is a vital part of cultural vitality: When a community has a place to gather, the arts are more likely to flourish. It could be a dedicated performance space, or streets that transform into parade routes; outdoor spaces that become powwow grounds, or gymnasiums and libraries that host performances. Performance spaces are part of the "social infrastructure" that brings people together, sparks a sense of belonging and builds stronger community bonds.<sup>30</sup>

Specific workspaces for artists also support interactions between residents and artists, allowing more participation in creative processes. These

spaces fuel cultural production and cultural participation at the same time — growing the social, cultural and economic aspects of a neighborhood.<sup>31</sup>

For certain communities, arts and culture are nurtured and sustained in churches and culturally specific associations and organizations, along with businesses such as restaurants and bars. Such opportunities help people feel rooted in their identity and cultivate valuable cultural connections.

Whatever this looks like, cultural opportunities and events contribute to outcomes like community development, stewardship of place, neighborhood pride and improved public safety.<sup>32</sup> Together, diverse parts of our community infrastructure play an important role in sustaining arts and culture. Culture builds bridges both within and between neighborhoods.<sup>33</sup>

### ACCESS TO LOCAL NEWS COVERAGE

In a world where information can connect or divide, radio, newspapers, television networks,

Evergreen Quartet at  
Newport Public Library



magazines, online news outlets and social media are an essential part of our community infrastructure. The desire to engage with each other and with issues of the day relies on access to reliable and inclusive local news.

According to a report from University of Oregon, areas with local news systems have more civic engagement, lower rates of polarization and corruption, and an increased sense of community connection.<sup>34</sup> Reporters bring attention to local decisions through their reporting, which boosts accountability. In addition, local media stories gain traction and merge with other local stories, ultimately getting picked up by state or national news and influencing political decision-making.

Trust plays an important role in media consumption; when people see and hear neighborhood perspectives and local issues in the news, it's validating. Research shows a direct relationship between local news, trust in journalism and connection to community, even across different values/belief systems and education levels.<sup>35</sup> With local news, community members are more likely to find commonalities amid a national atmosphere of divisiveness and partisanship. Indeed, 3 out of 4 Oregonians feel that they can trust local news organizations for information about community issues.<sup>36</sup>

At the same time, this trust is stronger for white communities than for communities of color, in part because fewer news outlets are found in the areas that are most racially and ethnically diverse.<sup>37</sup> The gap in trust is also due to bias in news reporting; in 2023, *The Oregonian* revisited its reporting on the 1948 Vanport flood as part of a series on "Publishing Prejudice," acknowledging the paper's racist legacy.<sup>38</sup> Local papers are evolving and reckoning with the past to rebuild trust.

Newspapers are experiencing a time of rapid change and adaptation. According to the Fund for Oregon Rural Journalism, more than a quarter of Oregon's small-town newspapers have closed and half of Oregon's incorporated cities lack a local news source.<sup>39</sup> (See Figure 4, above.) Closures since 2020 include Medford's *Mail Tribune*, *Umpqua Post*

**FIGURE 4. Oregon has three counties with no local news source and 11 counties with only one.**

*News sources include newspapers, digital sites and public broadcasting.*

0	Sherman, Wasco, Wheeler
1	Crook, Gilliam, Harney, Jefferson, Klamath, Lake, Morrow, Polk, Tillamook, Union, Wallowa
2	Baker, Benton, Deschutes, Douglas, Grant, Hood River, Josephine, Lincoln, Malheur, Yamhill
3–9	Clatsop, Columbia, Coos, Curry, Jackson, Lane, Linn, Marion, Umatilla, Washington
10+	Clackamas, Multnomah

**Source:** Medill Local News Initiative at Northwestern University. (2023). *Local news landscape: Oregon*. <https://localnewsinitiative.northwestern.edu/projects/state-of-local-news/explore/#/state-localnewslandscape?state=OR&stateCode=41>

in Reedsport, and the *Philomath Express*. At the same time, news outlets are adapting by shifting to online-only versions, like the Black-owned paper *The Skanner* or the *Philomath News*. Multiple factors contribute here; a declining readership and more papers owned by national conglomerates have resulted in less connection to local people and places. Total revenue for U.S. newspapers has gone from \$50 billion in 2005 to just under \$10 billion in 2022.<sup>40</sup>

Local media closures have rippling effects. "The role of rural news publications in informing their communities can't be overstated. But there is also great value in what they present to the wider world," says Scotta Callister, owner of the *Malheur Enterprise*. "They tell the stories of rural communities — their lifestyle, values and challenges — and that provides an important perspective in our regional, state and even national dialogue. When that perspective disappears, we all lose."<sup>41</sup> Without local media sources, people are less informed and less engaged in local and regional politics, and voting levels decline, especially in local races.<sup>42</sup> ■





## Exploring Connection Points

### SOCIAL CONNECTION & BELONGING + EDUCATION



Creativity allows youth to express themselves in new ways, and community arts organizations are part of that infrastructure of support for students, schools and communities. Along with science, technology, engineering and math, the arts are

part of a well-rounded education that encourages students to explore and solve problems. Looking across the state, 90% of elementary school students in suburban areas can access a stand-alone arts class; that number shrinks to 80% for students in city schools and to just 55% for rural students.<sup>43</sup> Based on these statistics, the Oregon Department of Education recommends greater partnership with community arts organizations that are integrated in neighborhoods and communities as well as a closer look at who enrolls in available science, technology, engineering, arts and math opportunities.

*Want to explore further? Turn to **Education**, page 32.*

### SOCIAL CONNECTION & BELONGING + NATURAL ENVIRONMENT



Scientists are learning more about the ways that plants and animals collectively overcome challenges and increase resilience. Decades of forest ecology research from an Oregon State University graduate show that trees support one another and communicate via roots and underground fungal networks.<sup>44</sup> In a show of cooperative intelligence, trees share nutrients, water and threat signals within and even between species during times of adversity. Recent evidence also shows that Chinook salmon are better able to navigate their journey upstream when they use group decision-making and social interaction.<sup>45</sup> They rely on their sense of smell and an innate map to sense where they were born. When faced with a fork in the stream, salmon will tread water and take time to sense which direction will lead them home, and then move to one side of the stream or the other, as if voting.<sup>46</sup> Typically, the more salmon are involved in the decision, the better the group does in reaching their destination. These findings have implications for how we harvest trees, how we build dams and fishing ladders, and how we look to the natural world for inspiration.

*Want to explore further? Turn to **Natural Environment**, page 76.*

## SECTION 1 ENDNOTES

- 1 Oregon Values and Beliefs Center. (2022, November 29). *Neighborhood and community*. <https://oregonvbc.org/neighborliness-and-community/>
- 2 National Academies of Sciences, Engineering, and Medicine. (2021). *Enhancing community resilience through social capital and connectedness: Stronger together!* The National Academies Press.
- 3 Aldrich, D.P., & Meyer, M.A. (2015). Social capital and community resilience. *American Behavioral Scientist*, 59(2). <https://doi.org/10.1177/0002764214550299>
- 4 Carr, E.W., Reece, A., Kellerman, G.R., & Robichaux, R. (2019, December 16). The value of belonging at work. *Harvard Business Review*. <https://hbr.org/2019/12/the-value-of-belonging-at-work>
- 5 Pastor, M., Speer, P., Gupta, J., Han, H., & Ito, J. (2022, July 13). *Community power and health equity: Closing the gap between scholarship and practice*. National Academies of Medicine. <https://nam.edu/community-power-and-health-equity-closing-the-gap-between-scholarship-and-practice/>
- 6 Sawhill, I.V. (2020). *Social capital: Why we need it and how we can create more of it*. Brookings Institution. <https://www.brookings.edu/articles/social-capital-why-we-need-it-and-how-we-can-create-more-of-it/>
- 7 Emery, M.E., & Flora, C. (2006). Spiraling-up: Mapping community transformation with community capitals framework. *Community Development*, 37(1), 19–35. <https://doi.org/10.1080/15575330609490152>
- 8 Bissel, E. (2019). *Notes on a cultural strategy for belonging*. Othering & Belonging Institute at University of California, Berkeley. <https://belonging.berkeley.edu/notesonaculturalstrategy>
- 9 National Endowment for the Arts. (n.d.). *Health and well-being*. <https://www.arts.gov/impact/arts-and-health>
- 10 Penn Social Policy & Practice. (2017, March 9). *New research shows how arts and culture improve health, safety and well-being*. <https://www.sp2.upenn.edu/new-research-shows-arts-culture-improve-health-safety-well/>
- 11 Makridis, C.A., & Parassidis, S. (2021, August 24). *Reclaiming arts and culture in education: The fundamental importance of the fine arts*. American Enterprise Institute. <https://www.aei.org/research-products/report/reclaiming-arts-and-culture-in-education-the-fundamental-importance-of-the-fine-arts/>
- 12 Stern, M.J., & Seifert, S.C. (2008). *From a creative economy to a creative society*. Grantmakers in the Arts. <https://www.giarts.org/article/culture-and-community-revitalization-collaboration>
- 13 National Endowment for the Arts. (2023, March 15). *New data show economic activity of the U.S. arts & cultural sector in 2021*. <https://www.arts.gov/news/press-releases/2023/new-data-show-economic-activity-us-arts-cultural-sector-2021>
- 14 Murthy, V.H. (2023). *Our epidemic of loneliness and isolation: The U.S. Surgeon General's advisory on the healing effects of social connection and community*. U.S. Department of Health and Human Services. <https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf>
- 15 Holt-Lunstad, J., Robles, T.F., & Sbarra, D.A. (2017). Advancing social connection as a public health priority in the United States. *American Psychologist*, 72(6), 517–530. <https://doi.org/10.1037/amp0000103>
- 16 Murthy, V.H. (2023). *Our epidemic of loneliness and isolation: The U.S. Surgeon General's advisory on the healing effects of social connection and community*. U.S. Department of Health and Human Services.
- 17 Campbell, D.E. (2013). Social networks and political participation. *Annual Review of Political Science*, 16(1), 33–48. <https://doi.org/10.1146/annurev-polisci-033011-201728>
- 18 National Research Council. (2014). *Civic engagement and social cohesion: Measuring dimensions of social capital to inform policy*. The National Academies Press. <https://doi.org/10.17226/18831>
- 19 Oregon Values and Beliefs Center. (2022, November 29). *Neighborhood and community*. <https://oregonvbc.org/neighborliness-and-community/>
- 20 Klinenberg, E. (2019). *Palaces for the people: How social infrastructure can help fight inequality, polarization, and the decline of civic life*. Crown Publishing Group.
- 21 Opportunity Insights. (2022). *Social capital atlas*. <https://socialcapital.org/>
- 22 Chetty, R., Jackson, M.O., et al. (2022). Social capital I: Measurement and associations with economic mobility. *Nature*, 608, 108–121. <https://doi.org/10.1038/s41586-022-04996-4>
- 23 AmeriCorps. (n.d.). *Oregon highlights*. Source data: U.S. Census Bureau. (2021). *Current population survey civic engagement and volunteering supplement*. <https://americorps.gov/about/our-impact/volunteering-civic-life/or>
- 24 Jackson, M.R., Kabwasa-Green, F., & Herranz, J. (2006). *Cultural vitality in communities: Interpretation and indicators*. The Urban Institute. <https://www.urban.org/sites/default/files/publication/50676/311392-Cultural-Vitality-in-Communities-Interpretation-and-Indicators.PDF>
- 25 Weiss, R., Anderson, P.E., & Christeson, C. (2020). *Artists at the community development table*. Americans for the Arts. [https://www.americansforthearts.org/sites/default/files/pdf/2020/networks-and-councils/local-arts-network/AFTA\\_ACDT\\_Standard\\_020420\\_digital\\_FINAL.pdf](https://www.americansforthearts.org/sites/default/files/pdf/2020/networks-and-councils/local-arts-network/AFTA_ACDT_Standard_020420_digital_FINAL.pdf)
- 26 SMU DataArts. (2023). *The arts vibrancy index report and map*. <https://culturaldata.org/what-we-do/arts-vibrancy-index/>
- 27 National Assembly of State Arts Agencies. (2024). *Creative economy state profiles*. Source data: U.S. Bureau of Economic Analysis & National Assembly of State Arts Agencies. (2024). [2022 data]. [https://nasaa-arts.org/nasaa\\_research/creative-economy-state-profiles/](https://nasaa-arts.org/nasaa_research/creative-economy-state-profiles/)



- 28 Ibid.
- 29 NORC at the University of Chicago. (2021). *Brightening the spotlight: The practices and needs of American Indian, Native Hawaiian, and Alaska Native creators in the performing arts*. First Peoples Fund. <https://drive.google.com/file/d/10Z2ZuKt3PTM076w5fjn5kyGPFYqFRCi2/view>
- 30 Bagnall A.M., Southby, K., Jones, R., Pennington, A., South, J., & Corcoran, R. (2023, January). *Systematic review of community infrastructure (place and space) to boost social relations and community wellbeing: Five year refresh: Technical summary report January 2023*. What Works Centre for Wellbeing. <https://whatworkswellbeing.org/wp-content/uploads/2023/01/Places-and-Spaces-Review-Refresh-31-Jan-2023-final-with-logos.pdf>
- 31 Stern, M.J., & Seifert, S.C. (2008). *From a creative economy to a creative society*. Grantmakers in the Arts.
- 32 Jackson, M.R., Kabwasa-Green, F., & Herranz, J. (2003). *Arts and culture in communities: A framework for measurement*. The Urban Institute. <https://www.urban.org/sites/default/files/publication/59196/311008-Art-and-Culture-in-Communities-A-Framework-for-Measurement.PDF>
- 33 Stern, M.J., & Seifert, S.C. (2008). *From a creative economy to a creative society*. Grantmakers in the Arts.
- 34 Lawrence, R.G., Tabor, C., Nicolosi, M., & DeVigal, A. (2022, October). *Assessing Oregon's local news and information ecosystem 2022: Connecting news, information, and civic health: Executive summary*. Agora Journalism Center at University of Oregon School of Journalism and Communication. <https://agorajournalism.center/newsecosystem22/>
- 35 Impact Architects. (n.d.). *Healthy news and information ecosystems: A diagnostic framework*. <http://www.theimpactarchitects.com/ecosystems>
- 36 Oregon Values and Beliefs Center. (2022, October 17). *Local news and community information*. <https://oregonvbc.org/local-news-and-community-information/>
- 37 Impact Architects. (n.d.). *Healthy news and information ecosystems: A diagnostic framework*.
- 38 Davis, R. (2023, May 30). Publishing prejudice: Flooded and forgotten. *The Oregonian*. <https://projects.oregonlive.com/publishing-prejudice/>
- 39 Fund for Rural Journalism. (n.d). *We're here for journalism*. <https://www.forjournalism.org/>
- 40 Pew Research Center. (2023, November 10). *Newspapers fact sheet*. <https://www.pewresearch.org/journalism/fact-sheet/newspapers/>
- 41 Lake County Examiner. (2022, March 28). New non-profit to support rural Oregon newspapers. [https://www.lakecountyexam.com/new-non-profit-to-support-rural-oregon-newspapers/article\\_09e81bbb-54f5-5b88-98e8-f33f6a0cf27e.html](https://www.lakecountyexam.com/new-non-profit-to-support-rural-oregon-newspapers/article_09e81bbb-54f5-5b88-98e8-f33f6a0cf27e.html)
- 42 Lawrence, R.G., Tabor, C., Nicolosi, M., & DeVigal, A. (2022, October). *Assessing Oregon's local news & information ecosystem 2022: Connecting news, information, and civic health: Executive summary*. Agora Journalism Center at University of Oregon School of Journalism and Communication.
- 43 Oregon Department of Education. (2022, January). *Well Rounded Access Program needs assessment: A report on access to STEAM and the arts for K–12 students in Oregon*. <https://www.oregon.gov/ode/educator-resources/Documents/WRAP%20Needs%20Assessment%20January%202022.pdf>
- 44 Simard, S. (2021). *Finding the mother tree: Discovering the wisdom of the forest*. Alfred A. Knopf.
- 45 Okasaki, C., Keefer, M.L., Westley, P.A.H., & Berdahl, A.M. (2020). Collective navigation can facilitate passage through human-made barriers by homeward migrating Pacific salmon. *Proceedings of the Royal Society B*, 287(1937), 2020–2137. <https://doi.org/10.1098/rspb.2020.2137>
- 46 Berdahl, A., Westley, P.A.H., & Quinn, T.P. (2017). Social interactions shape the timing of spawning migrations in an anadromous fish. *Animal Behaviour*, 126, 221–229. <https://doi.org/10.1016/j.anbehav.2017.01.020>



## SECTION 2

# Economy

### *In this chapter*

- Access to wealth
- Living-wage work
- Income supports
- Economic connectedness
- Connection points

**Looking at economic well-being is a primary way to assess how well communities are doing, and for good reason: The ability to meet needs like housing, food and health care depends on economic factors like jobs, income and relevant markets for goods and services. Income and wealth facilitate access to myriad social, economic, educational and recreational opportunities and resources across our lifetimes.**



Economic well-being has well-documented links to health and mental health outcomes, including our life expectancy and risk of disease.<sup>1</sup> A substantial body of research shows that infusions of cash can produce an array of benefits for children well into adulthood.<sup>2</sup> When a child has a savings account—even one with less than \$500 in it—research shows they are more likely to get to college and beyond, underscoring how financial assets can unlock opportunity in part by shaping our dreams and expectations.<sup>3,4</sup> As adults, income and wealth continue to help determine our power and influence in society. Conversely, experiences of poverty can limit participation in civic life, both through a lack of financial

# Income and wealth facilitate access to an array of social, economic, educational and recreational opportunities and resources across our lifetimes.

resources and the associated time costs of navigating the world without them.<sup>5</sup> These combined effects influence the stability and well-being of whole communities.

We can also see economic factors driving well-being at the community level. This can occur through the presence or loss of thriving industries and business sectors, as well as accompanying spending for public services. In Oregon, the timber industry's decline is a still-reverberating example, especially in rural communities. Although some former logging communities are thriving, others are still struggling to redefine economic vitality.

The technology industry, on the other hand, is a prime example of growth, though one largely centered in more urban areas. Beginning in the middle of the 20th century, a combination of homegrown technology companies and relocating out-of-state businesses formed what has become known as our "Silicon Forest." Today, this sector accounts for over 10% of Oregon's economy.<sup>6</sup>

For many of us, the idea of the "American Dream" shapes our view of economic systems. It assumes that the opportunity to build wealth is available to all. However, research shows this opportunity is increasingly limited by the disparate impacts of systems and institutions and by the characteristics of the communities in which we live. For children today, childhood circumstances largely determine earnings in adulthood (a relationship we explored deeply in past TOP reports).<sup>7</sup> In a recent statewide survey, 80% of Oregonians said that our economic system favors powerful interests.<sup>8</sup>

Oregonians are also telling alternative stories about what our economic systems can be.

Research from the Coalition of Communities of Color shows that for many Oregonians of color, wealth is partly about socioeconomic mobility, but it is also more than that. Black Oregonians who participated in the research spoke about democratized economic systems that are built from the ground up by community members. Native and indigenous Oregonians told stories of regenerative economies in which wealthy people draw on their physical health and material resources to care for generations to come. And Latine Oregonians shared narratives centered on worker rights and protections that enable not just survival but also having purpose, building relationships and handing down knowledge.<sup>9</sup>

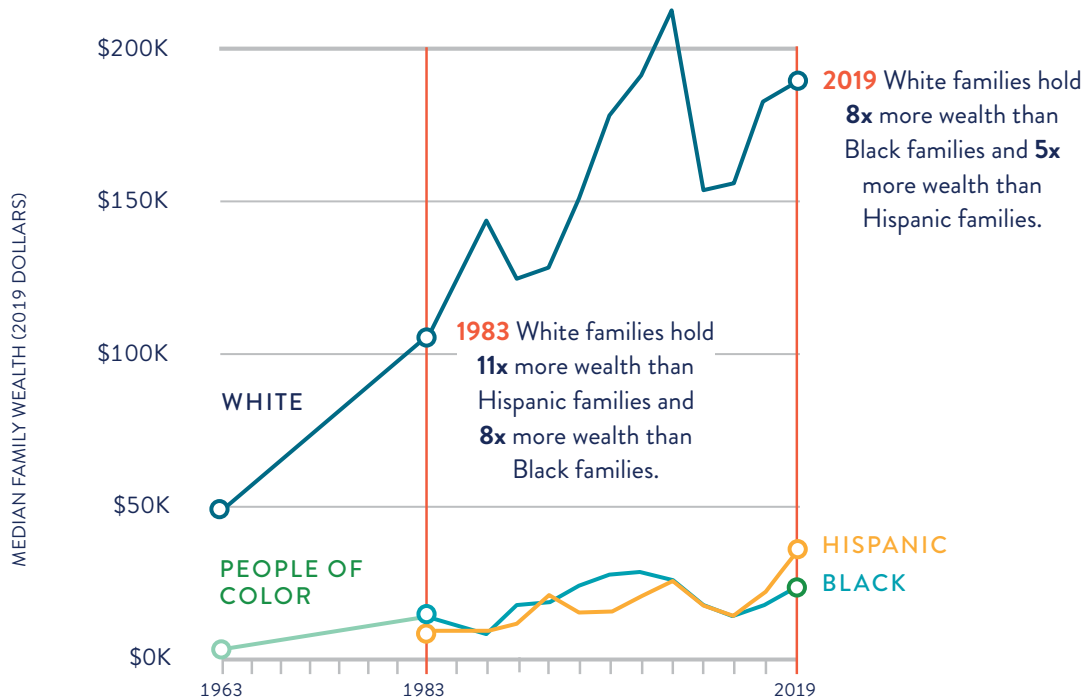
These threads are reinforced by the Latino/a/x Community Wealth Building Network's findings from a two-year, in-depth learning process in Oregon, which encourage thinking beyond traditional economic development to recognize interconnected levers for prosperity like education, entrepreneurship, housing and land.<sup>10</sup>

In this report, we are also shifting our view. We are used to thinking about "economic well-being" by looking at individual measures such as household income to determine life success. Here, we are beginning by thinking about *all* the things that matter for people, families and communities to thrive. And we ask: What are some key characteristics of our economic structures and systems that shape our collective well-being?



## FIGURE 5. U.S. wealth disparities have remained entrenched and even widened over the last 50 years.

Historical analysis of average family wealth from 1963 to 2019 shows a persistent gap between the relative wealth of white, Black and Hispanic families. Recent data\* suggests these disparities continue to widen, with white families holding 9 times more wealth than Black families and 5 times more than Hispanic families as of December 2021.



**Sources:** Kijakazi et al. (2021). *How policymakers can ensure the COVID-19 pandemic doesn't widen the racial wealth gap*. Urban Institute. <https://www.urban.org/urban-wire/how-policymakers-can-ensure-covid-19-pandemic-doesnt-widen-racial-wealth-gap>; \*Kochhar, R., & Moslimani, M. (2023). *Wealth gaps across racial and ethnic groups*. Pew Research Center. <https://www.pewresearch.org/race-ethnicity/2023/12/04/wealth-gaps-across-racial-and-ethnic-groups/#:~:text=Asian%20households%20overall%20had%20more>

## Additional Economic Measures

As is true across this report, the indicators explored in this section are by no means comprehensive. However, this may particularly stand out here as many of us are used to seeing news reports on additional indicators that measure key parts of our local, regional and national economic systems, often in an effort to explain the state of the economy and whether we are growing or headed for recession. These can range from looking at the formation or loss of businesses or industries in an area to tracking gross domestic product (GDP), which measures goods and services produced.

The work of Nobel-winning economists Amartya Sen and Joseph Stiglitz, among others, has spurred increasing

recognition that measures like GDP do not account for key components of our collective well-being.

There is no straightforward way to capture well-being in a single number, and within that context GDP has been commonly used as an insufficient proxy for both our economic and societal well-being. However, it leaves out key components for well-being like our life satisfaction or happiness and the preservation or depletion of key natural resources. In shifting our view in this report to consider well-being broadly and examine the interconnectedness of our systems, we are part of a global conversation broadening definitions of “progress.”



## Discussion of Key Indicators

### ACCESS TO WEALTH

In Oregon, and across the country, your access to wealth and wealth-building activities depends largely on your race. This is *the most important factor* for understanding wealth differences.<sup>11</sup>

Though disparities in income persist, wealth is arguably more important from a structural perspective: It measures a family's total assets versus an annual inflow of money and can be accumulated over a lifetime (or even over generations, determining the starting line for the next generation). Research examining multigenerational patterns finds that Black families are over 16 times more likely than white families to experience poverty over three generations.<sup>12</sup>

#### Wealth inequality in Oregon

Recognizing the need to better understand wealth inequality in our state, OCF partnered with Meyer Memorial Trust to commission and collaborate with the Coalition of Communities of Color on in-depth research.<sup>13</sup> In addition to generating the community narratives about wealth discussed at the top of this chapter, this research takes stock of existing data, including considerable gaps in what we know. It shows how generations of policies provided white Oregonians with “wealth starter kits” that included land, subsidies, government-backed loans and a social safety net — and excluded communities of color from the same opportunities.

At the same time, “wealth-stripping” mechanisms have disproportionately driven communities of color into debt (e.g., through regressive tax codes and predatory lending, fines and fees). Today, the lasting legacies of these discriminatory practices continue to perpetuate the wealth gap. Disparities have remained entrenched — or even widened — over the last 60 years, with white families now holding 8 times more wealth than Black families and 5 times more than Hispanic families. (See Figure

5, page 22.) Failures to adequately survey Native and Indigenous Americans prevent us and others from reporting similar figures for this group, though analysis of the limited data we have suggests a stark disparity.<sup>14</sup>

These gaps in wealth disadvantage *all* Oregonians. If our state's racial gaps in earnings, hours worked, educational attainment and employment were closed, the Federal Reserve estimates that our GDP would have increased by \$4.1 billion annually from 2005 to 2019.<sup>15</sup>

#### Access to capital









The availability of capital to support entrepreneurship and small business is a critical component of this landscape, along with homeownership opportunities, savings from earnings, intergenerational transfers from family, and investments in education. Access to capital allows businesses and entrepreneurs to finance their ideas, expand their operations and create jobs. Since 2012, the *Oregon Capital Scan* — an ongoing research series sponsored by OCF and partnering organizations — has examined the landscape of available capital in the state. The scan explores questions like “is Oregon's capital landscape similar to other states of our size?”

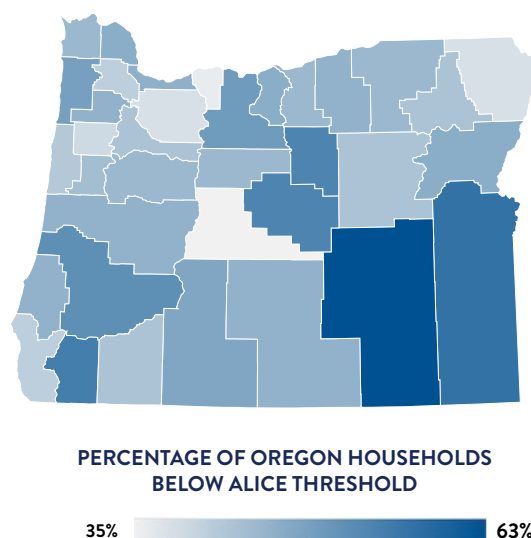
Unfortunately, the answer continues to be *no*. And minority-owned businesses face particular challenges accessing capital in Oregon, including for state government contracts.<sup>16,17</sup> National research reinforces this finding: Entrepreneurs of color face greater barriers to obtaining traditional bank loans in the amounts they seek, have less access to government funding resources, and often turn to nontraditional lenders like community development financial institutions that do not have enough resources for the need.<sup>18,19,20</sup> This landscape constrains the size, growth and sustainability of minority-owned businesses, causing them to face higher failure rates despite starting at a higher rate than those of white entrepreneurs.<sup>21</sup>

Research like this helps to fill critical gaps in our understanding of the systems and resources that support or hinder Oregonians in accessing and building wealth. But understanding our current

**FIGURE 6. In 2021, 44% of Oregon families did not have enough income to afford a basic survival budget.**

This map shows the percentage of families for each county who could not meet county-specific budgetary minimums as estimated by United for ALICE. The accompanying table shows a statewide basic survival budget.

BASIC SURVIVAL BUDGET		1 ADULT	FAMILY OF 4
	HOUSING	RENT \$651	RENT \$836
		UTILITIES \$154	UTILITIES \$292
	CHILD CARE	\$0	\$1,317
	FOOD	\$460	\$1,254
	TRANSPORTATION	\$350	\$826
	HEALTH CARE	\$146	\$808
	TECHNOLOGY	\$75	\$110
	MISCELLANEOUS	\$184	\$544
	TAXES	PAYMENT \$257	PAYMENT \$1,359
		CREDIT \$0	CREDIT -\$1,231
MONTHLY TOTAL		\$2,277	\$6,115



Source: United for ALICE. (2023). <https://www.unitedforalice.org/state-overview/Oregon>

landscape is just one piece of the puzzle. Research also shows how Oregonians are reimagining economic supports and systems, using community experience and knowledge to develop new wealth-building strategies while simultaneously driving bigger-picture change.<sup>22, 23</sup>

## LIVING-WAGE WORK

People across our state are facing a mismatch between the cost of living and what they can earn from work. In a 2022 survey, nearly two-thirds (64%) of Oregonians said they were worried about their personal financial situation. A respondent from Douglas County shared that “the minimum wage doesn’t reflect minimum living requirements. Food prices are soaring. My friends and family are suffering through financial impact.” Another, from Coos County, said, “Oregon’s housing price is way too expensive compared to the average family’s income. Most Oregonians have to live check to check and can only afford the essentials, because of how expensive housing is.”<sup>24</sup>

Quantitatively measuring the extent of this mismatch is not a straightforward research exercise. One side of the equation entails determining the costs necessary to get by, which vary by where we live, our family makeup and our need for services like health or child care.

The estimated costs for a family of four in Oregon range from \$26,500 using the federal poverty threshold to \$110,076 based on Massachusetts Institute of Technology’s living-wage calculator.<sup>25, 26</sup> The federal threshold is widely recognized as flawed due to its outdated expectations for expenses; other measures seek to define a more realistic standard of living.<sup>27</sup>

United for ALICE (*asset-limited, income-constrained, employed*) has taken a deep dive into this issue for Oregon. (See Figure 6, above.) They estimate that in 2021, nearly 745,000 households (or 44% of families) did not have enough income for a basic survival budget (i.e., a set of bare-minimum costs for needs like housing, food and health care).





Rising costs are an important driver here. Unsurprisingly, housing affordability was the top concern for families in this group. The cost of child care is also increasingly important. For families with two children, child care services can now be even more expensive than housing.<sup>28</sup>

Stories of increasing costs surface throughout this report. In *Housing*, we see how decades of housing underproduction in Oregon have contributed to outsized housing costs. In *Health and Education*, we see the costs of care and college climbing faster than incomes. And our spotlight on child care further explores the complex interplay between what can be insurmountably high costs for available slots and unfeasibly low compensation for workers.

On the other side of the equation are available earnings in the labor market. Our unemployment rate reached its all-time record low of 3.4% in July 2023.<sup>29</sup> This shows that almost everyone who wants to get a job can do so. However, these jobs frequently do not pay enough. For many Oregon families and communities, the decline of the timber industry is a prime example: Older generations could earn a living wage working in timber, but today the jobs that have offset those opportunities may pay considerably less.<sup>30</sup>

It's the same story in child care: Many workers providing this service simply do not earn enough to make ends meet for their own families. As a group, they had a median wage of \$14.33 in Oregon in 2021, and 41% could not afford a survival budget.

They are not alone. Many service workers, laborers, teaching assistants and office clerks find their families similarly squeezed.<sup>31</sup> Among farmworker families in Oregon — who are often left out of discussions like this due to data constraints — the squeeze of low pay in the face of high costs may be particularly pronounced.<sup>32</sup>

## INCOME SUPPORTS

When available jobs do not pay enough to cover costs, public supports and benefits can help bridge the gap. Research on temporary expansions of federal assistance programs during the pandemic shows that these infusions of support made a difference in reducing poverty.<sup>33</sup> For example, the federally funded child tax credit led to a significant reduction in child poverty, keeping 3.7 million children out of poverty nationwide in December 2021.<sup>34</sup> As these temporary measures expired, the gaps in already stretched family budgets have widened. Our state's new "Oregon Kids Credit" aims to fill some of this gap and could benefit more than 50,000 children across the state, including many in rural areas.<sup>35</sup>

We can also see how Oregon works to make the most of an inadequate federal safety net. Consider the Supplemental Nutritional Assistance Program (SNAP), which helps ensure that low-income families do not go hungry: On average, each member of a SNAP family can receive \$5.97 a day, and this small amount makes a big difference. Each year, SNAP lifts 100,000 Oregonians out of poverty — including 45,000 children — while also spurring our economy. The U.S. Department of Agriculture estimates that \$1 of SNAP benefits generates \$1.50 in economic activity when the economy is weak.<sup>36</sup>

However, traditional U.S. public assistance programs fail to reach all who are struggling, due in part to income and asset limits. SNAP eligibility is determined by considering income, expenses and other criteria. Oregon consistently achieves one of the nation's highest SNAP participation rates, effectively reaching 95–100% of eligible people.<sup>37</sup> (See *Figure 7, page 27.*) Yet if we return to the group discussed above — the 745,000 Oregon families without sufficient income to afford a survival budget, according to the United for ALICE analysis — we find that

SNAP reaches just 30%<sup>38</sup> The Oregon Health Plan (Medicaid) and Temporary Assistance for Needy Families programs provide further examples of this problem and how Oregon makes the most of it.

The earned income tax credit (EITC) is widely recognized by researchers and policymakers as one of our nation's most effective public antipoverty programs, but it too fails to reach many Oregon families.<sup>39</sup> Like SNAP, EITC payments target families with especially low incomes, leaving out others who could benefit.

The struggling Oregonians in the United for ALICE analysis illustrate this gap: Although a survival budget for an Oregon family of two parents and two children ranges from \$66,984 to \$73,380 depending on child care needs, EITC benefits in 2024 can only extend to those earning under \$59,478.<sup>40,41</sup> These benefits have also not been fully used even by eligible families. Qualified households often face barriers due to a lack of information and access; this is especially true for those who have not filed taxes before; are in families with mixed immigration status; or do not have reliable internet, stable housing or a bank account.<sup>42</sup>

The latest IRS estimates show that about 68% of eligible Oregonians received the EITC for tax year 2020, well below the national average of 76%. (See *Figure 8, page 27.*) While the data showed notable improvement in tax year 2019 — when the state reached 80% of eligible taxpayers — Oregon has frequently had one of the nation's lowest receipt rates over the last decade. In other words, tens of thousands of Oregonians remain eligible for the EITC but are not yet receiving it.

## ECONOMIC CONNECTEDNESS

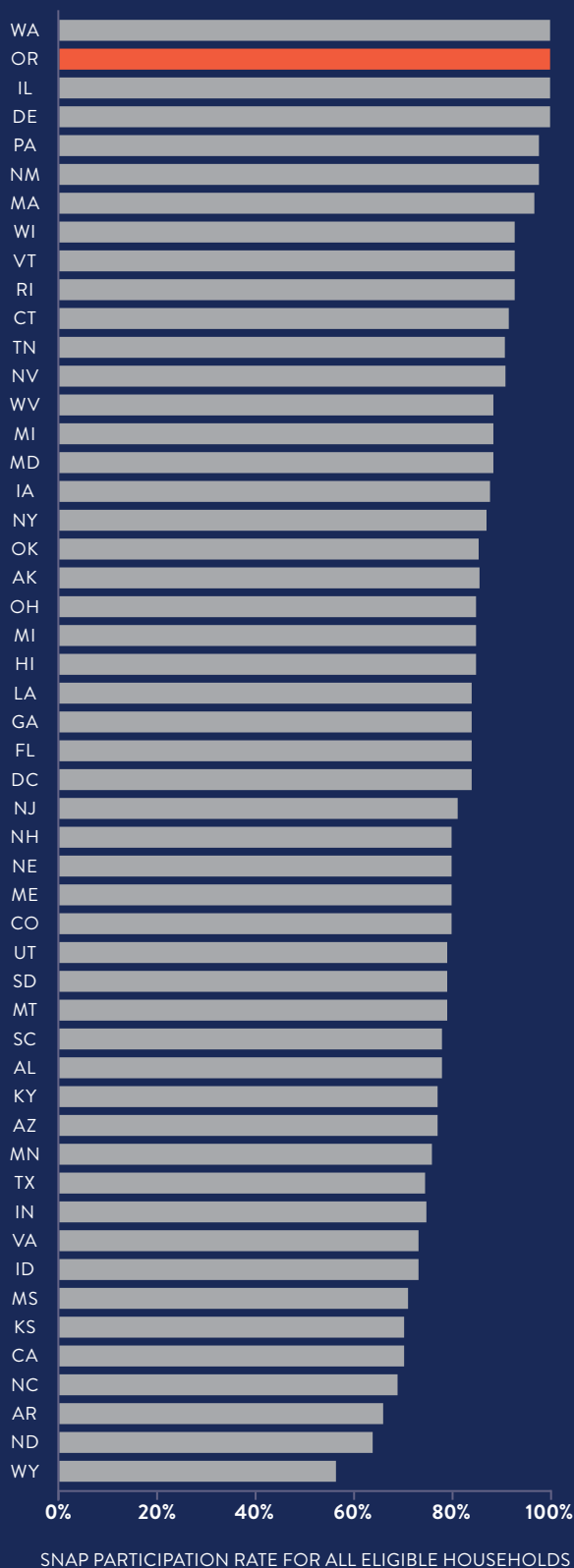
In prior TOP research, we explored the neighborhood-level factors that matter most for economic mobility, an important ingredient for community well-being. Working with the Opportunity Insights (OI) team at Harvard, we examined factors like school quality, job availability, social capital and neighborhood integration. New OI research suggests one community characteristic may be especially crucial: friendships that cross class divides.<sup>43,44</sup>

Friendships or social connections may not immediately strike readers as an aspect of our economic



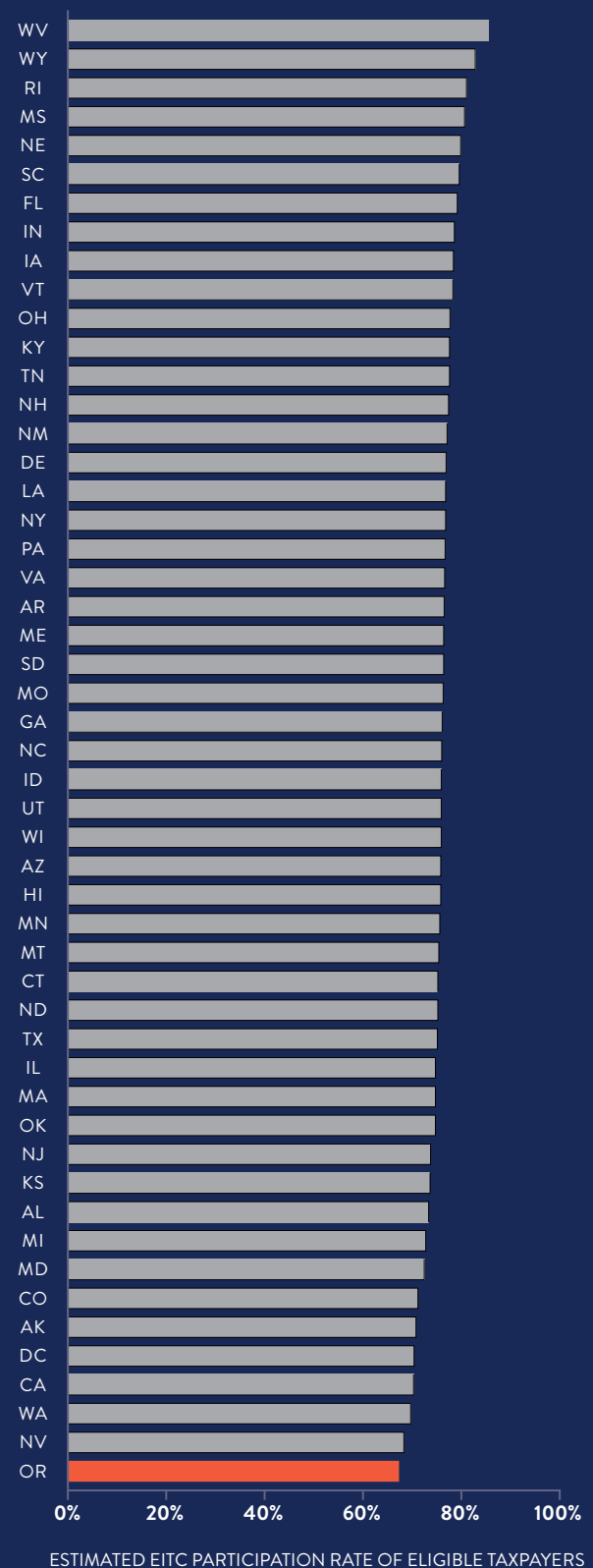
Family Promise of Tualatin Valley

**FIGURE 7.** 100% of eligible Oregonians received SNAP benefits in 2019, outperforming most other states.



**Source:** U.S. Department of Agriculture, Food and Nutrition Services. (n.d.). *SNAP participation rates by state, all eligible people (FY 2020)*. <https://www.fns.usda.gov/usamap>

**FIGURE 8.** Roughly 68% of eligible Oregonians received EITC benefits in tax year 2020 — the lowest proportion of any state that year.



**Source:** Internal Revenue Service. (n.d.). *State EITC participation, 2013 through 2020*. <https://www.eitc.irs.gov/eitc-central/participation-rate-by-state/eitc-participation-rate-by-states>



systems. Indeed, this discussion could live as easily in *Social Connection and Belonging*. But this indicator may resonate for anyone who has found a job opportunity through networking or felt shut out of opportunities due to a lack of connections. Additional research reinforces the importance of social networks not only for finding jobs but also for maximizing pay and tenure.<sup>45</sup> We discuss cross-class connectedness here given its emerging importance for economic mobility, further underscoring the need to think broadly about the interconnected systems that support well-being. (See Figure 9, below.)

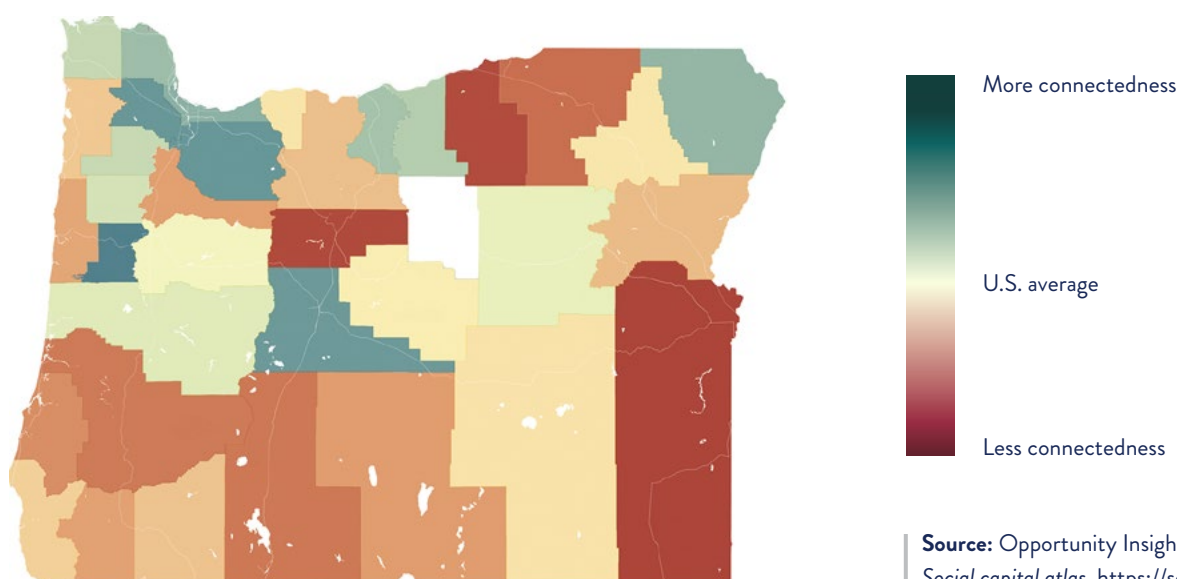
For this research, the OI team drew on Facebook data for 72.2 million users across the country. At the community level, they found that cross-class connections have a greater impact on economic mobility than other factors like racial segregation, economic inequality or education. This is likely due to opportunities these connections unlock

through networking or information about possibilities and how to navigate them. Nationally, Americans tend to make friends with a similar socioeconomic status; higher-income people often find friends in college while lower-income people make friends with neighbors.

With income inequality in Oregon at an all-time high, it may not be surprising to see a lack of friendships bridging these divides in many places.<sup>46</sup> However, higher levels of economic connectedness exist in places like Wallowa and Washington counties, both of which contain communities we explored in depth for past TOP research.<sup>47</sup> Examples of economic connections in these communities include internships with local businesses, mentoring programs and leadership development opportunities. Creating more connections across class lines, like those that exist in these Oregon counties, looks to be a promising path for strengthening opportunities and communities. ■

**FIGURE 9. Higher rates of economic connectedness — like those seen in the green-shaded Oregon counties — may be especially crucial for economic mobility.**

*This map shows rates of economic connectedness, which are measured as the share of high-income friends among people with low incomes. In green areas, low-income Oregonians have networks that are made up of more high-income friends. (Note: No data is reported for Wheeler County due to insufficient population size in this dataset.)*



**Source:** Opportunity Insights. (2022). *Social capital atlas*. <https://socialcapital.org/>



REDD Businesses, Portland



## Exploring Connection Points

### ECONOMY + HEALTH



The coronavirus pandemic was both a public health crisis and an economic one, underscoring just how tightly these systems are intertwined. COVID-19 produced significant economic shocks for supply chains, businesses, the labor market and households.<sup>48</sup> The vital importance of essential workers for our health and economy became clear, as did their inequitable compensation, exposure to health risks and experience of health impacts — especially for workers of color and their families.<sup>49</sup> In Oregon, an ongoing workforce shortage impacts hospitals, access to behavioral health care and other services, particularly in rural and frontier communities where the cost of housing is high and economic opportunities for spouses are sparse.<sup>50</sup>

*Want to explore further? Turn to **Health**, page 52.*

### ECONOMY + SOCIAL CONNECTION & BELONGING



Oregonians have many opportunities to shop local and support small businesses. Research shows these choices are investments in our communities, keeping more resources in our local economies while also bolstering social capital and civic engagement.<sup>51</sup> At the same time, limited access to capital can affect our creative and cultural landscape in addition to our entrepreneurial ecosystem, with investors and businesses playing important roles in sustaining arts and culture.

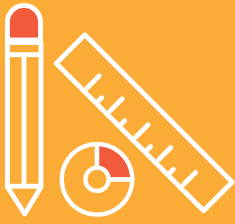
*Want to explore further? Turn to **Social Connection & Belonging**, page 10.*

## SECTION 2 ENDNOTES

- 1 Woolf, S.H., Aron, L.Y., et al. (2015, April 13). *How are income and wealth linked to health and longevity?* Urban Institute. <https://www.urban.org/research/publication/how-are-income-and-wealth-linked-health-and-longevity>
- 2 Marr, C., Huang, C., Sherman, A., & Debot, B. (2015). *EITC and child tax credit promote work, reduce poverty, and support children's development, research finds*. Center on Budget and Policy Priorities. <https://www.cbpp.org/research/federal-tax/eitc-and-child-tax-credit-promote-work-reduce-poverty-and-support-childrens>
- 3 Elliott, W. (2013, March). Small-dollar children's savings accounts and children's college outcomes. *Children and Youth Services Review*, 35(3), 572–585. <https://doi.org/10.1016/j.childyouth.2012.12.015>
- 4 Markoff, S., Loya, R., & Santos, J. (2018). *Quick guide to CSA research: An overview of evidence on children's savings accounts*. Prosperity Now. [https://prosperitynow.org/sites/default/files/resource/2018-10/CSA\\_Quick\\_Guide\\_FINAL.pdf](https://prosperitynow.org/sites/default/files/resource/2018-10/CSA_Quick_Guide_FINAL.pdf)
- 5 Mullainathan, S., & Shafir, E. (2013). *Scarcity: Why having too little means so much*. Times Books. <https://www.hks.harvard.edu/centers/cid/publications/books/scarcity-why-having-too-little-means-so-much>
- 6 Lehner, J. (2022, July). *Oregon's high-tech sector*. Oregon Office of Economic Analysis. <https://oregoneconomicanalysis.com/2022/07/20/oregons-high-tech-sector-july-2022/>
- 7 Ruffenach, C., Brandt, M., & Seel, B. (2020). *Cornerstones: Economic mobility and belonging in Oregon*. Oregon Community Foundation. <https://oregoncf.org/community-impact/research/top-report-2020/>
- 8 Oregon Values and Beliefs Center. (2024, February 23). *Election reform*. <https://oregonvbc.org/election-reform/>
- 9 Mohsini, M., Msibi, K., & Lopez, A. (2022). *Addressing the racial wealth gap*. Coalition of Communities of Color. [https://www.coalitioncommunitiescolor.org/s/RWG\\_FullReport\\_v2\\_DateNote-1.pdf](https://www.coalitioncommunitiescolor.org/s/RWG_FullReport_v2_DateNote-1.pdf)
- 10 Rodriguez, J.S. (2021, April). *From survival to stability and freedom: A vision of collective community wealth*. Latino/a/x Community Wealth Building Network. [https://oregoncf.org/assets/LPP/From-Survival-to-Stability-and-Freedom\\_FinalVersion.pdf](https://oregoncf.org/assets/LPP/From-Survival-to-Stability-and-Freedom_FinalVersion.pdf)
- 11 Mohsini, M., Msibi, K., & Lopez, A. (2022). *Addressing the racial wealth gap*. Coalition of Communities of Color.
- 12 Winship, S., Pulliam, C., Shiro, A.G., & Reeves, R. (2021). *Long shadows: The Black-white gap in multigenerational poverty*. American Enterprise Institute. <https://www.aei.org/research-products/report/long-shadows-the-black-white-gap-in-multigenerational-poverty/>
- 13 Mohsini, M., Msibi, K., & Lopez, A. (2022). *Addressing the racial wealth gap*. Coalition of Communities of Color.
- 14 Asante-Muhammad, D., Kamra, E., Sanchez, C., Ramirez, K., & Tec, R. (2022, February 14). *Racial wealth snapshot: Native Americans*. National Community Reinvestment Coalition. <https://ncrc.org/racial-wealth-snapshot-native-americans/>
- 15 Federal Reserve Community Development Staff. (2021, June 21). *How much could US states gain by closing racial and gender gaps in the labor market?* Fed Communities. <https://fedcommunities.org/data/closethegaps/>
- 16 Lundquist College of Business and School of Planning, Public Policy, and Management. (2022). *Oregon capital scan 2022*. University of Oregon. <https://oregoncf.org/community-impact/research/capital-scan-2022/>
- 17 BBC Research & Consulting. (2023, November). *2023 state of Oregon disparity study: Final report*. [https://www.oregon.gov/das/Docs/2023%20State%20of%20Oregon%20Disparity%20Study%20Final%20Report\\_November%2016%202023.pdf](https://www.oregon.gov/das/Docs/2023%20State%20of%20Oregon%20Disparity%20Study%20Final%20Report_November%2016%202023.pdf)
- 18 Misera, L. (2020, October). *An uphill battle: COVID-19's outsized toll on minority-owned firms*. Federal Reserve Bank of Cleveland. <https://doi.org/10.26509/frbc-cd-20201008>
- 19 Association for Enterprise Opportunity. (2019). *The tapestry of Black business ownership in America: Untapped opportunities for success*. [https://aeoworks.org/wp-content/uploads/2019/03/AEO\\_Black\\_Owned\\_Business\\_Report\\_02\\_16\\_17\\_FOR\\_WEB-1.pdf](https://aeoworks.org/wp-content/uploads/2019/03/AEO_Black_Owned_Business_Report_02_16_17_FOR_WEB-1.pdf)
- 20 Battisto, J., de Zeeuw, M., Landau, R., Misera, L., Sanchez, A., Wiersch, A.M., & Williams, J. (2021). *Small business credit survey: 2021 report on firms owned by people of color*. Federal Reserve Banks of Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas City, Minneapolis, New York, Philadelphia, Richmond, St. Louis and San Francisco. <https://www.newyorkfed.org/medialibrary/FedSmallBusiness/files/2021/sbcs-report-on-firms-owned-by-people-of-color>
- 21 Association for Enterprise Opportunity. (2019). *The tapestry of Black business ownership in America: Untapped opportunities for success*.
- 22 Santos, J., Gantla, S., Chun, D., & Daman, E. (2021, November). *Balance and belonging: Empowerment economics and community development at NAYA*. Brandeis University. <https://heller.brandeis.edu/iere/pdfs/racial-wealth-equity/capacd/empowerment-economics-at-naya.pdf>
- 23 Mercy Corps. (2019, December). *Case study: Community investment trust*. <https://www.mercycorps.org/research-resources/community-investment-trust-case-study>
- 24 Oregon Values and Beliefs Center. (2022, October 24). *State of the economy*. <https://oregonvbc.org/state-of-the-economy/>
- 25 U.S. Census Bureau. *Poverty thresholds*. <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>
- 26 Glasmeier, A.K. (2023) *Living-wage calculator*. Massachusetts Institute of Technology. <https://livingwage.mit.edu/states/41>
- 27 Kilduff, L. (2022, January 31). *How poverty in the United States is measured and why it matters*. Population Reference Bureau. <https://www.prb.org/resources/how-poverty-in-the-united-states-is-measured-and-why-it-matters/>
- 28 Hoopes, S., Abrahamson, A., Anglin, A., Connelly, C., Holdsworth, M., Isaac, D., Treglia, D., Assamah, D., &



- Lopez, K. (2023). *ALICE in the crosscurrents: COVID and financial hardship in Oregon*. United for ALICE. <https://www.unitedforalice.org/state-overview/Oregon>
- 29 Krumenauer, G. (2023, August 16). *Oregon's unemployment rate ties a record low at 3.4% in July*. Oregon Employment Department. <https://www.oregon.gov/employ/NewsAndMedia/Documents/2023-08-employmentInOregon.pdf>
  - 30 Lehner, J. (2019, July 25). *What replaces timber?* Oregon Office of Economic Analysis. <https://oregoneconomicanalysis.com/2019/07/25/what-replaces-timber/>
  - 31 Hoopes, S., Abrahamson, A., Anglin, A., Connelly, C., Holdsworth, M., Isaac, D., Treglia, D., Assamah, D., & Lopez, K. (2023). *ALICE in the crosscurrents: COVID and financial hardship in Oregon*. United for ALICE.
  - 32 Stamberger, J., Goodman, B., Cannon, J., & Kane, A. (2023, May). *Cultivating home: A study of farmworker housing in Hood River, Marion, Morrow, and Yamhill counties in Oregon*. Oregon Housing and Community Services Department. <https://www.oregon.gov/ohcs/development/pages/agriculture-workforce-housing.aspx>
  - 33 Center on Budget and Policy Priorities. (2023, March 6). *Robust COVID relief bolstered economy and reduced hardship for millions*. <https://www.cbpp.org/sites/default/files/3-6-23covid.pdf>
  - 34 Cox, K., Jacoby, S., & Marr, C. (2022, June 22). *Stimulus payments, Child Tax Credit expansion were critical parts of successful COVID-19 policy response*. Center on Budget and Policy Priorities. <https://www.cbpp.org/research/federal-tax/stimulus-payments-child-tax-credit-expansion-were-critical-parts-of-successful>
  - 35 Oregon Center for Public Policy. (2023, June 24). *Oregon Legislature sends landmark Oregon Kid's Credit to governor*. <https://www.ocpp.org/2023/06/24/oregon-kids-credit-governor-signature/#:~:text=House%20Bill%203235%20provides%20a,eligibility%20phases%20out%20by%20%2430%2C000>
  - 36 Hall, L., & Nchako, C. (2023, February 13). *A closer look at who benefits from SNAP: State-by-state fact sheets*. Center on Budget and Policy Priorities. <https://www.cbpp.org/research/food-assistance/a-closer-look-at-who-benefits-from-snap-state-by-state-fact-sheets#Oregon>
  - 37 U.S. Department of Agriculture, Food and Nutrition Service. *SNAP participation rates by state, all eligible people (FY2019)*. <https://www.fns.usda.gov/usamap/2019>
  - 38 Hoopes, S., Abrahamson, A., Anglin, A., Connelly, C., Holdsworth, M., Isaac, D., Treglia, D., Assamah, D., & Lopez, K. (2023). *ALICE in the crosscurrents: COVID and financial hardship in Oregon*. United for ALICE.
  - 39 Center on Budget and Policy Priorities. (2023, April 28). *Policy basics: The earned income tax credit*. <https://www.cbpp.org/research/federal-tax/the-earned-income-tax-credit>
  - 40 Hoopes, S., Abrahamson, A., Anglin, A., Connelly, C., Holdsworth, M., Isaac, D., Treglia, D., Assamah, D., & Lopez, K. (2023). *ALICE in the crosscurrents: COVID and financial hardship in Oregon*. United for ALICE.
  - 41 Internal Revenue Service. (2024, March 15). *Earned income and earned income tax credit (EITC) tables*. <https://www.irs.gov/credits-deductions/individuals/earned-income-tax-credit/earned-income-and-earned-income-tax-credit-eitc-tables>
  - 42 Bauer, J. (2022, January 27). *Oregon remains near bottom in use of EITC*. Oregon Center for Public Policy. <https://www.ocpp.org/2022/01/27/oregon-bottom-use-eitc/>
  - 43 Chetty, R., Jackson, M.O., Kuchler, T., et al. (2022). Social capital I: Measurement and associations with economic mobility. *Nature*, 608, 108–121. <https://doi.org/10.1038/s41586-022-04996-4>
  - 44 Chetty, R., Jackson, M.O., Kuchler, T., et al. (2022). Social capital II: Determinants of economic connectedness. *Nature*, 608, 122–134. <https://doi.org/10.1038/s41586-022-04997-3>
  - 45 Arbex, M., O'Dea, D., & Wiczer, D. (2016). *Network search: Climbing the job ladder faster* [Working Paper 2016-009]. Federal Reserve Bank of St. Louis. <https://doi.org/10.20955/wp.2016.009>
  - 46 Mac Innis, T. (2022, October 31). *Income inequality in Oregon hits new record*. Oregon Center for Public Policy. <https://www.ocpp.org/2022/10/31/income-inequality-oregon-hits-new-record/>
  - 47 Ruffenach, C., Brandt, M., & Seel, B. (2020). *Cornerstones: Economic mobility and belonging in Oregon*. Oregon Community Foundation. <https://oregoncf.org/community-impact/research/top-report-2020/>
  - 48 Bauer, L., Broady, K., Edelberg, W., & O'Donnell, J. (2020, September 17). *Ten facts about COVID-19 and the U.S. economy*. Brookings Institution. <https://www.brookings.edu/research/ten-facts-about-covid-19-and-the-u-s-economy/>
  - 49 Wolfe, R., Harknett, K., & Schneider, D. (2021, June 4). *Inequalities at work and the toll of COVID-19* [Health policy brief]. Health Affairs. <https://www.healthaffairs.org/doi/10.1377/hpb20210428.863621/>
  - 50 Li, T., Luck, J., Irvin, V., Peterson, C., & Kaiser, A. (2023, February). *Oregon's health care workforce needs assessment 2023*. Oregon Health Policy Board & Oregon Health Authority. <https://www.oregon.gov/oha/HPA/HP-HCW/Meeting%20Documents/5.-2023-Health-Care-Workforce-Needs-Assessment-Report-January-2023.pdf>
  - 51 Mitchell, S. (2016, January 8). *Key studies: Why independent matters*. Institute for Local Self-Reliance. <https://ilsr.org/key-studies-why-local-matters/>



## SECTION 3

# Education

### *In this chapter*

- Purposeful school funding and resources
- An experienced, supported and diverse teacher workforce
- Integrated learning for the whole child
- Postsecondary access and affordability
- Connection points

**Places like elementary schools, high schools and community colleges serve as key local connectors for communities. They expand social networks for children and parents and can even act as hubs, hosting competitions and performances in our neighborhoods and rural areas. Communities increasingly look to today's schools to supplement our food, health, child care and mental health systems.**



OMSI Black Family Science Night

And while it is not as widely recognized or measured, postsecondary education is also a way for students to give back to their communities — especially for rural and tribal youth who can apply their skills back home. Society at large also benefits with a qualified workforce, healthier populations and civic participation.<sup>1,2,3</sup>

At the individual level, research underscores the powerful role our formal education systems can play in supporting a breadth of definitions of success — for those who are able to access them. The impacts of education on careers and earnings are widely discussed and celebrated in the literature; as educational attainment increases with higher education,

# Community-based organizations play a critical role in our education landscape, and education is much more than classroom learning.

so do average earnings.<sup>4</sup> However, these benefits have not been equally available to all. Disparities in education persist, with research suggesting that our school systems are not performing well enough to lay the groundwork for success for students of color, English-language learners and students with disabilities.<sup>5,6</sup> Quality instruction, designed for these students and relevant to their experiences, can narrow this gap.<sup>7,8,9</sup>

Often, we observe and measure the success of our educational systems with individual student achievement metrics like test scores, reading proficiency, graduation rates or even postgraduation employment and earnings. But what are some of the structural conditions and measures that drive these outcomes? Many such indicators will focus on our formal education systems, providing signals on where to improve our schools to support community well-being.

Schools are also part of a broader educational ecosystem where nonprofits supplement the school day to provide after-school programs or tutoring for students who aren't getting what they need, or when we are expecting too much of schools.

Recent research from our Latino/x Student Success Community Engagement and Advocacy grant program reaffirms two core lessons that have guided much of OCF's work across the educational spectrum: Community-based organizations play a critical role in our education landscape, and education is much more than classroom learning. Community members hold a vision in which we are all students and teachers for one another.<sup>10</sup>

As with the other focus areas in this report, we are concentrating here on just a handful of meaningful indicators within education. Researchers identify a host of additional factors that directly influence students — like empowering and rigorous content, early learning and family engagement — as well as indirect factors like school leadership quality and learning-ready facilities.<sup>11</sup> Other factors, such as the deep-reaching influences of poverty and access to technology, are also foundational but are not covered in depth.



## Discussion of Key Indicators

### PURPOSEFUL SCHOOL FUNDING & RESOURCES

U.S. school funding has historically followed neighborhood wealth. This led to drastic differences in the funding available to school districts, which prompted 28 state supreme courts (including Oregon's) to review the constitutionality of school funding from 1971 to 2010.<sup>12</sup> The resulting court-mandated increases in district funding provide a rich body of evidence for how funding affects students and their communities. States and districts are reexamining funding streams, systems and newly available data to better understand what it takes to adequately resource schools and recognize underresourced areas.

Over the past 10 years, a wave of research into similar funding shifts is demonstrating powerful



links between school funding for those who need it most and student outcomes. One prominent national study has demonstrated that a 10% increase per student (throughout the public school years) improves high school graduation rates, raises earnings for students and their families by 17%, and reduces adult poverty; these impacts are most powerful for students from low-income backgrounds.<sup>13</sup> Importantly, it's not simply how many dollars are spent but how they are used and for whom. The study goes on to suggest that investments in lower student/teacher ratios, increased teacher salaries and increased instructional time can have substantial student impact.

The amount needed to achieve an “adequate” education — let alone a rigorous one — will vary based on district, neighborhood and student. Both adequacy and equity are essential threads of national and state conversations on school funding. What resources does it take to ensure a quality education for Oregon students, given differences in backgrounds, cultures and schools?

### **Adequate funding for Oregon school districts**

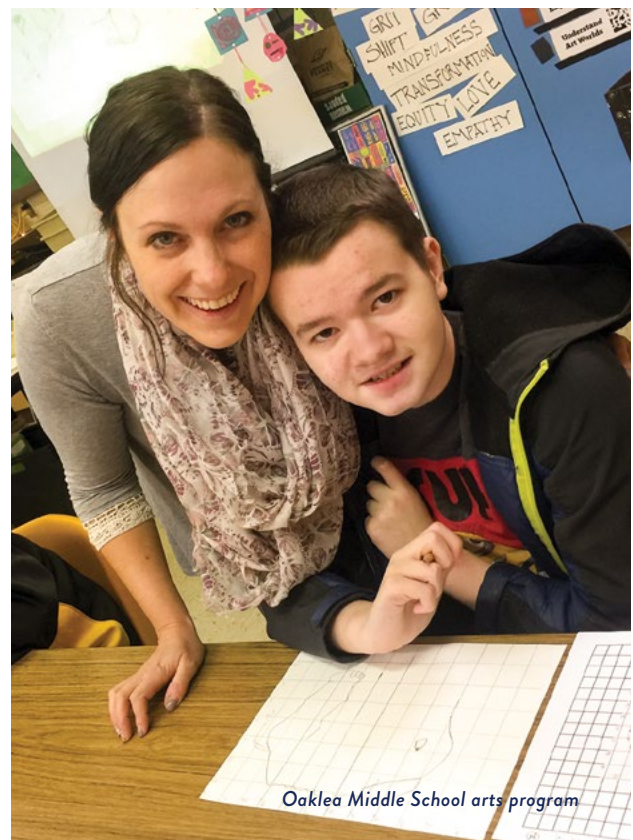
Similar to other states, Oregon's school resources were historically tied to neighborhood wealth. Until the 1990s, schools were primarily locally funded. Due to ballot measures with property tax limitations in the nineties, the balance of funding shifted, and the state took on more responsibility for education. Today, estimates range between 66% and 80% for school funding that comes from the state's General Fund — largely generated from personal income tax, lottery funds and marijuana taxes — with the remaining portion coming from federal and other sources.<sup>14,15</sup>

Unlike local dollars from property taxes, General Fund dollars are tied more closely to economic cycles, making education funding vulnerable to deep cuts during recessions. Looking across the decades, the state was a leader in education funding through the nineties (a robust decade for the state economically) until a recession hit in the early 2000s. The last couple of decades show that Oregon is catching up and now spends close to the U.S. average.<sup>16</sup> (See Figure 10, page 35.) In terms of

rankings, Oregon is 22nd among states for per-student funding with some states in the Northeast spending nearly twice as much in the 2021–2022 school year.<sup>17</sup>

### **Equity for Oregon students**

Understanding and tracking school funding in Oregon is a complex exercise, with efforts underway to make school funding distribution more equitable, transparent and accountable. When schools were primarily locally funded, schools and districts had drastic differences in per-student funding. Since the state took the lead in funding, state education dollars have been distributed based on a funding formula that's largely unchanged since the 1990s. This formula takes into account a number of student factors that may require more resources or tailored content, including the number of students; poverty; pregnancy or parenting status; special education and English-language learning needs; transportation costs; and variations in local taxes (such as districts with higher tax revenue receiving less

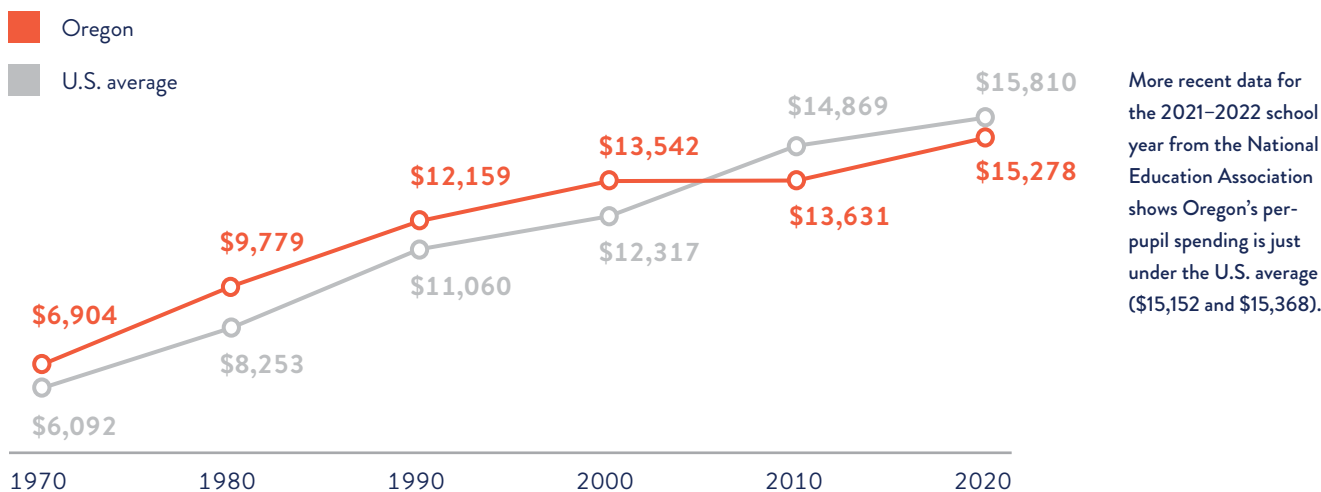






Lomakatsi Restoration Project

**FIGURE 10.** Oregon was a leader in per-pupil spending through the 1990s compared to the U.S. average and is regaining strength.



**Source:** National Center for Education Statistics. (2022). *Current expenditure per pupil in average daily attendance in public elementary and secondary schools, by state or jurisdiction: Selected school years, 1969–70 through 2019–20*. Digest 2022, Table 236.70. See also National Education Association. (2023, April). *Rankings of the states 2022 and estimates of school statistics 2023*. <https://www.nea.org/sites/default/files/2023-04/2023-rankings-and-estimates-report.pdf> **Note:** This chart shows per-student funding in K–12 public schools with dollars adjusted to 2021 value.

from the state). From there, the district receives the allocated dollars and can decide how to use them; the funding formula doesn't mandate that districts allocate their funds to schools or students that need more resources, nor does it offer guidelines on how the dollars are spent (e.g., toward things that research shows relate most closely to student impact).

When talking about resource equity for students — across income, geography or race — the funding formula helps but doesn't always have positive results for students. Researchers have suggested that a more equitable form of resourcing “shifts the allocation and use of resources (people, time, and money) to create student experiences that enable all children to reach empowering, rigorous learning outcomes.”<sup>18</sup>

Low-income, rural, English-language learners and/or students of color often need more or different resources for academic success. In a typical year, Oregon's intentional funding boosts for students from low-income backgrounds largely wash away when looking at the bigger picture and including local dollars and individual school fundraising.<sup>19</sup> Similar patterns can be seen for students of color, English-language learners and rural students, who are often getting similar amounts of funding (or just 5% higher or lower) compared to their wealthier, urban and/or white peers.<sup>20, 21, 22, 23</sup> In contrast, states like Utah, Delaware and Minnesota ensure funding streams that move significantly more resources to lower-income school districts where they matter most.<sup>24</sup>

It's not just the levels of funding and other resources that matter (i.e., adequacy), but how they are applied and for whom (equity) that can make the difference toward engaged and rigorous, quality learning for Oregon youth. Oregon's Student Success Act (SSA) is an important step toward equity and exemplifies a more tailored approach than other education funding streams in Oregon; it directs resources toward specific student groups to address long-standing gaps in education. The directed funding is especially important post-pandemic, as data on learning loss emerges to show that Oregon students fared



worse compared to other states and their achievement gap widened.<sup>25</sup> SSA funds were designed to improve equity at the state and local levels and infused \$2.35 billion (2021–2023) to supplement the \$9.3 billion from the state's General Fund.<sup>26</sup> Over half of the SSA funds were used toward student investment account grants, where districts developed goals and outcomes for traditionally marginalized students in partnership with educators and community members.<sup>27</sup> SSA funds also provided much-needed resources for culturally specific planning across regions and supported systemwide efforts to expand access to food benefits at school. The investment was cited as a best practice by Oregon's Quality Education Commission.<sup>28</sup>

## AN EXPERIENCED, SUPPORTED AND DIVERSE TEACHER WORKFORCE

Teachers are integral to building and maintaining a quality education system and can affect extended families and whole communities over the course of their careers. They steer engagement, tend to classroom dynamics and set the stage for learning. Not surprisingly, teachers are one of the greatest assets in a school. Research has





demonstrated the importance of both the number of teachers in school and their experience.<sup>29, 30, 31</sup> Students benefit from durable connections with trusted adults, including educators like librarians, specialists and coaches as well as formally licensed teachers and assistants.<sup>32</sup> Experts on child development at Harvard University find that “the single most common factor for children who develop resilience is at least one stable and committed relationship with a supportive parent, caregiver, or other adult.”<sup>33</sup> Teachers are often these very people.

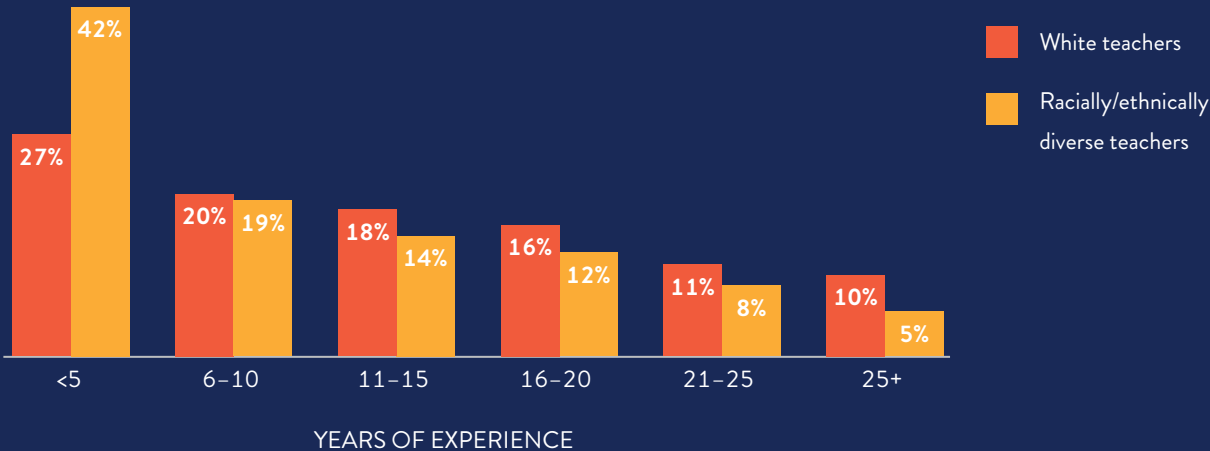
Teachers shape students in powerful ways, and communities need teachers who believe in their students and see their promise and brilliance. The Oregon Department of Education’s Student Success Plans, developed in partnership with Oregon communities, emphasize how crucial it is for students to see teachers who look like them and can speak to student strengths, create safe spaces, and ensure culturally responsive teaching.<sup>34, 35, 36</sup> This is important because inequity and bias can creep into teaching practices — even unconsciously — and become embedded in school systems and undermine student potential.

One nationally representative study revealed a marked difference in teacher expectations for higher education depending on whether the student and teacher came from similar racial/ethnic backgrounds.<sup>37</sup> And in Oregon specifically, EConorthwest found significant increases in on-time graduation when ninth-grade students of color had at least one race-congruent teacher.<sup>38</sup> Currently, 40% of Oregon students identify as students of color, while just 12% of teachers identify as teachers of color.<sup>39</sup> Research is just starting to explore how a more diverse cadre of teachers could bring additional experience and perspective that benefits all students.

To develop and maintain experienced teachers, Oregon needs smooth pathways for students to become teachers along with systemic supports to retain them. When parents were asked in 2018 whether they would want their child to become a public school teacher, negative answers exceeded affirmative ones — the only time this has happened since the question was first asked in 1967.

Once Oregon teachers become certified and find jobs, more than 60% of all first-year teachers

**FIGURE 11.** To have experienced teachers of color, Oregon schools must retain them. Currently, Oregon is better at retaining white teachers than racially and ethnically diverse teachers.



**Source:** Oregon Department of Education, Educator Advancement Council. (2022, September). *Educator equity report*. [https://www.oregon.gov/tspc/about/Publications\\_and\\_Reports/2022\\_Oregon\\_Educator\\_Equity\\_Report.pdf](https://www.oregon.gov/tspc/about/Publications_and_Reports/2022_Oregon_Educator_Equity_Report.pdf)

do not return. This retention challenge is most pronounced for teachers of color, with the highest exit rates seen among American Indian/Alaska Native (83%), Black/African American (82%) and Asian teachers (81%).<sup>40</sup> National research shows a range of structural factors are responsible, from low wages and instability in the face of high student debt to negative experiences in educational institutions.<sup>41, 42</sup>

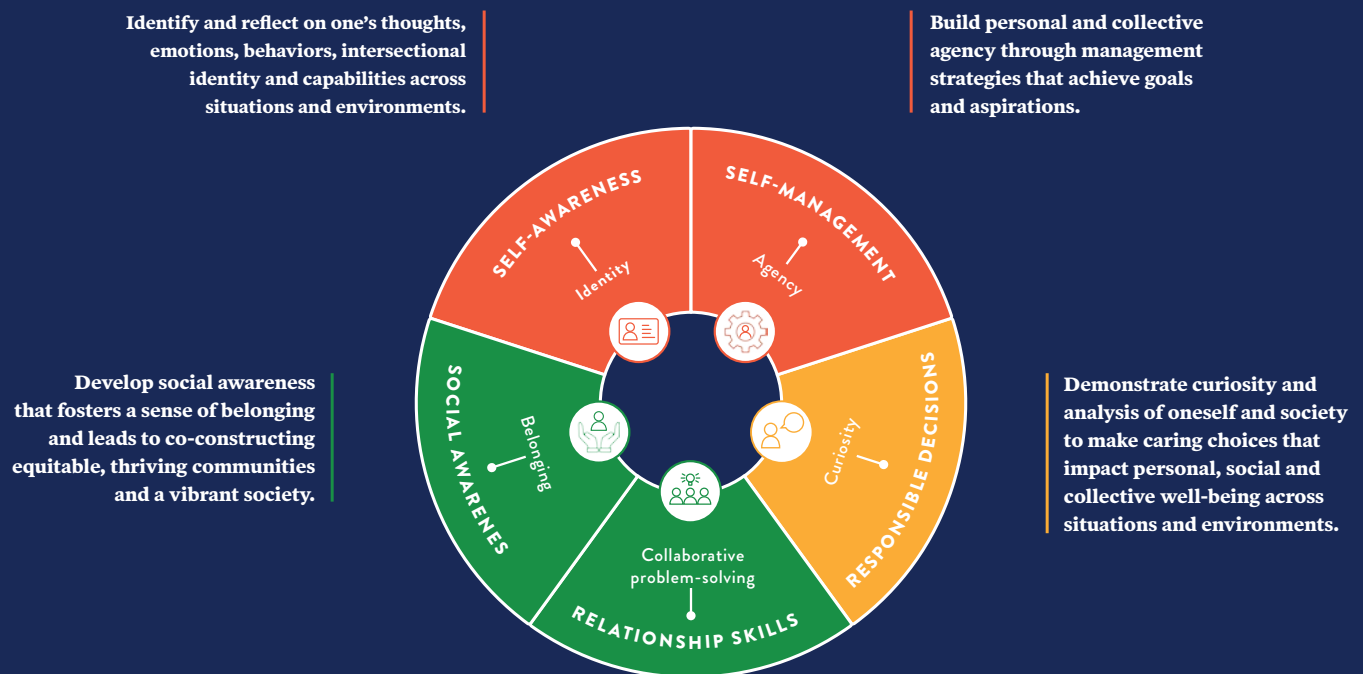
The Department of Education publishes annual report cards for each school and district, which highlight metrics like teacher experience.<sup>43</sup> Figure 11 (page 37) shows that racially/ethnically diverse teachers often have fewer than five years' experience (42%), compared to about one-quarter of white teachers. When students take the pathway to become educators, it's critical to help them succeed and become the experienced teachers we need.

## INTEGRATED LEARNING FOR THE WHOLE CHILD

Education is more than reading, writing and arithmetic, and it stretches far beyond school buildings. Experts in education equate learning to weaving a rope, where different types of skills are braided together by the brain.<sup>44</sup> Education is at its best and most effective when the social, emotional and cognitive elements of learning are woven together tightly.

Students benefit from a more holistic approach to learning through improved academic performance, relationships, behaviors, and college and career success.<sup>45, 46</sup> They can't do it alone; to secure their learning, students need supportive environments that offer opportunities to practice, grow and make mistakes both in and out of school.

**FIGURE 12.** Oregon's SEL standards for students and teachers are informed by the CASEL' model.



**Source:** Oregon Department of Education. (n.d.). *Oregon's transformative SEL standards*. <https://www.oregon.gov/ode/educator-resources/standards/SEL/Pages/framework-standards.aspx>

\*<https://casel.org/>

Research continuously demonstrates the importance of what are variously called *life, soft* and *noncognitive* skills to educational and life success. A comprehensive review of social-emotional learning (SEL) interventions in schools found that students “experienced significantly improved skills, attitudes, behaviors, school climate and safety, peer relationships, school functioning, and academic achievement.”<sup>47</sup> Further research suggests that skills like confidence, conflict resolution and problem-solving contribute meaningfully to well-being and may even rival academic and technical skills in their capacity to predict long-term positive life outcomes.<sup>48</sup> Work is underway to better document and understand what defines and supports SEL.

Educators also see the value in SEL. Nationwide, about 80% of elementary school principals and

70% of high school principals reported implementing an SEL program in the 2021–22 school year.<sup>49</sup> Locally, Oregon passed House Bill 2166 to ensure school districts adopt an SEL framework and standards starting in 2024, bringing SEL to 100% of Oregon’s districts. (See *Figure 12*, page 38.)

Importantly, ODE’s Transformative SEL Framework includes a focus on securing the *opportunities* that students (as well as the adults around them) need to secure SEL skills, and not just the skills themselves. The SEL umbrella of skills, behaviors and attitudes is broad; it needs to be customized to local communities and families and responsive to differences in cultural values and priorities. SEL outcomes like engagement, safety and a sense of belonging extend beyond students to families, caregivers, school staff and advocates as well.

After-school and summer learning programs are vital in enriching students’ lives and preparing them for the future, and they employ SEL as one tool among many to create environments rich with hands-on learning and belonging. OCF’s own research has shown how out-of-school time programs complement the core school system and can play a particularly powerful role in supporting student engagement and SEL.<sup>50</sup> Such opportunities extend academic learning and SEL beyond the school day and maintain gains over the summer, as well as offering wrap-around supports to supplement student and family resources.

As mentioned above, post-pandemic learning losses in Oregon were more severe than in other states, and national experts urge deep investments in summer learning in particular.<sup>51</sup> Through OCF’s Out-of-School Time Initiative, we’ve learned how useful it can be to build program capacity to measure quality and focus on improving the conditions for student success.<sup>52</sup>

Given the critical role after-school programming can play in preparing youth for school and life, opportunities exist to offer broader and longer-term funding to support their continued partnerships with schools and families.

South Wasco Youth Programs





## POSTSECONDARY ACCESS & AFFORDABILITY

Postsecondary education is an investment in our collective future. It introduces students to a wider world of skill and opportunities, braiding together student aspirations, civic learning and democracy, workforce needs and family economic livelihood. Postsecondary degrees have become more important over the past 50 years as the power of a high school diploma to secure a “good job” greatly diminished.<sup>53</sup> In five years, an estimated 70% of Oregon jobs will require more than a high school degree.<sup>54</sup>

Additional training, degrees and certifications offer students more power to direct their own lives and expand their career choices.<sup>55</sup> Today, people with postsecondary certificates or degrees are more likely to find employment, increase earnings and improve their health and civic participation — all of which can translate into benefits for the next generation.<sup>56, 57</sup> For individuals, employers and their communities to reap the rewards, education needs to be financially accessible and appealing to aspiring students.

While a bachelor’s degree continues to be a driver of economic and social mobility, it’s getting further and further out of reach for many students and families. Tuition and fees are only part of the story, and the portion that Oregon students are responsible for after financial aid has more than doubled for a four-year degree since 1980.<sup>58</sup>

National data shows that the cost of dorm housing has more than doubled as well.<sup>59</sup> The full cost of attendance is much more than tuition when including books, supplies, transportation, housing and food. Perhaps accordingly, the appetite and expectations for bachelor’s degrees are declining. In 2011, about 9 out of 10 parents expected their child to seek a four-year degree.<sup>60</sup> At this point, only about half of parents want a four-year degree for their child.<sup>61</sup> Two-year or associate degrees are appealing because of the lower cost, but Oregon stands out among other states for the high cost of both degree types relative to income (*See Figure 13, page 41.*)

---

**Whether a student pursues a postsecondary degree has more to do with the cost and other barriers than with their brilliance and drive. Among high school students with exceptional test scores in math, only about 40% of students from low-income households continue on to college compared to about 80% of students from more affluent backgrounds.**

■ MARKUS BROER & SAKIKO IKOMA (2015)  
AMERICAN INSTITUTES FOR RESEARCH

Although financial resources lessen the cost and expand student options for a variety of degrees after high school, they fall short of what students need. At the federal level, Pell grants provide up to \$7,395 per year for low-income students but aren’t accessible to students without documentation.<sup>62</sup> Oregon Promise grants (specific to community college) award a maximum of \$4,248 per year, while Oregon Opportunity grants provide up to \$3,900 for an associate degree and \$7,524 per year for a bachelor’s degree.<sup>63</sup> The investment is essential, and at the same time, Oregon’s public investments in postsecondary financial aid are 40% below the national average.<sup>64</sup> Faced with this landscape of costs and the limits of financial aid, young adults are taking on unprecedented levels of student debt.<sup>65</sup>

While college payoff is high when looking only at income, impacts to overall wealth are less clear. One Federal Reserve study shows that the overall wealth accumulation from a bachelor’s or postgraduate degree has steadily declined since the 1930s amid student loans, rising education costs and diminishing odds of graduation.<sup>66</sup> And the

benefits are uneven. Given different life circumstances and opportunities, the long-term impact of a bachelor's degree or higher is greatest for white students.<sup>67</sup> Also, women and people of color are more likely to take out loans but are generally paid less than white men, who will earn more and be able to pay off loans more easily.<sup>68,69</sup> Such studies are challenging long-held narratives about the universal financial benefits of a bachelor's degree or higher.

An affordable education with minimal debt allows students and graduates more freedom to pursue their dreams. Young entrepreneurs who need capital have better prospects without early debt.<sup>70</sup> Parents living with low incomes are better able to save for their retirement without the high-interest loans needed to finance their child's education.<sup>71</sup> Without student debt, graduates are more likely to return to their rural hometown instead of seeking higher-paying opportunities in the city.<sup>72</sup>

And if homebuying is one of the early avenues to building wealth and stability, the student without

debt is able to purchase a home nine years before the average undergraduate borrower.<sup>73</sup>

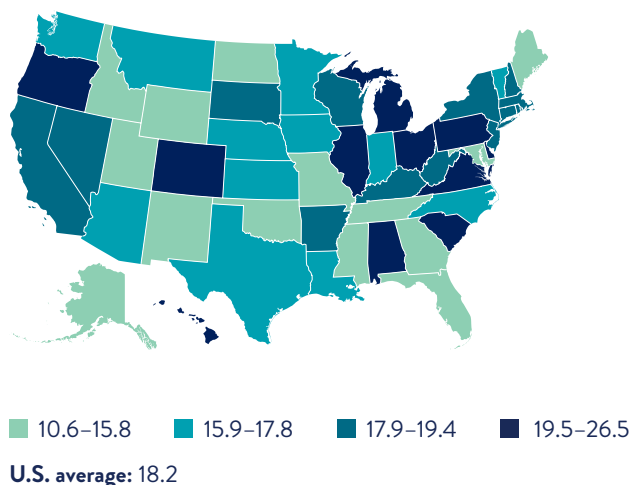
Higher education is at an inflection point; the narrative continues to promise big payoffs, the workforce needs advanced degrees, and yet the benefits of a degree aren't panning out for many of our students in the ways we expect.

The more options there are for postsecondary education, and pathways into and beyond that education, the more affordable those options are and the more education can deliver on its promise to support the potential of Oregonians. More parents today are encouraging their children toward career and technical training, or focusing on entrepreneurship, military or community service as paths to satisfying work.<sup>74</sup>

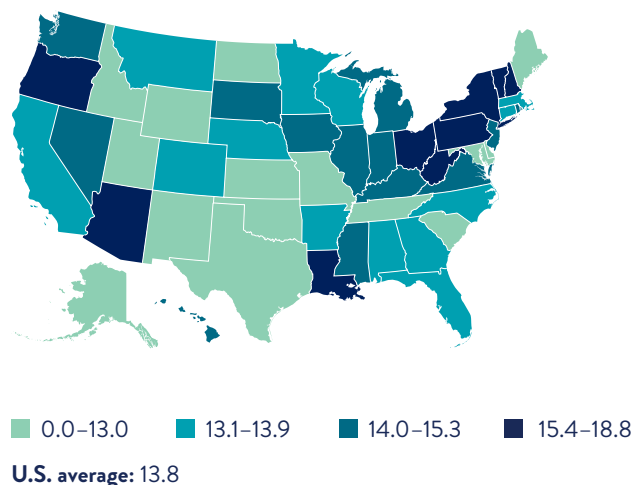
Ultimately, students want opportunities to find meaningful jobs, and parents want that for their children as well. We have an opportunity for our systems to better support the educational pathways to help them get there. ■

**FIGURE 13.** The percentage of family income needed to pay for a four-year or two-year degree is especially high in Oregon.

#### PUBLIC FOUR-YEAR COLLEGES/UNIVERSITIES



#### PUBLIC TWO-YEAR COLLEGES/UNIVERSITIES



**Source:** NCHEMS Information Center for Higher Education Policymaking and Analysis (n.d.). *Percent of family income needed to pay for college—by type of institution, 2018.* <http://www.higheredinfo.org/dbrowser/?level=nation&mode=map&state=&submeasure=77>



## Exploring Connection Points

### EDUCATION + HOUSING



Many students strive to get an education without a stable place to sleep. In 2022–2023, almost 21,500 Oregon K–12 students experienced houselessness.<sup>75</sup> And in school districts like McKenzie, Butte Falls, Arlington and Phoenix-Talent, this



amounted to 20% or more of students. Many more students have high mobility and frequently move from home to home, even if they aren't considered unhoused or homeless. Beyond K–12, more than half of students surveyed across Oregon's 17 community colleges were experiencing housing insecurity.<sup>76</sup> Colleges and universities in Oregon are piloting new tactics to ease the housing burden on students who might not otherwise enroll or stay in school. Conditions for success, including basic needs, are increasingly a concern for schools. If a student doesn't have a safe place to sleep or hasn't eaten that day, they can't focus and engage in the same way.

*Want to explore further? Turn to **Housing**, page 64.*

### EDUCATION + SOCIAL CONNECTION & BELONGING



For many Americans, schools are one of the first places we make social connections outside our families or neighbors.



These connections can help promote well-being and reduce depression and anxiety.<sup>77</sup> New research also shows that

relationships between students who come from different economic backgrounds are a primary driver of economic mobility in adulthood, influencing how much we earn even more than third-grade math test scores.<sup>78</sup> The people and potential friendships we're exposed to through our education matter. Social connections made through school matter for parents and caregivers too. The famous African proverb says "it takes a village to raise a child," and schools can be a place to find that "village." Schools of all types — from local elementary schools to community colleges — often serve as hubs for connection in one way or another (e.g., by hosting school or community events and providing information or resources).

*Want to explore further? Turn to **Social Connection & Belonging**, page 10.*



## ■ SECTION 3 ENDNOTES

- 1 Ma, J., Pender, M., & Welch, M. (2019). *Education pays 2019: The benefits of higher education for individuals and society*. College Board. <https://research.collegeboard.org/pdf/education-pays-2019-fullreport.pdf>
- 2 Brennan, J., Durazzi, N., & Séné, T. (2013). *Things we know and don't know about the wider benefits of higher education: A review of the recent literature* [BIS Research Paper, BIS/13/1244]. Department for Business, Innovation and Skills. <http://eprints.lse.ac.uk/55427/>
- 3 Healthy People 2030. (n.d.) *Enrollment in higher education: Literature summary*. <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/enrollment-higher-education>
- 4 Lehner, J. (2019, March 26). *Every year of education pays*. Oregon Office of Economic Analysis. <https://oregoneconomicanalysis.com/2019/03/26/every-year-of-education-pays-graph-of-the-week-spring-break-edition/>
- 5 Trujillo, T., Mahiri, J., Leonardo, Z., Gutierrez, K.D., Scott, J., & Narir, N. (2017). *Responding to educational inequality: Addressing race and social class disparities to increase opportunity*. Haas Institute for a Fair and Inclusive Society. [https://belonging.berkeley.edu/sites/default/files/haas\\_institute\\_race\\_education\\_brief\\_june\\_2017\\_1.pdf](https://belonging.berkeley.edu/sites/default/files/haas_institute_race_education_brief_june_2017_1.pdf)
- 6 National Academies of Sciences, Engineering and Medicine. (2022). *Supporting children with disabilities: Lessons from the pandemic: Proceedings of a workshop*. The National Academies Press. <https://doi.org/10.17226/26702>
- 7 American Institutes of Research, Center on Great Teachers and Leaders. (n.d.). *Equitable access toolkit*. <https://gtlcenter.org/learning-hub/equitable-access-toolkit>
- 8 Meyer, A., Rose, D.H., & Gordon, D. (2014). *Universal design for learning: Theory and practice*. CAST. <https://www.cast.org/news/2022/read-universal-design-learning-udl-theory-practice-free-clusive>
- 9 Oregon Department of Education. (n.d.). *Equity initiatives*. <https://www.oregon.gov/ode/students-and-family/equity/equityinitiatives/pages/default.aspx>
- 10 Leonard, K., & Reyes, N. (2023). *What we are learning through the Latino/a/x/e Student Success community engagement and advocacy grantmaking*. Oregon Community Foundation.
- 11 Travers, J. (2018). *What is resource equity?* Education Resource Strategies. <https://eric.ed.gov/?id=ED593369>
- 12 Jackson C. K., Johnson R.C., & Persico, C. (2016). The effects of school spending on educational and economic outcomes: Evidence from school finance reforms. *The Quarterly Journal of Economics*, 131(1), 157–218. <https://doi.org/10.1093/qje/qjv036>
- 13 Ibid.
- 14 ECONorthwest. *The impact of Oregon State School Fund spending on disparities between Black, Indigenous, and people of color (BIPOC) students and non-BIPOC students*. <https://econw.com/project/oregon-state-school-fund-evaluation/>
- 15 VanderHart, D., & Dake, L. (2023, December 1). *Oregon school funding is complicated: We try to break it down*. OPB. <https://www.opb.org/article/2023/12/01/explaining-oregon-school-funding-challenges-taxes/>
- 16 National Center for Education Statistics. (n.d.). *Table 236.70. Current expenditure per pupil in average daily attendance in public elementary and secondary schools, by state or jurisdiction: Selected school years, 1969-70 through 2019-20*. [https://nces.ed.gov/ipeds/data/ipedsreports/2019/ipeds2019-tables/dt22\\_236.70.asp?current=yes](https://nces.ed.gov/ipeds/data/ipedsreports/2019/ipeds2019-tables/dt22_236.70.asp?current=yes)
- 17 National Education Association. (2023). *Rankings of the states 2022 and estimates of school statistics 2023*. <https://www.nea.org/resource-library/educator-pay-and-student-spending-how-does-your-state-rank/teacher>
- 18 Travers, J. (2018). *What is resource equity? A working paper that explores the dimensions of resource equity that support academic excellence*. Education Resource Strategies. <https://files.eric.ed.gov/fulltext/ED593369.pdf>
- 19 ECONorthwest. (2023). *The impact of Oregon State School Fund spending on disparities between Black, Indigenous, and people of color (BIPOC) students and non-BIPOC students*.
- 20 Ivy, M. (2022). *Equal is not good enough: An analysis of school funding equity across the U.S. and within each state*. The Education Trust. <https://edtrust.org/resource/equal-is-not-good-enough/>; interactive data at <https://stateofeducationfunding.org/>
- 21 Blaga, K., Gutierrez, E., Terrones, F., Feldman, A., Melgar, L., Hinson, D., & Jenkins, W. (2022). *Which students receive a greater share of school funding?* Urban Institute. <https://apps.urban.org/features/school-funding-trends/>
- 22 Farrie, D., & Sciarra, D. (2022). *Making the grade 2021: How fair is school funding in your state?* Education Law Center. <https://edlawcenter.org/wp-content/uploads/2024/01/Making-the-Grade-2023.pdf>
- 23 ECONorthwest. (2023). *The impact of Oregon State School Fund spending on disparities between Black, Indigenous, and people of color (BIPOC) students and non-BIPOC students*.
- 24 Ivy, M. (2022). *Equal is not good enough: An analysis of school funding equity across the U.S. and within each state*. The Education Trust.
- 25 Fahle, E., Kane, T.J., Reardon, S.F., & Staiger, D.O. (2024). *Education recovery scorecard. The first year of pandemic recovery: A district-level analysis*. Center for Education Policy Research at Harvard & The Educational Opportunity Project at Stanford University. <https://educationrecoverycorecard.org/wp-content/uploads/2024/01/ERS-Report-Final-1.31.pdf>
- 26 Oregon Department of Education. (n.d.). *Student Success Act: 2021–2023 legislatively adopted budget*. <https://www.oregon.gov/ode/StudentSuccess/Documents/2021-2023%20Student%20Success%20Act%20-%20Legislatively%20Adopted%20Budget.pdf>
- 27 Oregon Department of Education. (n.d.). *Student Success Act: 2021–2023 program funding*. [https://www.oregon.gov/ode/StudentSuccess/Documents/21-23%20ODE\\_SSA\\_Funding%20One%20Pager\\_2022%20v4%20\(1\).pdf](https://www.oregon.gov/ode/StudentSuccess/Documents/21-23%20ODE_SSA_Funding%20One%20Pager_2022%20v4%20(1).pdf)

- 28 Quality Education Commission. (2022). *Quality education model: Identifying best practices and calculating the cost of a quality education*. [https://www.oregon.gov/ode/reports-and-data/taskcomm/Documents/QEMReport\\_2022\\_VERSION2\\_Revised2\\_8\\_23.pdf](https://www.oregon.gov/ode/reports-and-data/taskcomm/Documents/QEMReport_2022_VERSION2_Revised2_8_23.pdf)
- 29 Jackson C. K., Johnson, R. C., & Persico, C. (2016). The effects of school spending on educational and economic outcomes: Evidence from school finance reforms. *Quarterly Journal of Economics*, 131(1), 157–218.
- 30 Chetty, R., Friedman, J.N., Hilger N., Saez, E., Schanzenbach, D.W., & Yagan, D. (2011). How does your kindergarten classroom affect your earnings? Evidence from Project Star. *Quarterly Journal of Economics*, 126(4), 1593–1660. <https://doi.org/10.1093/qje/qjr041>
- 31 Kini, T., & Podolsky, A. (2016). *Does teaching experience increase teacher effectiveness? A review of the research*. Learning Policy Institute. <https://files.eric.ed.gov/fulltext/ED606427.pdf>
- 32 Barshay, J. (2023, June 5). *Proof points: How important was your favorite teacher to your success? Researchers have done the math*. Hetchinger Report. <https://hetchingerreport.org/proof-points-how-important-was-your-favorite-teacher-to-your-success-researchers-have-done-the-math/>
- 33 Center on the Developing Child at Harvard University. (n.d.). *Resilience*. <https://developingchild.harvard.edu/science/key-concepts/resilience/>
- 34 Oregon Department of Education. (2017). *House bill 2016: African American/Black student success plan*. <https://www.oregon.gov/ode/students-and-family/equity/AfricanAmericanBlackStudentEducation/Documents/aabsSuccessPlan.pdf>
- 35 Recent legislative approval for a Native Hawaiian/Pacific Islander student success plan will further the definitions of student success (and the conditions needed for success) within these specific communities.
- 36 Oregon Department of Education. (2022). *LGBTQ2SIA+ student success plan*. <https://www.oregon.gov/ode/students-and-family/equity/Documents/LGBTQ2SIA+%20Student%20Success%20Plan.pdf>
- 37 Gershenson, S., Holt, S.B., & Papageorge, N. (2016). Who believes in me? The effect of student-teacher demographic match on teacher expectations. *Economics of Education Review*, 52, 209–224. <http://dx.doi.org/10.1016/j.econedurev.2016.03.002>
- 38 ECONorthwest. *The impact of Oregon State School Fund spending on disparities between Black, Indigenous, and people of color (BIPOC) students and non-BIPOC students*.
- 39 Educator Advancement Council. (2022). *2022 Oregon educator equity report*. [https://www.oregon.gov/tspc/about/Publications\\_and\\_Reports/2022\\_Oregon\\_Educator\\_Equity\\_Report.pdf](https://www.oregon.gov/tspc/about/Publications_and_Reports/2022_Oregon_Educator_Equity_Report.pdf)
- 40 Ibid.
- 41 Cooc, N., & Kim, G. M. (2023). Racial and ethnic disparities in adolescent teaching career expectations. *American Educational Research Journal*, 60(5), 882–915. <https://doi.org/10.3102/00028312231184839>
- 42 Carver-Thomas, D. (2018). *Diversifying the teaching profession: How to recruit and retain teachers of color*. Learning Policy Institute. [https://learningpolicyinstitute.org/sites/default/files/product-files/Diversifying\\_Teaching\\_Profession\\_REPORT\\_O.pdf](https://learningpolicyinstitute.org/sites/default/files/product-files/Diversifying_Teaching_Profession_REPORT_O.pdf)
- 43 Oregon Department of Education. (n.d.). *At-a-glance school and district profiles*. <https://www.oregon.gov/ode/schools-and-districts/reportcards/reportcards/Pages/default.aspx>
- 44 Bales, S.N., & O’Neil, M. (2014). *Putting it back together again: Reframing education using a core story approach*. FrameWorks Institute. [https://www.frameworksinstitute.org/wp-content/uploads/2020/06/ecs\\_mm\\_nov2014\\_final\\_low.pdf](https://www.frameworksinstitute.org/wp-content/uploads/2020/06/ecs_mm_nov2014_final_low.pdf)
- 45 Leonard, K., & Reyes, N. (2023). *What we are learning through the Latino/a/x/e Student Success community engagement and advocacy grantmaking*. Oregon Community Foundation.
- 46 Nagaoka, J., Farrington, C.A., Ehrlich, S.B., & Heath, R.D. (2015). *Foundations for young adult success: A developmental framework*. University of Chicago Consortium on Chicago School Research. <https://www.wallacefoundation.org/knowledge-center/Documents/Foundations-for-Young-Adult-Success.pdf>
- 47 Cipriano, C., Strambler, M.J., Naples, L.H., Ha, C., Kirk, M., Wood, M., Sehgal, K., Zieher, A.K., Eveleigh, A., McCarthy, M., Funaro, M., Ponnock, A., Chow, J.C., & Durlak, J. (2023). The state of evidence for social and emotional learning: A contemporary meta-analysis of universal school-based SEL interventions. *Child Development*, 94(5), 1181–1204. <https://doi.org/10.1111/cdev.13968>
- 48 Lippman, L.H., Ryberg, R., Carney, R., & Moore, K.A. (2015, June 14). Key “soft skills” that foster youth workforce success: Toward a consensus across fields. *Workforce Connections*, #2015-24A. <https://cms.childtrends.org/wp-content/uploads/2015/06/2015-24WFCSoftSkills.pdf>
- 49 Schwartz, H.L., Bongard, M., Bogan, E.D., Boyle, A.E., Meyers, D.C., & Jagers, R.J. (2022). *Social and emotional learning in schools nationally and in the collaborating districts initiative: Selected findings from the American teacher panel and American school leader panel surveys*. RAND Corporation. [https://www.rand.org/pubs/research\\_reports/RRA1822-1.html](https://www.rand.org/pubs/research_reports/RRA1822-1.html)
- 50 Oregon Community Foundation & The Ford Family Foundation. (2021). *Building and sustaining high-quality out-of-school time programs: Lessons learned from a multiyear statewide initiative*. <https://oregoncf.org/community-impact/research/out-of-school-time-initiative-final-evaluation-report/overview/>
- 51 Fahle, E., Kane, T.J., Reardon, S.F., & Staiger, D.O. (2024). *Education recovery scorecard: The first year of pandemic recovery: A district-level analysis*. Center for Education Policy Research at Harvard & The Educational Opportunity Project at Stanford University. <https://educationrecoveryscorecard.org/wp-content/uploads/2024/01/ERS-Report-Final-1.31.pdf>
- 52 Oregon Community Foundation & The Ford Family Foundation. (2021). *Building and sustaining high-quality out-of-school time programs: Lessons learned from a multiyear statewide initiative*.
- 53 Carnevale, A.P., Strohl, J., Gulish, A., Van Der Werf, M., & Campbell, K.P. (2019). *The unequal race for good jobs: How whites made outsized gains in education and good jobs compared to*

- Blacks and Latinos*. Georgetown University Center on Education and the Workforce. [http://cew.georgetown.edu/wp-content/uploads/Full\\_Report-The\\_Unequal\\_Race\\_for\\_Good\\_Jobs.pdf](http://cew.georgetown.edu/wp-content/uploads/Full_Report-The_Unequal_Race_for_Good_Jobs.pdf)
- 54 Carnevale, A.P. (2023). *After everything: Projections of jobs, education, and training requirements through 2031*. Georgetown University Center on Education and the Workforce. [https://cew.georgetown.edu/wp-content/uploads/Projections\\_2031-State-Report.pdf](https://cew.georgetown.edu/wp-content/uploads/Projections_2031-State-Report.pdf)
  - 55 Oregon Community Foundation. (2022). *Bring the dream within reach: OCF scholarship brief*.
  - 56 Ma, J., Pender, M., & Welch, M. (2019). *Education pays 2019: The benefits of higher education for individuals and society*. College Board. <https://research.collegeboard.org/pdf/education-pays-2019-fullreport.pdf>
  - 57 Chetty, R., Friedman, J. N., Saez, E., Turner, N., & Yagan, D. (2017). *Mobility report cards: The role of colleges in intergenerational mobility* [NBER Working Paper No. 23618]. National Bureau of Economic Research. <https://doi.org/10.3386/w23618>
  - 58 State Higher Education Finance. (2024). *State profile: Oregon*. <https://shef.shceo.org/state-profile/oregon/>
  - 59 Sherman, E. (2023, July 23). 1982: The last time college costs kept pace with median income. *Forbes*. <https://www.forbes.com/sites/eriksherman/2023/07/23/1982-the-last-time-college-costs-kept-pace-with-median-income/?sh=13256fe0349f>
  - 60 Pew Research Center. (2011). *Is college worth it?* <https://www.pewresearch.org/social-trends/2011/05/15/is-college-worth-it/>
  - 61 Tough, P. (2023, September 5). Americans are losing faith in the value of college. Whose fault is that? *The New York Times*.
  - 62 U.S. Department of Education. (n.d.). *Federal Pell grants 2023–24 award year*. Federal Student Aid. <https://studentaid.gov/understand-aid/types/grants/pell>
  - 63 Higher Education Coordinating Commission. (n.d.). *Grants*. Oregon Student Aid. <https://oregonstudentaid.gov/grants/>
  - 64 State Higher Education Executive Officers Association. (2023). *State higher education finance: FY 2022*. <https://shef.shceo.org/report/>
  - 65 Oregon State Treasury. (2023). *Oregon financial wellness scorecard*. <https://www.oregon.gov/treasury/financial-empowerment/Documents/Annual-reports/230201-FINAL-Oregon-Financial-Wellness-Scorecard.pdf>
  - 66 Emmons, W.R., Kent, A.H., & Ricketts, L.R. (2019). Is college still worth it? The new calculus of falling returns. *Federal Reserve Bank of St. Louis Review*, 101(4), 297–329. <https://www.stlouisfed.org/on-the-economy/2019/february/is-college-still-worth-it-complicated>
  - 67 Ibid.
  - 68 Kent, A.H., & Addo, F.R. (2022, November 10). *Gender and racial disparities in student loan debt*. Federal Reserve Bank of St. Louis. <https://www.stlouisfed.org/publications/economic-equity-insights/gender-racial-disparities-student-loan-debt>. Cited in Oregon Department of Consumer and Business Services. (2023, July). *Student loan ombuds annual report: July 2023*. <https://dfr.oregon.gov/help/student-loan-help/Documents/2023-Student-Loan-Ombuds-Annual-Report.pdf>
  - 69 Rogoway, M. (2020, February 2). Oregon insight: Education produces a big wage boost—but race and gender can matter as much, or more. *The Oregonian*. <https://www.oregonlive.com/business/2020/02/oregon-insight-education-produces-a-big-wage-boost-but-race-and-gender-can-matter-as-much-or-more.html>
  - 70 Ewing Marion Kauffman Foundation. (2020). *Student loans and entrepreneurship: An overview* [Entrepreneurship Brief 2020:5]. [https://www.kauffman.org/wp-content/uploads/2021/07/Kauffman\\_Issue-Brief\\_Student-Loans-and-Entrepreneurship\\_2020.pdf](https://www.kauffman.org/wp-content/uploads/2021/07/Kauffman_Issue-Brief_Student-Loans-and-Entrepreneurship_2020.pdf)
  - 71 Granville, P. (2022, May 31). *Parent PLUS borrowers: The hidden casualties of the student debt crisis*. The Century Foundation. <https://tcf.org/content/report/parent-plus-borrowers-the-hidden-casualties-of-the-student-debt-crisis/?session=1>
  - 72 Tabit, P.J., & Winters, J. (2019, January). “Rural brain drain”: Examining millennial migration patterns and student loan debt. Federal Reserve Board Division of Consumer and Community Affairs.
  - 73 Mezza, A., Ringo, D., Sherlund, S., & Sommer, K. Student loans and homeownership (2020). *Journal of Labor Economics*, 38(1), 215–260. <https://doi.org/10.1086/704609>
  - 74 Barshay, J. (2021, Apr. 7). *Poll: Nearly half of parents don’t want their kids to go straight to a four-year college*. Hetchinger Report. <https://hechingerreport.org/poll-nearly-half-of-parents-dont-want-their-kids-to-go-to-a-four-year-college/>
  - 75 Oregon Department of Education. (2023). *Oregon statewide report card 2022–2023*. <https://www.oregon.gov/ode/schools-and-districts/reportcards/Documents/rptcd2023.pdf>
  - 76 Gabriel, E. (2021, May 19). *Oregon’s affordable housing crisis a challenge for college students too*. OPB. <https://www.opb.org/article/2021/05/19/oregons-affordable-housing-crisis-a-challenge-for-college-students-too/>
  - 77 Eugene, D.R. (2021). Connectedness to family, school, and neighborhood and adolescents’ internalizing symptoms. *International Journal of Environmental Research and Public Health*, 18(23), 12602. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8656744/>
  - 78 Chetty, R., Jackson, M.O., Kuchler, T., et al. (2022). Social capital I: Measurement and associations with economic mobility. *Nature*, 608(7921), 1–14. <https://doi.org/10.1038/s41586-022-04996-4>



# Spotlight on Connections

## Child Care in Oregon



**National research is increasingly demonstrating links between child care, parental employment and economic growth, with estimates that American businesses lose up to \$12.7 billion annually because of their employees' child care challenges and that the child care crisis costs roughly \$57 billion each year in lost earnings, productivity and revenue.**



In this report, we examine the systems and structures that support our collective well-being in areas of housing, health, education, economy, social connection and belonging, and the natural and built environment. These focus areas help us break down many factors that matter for our well-being into more manageable sections.

However, our experiences of these systems are more complicated. Issues may not fit cleanly in one category or another; they intersect and overlap, and the conditions of success for our communities are often entangled.

When one part of a community's system of supports is not working well, it can have major consequences for others. When they are working well, they mutually reinforce each other, creating and sustaining conditions for thriving communities.

Our child care system is a prime example of these connections and dependencies. Child care provides critical infrastructure to support young families, economic participation and school readiness across this report's focus areas. The type of care varies from informal solutions to more formal arrangements with in-home providers, centers and preschools; how well the model fits each family's unique needs and culture is central to its quality and success.



The availability of high-quality, affordable and stable child care is a key component of a healthy, thriving community. It's no surprise that child care matters to Oregonians; in the March 2022 Oregon Values and Beliefs Survey, 79% stated that making child care more affordable is important.<sup>1</sup>

Child care provides lifelong benefits to children. Developmentally, the early years are some of the most influential times in a child's life. Positive early caregiving relationships help children develop new skills and capabilities, lay foundations for healthy lives and minds, and can also help protect children from the negative impacts of adverse childhood experiences.<sup>2,3</sup> Child care settings cultivate learning, allowing children to explore and experiment with possibilities. Random and unpredictable opportunities for play — with others and with our environments — help us become experts at flexibility and adaptability.<sup>4</sup> Child care providers also help identify individual developmental needs to ensure the growth and learning each child deserves.

At both the individual and societal levels, child care is well worth the investment. Recent large-scale studies link preschool interventions with greater high school graduation, increased adult earnings and even decreases in crime.<sup>5,6,7</sup> Economists find that preschools and child care settings are some of the most effective and efficient ways to prepare children cognitively for



elementary school and life.<sup>8</sup> In the long run, community investments in quality child care programs pay for themselves with a return of \$4 to \$9 for each dollar invested.<sup>9</sup>

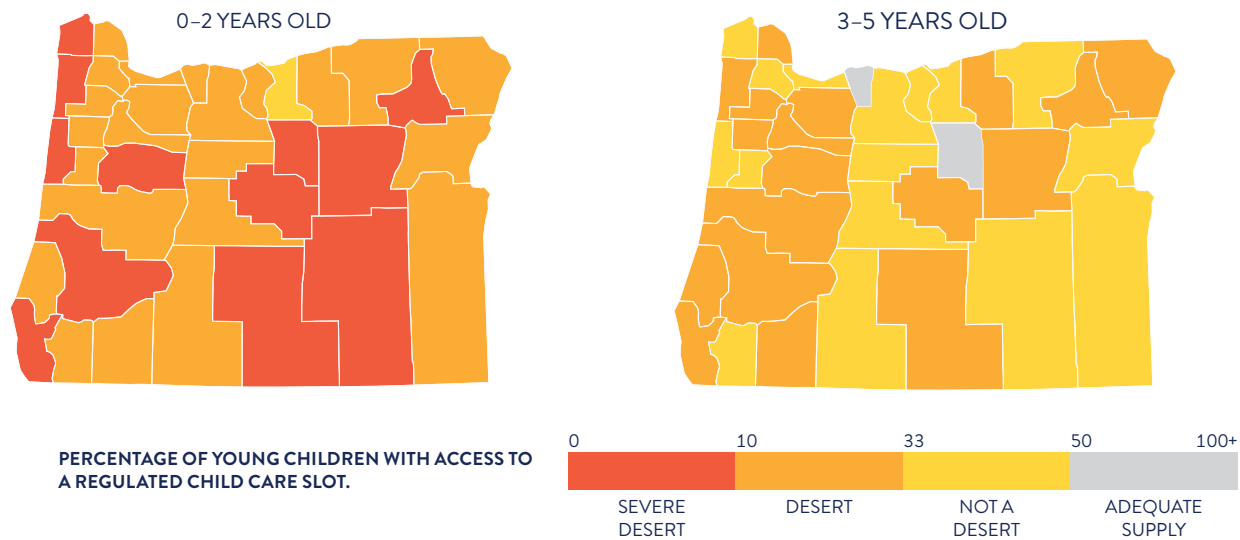
Child care not only provides positive impacts on children and families but is also an economic driver in its own right, with estimates of 25,000 people employed due to the industry. This translates into about \$496 million in direct revenue and \$492 million in spillover revenue each year, returning substantial dollars to the economy.<sup>10</sup>

When child care is affordable and accessible, it allows parents and guardians to participate in paid work and contribute to their community more fully. National research is increasingly demonstrating the links between child care, parental employment and economic growth, with estimates that American businesses lose up to \$12.7 billion annually because of their employees' child care challenges and that the child care crisis costs roughly \$57 billion each year in lost earnings, productivity and revenue.<sup>11</sup>

Across rural and urban areas of Oregon, over one-third of caregivers with children ages 0–5 report that child care issues led to employment issues for someone in their family, whether that meant turning down opportunities or needing to quit or change jobs.<sup>12</sup> The personal costs to mothers, who disproportionately

**FIGURE 14. Almost every county in Oregon is considered a child care desert for infants.**

*The availability of child care spaces for infants is extremely low and only somewhat better for older children. Regulated child care slots include slots in certified centers, certified family homes, registered family homes and exempt programs that have public slots.*



**Source:** Pratt, M., & Sektnan, M. (2022). *Oregon's child care deserts 2022: Mapping supply by age group and percentage of publicly funded slots.* Oregon Department of Early Learning and Care. [https://health.oregonstate.edu/sites/health.oregonstate.edu/files/early-learners/pdf/research-oregons\\_child\\_care\\_deserts\\_2022.pdf](https://health.oregonstate.edu/sites/health.oregonstate.edu/files/early-learners/pdf/research-oregons_child_care_deserts_2022.pdf)

provide unpaid caregiving, are outsized.<sup>13</sup> A 2018 survey from the Center for American Progress found that mothers were 40% more likely than fathers to report feeling the negative impact of child care issues on their careers.<sup>14</sup>

Oregon has recently seen some improvement from its most severe and extended dry spell in availability. In 2018, every county in the state was considered a child care desert for infants and toddlers (i.e., a place where child care is very scarce). Public funding for infants and toddlers increased between 2020 and 2022, but most counties remain child care

deserts — especially for infant care — and rural counties are far more likely to be severe deserts than their urban counterparts. (See Figure 14, above.) Whereas there were eight infants and toddlers for every child care spot statewide in 2018, there were six for each spot in 2022.<sup>15</sup>

The picture has been somewhat better for families with children ages 3 to 5, but it is still notably constrained, with three preschool-age children for every available child care slot in the state and half of Oregon counties considered child care deserts for this group. Even where child

care is more available, high costs limit access to this vital support system and economic engine. The annual amount Oregonians pay for child care now rivals housing and college expenses; \$13,616 for one year of infant care surpasses the average cost of rent by nearly \$1,500.<sup>16</sup> On average, child care costs take up 23% of household income for families across the state, with a range between counties of 18% to 30%.

Oregon is not alone in facing this challenge; the typical U.S. cost burden of child care is 25%, and the U.S. Department of Health and Human Services posits that





**72% of Oregonians say that finding affordable, high-quality child care is difficult.**

OREGON VALUES & BELIEFS CENTER (2022)

when child care exceeds 7% of household income, it is no longer affordable.<sup>17</sup>

Combined factors contribute to these shortages and prohibitive costs. Oregon child care providers face ongoing funding, staffing and facility challenges that make it hard for them to make ends meet. Also, the United States invests less in child care than almost every other developed nation, ranking 35th out of 37 nations tracked by the Organisation for Economic Co-operation and Development when stacked up by our public investment in child care as a proportion of GDP.<sup>18</sup>

Faced with governmental under-investment (estimated by the Oregon Department of Early Learning and Care to be \$220 million as of January 2024), providers and families are getting squeezed.<sup>19</sup> When providers are unable to raise prices because parents cannot afford to pay more, they compensate by trimming costs, often for their staff.<sup>20</sup> Nationally, child care workers earn an average annual salary of \$24,230, putting them in the bottom 2% of U.S. occupations.<sup>21</sup>

Local research has documented the caring and commitment of Oregon's child care staff, but low

pay and gaps in support and training make it hard for them to stay in the field, with median hourly wages in the \$15–\$20 range for teachers in center-based care.<sup>22, 23</sup> Inevitably, the resulting shortages have downstream impacts on parents, employers and communities. Families in rural and frontier regions, low-income areas and communities of color typically bear the brunt of these system failures.<sup>24</sup> ■

## SPOTLIGHT ON CONNECTIONS ENDNOTES

- 1 Oregon Values and Beliefs Center. (2022, April 19). *Early learning*. <https://oregonvbc.org/early-learning/>
- 2 Isaacs, J., & Roessel, E. (2008, September 4). *Impacts of early childhood programs*. Brookings Institution. <https://www.brookings.edu/articles/impacts-of-early-childhood-programs/>
- 3 Centers for Disease Control and Prevention. (2019). *Adverse childhood experiences prevention: Resource for action: A compilation of the best available evidence*. [https://www.cdc.gov/violenceprevention/pdf/ACEs-Prevention-Resource\\_508.pdf](https://www.cdc.gov/violenceprevention/pdf/ACEs-Prevention-Resource_508.pdf)
- 4 Gopnik, A. (2016, August 12). In defense of play. *The Atlantic*. <https://www.theatlantic.com/education/archive/2016/08/in-defense-of-play/495545/>
- 5 Gray-Lobe, G., Pathak, P.A., & Walters, C.R. (2012). *The long-term effects of universal preschool in Boston*. [Working Paper No. 28756]. National Bureau of Economic Research. [https://www.nber.org/system/files/working\\_papers/w28756/w28756.pdf](https://www.nber.org/system/files/working_papers/w28756/w28756.pdf)
- 6 Varshney, N., Temple, J.A., & Reynolds, A.J. (2022). Early education and adult health: Age 37 impacts and economic benefits of the Child-Parent Center preschool program. *Journal of Cost Benefit Analysis*, 13(1), 57–90. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9273114/>
- 7 Karoly, L.A. (2011, February 10). *Toward standardization of benefit-cost analyses of early childhood interventions* [Working Paper WR-823]. RAND. [https://www.rand.org/pubs/working\\_papers/WR823.html](https://www.rand.org/pubs/working_papers/WR823.html)
- 8 Knudsen, E.I., Heckman, J.J., Cameron, J.L., & Shonkoff, J.P. (2006, July 6). Economic, neurobiological, and behavioral perspectives on building America's future workforce. *Proceedings of the National Academy of Sciences*, 103(27), 10155–10162. <https://doi.org/10.1073/pnas.0600888103>
- 9 Center for High Impact Philanthropy. (2015). *High return on investment*. <https://live-penn-impact.panthelon.io/wp-content/uploads/2016/2015/06/Why-Invest-High-Return-on-Investment.pdf>
- 10 Committee for Economic Development. (2019). *Child care in state economies: Fact sheet*. [https://www.ced.org/assets/reports/childcareimpact/fact\\_sheets/revised/Oregon%20Fact%20Sheet%201312019.pdf](https://www.ced.org/assets/reports/childcareimpact/fact_sheets/revised/Oregon%20Fact%20Sheet%201312019.pdf)
- 11 Bishop-Josef, S., Beakey, C., Watson, S., & Garrett, T. (2019, January). *Want to grow the economy? Fix the child care crisis: Workers and employers feel pain in pocketbooks and productivity*. Council for a Strong America. <https://strongnation.s3.amazonaws.com/documents/602/83bb2275-ce07-4d74-bcee-ff6178daf6bd.pdf?1547054862&inline;%20filename=%22Want%20to%20Grow%20the%20Economy%20Fix%20the%20Child%20Care%20Crisis.pdf%22>
- 12 Pears, K.C., Bruce, J., & Scheidt, D. (2023). *Oregon preschool development grant needs assessment birth through age 5: 2022 statewide household survey results*. Oregon Department of Early Learning and Care. <https://www.oregon.gov/delc/Documents/pdg-hh-survey-2022-exec-summ-eng-FINAL.pdf>
- 13 Parker, K. (2015, October 1). *Women more than men adjust their careers for family life*. Pew Research Center. <http://www.pewresearch.org/fact-tank/2015/10/01/women-more-than-men-adjust-their-careers-for-family-life/>
- 14 Schochet, L. (2019, March). *The child care crisis is keeping women out of the workforce*. Center for American Progress. <https://www.americanprogress.org/wp-content/uploads/sites/2/2019/03/ECPP-ChildCare-Crisis-report-2.pdf>
- 15 Pratt, M., & Sektnan, M. (2022). *Oregon's child care deserts 2022: Mapping supply by age group and percentage of publicly funded slots*. Oregon Department of Early Learning and Care. [https://health.oregonstate.edu/sites/health.oregonstate.edu/files/early-learners/pdf/research/oregons\\_child\\_care\\_deserts\\_2022.pdf](https://health.oregonstate.edu/sites/health.oregonstate.edu/files/early-learners/pdf/research/oregons_child_care_deserts_2022.pdf)
- 16 Economic Policy Institute. (2020, October). *Child care costs in the United States: The cost of child care in Oregon*. <https://www.epi.org/child-care-costs-in-the-united-states/#/OR>
- 17 University of Wisconsin Population Health Institute. (2022). *County health rankings and roadmaps: 2022 state report: Oregon*. [https://www.countyhealthrankings.org/sites/default/files/media/document/CHR2022\\_OR\\_0.pdf](https://www.countyhealthrankings.org/sites/default/files/media/document/CHR2022_OR_0.pdf)
- 18 U.S. Department of the Treasury. (2021, September). *The economics of child care supply in the United States*. <https://home.treasury.gov/system/files/136/The-Economics-of-Childcare-Supply-09-14-final.pdf>
- 19 Chatterjee, A., Webb, A., & Spence, D. (2024, January 11). *EDRC update*. Oregon Department of Early Learning and Care. <https://olis.oregonlegislature.gov/liz/202311/Downloads/CommitteeMeetingDocument/279283>
- 20 Miller, C.C., Parlapiano, A., & Ngo, M. (2023, June 21). *Child care disruptions expected as record funding nears an end*. *The New York Times*. <https://www.nytimes.com/2023/06/21/upshot/child-care-daycare-disruptions.html>
- 21 U.S. Department of the Treasury. (2021, September). *The economics of child care supply in the United States*.
- 22 Schlieber, M., Knight, J., Adejumo, T., Copeman Petig, A., Valencia López, E., & Jones, E.P. (2022). *Early educator voices: Oregon work environment conditions that impact early educator practice and program quality*. Center for the Study of Child Care Employment, University of California, Berkeley. <https://cscce.berkeley.edu/wp-content/uploads/2023/02/SEQUAL-Oregon-Report.pdf>
- 23 Oregon Child Care Research Partnership. (2023, December). *Oregon early learning workforce: Nine years beyond baseline comparison of 2012 and 2021*. <https://health.oregonstate.edu/sites/health.oregonstate.edu/files/Oregon-Early-Learning-Workforce---2021-Report.pdf>
- 24 Shuler, J.T. (2022, January). *Oregon's child care conundrum: Hurdles, disparities, and opportunities amidst the COVID-19 pandemic*. Our Children Oregon. <https://ourchildrenoregon.org/publications/oregons-child-care-conundrum-hurdles-disparities-and-opportunities-amidst-the-covid-19-pandemic/>









## SECTION 4

# Health

### *In this chapter*

- Healthy, affordable food
- Access to health insurance and costs of care
- Available and affirming care
- Public investments
- Connection points

**The concept of health has historically been interpreted as a simple absence of physical disease. Today, increasing attention to the multiple dimensions of well-being, and the intertwined systems and conditions that support healthy communities, is fundamentally shifting this understanding and definition.**



Madras Community Food Pantry

The World Health Organization (WHO) defines health as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”<sup>1</sup>

Health impacts all aspects of our lives. Our physical, mental and emotional well-being affects our ability to learn in the classroom, work in our chosen professions and engage in our communities. And research continues to document the important links between mental and physical well-being, including depression, chronic diseases and cancers.<sup>2</sup> The connection between health and other aspects of well-being was driven home over the course of the COVID-19

We need access to health care when we are sick, but we also need access to the resources, supports and systems that keep us well.

**“Policies intended to create conditions for health for everyone — like equal access to quality care, housing, employment and education — when applied differently, often exacerbate inequities. Communities of color, tribal communities, people living in rural Oregon and people with lower income in particular have been and continue to be systematically more exposed to health hazards while not receiving equal resources to support resilience.”**

■ OREGON HEALTH AUTHORITY (2022).  
PUBLIC HEALTH MODERNIZATION: FUNDING  
REPORT TO LEGISLATIVE FISCAL OFFICE

pandemic, which not only affected our physical health but also our economic livelihoods, educational progress and opportunities to connect in community.

Focusing on prevention is critical to personal well-being, community well-being and community health. We need access to health care when we are sick, but we also need access to the resources, supports and systems that keep us well.

A social determinants of health (SDOH) model, as adopted by the Centers for Disease Control and Prevention, recognizes the role of

**FIGURE 15. Social determinants of health.**



**Source:** Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion.

nonmedical factors in health outcomes — things that shape the conditions of our daily lives like economic policies and systems, social norms, social policies, racism, environment, climate and political systems.<sup>3,4</sup> (See Figure 15, above). Every aspect of our lives contributes to our health, whether positively or negatively. Rather than thinking about health as primarily the result of individual decisions or genetic risk factors, SDOH understands personal and community health as a symptom of interconnected systems and infrastructures that shape the distribution of money, power and resources.<sup>5</sup>

In many ways, all seven focus areas in this report contribute to our health, as the indicators explored across the report demonstrate; focusing on the systems and structures within each will inevitably improve individual and community health. Research suggests that SDOH factors can be even more important than access to health care, driving up to 50% of health outcomes.<sup>6</sup> (See Figure 16, below.) OCF's previous TOP research illustrated the importance of place and ZIP code in shaping economic opportunity.<sup>7</sup> The Child Opportunity Index shows a strong relationship between the conditions and resources in our neighborhoods and our life expectancy at birth, translating into a seven-year difference in longevity between people born

in very low-opportunity neighborhoods (life expectancy of 75) and those in very high-opportunity neighborhoods (life expectancy of 82).<sup>8, 9</sup>

Social determinants play a particularly important role across populations. Gender discrimination that disproportionately impacts women and girls has implications for every part of life, including access to health care and exposure to disease and gender-based violence.<sup>10</sup>

People who identify as LGBTQ+ disproportionately experience depression, anxiety, post-traumatic stress, substance use and suicidality, often in response to external and internalized stressors produced by an oppressive environment.<sup>11, 12</sup>

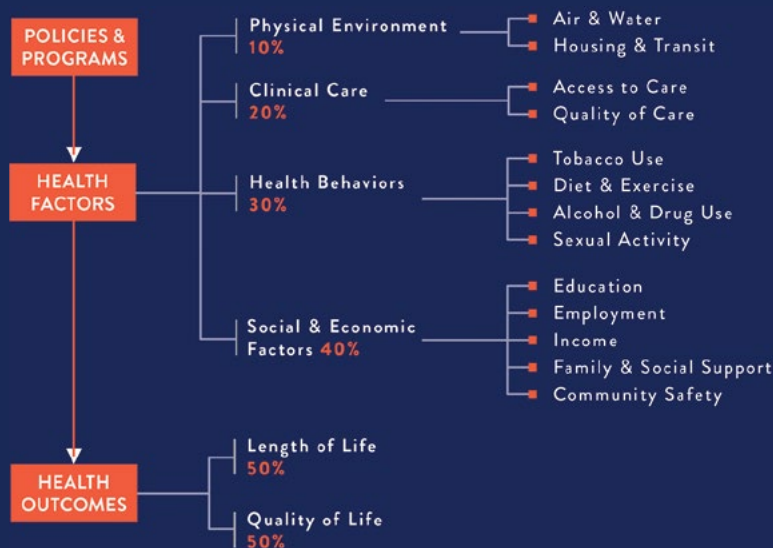
People of color not only experience higher rates of illness across a wide range of health conditions, but they also get sicker and have higher rates of mortality.<sup>13</sup> For example, both the diagnosis of cancer and the death rate from cancer are highest in Black men, and the life expectancy of Black Americans is four years lower than that of white Americans.<sup>14, 15</sup>

The psychological stressor of racism alone has been linked to the prevalence of cardiovascular disease and high blood pressure in Latino/x and Black populations in the United States,<sup>16</sup> and a 22-year longitudinal study of Black women found that experiencing racism in employment, housing and interactions with police was associated with a 26% higher risk of coronary heart disease.<sup>17</sup>

Finally, no discussion of health can ignore the lessons of COVID-19, which laid bare the importance of a robust public health infrastructure nationally and globally. The United States suffered more COVID-19 deaths than any other country in the world, with disproportionate impacts on people of color and low-income communities — an especially stark contrast with countries that invested in public health preparedness *before* the pandemic.<sup>18</sup>

Widening racial/ethnic disparities in COVID-19 mortality and comorbidities, and their implications for our future well-being, have only magnified our need to address the broader societal conditions at the root of poor mental, behavioral and physical health outcomes.<sup>19</sup>

**FIGURE 16. Health outcomes are impacted by various factors.**



Source: University of Wisconsin Population Health Institute. (n.d.). *Explore health topics.* <https://www.countyhealthrankings.org/what-impacts-health/county-health-rankings-model>



In this chapter, we focus our attention on some of the elements of our health systems and structures that contribute to our well-being while understanding that they are just one piece of a larger puzzle. A strong public health system is essential to support community health across Oregon, along with healthy environments and an array of well-functioning partner systems. COVID-19 revealed gaps in our ability to respond to public health and other emerging health threats, as well as to meet our goal of achieving equitable, community-centered and accountable services.<sup>20</sup>



## Discussion of Key Indicators

### HEALTHY, AFFORDABLE FOOD

Research shows that the availability of grocery stores or markets and safe spaces to exercise correlates with improved health outcomes.<sup>21, 22</sup> Conversely, food deserts (areas where people have very limited access to healthy, affordable food through markets<sup>23</sup>) are linked with a higher prevalence of overweight/obesity and premature death;<sup>24, 25</sup> and food insecurity (a lack of consistent access to food) is related to negative health outcomes such as weight gain, premature mortality, asthma and activity limitations, as well as increased health care costs.<sup>26, 27, 28, 29</sup>

Access to healthy foods is important to all Oregonians; between 72% and 81% support using tax dollars to increase access to affordable, healthy and culturally appropriate foods for families, with no significant differences in support between respondents of different racial/ethnic identities, education levels, urbanicity or income levels.<sup>30</sup>

In Oregon, 5% of people have low incomes and do not live close to a grocery store, limiting their ability to access healthy foods. In addition, 10% of Oregonians do not have any reliable source of food. This translates to an overall food environment index score of 8.1 out of a possible 10 (1 being the worst and 10 being the best), with ranges from 6.3 to 9.4 (and one notable outlier on the lower end

of the scale).<sup>31</sup> Other sources estimate that 1 in 5 people face hunger in rural, urban and suburban communities throughout the state. This represents a dramatic increase from the 1 in 11 Oregonians who were food-insecure before the pandemic and is driven by the ongoing economic fallout of COVID-19 and the rising cost of food and housing.<sup>32</sup> Note, too, that food availability doesn't necessarily result in *culturally appropriate* offerings (a term that refers both to the food itself and the cultural practices around its preparation); further research may be needed to understand the food environment index landscape more fully.

### ACCESS TO HEALTH INSURANCE & COSTS OF CARE

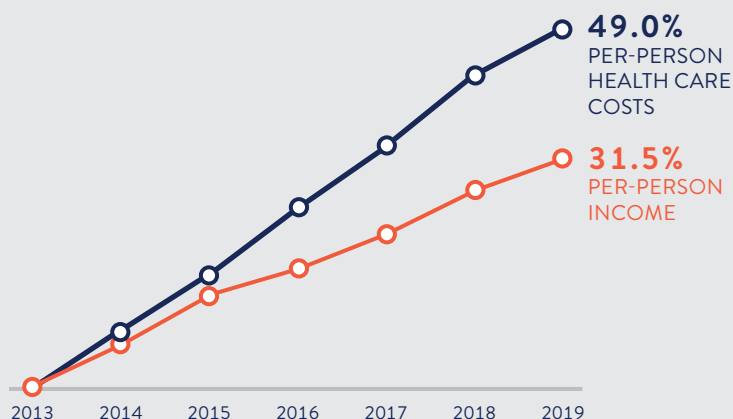
In the U.S. health system, health insurance functions as a gateway to accessing available care. Without it, health services are more likely to be prohibitively expensive. Policy and insurance market reforms authorized by the Affordable Care



White Bird Clinic

Act (ACA) have significantly increased the number of Oregonians with health insurance in recent years. Offering insurance is also popular among Oregonians; when asked specifically about the Children's Health Insurance Program (CHIP) — which provides health care to all children from low-income families in the state, regardless of

**FIGURE 17. Per-person health care costs in Oregon grew faster than per-person income between 2013 and 2019.**



**Source:** Oregon Health Authority. (2022). *Health care costs trends: State and market-level cost growth in Oregon 2013–2019*. [https://www.oregon.gov/oha/HPA/HP/Cost%20Growth%20Target%20documents/Oregon-Health-Care-Cost-Trends-Report-2013-2019-FINAL.pdf?utm\\_medium=email&utm\\_source=govdeliv](https://www.oregon.gov/oha/HPA/HP/Cost%20Growth%20Target%20documents/Oregon-Health-Care-Cost-Trends-Report-2013-2019-FINAL.pdf?utm_medium=email&utm_source=govdeliv)

documentation status — 85% of Oregonians felt positively about this program.<sup>33</sup>

Fewer than 10% of Oregonians were uninsured as of 2021, ranking the state 19th in the country.<sup>34</sup> However, important coverage disparities persist by county (particularly in Malheur, Morrow and Umatilla, where 17%–20% of the population remains uninsured<sup>35</sup>) and by population (e.g., 24% of Latino/x/Hispanic and 16% of American Indian/Alaska Native Oregonians are uninsured<sup>36</sup>).

This is especially important given the positive impact of insurance. Studies find that people with insurance coverage tend to fare better on significant indicators, including the likelihood of having a personal doctor;<sup>37</sup> obtaining early diagnosis and treatment;<sup>38, 39</sup> access to behavioral health and substance use disorder treatment;<sup>40</sup> access to prescription drug therapies;<sup>41, 42, 43</sup> and a decrease in mortality.<sup>44</sup> In Oregon specifically, people who became eligible for Medicaid experienced lower rates of depression than those who did not.<sup>45</sup>

Even with insurance, and despite advances made by the ACA, the high cost of wellness can jeopardize individuals' and families' financial well-being. Out-of-pocket costs remain burdensome *even with coverage*, rising disproportionately to household income. A study by Kaiser Family Foundation

finds that since 2010, average family premiums for employer-sponsored health insurance have increased by 55% — at least twice as fast as wages (27%) and inflation (19%).<sup>46</sup> A study by Oregon Health Authority shows that the state's per-person health care costs grew by 49% (an average of almost 7% annually) between 2013 and 2019, outpacing both income *and* inflation. (See Figure 17, above.) This growth rate is faster than the national average, although health care in Oregon tends to be less expensive in sheer dollar amounts.<sup>47</sup>

While Oregon offers some level of protection against medical debt,<sup>48</sup> two-thirds of those filing for bankruptcy nationally cite medical issues as a key reason for their financial downfall. Estimates say as many as 40% of U.S. adults are currently in debt because of medical or dental bills.<sup>49, 50</sup> Nationwide, at least \$88 billion in estimated medical debt is on consumer credit records, with Black and Hispanic people, young adults and low-income people of all races and ethnicities being likely to have more medical debt than the national average.<sup>51</sup>

#### AVAILABLE & AFFIRMING CARE

When considering overall state health system performance, Oregon ranks 14th in the country and 4 out of 6 among Western states (Alaska, California, Hawaii, Nevada and Washington). These rankings are based on 56 indicators of

access and affordability; prevention and treatment; available hospital use and cost; healthy lives; income disparity; and racial and ethnic equity.<sup>52</sup>

The Commonwealth Fund's examination of how statewide health care systems held up during the pandemic ranks Oregon fifth in the nation (through March 2022), noting that our ICUs were full for less time than many other states.<sup>53</sup> Oregon is also a national leader in forming a network of coordinated care organizations (CCOs) that span physical, mental, behavioral and dental health care under the Oregon Health Plan (OHP/Medicaid).<sup>54</sup> OHP continues to lead as it begins testing innovations using \$1.1 billion in federal funding to expand coverage for health-related social needs such as food assistance and housing benefits.<sup>55</sup>

But important gaps remain. Compared with other U.S. states, Oregon has the highest prevalence of mental health and substance use issues.<sup>56</sup> According to Mental Health America, it ranks as one of the worst states when it comes to mental illness prevalence and access to care for adults, and as *the absolute worst* for youth.<sup>57</sup>

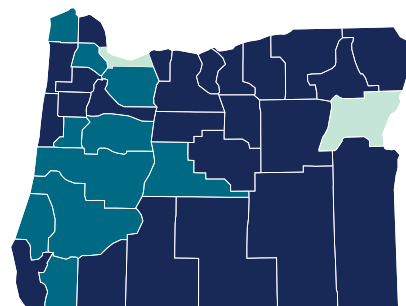
Oregon is also listed as a health professional shortage area (HPSA) by the U.S. Health Resources and Services Administration, meeting only 29% of its need as of fall 2022.<sup>58</sup> Under HPSA classification, almost all counties in Oregon have a high overall need for health care.<sup>59</sup> (See *Figure 18, right*.) The story is only slightly better when it comes to dental care (32% of need met) and primary health care (64% of need met). For substance use disorder specifically, recent analysis shows a 49% gap in unmet treatment needs, including prevention, harm reduction, treatment and recovery services.<sup>60</sup>

Rural regions experience higher rates of unmet needs for all services due to combined factors including lack of providers, distance to services, lack of transportation or child care, stigma associated with seeking care and, in some cases, state requirements and guidelines around treatment models (requirements that hinder urban areas as well). This exemplifies the lack of health care for those who aren't clustered along the Interstate 5

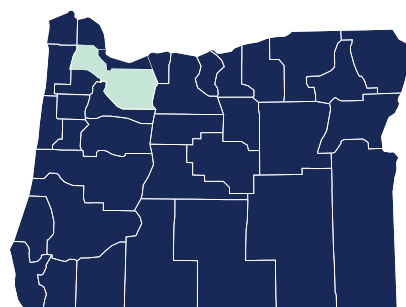
**FIGURE 18. Most Oregon counties qualify as health professional shortage areas (HPSAs).**

HPSAs can be based on geography, population or facilities. Learn more at <https://bhwhrsa.gov/workforce-shortage-areas/shortage-designation>

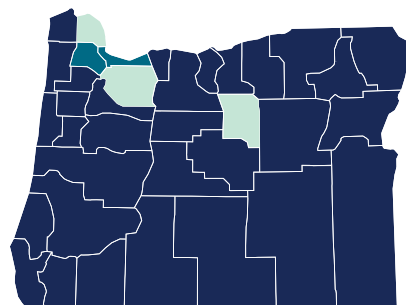
#### PRIMARY CARE



#### MENTAL HEALTH CARE



#### DENTAL CARE



**Source:** U.S. Department of Health and Human Services, Health Resources and Services Administration. (2024). *RHIhub maps on rural health workforce*. Rural Health Information Hub. <https://www.ruralhealthinfo.org/rural-maps/health-workforce>



corridor, particularly for behavioral health needs. Some services, like psychiatric care for children, are virtually nonexistent outside of Metro Portland.<sup>61,62</sup> The U.S. Government Accountability Office estimates that rural residents travel an average of 24 miles for inpatient care and 45 for alcohol or drug treatment compared to their urban peers, who travel about 4 miles for inpatient and 6 miles for alcohol or drug care.<sup>63</sup>

Gaps are especially acute for those seeking culturally and linguistically specific care. Oregon is one of only 10 states requiring cultural competency training for licensed health professionals,<sup>64</sup> but research continues to show that racial/ethnic inequities persist across all state health systems,<sup>65</sup> with nondominant and non-English speaking Oregonians experiencing high rates of racism, discrimination and bias in medical settings.<sup>66</sup>

Mental health professionals in Oregon are also less diverse than the state population; the Oregon

Board of Licensed Professional Counselors and Therapists estimates that just 7% of Oregon therapists are people of color, compared to 25% of Oregonians overall.<sup>67</sup> A report on Latino mental health in the state also documents the lack of culturally specific mental health providers, especially in rural areas.<sup>68</sup>

This is echoed by research from KGR&C on behalf of OCF, which found that among those who are licensed to provide mental or behavioral health services, it is rare to find practitioners from nondominant cultural backgrounds or with nondominant identities.<sup>69</sup>

Most recently, a community-led research project conducted by the Coalition of Communities of Color on behalf of Oregon Health Authority demonstrated that previous negative experiences cause nondominant patients to hesitate in seeking behavioral health providers or services.<sup>70</sup> (See *Figure 19, below.*) Given this staffing challenge,

## FIGURE 19. Barriers to accessing behavioral health services.

From English-language survey (N=259).

<b>DISTANCE</b>	<ul style="list-style-type: none"> <li>■ CCO/health provider is too far away.</li> <li>■ Don't have access to transportation.</li> <li>■ Don't have access to child care.</li> <li>■ The service(s) I/we need is not available near me.</li> </ul>
<b>CULTURAL &amp; LINGUISTIC BARRIERS</b>	<ul style="list-style-type: none"> <li>■ Provider cannot communicate in a language that I'm comfortable using.</li> <li>■ Provider doesn't have the same cultural background as me.</li> <li>■ Information about services is not provided in a language I'm comfortable using.</li> <li>■ Don't trust that my CCO/health provider will be respectful of my cultural values.</li> </ul>
<b>PROCESS</b>	<ul style="list-style-type: none"> <li>■ Process for making an appointment with a provider is difficult.</li> </ul>
<b>COMMUNICATION</b>	<ul style="list-style-type: none"> <li>■ Don't have consistent access to internet for virtual appointments.</li> <li>■ Not aware of what services are available near me.</li> </ul>
<b>SAFETY</b>	<ul style="list-style-type: none"> <li>■ Don't feel safe visiting my provider.</li> </ul>
<b>INSURANCE</b>	<ul style="list-style-type: none"> <li>■ Don't have health insurance.</li> <li>■ The service(s) I/we need is not covered by my insurance.</li> </ul>

**Source:** Coalition of Communities of Color. (2021). *English-language survey: Investing in culturally and linguistically responsive behavioral health care in Oregon.* <https://www.coalitioncommunitiescolor.org/research-and-publications/2021-behavioral-health-eng>

organizations like the Oregon Mental Health Regulatory Agency are considering what they can do to mitigate disparities in the representation of people of color in mental health professions.<sup>71</sup>

Access to equitable and affirming health care is also limited for members of the LGBTQ+ community due to the discrimination and mistreatment they experience in the health care system.<sup>72</sup> Multiple research studies have documented the importance of gender-affirming care (medical and psychosocial health care designed to affirm people's gender identities) to the mental health and overall well-being of gender-diverse, transgender and nonbinary children and adolescents.<sup>73,74</sup> These studies have documented that when this need is met, resiliency and other positive outcomes increase.<sup>75</sup> But access remains elusive. As an example, while gender-affirming health services in many parts of Oregon are often perceived as relatively trans-friendly compared to other U.S. states (i.e., inclusion of hormone therapy in OHP and availability of informed consent hormone therapy), a recent study highlights how economic and social discrimination limits people from accessing these services.<sup>76</sup>

## PUBLIC INVESTMENTS

The importance of investing in public health infrastructure cannot be overstated.<sup>77</sup> Research links increased public health spending to a host of positive outcomes, associating even a \$10 per-capita increase in local public health spending with lower mortality rates and better health overall.<sup>78,79</sup>

Additional research suggests that every \$1 invested in public health interventions focused on common chronic conditions such as diabetes and cardiovascular disease recoups at least \$5 in health care savings.<sup>80,81</sup> One study in California estimated an impressive \$67–\$88 in benefit to society for every \$1 invested in public health.<sup>82</sup> Further state-level analyses show how increases in public health spending reduce Medicare utilization (particularly in areas with high poverty, high uninsurance rates and fewer medical professionals).<sup>83</sup> Yet of the roughly \$3.8 trillion dollars spent on health in the United States, less than 3% is spent on



public health, which represents a decline from the amount spent in 2000.<sup>84</sup> Oregon has responded by stepping up public funding in this area. In 2021, the Oregon Legislature allocated an additional \$45 million in funding, bringing total dollars in public health modernization since 2017 to \$60.6 million.<sup>85</sup>

Investments in 2023–2025 aim to accelerate work toward health equity for communities of color, tribal communities, immigrant and refugee communities, LGBTQ+ communities, people in rural areas, people with low incomes, and those experiencing intersecting oppressions. According to an Oregon Health Authority report, an additional \$276 million in state funds will be needed to implement these priorities along with community-based organizations and other providers.<sup>86</sup>

The increase in funding, attention and initiatives is welcome, but given the gaps mentioned above, we need to ensure that these investments respond to community needs and translate into the increased health equity across populations and places that Oregon needs. Research suggests that this work entails not just a financial investment, but also funding and working with communities and those organizations they already trust, as well as coordinating and desiloing across agencies, partners and stakeholders.<sup>87</sup> ■



Trust for Public Land



## Exploring Connection Points

### HEALTH + NATURAL ENVIRONMENT



Extensive research has demonstrated the negative health impacts of air pollutants such as ozone and particulate matter, most prominently in the prevalence and seriousness of lung and heart diseases.<sup>88</sup>



A recent report from the Oregon

Department of Environmental Quality finds an uptick in the number of days that areas across Oregon have hit dangerous air pollution levels due to wildfires,<sup>89</sup> and the Oregon Environmental Council has estimated that the state's cost of environmentally attributable disease and disability for adults and children combined is at least \$1.57 billion annually. For children alone, these costs amount to \$1.1 billion per year, in a range of \$984 million to 1.29 billion.<sup>90</sup>

*Want to explore further? Turn to **Natural Environment**, page 76.*

### HEALTH + HOUSING



Access to affordable, safe and stable housing is basic to community health. Oregon's housing crisis is exacerbating economic challenges locally. Many businesses are unable to hire people because they can't find housing. As just one example, prospective health care hires face a lack of readily available affordable housing, especially in coastal and rural communities. In John Day, efforts are underway to reimagine and rebuild the entire town to meet the demand for income and housing type, including places where doctors and other medical professionals can settle.<sup>91, 92</sup>

*Want to explore further? Turn to **Housing**, page 64.*

### HEALTH + ECONOMY



Medicaid expansions have proven to be a huge local driver for our economy and personal finances, generating jobs and income, improving health and lowering debt.<sup>93, 94</sup> Oregon added over 23,000 health care jobs from 2013 to 2016 — a rate that outpaced those of states that did not expand Medicaid coverage. And Oregon's reforms have saved state and federal taxpayers an estimated \$1.3 billion, with hospitals in particular reporting fewer losses from uncompensated care costs (a decline from \$845 million in 2013 to \$315 million in 2015).<sup>95</sup>

*Want to explore further? Turn to **Economy**, page 20.*



## SECTION 4 ENDNOTES

- 1 World Health Organization. (1946). *Constitution of the World Health Organization*. <https://www.who.int/about/governance/constitution>
- 2 Galson, S.K. (2009, March-April). Mental health matters. *Public Health Reports*, 124(2), 189–191. <https://doi.org/10.1177/003335490912400202>
- 3 Hacker, K., Auerbach, J., et al. (2022). Social determinants of health—An approach taken by CDC. *Journal of Public Health Management and Practice*, 28(6), 589–594. <https://doi.org/10.1097/phh.0000000000001626>
- 4 Centers for Disease Control and Prevention. (2020, November 30). *Paving the road to health equity*. [https://www.cdc.gov/minorityhealth/publications/health\\_equity/index.html](https://www.cdc.gov/minorityhealth/publications/health_equity/index.html)
- 5 FrameWorks Institute. (2020). *Framing public issues toolkit: Explaining social determinants of health*. <https://www.frameworksinstitute.org/wp-content/uploads/2020/08/rec2.pdf>
- 6 Hood, C.M., Gennuso, K.P., Swain, G.R., & Catlin, B.B. (2015, October 30). County health rankings: Relationships between determinant factors and health outcomes. *American Journal of Preventative Medicine*, 50(2), 129–135. <https://doi.org/10.1016/j.amepre.2015.08.024>
- 7 Ruffenach, C., Brandt, M., & Seel, B. (2020). *Cornerstones: Economic mobility and belonging in Oregon*. Oregon Community Foundation. <https://oregoncf.org/community-impact/research/top-report-2020/>
- 8 Ibid.
- 9 Acevedo-Garcia, D., Noelke, C., & McArdle, N. (2020). *The geography of child opportunity: Why neighborhoods matter for equity*. Brandeis University. [https://www.diversitydatakids.org/sites/default/files/file/ddk\\_the-geography-of-child-opportunity\\_2020v2\\_0.pdf](https://www.diversitydatakids.org/sites/default/files/file/ddk_the-geography-of-child-opportunity_2020v2_0.pdf)
- 10 Miani, C. et al. (2021). Measurement of gender as a social determinant of health in epidemiology—A scoping review. *PLoS One*, 16(11). <https://doi.org/10.1371/journal.pone.0259223>
- 11 Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- 12 Alessi, E.J., Martin, J.I., Gyamerah, A., & Meyer, I.H. (2013). Prejudice-related events and traumatic stress among heterosexuals and lesbians, gay men and bisexuals. *Journal of Aggression, Maltreatment & Trauma*, 22(5), 510–526. <https://doi.org/10.1080/10926771.2013.785455>
- 13 Centers for Disease Control and Prevention. (2023, September 18). *Racism and health*. <https://www.cdc.gov/minorityhealth/racism-disparities/index.html>; Radley, D.C., Baumgartner, J.C., et al. (2021, November 18). *Achieving racial and ethnic equity in U.S. health care: A scorecard of state performance*. The Commonwealth Fund. <https://www.commonwealthfund.org/publications/scorecard/2021/nov/achieving-racial-ethnic-equity-us-health-care-state-performance>
- 14 Haque, A. T., Berrington de González, A., et al. (2023). Cancer mortality rates by racial and ethnic groups in the United States, 2018–2020. *Journal of the National Cancer Institute*, 115(7), 822–830. <https://doi.org/10.1093/jnci/djad069>; NIH National Cancer Institute. (2023). *Cancer stat facts: Cancer disparities*. <https://seer.cancer.gov/statfacts/html/disparities.html>
- 15 National Center for Health Statistics. (2023, June 26). *Table 4: Life expectancy at birth, at age 65, and at age 75, by sex, race, and Hispanic origin: United States, selected years 1900–2018*. <https://www.cdc.gov/nchs/data/hest/2019/004-508.pdf>
- 16 Brondolo, E. (2008, January). Racism and ambulatory blood pressure in a community sample. *Psychosomatic Medicine*, 70(1), 49–56. <https://doi.org/10.1097/psy.0b013e31815ff3bd>
- 17 Thurston, A. (2023, March 1). *Experiencing racism increases Black women's heart disease risk, BU research finds*. The Brink. <https://www.bu.edu/articles/2023/experiencing-racism-increases-black-women-heart-disease-risk/>
- 18 Johns, M., & Rosenthal, J. (2022). *How investing in public health will strengthen America's health*. Center for American Progress. <https://www.americanprogress.org/article/fact-sheet-how-investing-in-public-health-will-strengthen-americas-health/>
- 19 World Health Organization. (2021, December). *COVID-19 and the social determinants of health and health equity*. <https://www.who.int/publications/i/item/9789240038387>
- 20 Oregon Health Authority Public Health Division. (2022, June). *Public health modernization: Funding report to Legislative Fiscal Office*. <https://www.oregon.gov/oha/PH/ABOUT/TASKFORCE/Documents/2022-Public-Health-Modernization-Funding-Report.pdf>
- 21 Bell, J., Mora, G., Hagan, E., Rubin, V., & Karpyn, A. (2013). *Access to healthy food and why it matters: A review of the research*. PolicyLink. [https://www.policylink.org/sites/default/files/GROCERYGAP\\_SUMMARY\\_FINAL\\_NOVEMBER2013.pdf](https://www.policylink.org/sites/default/files/GROCERYGAP_SUMMARY_FINAL_NOVEMBER2013.pdf)
- 22 Ou, J. Y., Levy, J. I., et al. (2016). A walk in the park: The influence of urban parks and community violence on physical activity in Chelsea, MA. *International Journal of Environmental Research and Public Health*, 13(1), 97.
- 23 U.S. Department of Agriculture. (2022, October 20). *Documentation: Definitions*. <https://www.ers.usda.gov/data-products/food-access-research-atlas/documentationhttps://doi.org/10.3390/ijerph13010097>
- 24 Ahern, M., Brown, C., & Dukas, S. (2011, April 27). A national study of the association between food environments and county-level health outcomes. *Journal of Rural Health*, 27(4), 367–379. <https://doi.org/10.1111/j.1748-0361.2011.00378.x>; Schafft, K.A., Jensen, E.B., Hinrichs, C.C. Food deserts and overweight schoolchildren: Evidence from Pennsylvania. *Rural Sociology*, 74(2), 153–277. <https://doi.org/10.1111/j.1549-0831.2009.tb00387.x>
- 25 Schafft, K. A., Jensen, E. B., & Clare Hinrichs, C. (2009). Food deserts and overweight schoolchildren: Evidence from Pennsylvania.
- 26 Brownson R.C., Haire-Joshu, D., & Luke, D.A. (2006). Shaping the context of health: A review of environmental and policy approaches in the prevention of chronic diseases. *Annual Review of Public Health*, 27, 341–70. <https://doi.org/10.1146/annurev.publhealth.27.021405.102137>
- 27 Adams, E.J., Grummer-Strawn, L., & Chavez, G. (2003). Food insecurity is associated with increased risk of obesity in

- California women. *The Journal of Nutrition*, 133(4), 1070–1074. <https://doi.org/10.1093/jn/133.4.1070>
- 28 Gunderson, C., & Ziliak, J.P. (2015). Food insecurity and health outcomes. *Health Affairs*, 34(11). <https://doi.org/10.1377/hlthaff.2015.0645>
  - 29 Berkowitz, S.A., Basu, S., Meigs, J.B., & Seligman, H.K. (2018, June). Food insecurity and health care expenditures in the United States, 2011–2013. *Health Services Research*, 53(3), 1600–1620. <https://doi.org/10.1111/1475-6773.12730>
  - 30 Oregon Values and Beliefs Center. (2022). *Children and family support services*. <https://oregonvbc.org/children-and-family-support-services/> <https://doi.org/10.1111/1475-6773.12730>
  - 31 University of Wisconsin Population Health Institute. (2023). *Oregon county health ranking and roadmaps*. <https://www.countyhealthrankings.org/explore-health-rankings/oregon?year=2023>
  - 32 Oregon Food Bank. (2023). *Oregon hunger facts*. <https://www.oregonfoodbank.org/posts/oregon-hunger-facts>
  - 33 Oregon Values and Beliefs Center. (2022). *Children and family support services*.
  - 34 The Commonwealth Fund. (2022). *2022 Scorecard on state health system performance: How did states do during the COVID-19 pandemic?* <https://www.commonwealthfund.org/publications/scorecard/2022/jun/2022-scorecard-state-health-system-performance>
  - 35 Places. (n.d.). Local data for better health [Interactive web application]. Centers for Disease Control and Prevention. <https://experience.arcgis.com/experience/22c7182a162d45788dd52a2362f8ed65>
  - 36 The Commonwealth Fund. (2022). *Achieving racial and ethnic equity in U.S. health care: A scorecard of state performance*.
  - 37 Simon, K., Soni, A., & Cawley, J. (2017). The impact of health insurance on preventive care and health behaviors: Evidence from the first two years of the ACA Medicaid expansions. *Journal of Policy Analysis and Management*, 36(2), 390–417. <https://doi.org/10.1002/pam.21972>
  - 38 Antonisse, L. et al. (2018). *The effects of Medicaid expansion under the ACA: Updated findings from a literature review*. Kaiser Family Foundation. <https://files.kff.org/attachment/Issue-Brief-The-Effects-of-Medicaid-Expansion-Under-the-ACA-Updated-Findings-from-a-Literature-Review>
  - 39 Guth, M., Garfield, R., & Rudowitz, R. (2020). *The effects of Medicaid expansion under the ACA: Studies from January 2014 to January 2020*. Kaiser Family Foundation. <https://www.kff.org/medicaid/report/the-effects-of-medicaid-expansion-under-the-aca-updated-findings-from-a-literature-review/>
  - 40 Ibid.
  - 41 Ghosh, A., Simon, S., & Sommers, D.S. (2017). *The effect of state Medicaid expansions on prescription drug use: Evidence from the Affordable Care Act*. National Bureau of Economic Research. <http://www.nber.org/papers/w23044>
  - 42 Myerson, R., Lu, T., Tonnu-Mihara, I., & Huang, E.S. (2018). *Medicaid eligibility expansions may address gaps in access to diabetes medications*. *Health Affairs*, 37(8), 1200–1207. <https://doi.org/10.1377/hlthaff.2018.0154>
  - 43 Connecticut Health Foundation. (2018). *Faces of Husky D: The impact of Connecticut's Medicaid expansion*. <https://www.cthealth.org/publication/huskyd/>
  - 44 Miller, S., Altekruze, S.F., Johnson, N.J., & Wherry, L.R. (2019). *Medicaid and mortality: New evidence from linked survey and administrative data*. National Bureau of Economic Research. <https://www.nber.org/papers/w26081>; Kaiser Family Foundation. (2020). *Employee health benefits 2020 annual survey*. <https://www.kff.org/health-costs/report/2020-employer-health-benefits-survey/>
  - 45 Baicker, K., Taubman, S.L., et al. (2013). The Oregon experiment: Effects of Medicaid on clinical outcomes. *The New England Journal of Medicine*, 368(18), 1713–22. <https://doi.org/10.1056/NEJMsa1212321>
  - 46 Kaiser Family Foundation. (2020). *Employee health benefits 2020 annual survey*.
  - 47 Oregon Health Authority. (2022). *Health care costs trends: State and market-level cost growth in Oregon 2013–2019*. <https://www.oregon.gov/oha/HPA/HP/Pages/cost-growth-target-reports.aspx>
  - 48 Kona, M., & Raimugia, V. (2022). *Interactive map: State protections against medical debt*. The Commonwealth Fund. <https://www.commonwealthfund.org/publications/maps-and-interactives/state-protections-against-medical-debt>
  - 49 Himmelstein, D., Lawless, R.M., Thorne, D., Foohey, P., & Woolhandler, S. (2019). Medical bankruptcy: Still common despite the Affordable Care Act. *American Journal of Public Health*, 109(3), 431–433. <https://doi.org/10.2105/ajph.2018.304901>
  - 50 Kaiser Family Foundation. (2022). *Health care debt survey*. <https://www.kff.org/report-section/kff-health-care-debt-survey-main-findings/>
  - 51 Consumer Financial Protection Bureau. (2022). *Medical debt burden in the United States*. [https://files.consumerfinance.gov/f/documents/cfpb\\_medical-debt-burden-in-the-united-states-report\\_2022-03.pdf](https://files.consumerfinance.gov/f/documents/cfpb_medical-debt-burden-in-the-united-states-report_2022-03.pdf)
  - 52 See reference 34 for indicators and Oregon-specific data.
  - 53 The Commonwealth Fund. (2022). *2022 Scorecard on state health system performance: How did states do during the COVID-19 pandemic?*
  - 54 Think Cultural Health. (2023). *Tracking CLAS*. U.S. Department of Health and Human Services. <https://thinkculturalhealth.hhs.gov/clas/clas-tracking-map>
  - 55 U.S. Department of Health and Human Services. (2022). *HHS approves groundbreaking Medicaid initiatives in Massachusetts and Oregon*. <https://www.hhs.gov/about/news/2022/09/28/hhs-approves-groundbreaking-medicaid-initiatives-in-massachusetts-and-oregon.html>
  - 56 Reinert, M, Fritz, D., & Nguyen, T. (2021). *The state of mental health in America 2022*. Mental Health America. <https://mhanational.org/research-reports/2022-state-mental-health-america-report>
  - 57 Mental Health America. (2023). *Adult ranking 2023*. <https://mhanational.org/issues/2023/ranking-states>
  - 58 Kaiser Family Foundation. (2022). *State health facts: Mental health care health professional shortage areas*. <https://www.kff.org/other/state-indicator/mental-health-care-health-professional-shortage-areas-hpsas/>

- 59 Rural Health Information Hub. (2023). *Health professional shortage areas: Mental health by county, 2023—Oregon*. <https://www.ruralhealthinfo.org/charts/7?state=OR>
- 60 Oregon Health + Science University & PSU School of Public Health. (2022). *Oregon substance use disorder services inventory and gap analysis*. Oregon Health Authority.
- 61 Oregon Health Authority. (2020). *Dec 2020 Oregon primary care health professional shortage areas*. <https://www.oregon.gov/oha/HPA/HP-PCO/Documents/HPSA-Primary-Type-Dec-2020.pdf>
- 62 KGR&C. (2022). *Mental health in Oregon: Opportunities for philanthropy* [Contact OCF for access]; see also Templeton, A. (2023, March 17). *In rural Oregon, there's a higher need for mental health care, but few options*. OPB. <https://www.opb.org/article/2023/03/17/rural-oregon-mental-health-services-lacking-access/>
- 63 U.S. Government Accountability Office. (2023). *Why health care is harder to access in rural America*. Watchblog. <https://www.gao.gov/blog/why-health-care-harder-access-rural-america>
- 64 Think Cultural Health. (2023). *Tracking CLAS*.
- 65 The Commonwealth Fund. (2022). *Achieving racial and ethnic equity in U.S. health care*.
- 66 Coalition of Communities of Color. (2022). *Investing in culturally and linguistically responsive behavioral health care in Oregon*. Oregon Health Authority.
- 67 Keen Independent Research. (2022). *Oregon mental health regulatory agency diversity study*. [https://www.oregon.gov/obl/pct/Documents/Diversity\\_Study\\_12-22.pdf](https://www.oregon.gov/obl/pct/Documents/Diversity_Study_12-22.pdf)
- 68 Kim-Gerver, C., et al. (2020). *Crisis de nuestro bienestar: A report on Latino mental health in Oregon*. Oregon Commission on Hispanic Affairs. [www.oregon.gov/oac/Pages/Bienestar.aspx](http://www.oregon.gov/oac/Pages/Bienestar.aspx)
- 69 KGR&C. (2022). *Mental health in Oregon: Opportunities for philanthropy*.
- 70 For an in-depth list of research, please see Coalition of Communities of Color (2022) above.
- 71 Keen Independent Research. (2022). *Oregon mental health regulatory agency diversity study*.
- 72 Center for American Progress. (2022). *Discrimination prevents LGBTQ people from accessing health care*. <https://www.americanprogress.org/article/discrimination-prevents-lgbtq-people-accessing-health-care/>
- 73 Turban, J. (2022). *The evidence for trans youth gender-affirming medical care*. *Psychology Today*. <https://www.psychologytoday.com/us/blog/political-minds/202201/the-evidence-trans-youth-gender-affirming-medical-care>
- 74 Matouk, K.M., & Wald, M. (2022). *Gender-affirming care saves lives*. <https://www.columbiapsychiatry.org/news/gender-affirming-care-saves-lives>
- 75 Tordoff, D.M. et al. (2022). *Mental health outcomes in transgender and nonbinary youths receiving gender-affirming care*. *JAMA Network Open*, 5. <https://doi.org/10.1001/jamanetworkopen.2022.0978>
- 76 Garcia, J., & Crosby, R.A. (2020). *Social determinants of discrimination and access to health care among transgender women in Oregon*. *Transgender Health*, 5, 225–233.
- 77 Johns, M., & Rosenthal, J. (2022). *How investing in public health will strengthen America's health*. Center for American Progress.
- 78 Erwin, P.C., Mays, G.P., & Riley, W.J. (2012). *Resources that may matter: The impact of local health department expenditures on health status*. *Public Health Reports*, 127(1), 89–95. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3234401/>
- 79 Brown, T.T., Martinez-Gutierrez, M.S., & Navab, B. (2014). *The impact of changes in county public health expenditures on general health in the population*. *Health, Economics, Poverty, and Law* 9(3), 251–269. <https://pubmed.ncbi.nlm.nih.gov/24524261>
- 80 McCullough, J.M. (2018). *The return on investment of public health system spending*. *AcademyHealth*. [https://academyhealth.org/sites/default/files/roi\\_public\\_health\\_spending\\_june2018.pdf](https://academyhealth.org/sites/default/files/roi_public_health_spending_june2018.pdf)
- 81 American Public Health Association. (2022). *Public health and chronic disease: Cost savings and return on investment*. [https://www.apha.org/~media/files/pdf/factsheets/chronicdiseasefact\\_final.ashx](https://www.apha.org/~media/files/pdf/factsheets/chronicdiseasefact_final.ashx)
- 82 Brown, T.T. (2016). *Returns on investment in California county departments of public health*. *American Journal of Public Health*, 106(8), 1477–1482. <https://doi.org/10.2105/ajph.2016.303233>
- 83 Mays, G.P., & Mamaril, C.B. (2017). *Public health spending and Medicare resource use: A longitudinal analysis of U.S. communities*. *Health Services Research*, 52(52), 2357–2377. <https://doi.org/10.1111/1475-6773.12785>
- 84 American Medical Association. (2002). *Trends in health care spending*. <https://www.ama-assn.org/about/research/trends-health-care-spending>
- 85 Oregon Health Authority Public Health Division. *Public health modernization: Report to Legislative Fiscal Office*.
- 86 Ibid.
- 87 KGR&C. (2022). *Mental health in Oregon*.
- 88 Environmental Protection Agency. (2023). *Research on health effects from air pollution*. <https://www.epa.gov/air-research/research-health-effects-air-pollution>
- 89 Oregon Department of Environmental Quality. (2023). *Wildfire smoke trends and the air quality index*. <https://www.oregon.gov/deq/wildfires/Documents/WildfireSmokeTrendsReport.pdf>
- 90 Oregon Environmental Council. (2008). *The price of pollution: The cost of environmentally related diseases in Oregon*. <https://doi.org/10.1080/13549830903575612>
- 91 ECONorthwest. (2019). *City of John Day housing and community development analysis*. <https://www.cityofjohnday.com/planning/page/master-plans-studies-and-reports>
- 92 Peacher, A. (2018). *People are leaving John Day: Housing shortage may be part of the problem*. OPB. <https://www.opb.org/news/article/john-day-oregon-rental-housing-shortage-initiative/>
- 93 Bureau of Business and Economic Research. (2018, April). *The economic impact of Medicaid expansion in Montana*. University of Montana. <http://www.bber.umt.edu/pubs/Health/MedicaidExpansionImpact2018.pdf>
- 94 Miller, S. et al. (2018). *The ACA Medicaid expansion in Michigan and financial health*. National Bureau of Economic Research. <http://www.nber.org/papers/w25053>
- 95 Oregon Health Authority. (n.d.). *Affordable Care Act: Impact on Oregon*. <https://dfr.oregon.gov/AdminOrders/handout.pdf>





## SECTION 5

# Housing

### *In this chapter*

- Housing availability
- Housing options
- Housing affordability
- Connection points

**Access to safe, stable and affordable housing is vital to thriving communities. It supports strong social networks and vibrant civic, social, cultural and religious institutions, as well as a sense of security and belonging in our neighborhoods and communities. Housing is one of the best-researched social determinants of health, and the connection between housing and health is clear.**



Lincoln City HOPE Center

Housing stability, quality, safety and affordability affect physical, emotional and mental well-being.<sup>1</sup> Affordable housing helps ensure that people have a stable home base and opens up opportunities for them to invest in their families, health and education.<sup>2</sup> Students in stable housing are more likely to thrive in school than their peers without, and their classmates also benefit as less time is needed for catching up and review.<sup>3</sup> In addition, research shows that the makeup of affordable housing in the community where we live *also* matters: Children benefit educationally and economically from growing up in lower-poverty, higher-opportunity neighborhoods with more racially and economically integrated housing.<sup>4,5</sup>

# Children benefit from growing up in lower poverty, higher opportunity neighborhoods with more racially and economically integrated housing.

Housing is top of mind for Oregonians today. When asked in a 2022 survey what issue public officials most need to address — both statewide and within diverse demographic and geographic groups — their most frequent response was homelessness, followed by affordable housing.<sup>6</sup> Oregonians' responses reflect that homelessness is a housing issue with complex connections to other systems that contribute to housing insecurity and an inadequate social safety net, such as a lack of mental health and substance use services.

Decades of research support this understanding and demonstrate the effectiveness of “housing first” approaches that prioritize getting people housed and then providing supportive services to help them stay housed.<sup>7</sup> Many unhoused Oregonians are families, women and older adults — a starkly disproportionate share of whom identify as LGBTQ+, Black or Indigenous.<sup>8,9</sup> And while we might think of homelessness as an urban issue, it's also a major — though often less visible — concern in our rural communities. Indeed, the most recent state health assessment (2018) noted that Oregon's highest rates of per-capita homelessness were found in largely rural Clatsop, Tillamook, Josephine and Wasco counties.<sup>10</sup> Research suggests that the benefits of reducing homelessness can also extend to entire communities, in part by improving overall economic conditions and the efficiency and effectiveness of local health and human services systems.<sup>11</sup>

We often study “housing” at the individual or household level by looking at things like homelessness rates. Sometimes, this leads us to talk

about community-level or structural indicators. In the case of homelessness, we might examine some systemic contributors like income supports or health care access (which are discussed in the *Economy* and *Health* areas of this report). Here, we start by considering conditions for success: If we think about well-being measures as outcomes, what housing-related factors lead to the conditions and patterns we see in our communities?



## Discussion of Key Indicators

### HOUSING AVAILABILITY

In Oregon, construction has not kept pace with population growth; just 63 new housing units were produced for every 100 households formed in recent years. This results in a low vacancy rate, raises housing costs and contributes to high rents and cost-burdening.<sup>12</sup> Further, research shows that constrained housing markets are the primary driver of homelessness nationwide. Characteristics of those markets (e.g., the cost and availability of rental housing) best predict the rates of homelessness in different places across the country, while other commonly heard explanations—like drug use, mental illness, poverty or local political context—fail to do so.<sup>13,14</sup>

Oregon has been underproducing housing for about 20 years, resulting in a compounding shortage year over year. While disruptions to the housing market during the 2008 recession

**FIGURE 20. Low-income households are getting squeezed by Oregon’s housing shortage.**

“Affordable and available rental units” have a cost not exceeding 30% of renter income and are either vacant or not occupied by a higher-income household.

■ **EXTREMELY LOW INCOME** (LESS THAN 30% OF THE AREA MEDIAN INCOME)



■ **VERY LOW INCOME** (31%–50% OF THE AREA MEDIAN INCOME)



■ **LOW INCOME** (51%–80% OF THE AREA MEDIAN INCOME)



**Source:** Oregon Housing and Community Services. *Oregon county profiles*. <https://public.tableau.com/app/profile/oregon.housing.and.community.services/viz/CountyProfiles2023-OregonHousing/LandingPage>

exacerbated the problem, our current housing undersupply reflects a longer trend driven by regulations and zoning policies that limit new construction.<sup>15</sup> To catch up and keep pace with needs, Oregon will need to build an estimated 584,000 new homes over the next 20 years. Oregon needs 140,000 new homes simply to accommodate the current population. This would mean *doubling* our recent production.<sup>16</sup> (See *Figure 20, above*.)

The need to address our historic undersupply of housing and our homelessness crisis extends to all corners of the state. Producing sufficient housing can be particularly challenging in rural areas, which often have high housing development costs and limited local resources.<sup>17</sup>

The need also extends across the housing continuum from shelter and supportive housing to affordable housing and “starter” homes. Oregon has an especially severe shortage of middle-income workforce housing (i.e., housing that would be affordable for Oregonians who are teachers’ assistants, construction workers or in other similarly compensated occupations).<sup>18</sup>

The Housing Innovation Partnership, a politically diverse group of 35 organizations from across the state, was co-convened by OCF and Oregon State Representative Pam Marsh (District 5) in partnership with the nonprofit iSector to identify workable solutions for addressing this gap. The group identified top barriers to Oregon housing production, including a lack of financial capital and tools to build housing and a limited capacity for navigating complex permitting, clearing financial hurdles, and advancing off-site construction such as modular housing.

Although other regulatory and systems barriers exist, the partnership focuses on advancing rapid solutions to increasing housing production — with an emphasis on middle-income workforce housing — by overcoming financial and capacity-related obstacles. Their strategies include creating grant and loan programs for land acquisition and predevelopment work; investing in regional resource centers to streamline permitting, offer workforce development and spur off-site housing production; increasing local capacity to navigate the complex system of development; and designing tax-increment financing



tools that would be capitalized across the state, creating a durable fund with a lasting impact on housing production.

While the need remains significant, we have seen some promising indications of progress. In 2023, the Governor declared a state of emergency due to homelessness; set a statewide goal to construct 360,000 new housing units over the next decade (an 80% increase over recent production); and formed the Housing Production Advisory Council, whose main responsibility is planning toward this goal. The state also made a historic, bipartisan \$200 million investment in housing in 2023, with regulatory changes aimed at speeding up production. In the 2024 short session, the Legislature approved an additional \$376 million. Some of the Housing Innovation Partnership's proposed solutions were included in these plans (e.g., loans that workforce housing builders can use to pay predevelopment costs, and funds to spur production of off-site modular and mass timber housing).

We've seen evidence that Portland is beginning to rebalance supply and demand with an increasing amount of new housing (particularly multifamily units).<sup>19</sup> We've also seen that quick solutions are possible even in the complicated space of housing production. In 2021, Project Turnkey — a

state-funded project for which OCF serves as lead administrator — created 19 new shelters in less than seven months, leading to a 20% increase in the state supply of shelter beds.<sup>20</sup> An additional round of funding brought the total number of shelters created to 32 properties across 18 Oregon counties — a 30% total increase in the state's shelter supply.<sup>21</sup>

## HOUSING OPTIONS

Housing availability depends not just on what housing is being built but also on how it has been distributed. Turning our attention to the distribution of existing housing, we can see that it reflects Oregon's history of discrimination and displacement; decades of underproduction have driven up costs and constrained housing options, especially for lower-income households and communities of color. This perpetuates inequitable housing patterns across the housing continuum.<sup>22</sup> We can trace these histories and their lasting effects through research and data on homeownership.

The Oregon Donation Land Act of 1850 offered free land to white settlers, who then claimed 2.8 million acres of tribal land within five years. Tribes never received anything in return.<sup>23</sup> Native people still experience barriers to homeownership that spring from this history of dispossession from

Hacienda CDC







their lands, tribal termination and broken treaties with the U.S. government. For Native Americans living on reservations, policies make homeownership difficult; Tribal lands are held in trust by the federal government, which means Native people cannot own or build equity from the land. Similarly, banks cannot own reservation land and therefore cannot foreclose on a property, which disincentivizes mortgage lending.<sup>24</sup>

A parallel set of discriminatory policies, practices and institutions prevented generations of Oregonians of color from owning homes. Although slavery was illegal in Oregon, voters added a clause to Oregon's constitution in 1857 prohibiting Black people from residing in the state. It was not repealed until 1926.<sup>25</sup> And while Oregon has long relied on Latino/x labor — going back at least to the railroad expansion of the early 20th century — the state also would also go on to deport Latino/x workers during economic downturns.<sup>26</sup> Research shows how demographic patterns during this period shaped the nascent public welfare system across the country; regions with larger populations of white European immigrants invested more in supports like shelter, food and medical care, while those with larger Black or Mexican populations invested less.<sup>27</sup>

In the 1930s, urban neighborhoods with large shares of nonwhite residents were “redlined.” Banks classified them as high risk, affecting how homes in these areas could appreciate. Banks required higher down payments from residents in redlined areas and made it difficult for them to access low-interest government-backed mortgages.

Over the past 50 years, the primary policy mechanism segregating communities of color has been access to mortgages.<sup>28</sup> Research from as recently as 2010 shows that people of color *at every income range* are about 50% more likely than whites to be denied mortgages in Multnomah County, and 3 times more likely to have unfavorable or predatory home loans.<sup>29</sup> Communities of color in Multnomah County also have median housing values nearly \$50,000 below those of white homeowners.<sup>30</sup>

These practices entrenched residential segregation along racial and economic lines in urban and suburban areas across the country, limiting opportunity for some while concentrating it for others.<sup>31</sup> Today, we continue to see their legacy in state homeownership data. As of 2021, the total share of all Oregonians who owned a home was 66%. For Oregonians of color, homeownership rates are often significantly lower, standing at 45% for

**FIGURE 21. Oregon homeownership rates vary significantly when broken down by race/ethnicity.**

This analysis breaks down homeownership rates from the American Community Survey (public use microdata sample data, 2017–21 estimates) using OHA race/ethnicity categories. Groups with small sample sizes (\*) received a placeholder of 1%, reflecting community members’ expressed desire to be visibly represented as part of the Data for the People project.



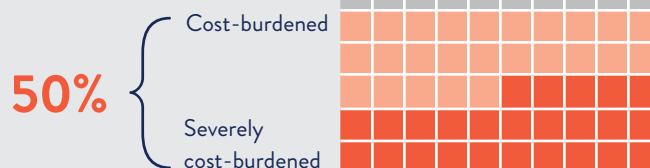
Source: Oregon Center for Public Policy. (2022). *Data for the people*.  
<https://www.ocpp.org/2022/12/22/data-for-people/#FAQ5>



**FIGURE 22. 1 in 4 Oregon renters spent over half their budget on housing in 2020.**

Households are defined as “severely cost-burdened” when they spend more than 50% of income on housing and “cost-burdened” when they spend more than 30%. One-half of Oregon renters were considered cost-burdened in 2020.

**Source:** National Equity Atlas. *Housing burden*. [https://nationalequityatlas.org/indicators/Housing\\_burden](https://nationalequityatlas.org/indicators/Housing_burden)



African American Oregonians and 48% for Latino/x Mexican Oregonians.<sup>32</sup> (See Figure 21, page 69.)

While such indicators are frequently discussed for large, census-aligned categories of race and ethnicity (like Black, white and Latino/x), this approach can obscure particular communities — ones that are often more personally meaningful.

The Oregon Center for Public Policy’s granular analysis of homeownership highlights that better data collection is needed for Oregonians who are Alaska Native, American Indian, Hmong, Chamoru/Chamorro, Samoan, Somali, Laotian, Marshallese or from the communities of Myanmar or Micronesia, as well as those belonging to groups that still go unnamed in their more detailed analysis. Their analysis also calls our attention to diverse communities — too many to call out by name — with homeownership rates below the state average. Historically inequitable systems created these disparities, and today this landscape of homeownership forms part of the structure of our communities. Research finds that parental homeownership and wealth influence whether children grow up to be homeowners themselves, highlighting just one way in which inequitable systems repeat themselves over successive generations.<sup>33</sup>

## HOUSING AFFORDABILITY

When housing is scarce, prices go up just as in other supply-and-demand scenarios. Increased

home prices are not necessarily a bad thing, provided local economies support incomes that match them. However, housing underproduction has been a growing problem nationally, putting increasing pressure on affordability. Oregon’s underproduction ranks among the worst, placing us fourth among all 50 states.<sup>34</sup> Our need for affordable and workforce housing helps to concentrate an affordability crunch in the market for low-income families. Supplementary governmental income and housing supports help bridge this gap but can only go so far.

The mismatch between these systems is reflected in Oregon families’ difficulty in finding affordable housing. Since shelter is what economists would call an “essential good,” prospective homebuyers and renters will often stretch their budgets beyond what is truly affordable in order to stay housed. One-quarter (25%) of Oregon renters use over half their income for housing (see Figure 22, above), with high rates in Corvallis (37%), some Portland suburbs (33%–35%), and Southern Oregon cities like Grants Pass, Ashland and Klamath Falls (32% each).<sup>35, 36</sup>

Children of color and low-income children are more likely to live in cost-burdened households.<sup>37</sup> Oregonians in rural areas also feel the squeeze; while incomes are roughly comparable to those across rural America, housing costs are higher in rural Oregon.<sup>38</sup>

Housing unaffordability has also been increasing in urban areas outside Portland, like Hood River, Bend and Medford; as they have attracted telecommuting workers, the housing supply is low, and local workers generally get paid less than in Portland.<sup>39</sup> In 2022, fewer than 1 in 5 Portland households could afford to buy a median home. In Bend, only 1 in 10 households could.<sup>40</sup>

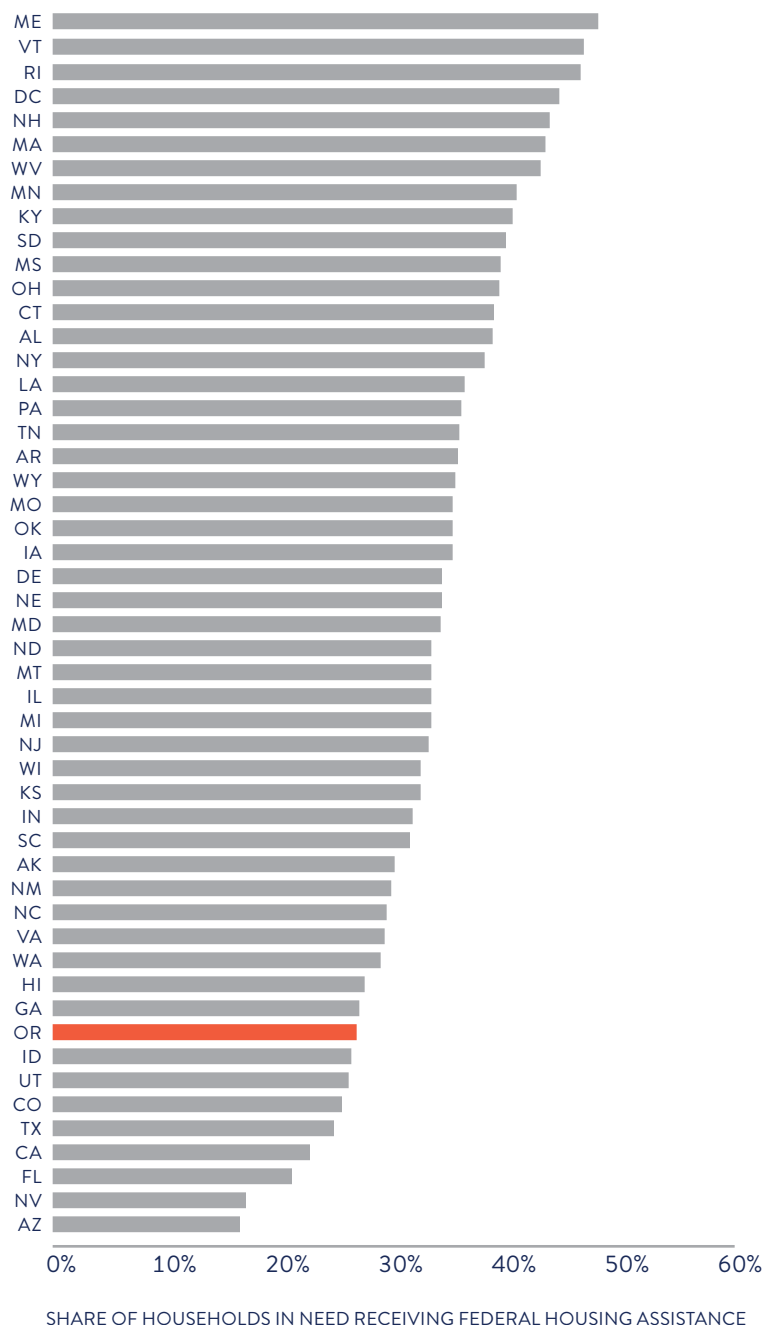
This collision of housing and economic systems is especially apparent in the experiences of Oregon farmworkers. Research from the Oregon Housing and Community Services Department examined agricultural worker housing with a focus on elevating the voices of workers in Hood River, Yamhill, Marion and Morrow counties. While over 100,000 migrant and seasonal workers are an engine for the state's \$42 billion agricultural sector, many of these workers live in overcrowded and poor-quality conditions due to a combination of low wages and a lack of affordable housing. Interviewed workers were largely skeptical of receiving any government assistance to address the problem. One Morrow County worker said, "To the state and federal [government], please support reform. We are souls in the dark. ... We are bringing food to many homes and are always underseen."<sup>41</sup>

The availability of federally provided support like rent assistance is another driver of affordability for low-income families. Rent assistance does not expand with need as other elements of our safety net do. Instead, funding levels are largely determined by Congress in the annual appropriation process, leaving unmet needs in states facing housing crises (see *Figure 23, right*).

The Center on Budget and Policy Priorities estimated that just over one-quarter of Oregon households needing this assistance received it in 2016. This left 153,000 households (the other 73%) without assistance and severely cost-burdened, which is defined as spending more than half of household income on rent and utilities. These families may struggle to afford other necessary expenses like food or medical care. In measuring the unmet housing needs in all 50 states, Oregon ranks ninth.<sup>42</sup> ■

**FIGURE 23. Unlike other aspects of our federal safety net, rent assistance does not expand with need, leaving significant unmet need in Oregon.**

*Only 27% of Oregon households that need this housing assistance receive it, leaving the other 73% severely cost-burdened without assistance from other sources.*



**Source:** Tapogna, J., & Baron, M. (2019, March). *Homelessness in Oregon: A review of trends, causes and policy options*. ECONorthwest. <https://oregoncf.org/assets/PDFs-and-Docs/PDFs/OregonHomelessness.pdf>



Klamath Tribes: Project Turnkey site



## Exploring Connection Points

### HOUSING + NATURAL ENVIRONMENT



In Oregon, we've experienced firsthand how the health of our housing is linked to the health of our natural environment.



The 2020 wildfire season destroyed 4,000 homes, nearly half of which were affordable housing.<sup>43</sup> Our housing systems

also have myriad environmental impacts; buildings are Oregon's second-leading cause of greenhouse gas emissions after transportation.<sup>44</sup> And though our natural environment and housing can sometimes seem to be a threat to one another, they can also mutually reinforce our well-being. For example, more efficient, resilient or green homes can reduce emissions while also lowering consumer costs and protecting families from wildfire and extreme weather.

*Want to explore further? Turn to **Natural Environment**, page 76.*

### HOUSING + ECONOMY



Housing production can be a key component of healthy regional economies, and the resulting housing stock is an important resource for labor supply. A lack of affordable workforce housing in places like Bend has impacted the ability of local organizations to hire and retain workers, including for core services like health care.<sup>45</sup> Housing through homeownership is also a key path to wealth-building from which Oregonians of color have historically been blocked.

*Want to explore further? Turn to **Economy**, page 20.*







## SECTION 5 ENDNOTES

- 1 Taylor, L.A. (2018). *Housing and health: An overview of the literature*. Health Affairs. <https://www.healthaffairs.org/doi/10.1377/hpb20180313.396577/>
- 2 Brennan, M., & Galvez, M. (2017, September). *Housing as a platform: Strengthening the foundation for well-being*. Urban Institute. [https://www.urban.org/sites/default/files/publication/93606/housing-as-platform\\_1.pdf](https://www.urban.org/sites/default/files/publication/93606/housing-as-platform_1.pdf)
- 3 Weiss, E., & Brown, N. (2017). *A place to call home: The case for increased federal investments in affordable housing*. National Low Income Housing Coalition. <http://nlihc.org/sites/default/files/A-Place-To-Call-Home.pdf>
- 4 Chetty, R. (2016, April). The effects of exposure to better neighborhoods on children: New evidence from the Moving to Opportunity experiment. *American Economic Review*, 106(4), 855–902. <https://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.20150572>
- 5 Chetty, R., & Hendren, N. (2018, December). The impacts of neighborhoods on intergenerational mobility II: County-level estimates. *The Quarterly Journal of Economics*, 133(3), 1163–1228. [https://scholar.harvard.edu/files/hendren/files/movers\\_paper2.pdf](https://scholar.harvard.edu/files/hendren/files/movers_paper2.pdf)
- 6 Oregon Values and Belief Center (2022, February). *2022 research summary: Oregonians' common ground*. <https://oregonvbc.org/2022-research-summary-oregonians-common-ground/>
- 7 Szalavtiz, M. (2023, January 26). We can reduce homelessness if we follow the science on what works. *New Scientist*. <https://www.newscientist.com/article/2356643-we-can-reduce-homelessness-if-we-follow-the-science-on-what-works/>
- 8 Tapogna, J., & Baron, M. (2019, March). *Homelessness in Oregon: A review of trends, causes and policy options*. ECONorthwest. <https://oregoncf.org/community-impact/research/homelessness-in-oregon/>
- 9 Ray, N. (2007). *Lesbian, gay, and transgender youth: An epidemic of homelessness*. National Gay and Lesbian Taskforce. <https://www.thetaskforce.org/app/uploads/2007/01/Lesbian-Gay-Bisexual-and-Transgender-Youth-An-Epidemic-of-Homelessness.pdf>
- 10 Oregon Health Authority. (2019). *Oregon state population health indicators*. <https://www.oregon.gov/oha/PH/ABOUT/Documents/indicators/homeless-county.pdf>
- 11 Batko, S., Solari, C., & DuBois, N. (2021, August). *The value of ending veteran and chronic homelessness in four communities: A framework for measuring community-wide costs and benefits*. Urban Institute. <https://www.urban.org/research/publication/value-ending-veteran-and-chronic-homelessness-four-communities>
- 12 Tapogna, J., & Baron, M. (2019, March). *Homelessness in Oregon: A review of trends, causes and policy options*. ECONorthwest.
- 13 Colburn, G., & Aldern, C. P. (2022). *Homelessness is a housing problem: How structural factors explain U.S. patterns*. University of California Press. <https://homelessnesshousingproblem.com/>
- 14 Glynn, C. (2021, June). Inflection points in community-level homeless rates. *Ann. Appl. Stat.* 15(2): 1037-1053. [https://wp-tid.zillowstatic.com/3/Homelessness\\_InflexionPoints-27eb88.pdf](https://wp-tid.zillowstatic.com/3/Homelessness_InflexionPoints-27eb88.pdf)
- 15 Baron, M., Buchman, M., Kingsella, M., Pozdena, R., & Wilkerson, M. (2018, October). *Housing underproduction in Oregon: Economic, fiscal and environmental impacts of enabling transit-oriented smart growth to address Oregon's housing affordability challenge*. ECONorthwest. <https://www.remi.com/wp-content/uploads/2018/10/747-Housing-Underproduction-in-Oregon.pdf>
- 16 Oregon Housing and Community Services & ECONorthwest. (2021, February). *Building on new ground: Meeting Oregon's housing need*. <https://www.oregon.gov/ohcs/about-us/Documents/RHNA/02-21-2021-ECONW-OHCS.pdf>
- 17 Oregon Department of Land Conservation and Development. (2022, December). *Oregon housing needs analysis legislative recommendations report: Leading with production*. [https://www.oregon.gov/lcd/UP/Documents/20221231\\_OHNA\\_Legislative\\_Recommendations\\_Report.pdf](https://www.oregon.gov/lcd/UP/Documents/20221231_OHNA_Legislative_Recommendations_Report.pdf)
- 18 Oregon Housing and Community Services & ECONorthwest. (2021, March). *Implementing a regional housing needs analysis methodology in Oregon: Approach, results, and initial recommendations*. <https://www.oregon.gov/ohcs/about-us/Documents/RHNA/RHNA-Technical-Report.pdf>
- 19 Lehner, J. (2019). *Oregon's housing supply*. Oregon Office of Economic Analysis. <https://oregoneconomicanalysis.com/2019/01/29/oregons-housing-supply/>
- 20 Daley, E., & Loeb, M. (2021, August). *Oregon's Project Turnkey: Report to the Oregon State Legislature*. Oregon Community Foundation. <https://oregoncf.org/community-impact/research/oregons-project-turnkey-report-to-the-oregon-state-legislature/>
- 21 Oregon Community Foundation. (2024, January). *Project Turnkey 2020–2023: Report to the Oregon Legislature*. <https://oregoncf.org/2024-pt-report>
- 22 Oregon Department of Land Conservation and Development. (2022, December). *Oregon housing needs analysis legislative recommendations report: Leading with production*.
- 23 Cain, E., & Rosman, J. (2017, March 20). *Broken treaties: An oral history tracing Oregon's Native population*. OPB. <https://www.opb.org/artsandlife/series/brokentreaties/oregon-tribes-oral-history-broken-treaties/>
- 24 Mohsini, M., Msibi, K., & Lopez, A. (2022). *Addressing the racial wealth gap*. Coalition of Communities of Color. [https://www.coalitioncommunitiescolor.org/s/RWG\\_FullReport\\_v2\\_DateNote-1.pdf](https://www.coalitioncommunitiescolor.org/s/RWG_FullReport_v2_DateNote-1.pdf)
- 25 Gibson, K. (2007). Bleeding Albina: A history of community disinvestment, 1940-2000. *Transforming Anthropology*, 15(1), 3–25. <https://doi.org/10.1525/TRAN.2007.15.1.03>
- 26 Mohsini, M., Msibi, K., & Lopez, A. (2022). *Addressing the racial wealth gap*. Coalition of Communities of Color.

- 27 Fox, C. (2012). *Three worlds of relief: Race, immigration, and public and private social welfare spending in American cities*. Princeton University Press. <https://press.princeton.edu/books/paperback/9780691152240/three-worlds-of-relief>
- 28 Mohsini, M., Msibi, K., & Lopez, A. (2022). *Addressing the racial wealth gap*. Coalition of Communities of Color.
- 29 Curry-Stevens, A., Cross-Hemmer, A., & Coalition of Communities of Color. (2010). *Communities of color in Multnomah County: An unsettling profile*. Portland State University. [https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1091&context=socwork\\_fac](https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1091&context=socwork_fac)
- 30 Ibid.
- 31 Givens, M., Gennuso, K., Johnson, S., & Brown, L. (2020). *County health rankings key findings 2020*. University of Wisconsin Population Health Institute. [https://www.countyhealthrankings.org/sites/default/files/media/document/CHRR\\_Key\\_Findings\\_2020\\_0.pdf](https://www.countyhealthrankings.org/sites/default/files/media/document/CHRR_Key_Findings_2020_0.pdf)
- 32 Oregon Center for Public Policy. (2023). *Data for the people*. <https://www.ocpp.org/data-for-people/>
- 33 Choi, J.K., McCargo, A., Neal, M., Goodman, L., & Young, C. (2019, November). *Explaining the Black-white home ownership gap: A closer look at disparities across local markets*. Urban Institute. [https://www.urban.org/sites/default/files/publication/101160/explaining\\_the\\_black-white\\_homeownership\\_gap\\_2.pdf](https://www.urban.org/sites/default/files/publication/101160/explaining_the_black-white_homeownership_gap_2.pdf)
- 34 Ehrlich, A. (2023, July 26). *Oregon has an extreme housing shortage: Here's what could be done*. OPB. <https://www.opb.org/article/2023/07/26/oregon-cost-of-living-housing-construction-building-land-use-high-rent/>
- 35 National Equity Atlas. (2020). *Housing burden: All residents should have access to quality, affordable homes*. [https://nationalequityatlas.org/indicators/Housing\\_burden](https://nationalequityatlas.org/indicators/Housing_burden)
- 36 Oregon.gov. (2022). *2022 severe rent burden in Oregon (2020 ACS)*. [https://www.oregon.gov/lcd/UP/Documents/Annual\\_Severe\\_Rent\\_Burden\\_Announcement.pdf](https://www.oregon.gov/lcd/UP/Documents/Annual_Severe_Rent_Burden_Announcement.pdf)
- 37 Annie E. Casey Foundation. (2023). *2023 Kids count data book: 2023 state trends in child well-being*. <https://www.aecf.org/resources/2023-kids-count-data-book>
- 38 Salazar, M. (2019, May 23). *Housing supply and affordability in rural Oregon*. My Oregon News. <https://www.myoregon.gov/2019/05/03/housing-supply-and-affordability-in-rural-oregon/>
- 39 Jaquis, N. (2022, May 25). *New numbers show Oregon homes at their least affordable in 15 years*. Willamette Week. <https://www.wweek.com/news/2022/05/25/new-numbers-show-oregon-homes-at-their-least-affordable-in-15-years/>
- 40 Lerner, J. (2022, June). *Priced out Oregon households*. Oregon Office of Economic Analysis. <https://oregoneconomicanalysis.com/2022/06/21/priced-out-oregon-households/>
- 41 Agricultural Workforce Housing Facilitation Team. (2017). *Cultivating home: A study of farmworker housing in Hood River, Marion, Morrow, and Yamhill counties in Oregon*. <https://www.oregon.gov/ohcs/development/pages/agriculture-workforce-housing.aspx>
- 42 Tapogna, J., & Baron, M. (2019, March). *Homelessness in Oregon: A review of trends, causes and policy options*. EConorthwest.
- 43 Oregon Housing and Community Services & EConorthwest. (2021, February). *Building on new ground: Meeting Oregon's housing need*.
- 44 Macdonald, C., Baker, Z., & Schlusser, M. (2023). *Greenhouse gas emissions data*. Oregon Global Warming Commission. <https://www.oregon.gov/energy/energy-oregon/pages/greenhouse-gas-snapshot.aspx>
- 45 Sadiq, S. (2022, November 30). *How a lack of affordable housing impacts Bend's workforce and regional economy*. OPB. <https://www.opb.org/article/2022/11/30/bend-oregon-housing-costs-crisis-affordability/>





## SECTION 6

# Natural Environment

### *In this chapter*

- Climate resilience
- Heat safety
- Clean air
- Vital water sources
- Connection points

**People who call Oregon home have long valued protecting the natural environment on which communities depend. We can see this throughout our history. Tribal communities have maintained relationships with the natural environment since time immemorial, informing today's land management practices with their rich traditions and knowledge.**



For additional examples, we could turn to our trail-blazing Beach and Bottle bills — both passed in the 1970s — which preserved our coastline for anyone to access and created a national model for promoting recycling to address a growing litter problem.

Indeed, the well-being of our environment and communities is connected. Whether we live in a rural or urban area, our environment affects our quality of life. When our air, lands and waters are healthy, we see that nature and people can thrive. Clean air makes it easier for us to breathe, reduces asthma and contributes to longer life expectancy.<sup>1</sup> Research suggests that connecting with nature benefits our

When our air, lands and waters are healthy, we see that nature and people can thrive.

mental health, helping to alleviate stress and depression.<sup>2</sup> Our natural areas serve as space for recreation, gathering and connecting with others. They can also be expansive classrooms for learning, as students across Oregon know from their experiences in outdoor school.<sup>3</sup> And though our natural and economic worlds have been portrayed as opposing forces at times, a healthy environment also supports the economic vitality of our communities. Farmlands, forests, rivers and oceans bolster our local industries and jobs while providing habitat for plants and animals. Today, as our nation grapples with climate change, unprecedented funding opportunities accompany new work to protect people and places.

In recent years, the inverse of this link has become all too apparent: When our natural environment is imperiled, our families and communities also struggle. We have experienced firsthand major threats to our collective well-being through large-scale wildfires, extreme heat events and long-lasting drought. But we have also seen that it's within our power to build resilience for the people and places of the Pacific Northwest. Our state has the potential to build on our shared history of environmental leadership. Among other opportunities, we have the ability to contribute to climate solutions nationally through the power of our natural spaces, which are critical to mitigating the effects of a warming planet.<sup>4</sup>

Oregon Black Pioneers







Across Oregon, environmental impacts are not felt equally, though they are widespread. Urban areas often face different challenges and opportunities than those experienced in rural communities, where natural resources are an essential foundation for local economies and communities.

Nationally, impacts like crop and livestock loss from drought and extreme heat, or damage to infrastructure like buildings and roads from extreme weather, have a profound effect on these places.<sup>5</sup> Research also shows that negative environmental impacts are disproportionately borne by communities of color.<sup>6</sup> Indigenous communities, for example, face increasing exposure to health and safety hazards along with new constraints on their already limited access to traditional places and foods; this in turn threatens their livelihoods, economies and culture.<sup>7</sup>

This layers onto a historically uneven distribution of socioeconomic conditions: Some people are more exposed to risks by living or working close to environmental hazards and may also be less likely to benefit from new investments in clean energy and similar programs. For example, farmworkers have higher exposure to pesticides and are also at higher risk from extreme heat.<sup>8</sup> People of color can be less likely to benefit from urban tree planting efforts or green energy upgrades.<sup>9,10</sup> Young children, older adults, people with disabilities and those with chronic medical conditions are also more likely to be adversely affected by health stressors from our environment.<sup>11</sup>

These unequal hazards and benefits may make it harder to access healthy environmental conditions, including clean air, clean water, green space and healthy food.

## COLLABORATIVE EFFORTS

The people closest to an issue often have the best insights on durable solutions, and these frontline communities in Oregon are not only identifying how we can adapt and build resilience but also showing us that progress is possible. Oregon tribes have been gaining national recognition for sustainable timber management practices that can transform our forests, making the lands more resilient to fires and also more cost-effective.<sup>12</sup> Nondominant and culturally specific organizations and coalitions in Oregon have conducted path-breaking work advancing clean energy.<sup>13</sup>

More broadly, Oregon is known for its history of collaborative, community-led efforts that blend diverse public and private interests to advance environmental goals.<sup>14</sup> Nonprofit land trusts and water collaboratives are prime examples of this approach. Government leaders have been taking notice by advancing new initiatives that tap into community knowledge and leadership, like the federal Justice40 Initiative for environmental justice or the state-level work of the Oregon Racial Justice Council's Environmental Equity subcommittee. Many other innovative efforts — including funding for electric heat pumps and stronger water infrastructure — have emerged out of such collaborations within and across Oregon communities.<sup>15</sup>

When we consider how much our natural environment matters for community well-being, it's easy to think about community or system-level measures like air quality. That said, public messaging has often emphasized opportunities for individual action by promoting things like household recycling or shifting our personal consumption habits. While those actions remain important, our continued, collaborative engagement and collective efforts are needed to support the well-being of all Oregon's places and people.





## Discussion of Key Indicators

### CLIMATE RESILIENCE

Throughout this report, we've seen how conditions for community well-being are interconnected, and that is especially apparent in this section. Climate resilience can mean a lot of things on its own, encompassing ideas such as natural climate solutions, community resilience, and clean energy for transportation and buildings. It represents both our ability to anticipate and mitigate future climate shocks by reducing greenhouse gas emissions and the ways in which we can adapt to their impacts once they occur. In this section, we focus on the former, but we also recognize that we cannot fully separate these ideas from discussions focused on heat safety, clean air and vital water sources.

In March 2020, an executive order set an ambitious new goal to reduce greenhouse gas emissions. This opens a door to considerable economic opportunity. Specifically, modeling conducted in 2023 shows the potential for Oregon to create thousands of new jobs and more than \$120 billion in cumulative economic and health benefits through 2050.<sup>16</sup> Reducing emissions comes with an array of additional benefits, including promoting clean air and water and supporting our physical and mental well-being.<sup>17</sup> Conversely, unmitigated emissions are a trigger for negative environmental impacts like those we discuss below.

In recent years, Oregon has emerged as a leader for its contributions to the shared global effort to reduce our emissions. For instance, Oregon set one of the nation's fastest timelines for reaching 100% clean electrical energy.<sup>18</sup> U.S. electric power generation was the second-largest contributor to total carbon emissions as of 2018. In Oregon, as in the nation, transportation is the top contributor to emissions, and we are leading on this front as well. The state ranks second in the nation for new electric vehicles sold and is investing in infrastructure, setting ambitious targets and providing funding for things like electric school buses.<sup>19</sup> Oregon was also the second

state after California to adopt new rules promoting cleaner trucks. Since then, additional states have followed suit, affecting almost one-quarter of the country's auto market.<sup>20, 21</sup>

The Oregon Legislature created the Oregon Climate Action Commission (formerly known as the Oregon Global Warming Commission), which is responsible for tracking and evaluating the impacts of climate change along with state progress reducing emissions. While the Commission's latest report documents slow progress, its analysis also shows the state can deliver on ambitious goals. The Commission recommends acting with more urgency and setting bigger goals. The significant and growing costs of inaction show this urgency is warranted. Extreme weather events, which can be exacerbated by climate change, caused \$1.8 billion in damage in Oregon in 2021 and 2022 alone.<sup>22</sup> Costs can be felt through lost or damaged buildings and infrastructure, higher insurance premiums, health impacts, and impacts on crops and livestock.<sup>23</sup>

Oregon has the opportunity to mitigate emissions and promote climate resilience in the management and conservation of our natural and working lands, such as forests, farms and ranches.<sup>24</sup> By doing so, we can maximize the potential of these lands to sequester carbon, essentially reducing the amount of carbon dioxide in our atmosphere by capturing and storing it in plants and soil. This approach can achieve multiple goals at once: promoting the

*Oregon Land Justice Project*



productivity of our natural and working lands and providing refuge for our native plants and animals, while also ensuring that communities continue to receive necessities like clean drinking water. Looking nationwide, the Environmental Protection Agency reports that this effect reduced carbon emissions by 12% in 2019. Researchers estimate that managing farms, forests and natural habitats toward these goals, often referred to as “natural climate solutions,” could more than double the size of this reduction.<sup>25</sup> In 2023, the state passed a broad Climate Resilience Package that commits \$90 million to a range of actions — including advancing natural climate solutions — and carries the potential to leverage up to \$1 billion in federal funds.<sup>26, 27</sup>

## HEAT SAFETY

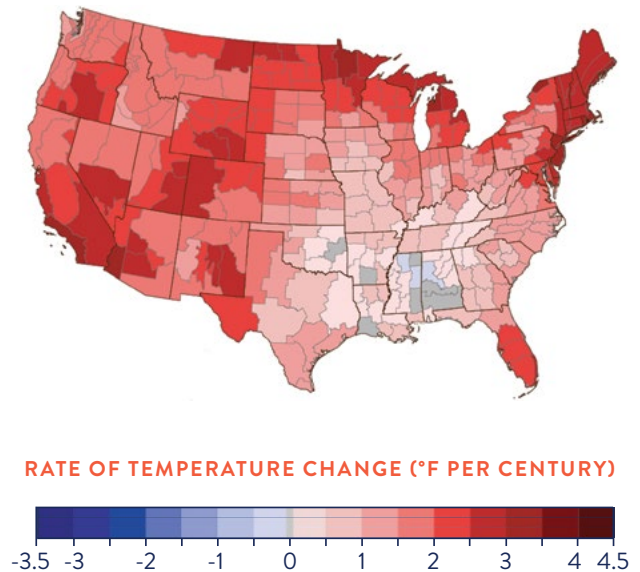
You don’t need to have lived in Oregon long to have experienced our state’s increase in days of extreme heat. The summers of 2021 and 2022 were among our hottest years on record, and 2023 was the world’s warmest year on record since 1850.<sup>28</sup> This is happening within the context of generally higher temperatures across the country.<sup>29</sup> Over the last century, Oregon’s average annual temperature has increased by about 2.2°F, with even larger increases in our southern and eastern counties (see Figure 24, right).

In the 1950s, Portland averaged just over one week of days on which the temperature reached 90°F or above. That average more than tripled to 27 days in 2021 and 2022 (see Figure 25, page 81). While less pronounced, this trend extends to other parts of the state, with longtime Pendleton residents seeing an increase from 32 days to 56 days. In Medford, extreme heat rose over this same period from 53.5 days to a full 11 weeks (77 days).<sup>30</sup> Temperatures can fluctuate day to day or year to year, but over these long periods, trends become apparent in the data — and in our lives.

These temperature changes have ripple effects across Oregon. They have been accompanied by increased drought, decreased snowpack and earlier spring runoff, all of which put new stress on our state’s water systems. The heat threatens the equilibrium of our ecosystems and the well-being of

## FIGURE 24. Over the last century, average annual temperatures have increased across most of the United States, including Oregon.

*This map shows the rate of U.S. temperature change from 1901 to 2021. Areas in red have seen temperatures increase over this period. Oregon’s average annual temperature has increased by about 2.2°F overall, with even larger increases in southern and eastern counties.*



**Source:** U.S. Environmental Protection Agency. (2022). *Climate change indicators: U.S. and global temperature*. <https://www.epa.gov/climate-indicators/climate-change-indicators-us-and-global-temperature>

our communities, both by creating conditions that increase the likelihood of large-scale wildfires and through the direct impacts of high temperatures.

Drought and wildfire smoke negatively impact forests, farms and ranches, harming local economies. Extreme heat is the leading cause of U.S. weather-related deaths.<sup>31</sup> Recognizing these ties, Oregon Health Authority now tracks the health impacts of heat in a real-time dashboard.<sup>32</sup> Oregon has also launched adaptive strategies ranging from distributing air conditioning units and heat pumps to opening cooling centers during heat events.<sup>33</sup>

Heat has disproportionate effects on communities of color and underresourced, low-income areas. Portland State University researcher and

climatologist Dr. Vivek Shandas studies the impact of heat waves and has found that the hottest parts of Portland can reach temperatures 15–20 degrees higher than cool, shaded areas like Irvington or Eastmoreland.<sup>34</sup> During the 2021 heat dome, nearly one-quarter of heat-related deaths were in a cluster of neighborhoods in East Portland.

The biggest factors determining these so-called heat islands were things in the built environment that trap heat and inhibit breezes: dense midrise developments; proximity to highways, parking lots and pavement; and a lack of tree cover.<sup>35</sup> Nationally, Portland has one of the strongest urban heat island effects, and cities like Eugene, Medford and Albany are also affected.<sup>36</sup>

Factors in our social environment also matter. Research shows that isolated people face more extreme consequences during heat waves, while people with greater levels of trust and connection endure the extremes better.<sup>37</sup>

Additional factors are at play in our rural regions. Increased heat is threatening the survival of some animal species in our state and may already be changing our forest types.<sup>38</sup> Oregon’s iconic salmon species are just one example: Fish are increasingly

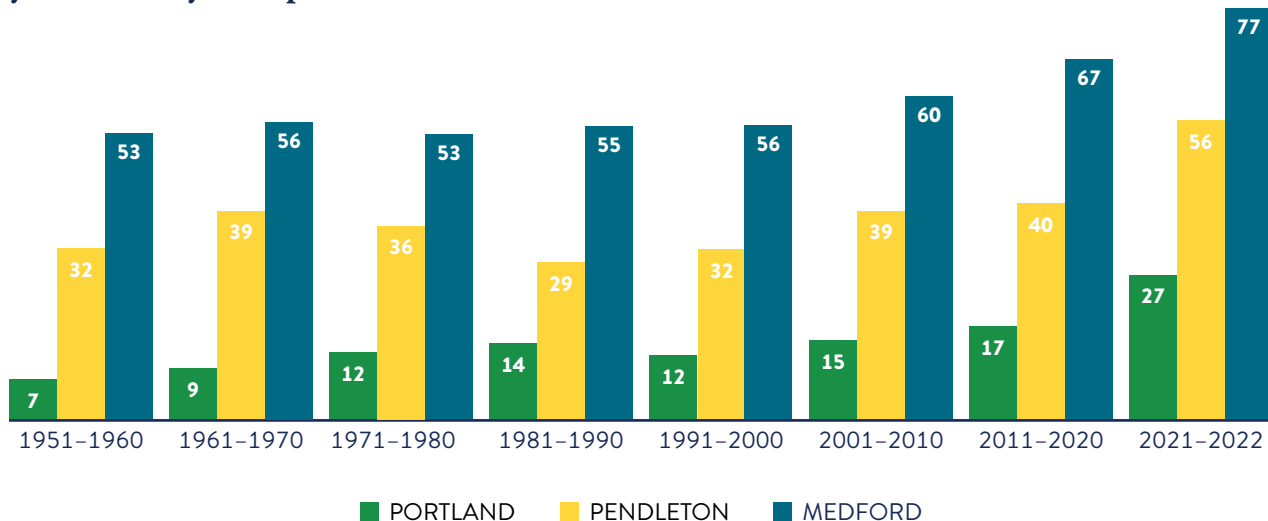
becoming sick or dying when the waters they swim in are too warm, and this is compounded by barriers to their spawning grounds and reduced water in streams and rivers.<sup>39</sup>

Heat presents new challenges for Oregon’s farmers, affecting the crops they can grow and, in turn, their livelihoods and well-being.<sup>40</sup> It also brings pronounced health risks for farmworkers in particular — primarily Latino/x Oregonians — who must work outdoors and often have little or no access to cooling spaces. If well enforced, new rules currently being implemented in Oregon will provide outdoor workers, including construction workers, with the nation’s most comprehensive protections against the adverse impacts of heat and wildfire smoke.<sup>41</sup>

## CLEAN AIR

Since 1970, efforts to promote clean air in the United States have helped reduce pollution by 65%, which research estimates is extending Americans’ average life expectancy by 1.4 years.<sup>42</sup> However, despite this notable progress, air pollution continues to endanger our health and well-being. The American Lung Association’s annual *State of the Air* report finds that over one-third of

**FIGURE 25. Towns across Oregon have seen more days of extreme heat (90°F or higher) in recent years than they did in past decades.**



**Source:** Fleishman, E. [Ed.]. (2023). *Sixth Oregon climate assessment*. Oregon Climate Change Research Institute, Oregon State University. <https://blogs.oregonstate.edu/occri/oregon-climate-assessments/>



Americans (119.6 million people) still live in places with failing grades for air quality.<sup>43</sup> Pollutants from transportation, buildings and manufacturing are long-standing contributors.<sup>44</sup> Due to historically racist and discriminatory practices shaping our highways and housing, communities of color often experience the greatest impacts.<sup>45</sup> We can see this finding echoed in local research for Multnomah County showing that communities of color tend to be closer to facilities emitting air toxics.<sup>46</sup>

Smoke and particulates from wildfires are a growing contributor to poor air quality. Large wildfires have increased in recent decades — especially in Oregon and other Western states — and they are expected to become more frequent according to the National Interagency Fire Center.<sup>47</sup> Wildfires can cause devastating destruction, with long-lasting impacts for our homes and communities.

Wildfire smoke also carries significant negative health impacts,<sup>48</sup> and it can travel many miles to

disrupt downwind communities with cultural and economic impacts. In 2018, choking smoke forced the Oregon Shakespeare Festival to cancel 26 outdoor performances — more than in the previous five years combined.<sup>49</sup>

Reflecting the fact that most wildfires occur in the West, 24 of the 25 worst cities with particulate matter pollution were west of the Rocky Mountains in 2022, including three clusters of Oregon cities: Medford/Grants Pass, Bend/Prineville, and Eugene/Springfield.<sup>50</sup>

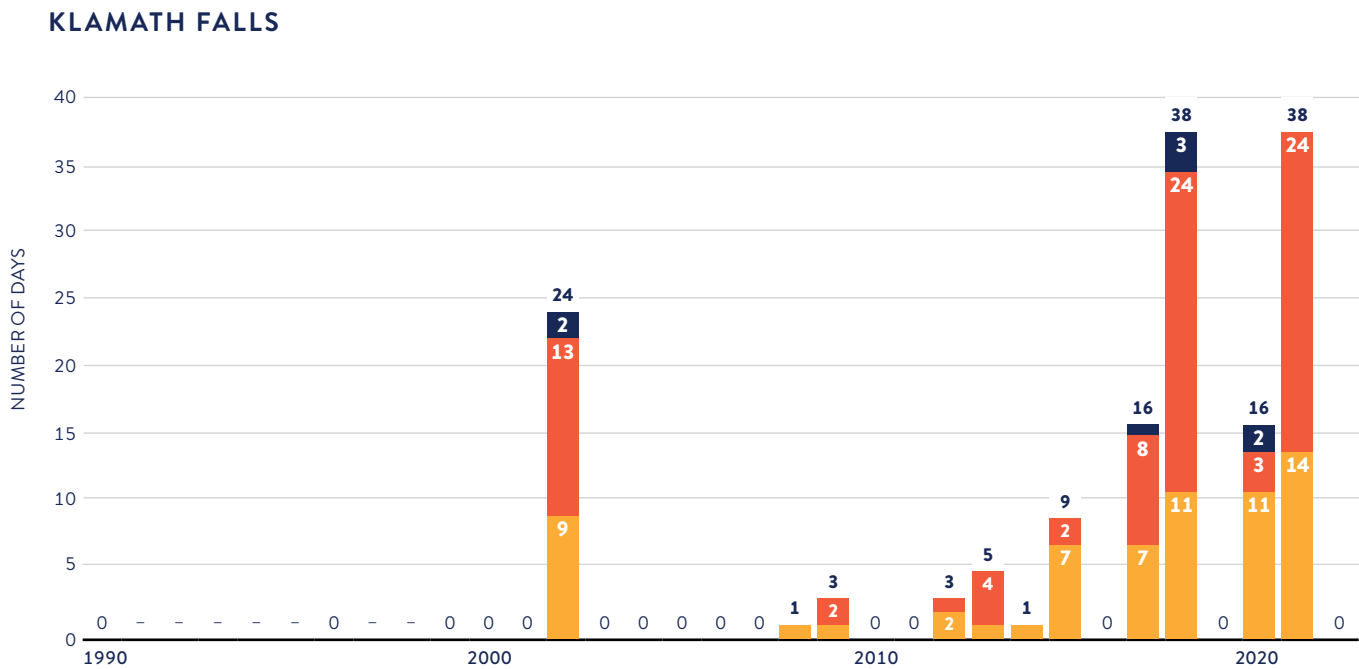
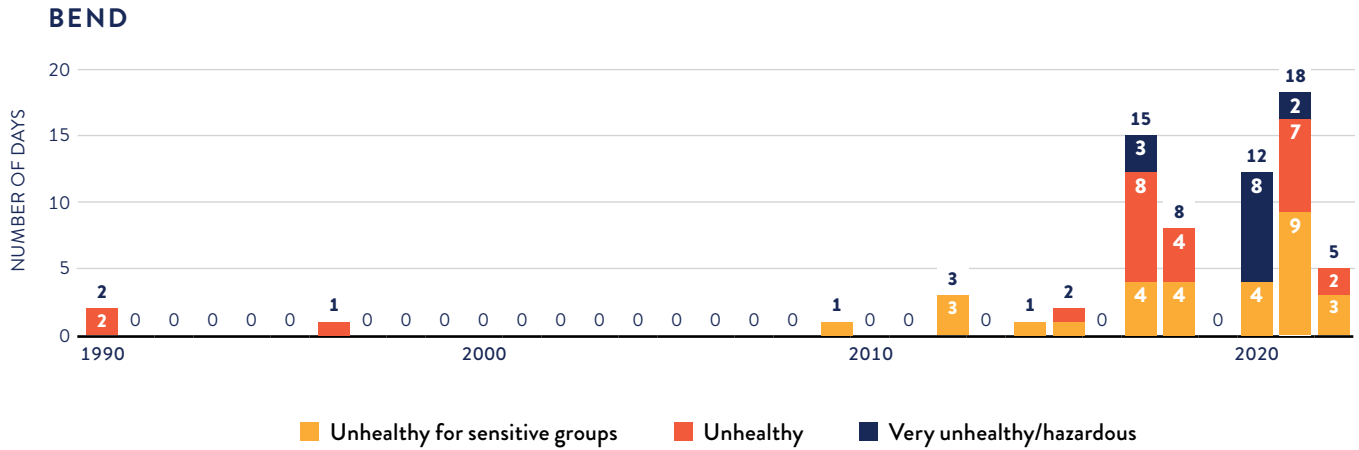
The Oregon Department of Environmental Quality analyzes smoke trends by looking at the number of days with air quality levels defined as unhealthy for specific groups. From 1989 to 2014, the Bend area had an average of less than 1 poor air quality day per year. This jumped to an average of about 8 days in 2015–2022. Over the same period, the Klamath Falls area jumped from a little over 1 day to 15 days.<sup>51</sup> (See Figure 26, page 83.)





**FIGURE 26. Places from Bend to Klamath Falls are experiencing an increase in days with poor air quality due to wildfire smoke.**

These charts show the number of days on which the air quality index was unsafe for specific or general populations due to wildfire smoke. “Sensitive groups” include older adults, pregnant women, children and people with heart or lung disease. Note: Summer data for Klamath Falls was not collected from 1991 through 1995, or in 1997 and 1998.



**Source:** Oregon Department of Environmental Quality. (2023, May). *Wildfire smoke trends and the air quality index*. <https://www.oregon.gov/deq/wildfires/Documents/WildfireSmokeTrendsReport.pdf>



The Freshwater Trust

Wildfire smoke exposure adds to existing health risks from air pollution, which are disproportionately borne by communities of color and lower-income Oregonians.

## VITAL WATER SOURCES

Over the last two decades, Oregon has experienced its driest period in the last thousand years. Although specific years or seasons may bring relief in the form of cool weather, rain or snowpack, rising temperatures and shifting precipitation patterns have resulted in decades of prevailing dryness statewide.<sup>52</sup>

U.S. Drought Monitor data shows that droughts in Oregon are becoming more intense and lasting longer (see Figure 27, page 85.) In summer 2021, almost the entire state experienced severe, extreme or exceptional drought conditions. Although conditions have been improving recently, almost one-third (31%) of our state remained abnormally dry as of April 2024, with drought conditions persisting in areas of central and north-eastern Oregon.

Water scarcity has ripple effects on the health of our environment, the productivity of our working lands, and our access to clean drinking water. Dry weather and vegetation create conditions for large wildfires to spread, which can in turn negatively affect our water infrastructure and promote

harmful algae blooms.<sup>53</sup> Limited water availability can contribute to insect outbreaks, compounding the effects for farms, ranches and grazing lands by affecting the quantity and quality of their produce, the costs they pass on to consumers for local foods, and their ability to make a sustainable living. Decreased water levels also create conditions that reduce water quality, affecting our health through what we eat and drink.<sup>54</sup>

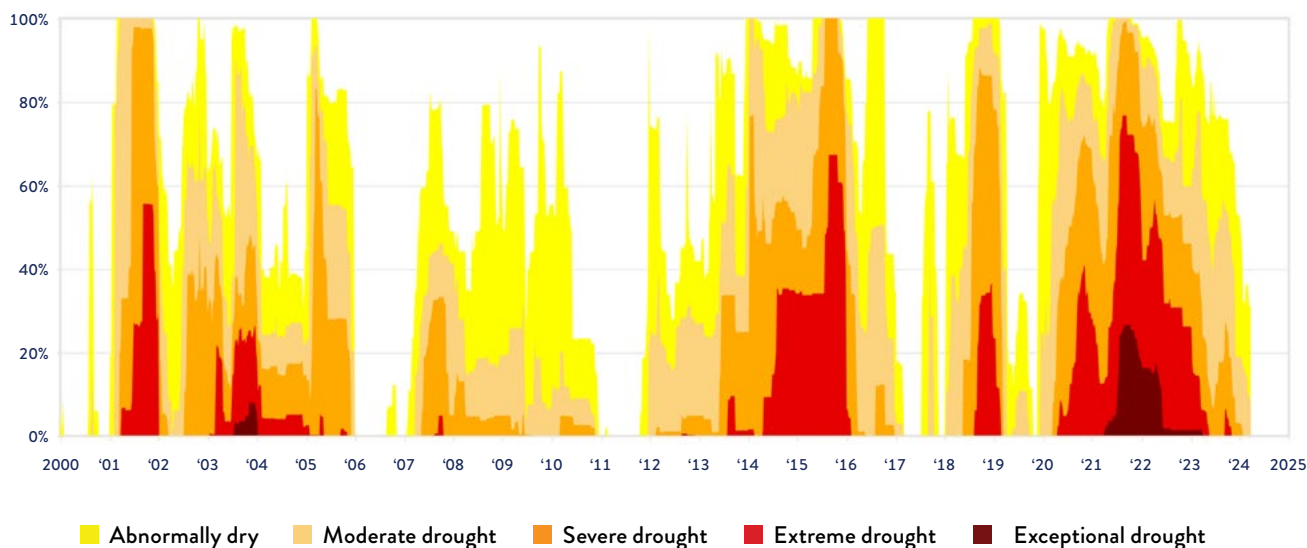
Rural communities are often the first to face the consequences of drought, which may be exacerbated by issues stemming from underfunded, aging water infrastructure and pollution. Communities of color and low-income residents of these areas are particularly affected, as the decades-long groundwater crisis in Umatilla and Morrow counties demonstrates. Often, Oregon communities also encounter institutional barriers to addressing local water issues, including fragmented governing structures and insufficient monitoring systems.<sup>55</sup>

The Oregon Water Futures Project underscores these patterns. The project worked in 2020 to elevate historically excluded voices in water policy conversations, including those of Native, Indigenous Latin American, Latino, Black, Asian American, Pacific Islander, Middle Eastern, Arab and migrant communities. The research shows that although these community members have valuable knowledge and experience to contribute, they



**FIGURE 27. Drought episodes in Oregon have become more intense and are lasting longer.**

This chart shows the percentage of Oregon's total geographic area that fell into some classification of drought over time, with deeper reds indicating more intense drought conditions. When we compare the right-hand side of the chart (roughly the last 10 years) to the left, we can see more red, indicating longer and more intense periods of extreme or exceptional drought. We also see less white, indicating less relief from dry conditions.



**Source:** National Drought Mitigation Center. (n.d.). *U.S. drought monitor: Time series*. University of Nebraska–Lincoln.  
<https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx>

face barriers to participating in the state's decision-making processes.

It also emphasizes the growing extent of serious water availability and quality issues, as participants across the state share stories of community drinking water that looked, smelled or tasted bad.<sup>56</sup> In 2021, the Oregon Legislature made a historic \$530 million investment in state water infrastructure, including unprecedented funding for community-led water needs assessments.<sup>57</sup> Later the same year, the federal government passed the bipartisan infrastructure bill with a \$50 billion investment in the nation's water infrastructure.

Still, even more needs to be done in the coming years. A 2021 survey conducted by the League of Oregon Cities in partnership with Portland State University identified \$4.4 billion in needed investments for state drinking water infrastructure over the next 10 years.<sup>58</sup> Promoting water quality also requires thinking beyond our built infrastructure. Clean water starts at its source with healthy watersheds, which are in turn supported by the health

of surrounding natural lands. They act as a kind of natural infrastructure by filtering water, keeping it cool and stabilizing supply. This allows providers to deliver community water more reliably and affordably.<sup>59</sup>

In 2023, the Oregon Legislature made an additional \$174 million investment in water infrastructure that will — among other things — modernize irrigation; protect, enhance and restore water systems; advance water management with improved data; and provide resources for community and tribal engagement. Protecting and conserving natural lands supports our water supply and provides an array of other environmental, social, health and economic benefits.

Crucially, as discussed above, healthy natural and working lands can help keep carbon in the ground, reducing our overall emissions. By capturing carbon, protected lands can promote a virtuous cycle of reducing our emissions, and in turn promoting air and water quality, economic benefits and community well-being.<sup>60</sup> ■



## Exploring Connection Points

### NATURAL ENVIRONMENT + ECONOMY



Natural resources boost local economies and job opportunities. Oregon's agriculture industry, for example, has an annual value of over \$40 billion and supports over 500,000 jobs.<sup>61</sup> But Oregon has lost almost 10% of its farmland since 1997,<sup>62</sup>



and most farms (over 95%) are family-held.<sup>63</sup> As these farmers age, questions of succession become more pressing for the future of these lands and their role in our economy.<sup>64</sup> While economic well-being and environmental health are often positioned as opposing goals, they can be mutually reinforcing, with natural resource economies supporting — or even restoring — the health of our lands and waters. For workers, the health effects of an unhealthy workplace or environment lead to lost work days, with impacts on their productivity and earnings, their employers' profits, and the health of local economies. Research shows that environmentally attributable health conditions like asthma and lead poisoning carry a significant economic cost due to increased health care expenditures, lost productivity and diminished earning potential amounting to over \$1.5 billion annually in our state.<sup>65</sup>

*Want to explore further? Turn to **Economy**, page 20.*

### NATURAL ENVIRONMENT + BUILT ENVIRONMENT



Green infrastructure can lead to cleaner air and water, and it can offer flood protection, greener spaces and healthier communities while also lowering energy costs for our homes, schools and workplaces.<sup>66</sup> Recognizing this, the Building

Resilience coalition formed in Oregon from a broad array of organizations working in fields like public health, environmental justice, business and labor. New legislation advancing resilient, efficient buildings — which drew on this group's work — was included in the bipartisan Climate Resilience Package passed by the Oregon Legislature in June 2023. Conversely, the negative aspects of historic infrastructure — like the harmful emissions from cars and trucks — often have disproportionate effects on communities of color and people with lower incomes, who also tend to have limited access to clean transportation given that Oregon's electric vehicle infrastructure has critical gaps for renters as well as underserved, rural and disadvantaged communities.<sup>67</sup>

*Want to explore further? Turn to **Built Environment**, page 90.*

## SECTION 6 ENDNOTES

- 1 Manisalidis, I., Stavropoulou, E., Stavropoulos, A., & Bezirtzoglou, E. (2020, February 20). Environmental and health impacts of air pollution: A review. *Frontiers in Public Health*, 8(14). <https://doi.org/10.3389/fpubh.2020.00014>
- 2 Jimenez, M.P., DeVille N.V., Elliott, E.G., Schiff, J.E., Wilt, G.E., Hart, J.E., & James, P. (2021, May). Associations between nature exposure and health: A review of the evidence. *International Journal of Environmental Research and Public Health*, 18(9), 4790. <https://doi.org/10.3390/ijerph18094790>
- 3 Braun, S.M. (2020). *Outdoor school for all: Diverse programming and outcomes in Oregon: 2019 evaluation report*. Oregon State University. <https://outdoorschool.oregonstate.edu/about-us/research-evaluation-and-assessment/student-outdoor-school-evaluation/>
- 4 Oregon Forest Resources Institute. (2021). *Oregon forest facts: 2021–22 edition*. [https://oregonforests.org/sites/default/files/2021-01/OFRI\\_2021ForestFacts\\_WEB3.pdf](https://oregonforests.org/sites/default/files/2021-01/OFRI_2021ForestFacts_WEB3.pdf)
- 5 Melillo, J., Richmond, T., & Yohe, G. [Eds.]. (2014). *Climate change impacts in the United States: The third national climate assessment*. U.S. Global Change Research Program. <https://nca2014.globalchange.gov/highlights/regions/rural-communities>
- 6 Berberian, A., Gonzalez, D., & Cushing, L. (2022, May 28). Racial disparities in climate change-related health effects in the United States. *Current Environmental Health Reports*, 9(3), 451–464. <https://doi.org/10.1007/s40572-022-00360-w>
- 7 U.S. Climate Resilience Toolkit. (2024, April 17). *Tribes and Indigenous peoples*. United States Global Change Research Program. <https://toolkit.climate.gov/topics/tribal-nations>
- 8 Ferguson, R., Dahl, K., & DeLonge, M. (2019, December 9). *Farmworkers at risk: The growing dangers of pesticides and heat*. Union of Concerned Scientists. <https://www.ucsusa.org/resources/farmworkers-at-risk>
- 9 Yeager, R., Browning, M., et al. (2023, May 12). Greenness and equity: Complex connections between intra-neighborhood contexts and residential tree planting implementation. *Environment International*, 176. <https://doi.org/10.1016/j.envint.2023.107955>
- 10 Sunter, D.A., Castellanos, S., & Kammen, D.M. (2019, January 10). Disparities in rooftop photovoltaics deployment in the United States by race and ethnicity. *Nature Sustainability* 2, 71–76. <https://doi.org/10.1038/s41893-018-0204-z>
- 11 Gamble, J., Balbus, J., et al. (2016). Populations of concern. In Crimmins, A., Balbus, J., et al. (2016). *The impacts of climate change on human health in the United States: A scientific assessment* (pp. 247–286). U.S. Global Change Research Program. <http://dx.doi.org/10.7930/JOQ81B0T>
- 12 Bull, B. (2019, January 30). *Native American tribes gaining recognition for timber and forestry practices*. KLCC. <https://www.klcc.org/nature/2019-01-30/native-american-tribes-gaining-recognition-for-timber-and-forestry-practices>
- 13 Profita, C. (2020, November 21). *Climate justice fund counters “centuries of underinvestment.”* NPR. <https://www.npr.org/2020/11/21/936850821/climate-justice-fund-counters-centuries-of-underinvestment>
- 14 Oregon Explorer. (2021). *Collective groups*. Oregon State University Libraries and Press & Institute for Natural Resources. <https://oregonexplorer.info/topics/collective-groups?ptopic=2>
- 15 Oregon Health Authority. (2023). *Climate and health in Oregon: 2021–2022 report*. [https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/CLIMATECHANGE/Documents/le-105251\\_23.pdf](https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/CLIMATECHANGE/Documents/le-105251_23.pdf)
- 16 MacDonald, C., Baker, Z., & Schlusser, A. (2023). *Oregon Global Warming Commission biennial report to the Oregon Legislature*. <https://www.keeporegoncool.org/s/2023-Legislative-Report.pdf>
- 17 Intergovernmental Panel on Climate Change. (2023). *AR6 synthesis report: Climate change 2023: Contribution of working groups I, II and III to the sixth assessment report of the Intergovernmental Panel on Climate Change*. <https://www.ipcc.ch/report/ar6/syr/>
- 18 Energy Innovation & Orvis, R. (2022, March 21). Oregon’s \$4 billion economic opportunity from ambitious climate policy. *Forbes*. <https://www.forbes.com/sites/energyinnovation/2022/03/21/oregons-4-billion-economic-opportunity-from-ambitious-climate-policy/?sh=29d39b7758a9>
- 19 Samayoa, M. (2023, April 14). *Oregon needs to cut more greenhouse gas emissions to reach climate goals, panel says*. OPB. <https://www.opb.org/article/2023/04/14/oregon-must-cut-more-greenhouse-gas-emissions-to-reach-climate-goal-panel-says/>
- 20 Samayoa, M., & Steves, D. (2021, November 17). *Zero emissions truck plan gets green light from Oregon regulators*. OPB. <https://www.opb.org/article/2021/11/17/zero-emissions-truck-plan-gets-green-light-from-oregon-regulators/>
- 21 Von Kaenel, C., & Guilen, A. (2023, March 31). *Biden-backed California rule pushes clean trucks*. Politico. <https://www.politico.com/news/2023/03/31/epa-approves-california-clean-trucks-rule-00089868>
- 22 MacDonald, C., Baker, Z., & Schlusser, A. (2023). *Oregon Global Warming Commission biennial report to the Oregon Legislature*.
- 23 Troy, A., Pusina, T., Romsos, S., Moghaddas, J., & Buchholz, T. (2022). *The true cost of wildfire in the western U.S.: 2022 report*. Western Forestry Leadership Coalition. <https://www.thewflc.org/sites/default/files/TrueCostofWildfire.pdf>
- 24 MacDonald, C., Baker, Z., & Schlusser, A. (2023). *Oregon Global Warming Commission biennial report to the Oregon Legislature*.
- 25 MacDonald, C., Buchanan, M., Hatch, A., & Strawn, A. (2021). *Natural & working lands proposal*. Oregon Global Warming Commission. <https://static1.squarespace.com/>



[static/59c554e0f09ca40655ea6eb0/t/6148a9d3643174181e05c7c/1632152029009/2021+OGWC+Natural+and+Working+Lands+Proposal.pdf](https://static59c554e0f09ca40655ea6eb0/t/6148a9d3643174181e05c7c/1632152029009/2021+OGWC+Natural+and+Working+Lands+Proposal.pdf)

- 26 Samayoa, M. (2023, June 28). *Oregon's latest climate package targets building resilience, and hefty federal dollars*. OPB. <https://www.opb.org/article/2023/06/28/oregon-climate-change-environment-portland-politics-heat-dome-resilience-package-extreme-weather/>
- 27 Troost, S., Ruther, E., & Hayden, B. (2023, August 2). *Oregon elevates natural and working lands to help slow climate change*. Pew Charitable Trusts. <https://www.pewtrusts.org/en/research-and-analysis/articles/2023/08/02/oregon-elevates-natural-and-working-lands-to-help-slow-climate-change>
- 28 National Oceanic and Atmospheric Administration. (2024, January 12). *2023 was the world's warmest year on record, by far*. U.S. Department of Commerce. <https://www.noaa.gov/news/2023-was-worlds-warmest-year-on-record-by-far#:~:text=Earth's%20average%20land%20and%20ocean,0.15%20of%20a%20degree%20C>
- 29 Wuebbles, D.J., Fahey, D.W., et al. [Eds.]. (2017). *Climate science special report: Fourth national climate assessment, volume 1*. U.S. Global Change Research Program. <https://science2017.globalchange.gov>
- 30 Fleishman, E. [Ed.]. (2023). *Sixth Oregon climate assessment*. Oregon Climate Change Research Institute, Oregon State University. <https://doi.org/10.5399/osu/1161>
- 31 National Weather Service. (n.d.). *Weather related fatality and injury statistics*. <https://www.weather.gov/hazstat/>
- 32 Oregon Health Authority. (2023). *Climate and health in Oregon: 2021–2022 report*.
- 33 Oregon Office of Emergency Management. (2021, July 27). *Initial after-action review (AAR) of the June 2021 excessive heat event*. [https://www.oregon.gov/oem/Documents/2021\\_June\\_Excessive\\_Heat\\_Event\\_AAR.pdf](https://www.oregon.gov/oem/Documents/2021_June_Excessive_Heat_Event_AAR.pdf)
- 34 Waldroupe, A. (2016, September 1). *Portland's hot spots: Urban heat islands pose threat to lower income residents*. Street Roots. <https://www.streetroots.org/news/2016/09/01/portland-s-hot-spots-urban-heat-islands-pose-threat-lower-income-residents>
- 35 Peel, S. (2021, July 14). *This is the hottest place in Portland: Dr. Vivek Shandas says where you live could decide whether you survive a roasting city*. Willamette Week. <https://www.wweek.com/news/city/2021/07/14/this-is-the-hottest-place-in-portland/>
- 36 Rakshe, S. (2022, October 11). *Climate change & child well-being in Oregon* [Issue brief]. Our Children Oregon. [https://ourchildrenoregon.org/wp-content/uploads/2022/10/Climate\\_Issue\\_Brief\\_Fall\\_2022-FINAL2.pdf](https://ourchildrenoregon.org/wp-content/uploads/2022/10/Climate_Issue_Brief_Fall_2022-FINAL2.pdf)
- 37 Aldrich, D.P., & Meyer, M.A. (2015). *Social capital and community resilience*. *American Behavioral Scientist*, 59(2), 254–269. <https://doi.org/10.1177/0002764214550299>
- 38 MacDonald, C., Baker, Z., & Schlusser, A. (2023). *Oregon Global Warming Commission biennial report to the Oregon Legislature*.
- 39 Flatt, C. (2021, July 28). *Underwater video shows heat-stressed salmon, but it could have been worse*. OPB. <https://www.opb.org/article/2021/07/28/heat-stress-salmon>
- 40 Sadiq, S. (2023, July 7). *How hot, dry conditions are affecting Oregon farmers and ranchers*. OPB. <https://www.opb.org/article/2023/07/07/how-hot-dry-conditions-are-affecting-oregon-farmers-and-ranchers/>
- 41 Selsky, A. (2021, July 8). *Oregon adopts most protective heat rules for workers in US*. Associated Press. <https://apnews.com/article/business-science-health-government-and-politics-environment-and-nature-ecea3ed406610f352f5e3f64850b32f0>
- 42 Greenstone, M., & Hasenkopf, C. (2023). *Air quality life index: Annual update*. Energy Policy Institute at the University of Chicago. [https://aqli.epic.uchicago.edu/wp-content/uploads/2023/08/AQLI\\_2023\\_Report-Global.pdf](https://aqli.epic.uchicago.edu/wp-content/uploads/2023/08/AQLI_2023_Report-Global.pdf)
- 43 American Lung Association. (2023). *State of the air: 2023 report*. <https://www.lung.org/research/sota>
- 44 National Institute of Environmental Health Sciences. (2024, April). *Air pollution and your health*. <https://www.niehs.nih.gov/health/topics/agents/air-pollution#:~:text=Vehicle%20emissions%2C%20fuel%20oils%20and,of%20human%2Dmade%20air%20pollution>
- 45 Lane, H.M., Morello-Frosch, R., Marshall, J.D., & Apte, J.S. (2022, March 9). *Historical redlining is associated with present-day air pollution disparities in U.S. cities*. *Environmental Science & Technology Letters*, (2022)9, 345–350. <https://doi.org/10.1021/acs.estlett.1c01012>
- 46 Sanchez-Pacheco, I., Brannon, J., & Pilchowski, E. (2023, July). *Cultivating justice in a changing climate: A collection of stories and art rooted in Multnomah County's communities of color*. Multnomah County Office of Sustainability. [https://multco-web7-psh-files-usw2.s3-us-west-2.amazonaws.com/s3fs-public/2023%20EJ%20Zine%208.5%20x%2011%20Final\\_0.pdf](https://multco-web7-psh-files-usw2.s3-us-west-2.amazonaws.com/s3fs-public/2023%20EJ%20Zine%208.5%20x%2011%20Final_0.pdf)
- 47 Oregon Department of Environmental Quality. (2023, May). *Wildfire smoke trends and the air quality index*. <https://www.oregon.gov/deq/wildfires/Documents/WildfireSmokeTrendsReport.pdf>
- 48 U.S. Environmental Protection Agency. (2023, November 2). *Health effects attributed to wildfire smoke*. <https://www.epa.gov/wildfire-smoke-course/health-effects-attributed-wildfire-smoke>
- 49 Flaccus, G. (2018, September 25). *Wildfire smoke costs Shakespeare Festival*. *The Columbian*. <https://www.columbian.com/news/2018/sep/25/wildfire-smoke-costs-shakespeare-festival/>
- 50 American Lung Association. (2023). *State of the air*.
- 51 Oregon Department of Environmental Quality. (2023, May). *Wildfire smoke trends and the air quality index*.
- 52 Oregon Water Resources Department. (n.d.). *Oregon drought*. <https://www.oregon.gov/owrd/programs/climate/droughtwatch/pages/default.aspx#:~:text=The%2022%2Dyear%20period%20from,for%20less%20than%20a%20decade>

- 53 U.S. Environmental Protection Agency. (2021, September 7). *EPA researchers investigate impacts of wildfires on water resources*. Science Matters. <https://www.epa.gov/sciencematters/epa-researchers-investigate-impacts-wildfires-water-resources>
- 54 National Integrated Drought Information System. (n.d.). *What is drought: Drought basics*. <https://www.drought.gov/what-is-drought/drought-basics>
- 55 Oregon Secretary of State & Oregon Audits Division. (2023, January). *Advisory report: State leadership must take action to protect water security for all Oregonians*. [https://sos.oregon.gov/audits/documents/2023-04.pdf?utm\\_source=SOS&utm\\_medium=egov\\_redirect&utm\\_campaign=https%3A%2F%2Fsos.oregon.gov%2Fwater](https://sos.oregon.gov/audits/documents/2023-04.pdf?utm_source=SOS&utm_medium=egov_redirect&utm_campaign=https%3A%2F%2Fsos.oregon.gov%2Fwater)
- 56 Reyes-Santos, A., Holliday, C., Dalgaard, S., Evans, T., & Witherill, K. (2021). *Oregon water futures project report: 2020–21 community engagement*. University of Oregon. <https://www.oregonwaterfutures.org/report-20-21>
- 57 Dalgaard, S. (2021, September 2). *New report elevates water justice in Oregon*. Oregon Environmental Council. <https://oeconline.org/new-report-elevates-water-justice-in-oregon/>
- 58 Lazenby, S., Odeh, D., & Salzberg, S. (2021). *2021 infrastructure survey report*. Portland State University. [https://www.orcities.org/download\\_file/1631/0](https://www.orcities.org/download_file/1631/0)
- 59 Smith, M. (2022). *Protecting Oregon’s drinking water sources: A guide for using land conservation to secure clean and reliable drinking water*. Coalition of Oregon Land Trusts. <https://oregonlandtrusts.org/wp-content/uploads/2023/07/Source-Water-Guide-June-2023-Update.pdf>
- 60 MacDonald, C., Buchanan, M., Hatch, A., & Strawn, A. (2021). *Natural & working lands proposal*. Oregon Global Warming Commission.
- 61 Sorte, B., Reimer, J., & Jones, G. (2021). *Oregon agriculture, food and fiber: An economic analysis*. Oregon State University. [https://agsci.oregonstate.edu/sites/agscid7/files/main/about/oragecon\\_report\\_2021.pdf](https://agsci.oregonstate.edu/sites/agscid7/files/main/about/oragecon_report_2021.pdf)
- 62 U.S. Department of Agriculture. (2017). *2017 census of agriculture: Oregon state and county data: Volume 1: Geographic area series: Part 37: Chapter 1: State level data*. [https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1,\\_Chapter\\_1\\_State\\_Level/Oregon/](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_State_Level/Oregon/)
- 63 Sorte, B., Reimer, J., & Jones, G. (2021). *Oregon agriculture, food and fiber: An economic analysis*. Oregon State University. [https://agsci.oregonstate.edu/sites/agscid7/files/main/about/oragecon\\_report\\_2021.pdf](https://agsci.oregonstate.edu/sites/agscid7/files/main/about/oragecon_report_2021.pdf)
- 64 Nixon, C. (2023, July 17). *Aging farmers toil well past retirement, with no heirs or desire to leave land they’ve tended for decades*. *The Oregonian/Oregon Live*. <https://www.oregonlive.com/business/2023/07/aging-farmers-toil-well-past-retirement-with-no-heirs-or-desire-to-leave-land-theyve-tended-for-decades.html>
- 65 Hackenmiller-Paradis, R. (2008, February). *The price of pollution: Cost estimates of environmentally-related disease in Oregon*. Oregon Environmental Council. <https://oeconline.org/wp-content/uploads/2014/12/pop.pdf>
- 66 González Martinez, J., & Johnson, S. (2022). *Communication resource guide for inclusive economic development*. New Growth Innovation Network. <https://secureservercdn.net/198.71.233.72/y4n.574.myftpupload.com/wp-content/uploads/2022/06/NGIN-Communication-Resource-Guide-for-Inclusive-Economic-Development.pdf>
- 67 Oregon Department of Transportation. (2022, July). *Oregon national electric vehicle infrastructure plan*. <https://www.oregon.gov/odot/climate/Documents/Oregon%20NEVI%20EV%20State%20Plan.pdf>



## SECTION 7

# Built Environment

### *In this chapter*

- Access to broadband
- Transportation
- Connection points

**The physical design of our homes, office buildings and streets shapes and defines the ways we live and how we interact. Architects and city or regional planners often design these spaces to manage the flow of people and encourage movement or connection along with other goals like ensuring health and safety.**



Other examples of our built environment include everything from power plants, schools, ports, communication systems, water pipes and treatment centers to sidewalks and trails. The related concept of *infrastructure* can refer to physical buildings as well as to structures and systems that organize and even facilitate flow and connection. Some infrastructure, like power lines and highways, is in plain sight; satellite communication networks, internet fiber cables and airline flight paths may be less obvious.

On a large scale, additions to our built environment and infrastructure can mark the priorities of the current moment and act as blueprints for the



# The built environment shapes human health from birth by promoting physical activity, optimizing air quality, and mitigating environmental hazards.

future — whether that future includes more community engagement or clean, efficient energy.

Throughout history, infrastructure advancements have been linked with economic growth, from the construction of railways in the 19th century to the introduction of the internet in the 20th.<sup>1</sup> The human-made features of our environment also intertwine with aspects of the natural environment like land, air, water and weather. These systems can mutually reinforce each other, supporting the resilience of our natural world alongside that of our cities, towns and communities.

The built environment shapes human health from birth by promoting physical activity, optimizing indoor and outdoor air quality, and mitigating environmental hazards like exposure to lead, extreme heat and wildfires.<sup>2</sup> What we construct also shapes the social aspects of our lives and can either facilitate connections or contribute to artificial divides, reinforcing or fueling inequality in our communities.<sup>3</sup>

Globally, the United Nations estimates that three-quarters of the infrastructure that will be present in 2050 is yet to be built.<sup>4</sup> Technological advances and population growth in the coming years present an opportunity to redesign our power, telecommunication, transport, and heating and cooling systems in ways that support human and environmental well-being. Reimagining our built environment in new ways — especially our buildings and transportation systems — holds considerable potential to

reduce greenhouse gas emissions and create healthier and more resilient places.<sup>5</sup>

Planners are also seeing the transformative potential of the current moment as the federal government invests significantly in infrastructure. The opportunity we face is to build something better by taking the goals of well-being, equity and inclusivity as *starting points* for design and infrastructure rather than as afterthoughts.<sup>6</sup>

Looking ahead, how do we build structures and systems



Cascade Head. Photo: Jennifer Emerling/The Nature Conservancy

that support opportunity, connection, large-scale problem-solving and general well-being? In this section, we explore broadband internet and transportation systems as two examples that highlight the limits and opportunities of our present moment.



## Discussion of Key Indicators

### ACCESS TO BROADBAND

The internet continually expands and reshapes the ways we interact and access opportunities. It's opened new territory — working toward a degree after putting the kids to bed, maintaining communication during natural disasters, finding a dream job via remote work, using precision farming techniques with satellite imagery, or reading to grandchildren across state lines.

Broadband (high-speed internet) is faster than dial-up connections and is an entry point to full participation in social, economic and educational benefits. Although it is increasingly embedded into services, education, products and job requirements, it isn't universally available or accessed. Much like running water and electricity, many now consider high-speed internet access a modern utility foundational to the way we live.

#### Infrastructure and availability

The vision for universal access to high-speed internet is as bold as it is vital. And it's coming closer to reality with the news of more than \$800 million in federal funding for Oregon broadband in 2023 (the price tag for a fully connected state is close to \$3 billion).<sup>7</sup>

According to the Oregon Office of Broadband's five-year plan, federal Broadband Equity Access and Deployment (BEAD) funding will go first to areas without broadband — which are often rural — and then to areas with inadequate or outdated broadband.



Cyber Mill, Grant County

Importantly, our understanding of what is considered *adequate* broadband is also shifting quickly. A 2015 definition that allows just one person in a household to access Zoom meetings, Google meetups or remote learning is already considered outdated and indicates an “underserved” household to the Oregon Office of Broadband.<sup>8</sup>

Oregon is the nation's 10th largest state, and its mountains, valleys, canyons, forests and large swaths of public land all pose special challenges to installing broadband fiber cables. The largest areas without broadband are the coast, the Coast Range and areas east of the Cascade Range.<sup>9</sup> Many rural and tribal communities are left without quality service, along with developments just beyond city limits and even pockets within urban areas.<sup>10</sup>

As an example, the Warm Springs Indian Reservation is home to deep canyons and areas of solid rock where it costs \$55 per foot to lay down copper, cable or fiber internet lines. In areas like the Willamette Valley, which have fairly soft soil, it costs only \$5 per foot.<sup>11</sup> Also, places without high-speed internet access are often asked to bear the infrastructure costs in ways that other areas don't have to. Targeted support to get Oregon fully connected comes mainly from federal infrastructure funding and U.S. Department of Agriculture rural development funds, in addition to local innovations through cooperatives.

## Access and affordability

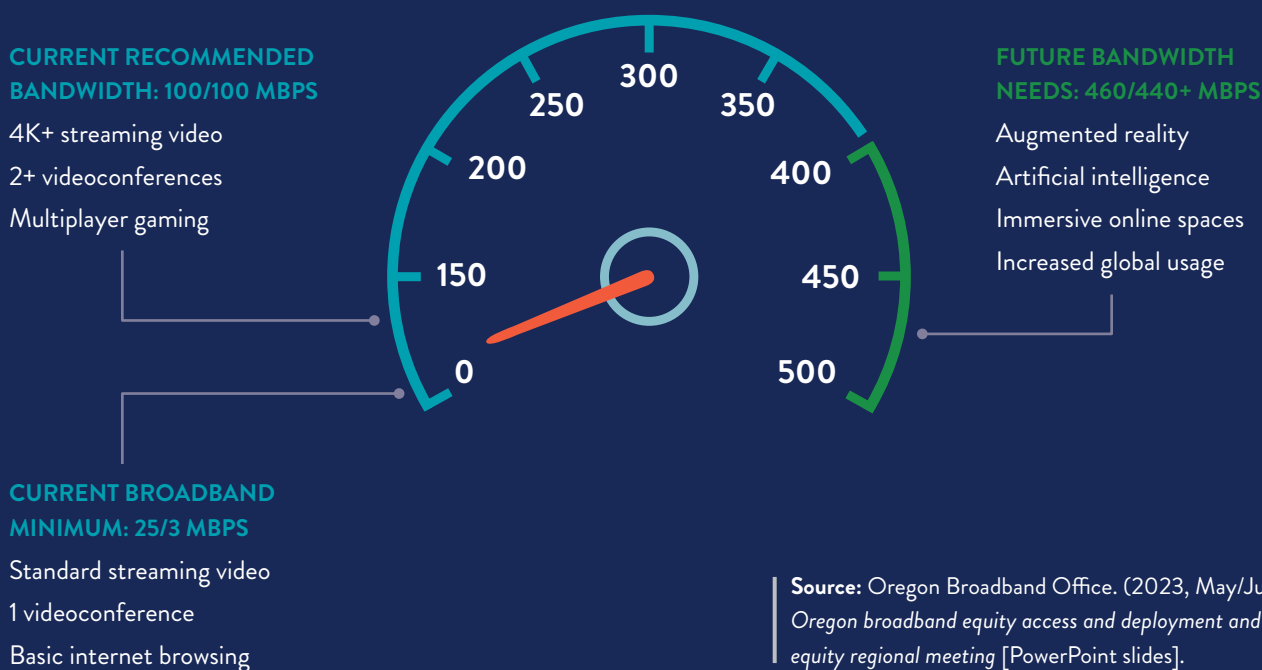
A 2023 report from the Brookings Institution finds that “digitalization divides across and within places now stand as one of the nation’s starkest limits on opportunity,” in part because the full spectrum of jobs (including those with digital components) aren’t available in rural areas.<sup>12</sup>

Ideally, there’s a balance between increasing digital skills and jobs while still maintaining place-based opportunities and local character. Of those who live in areas without broadband, almost half report they are definitely or very likely planning to relocate to get better internet access.<sup>13</sup> In rural areas, communities with broadband access are more likely to host business startups compared to areas without access, especially in remote areas and for woman-led businesses and companies without storefronts.<sup>14</sup> Indeed, the U.S. Department of Agriculture has named broadband as one of its cornerstone strategies for rural growth and prosperity in the coming years.<sup>15</sup>

Research on the benefits of broadband emphasizes that availability alone won’t help communities — the impacts are strongest with widespread adoption.<sup>16</sup> Today’s recommended standard (a minimum of 100 megabits per second download and upload) is available to, but not necessarily accessed by, 2 out of 3 Oregonians.<sup>17</sup> (See Figure 28, below.)

Once broadband is available locally, households still need affordable options, language accessibility, devices to connect and an understanding of how to navigate the internet safely. Less than half of U.S. households with income in the bottom 20% connect to the internet at home, whereas 95% of households with income in the top 20% do so.<sup>18</sup> Sizable differences also exist by race and ethnicity. About 80% of white adults have home broadband, compared to 71% of Black/African American adults and 65% of those identifying as Hispanic.<sup>19</sup> Oregon’s Digital Equity Plan also shows that people with disabilities, veterans, older adults

**FIGURE 28.** American households have already outgrown the 25/3 Mbps download/upload standard set by the U.S. Federal Communications Commission.





and English-language learners face more access barriers and use home internet at lower rates.<sup>20</sup>

Individuals and communities need to be able to tap into the benefits of broadband without laying the groundwork and addressing barriers to access on their own. The Digital Equity Plan outlines how the state is addressing areas that are disconnected, unserved or underserved,<sup>21</sup> and Oregon's rural school districts, tribes and local cooperatives are working with state and federal partners to secure loans and grants for a connected future.

## TRANSPORTATION

One common symbol of connection is a bridge. And indeed, Oregon's transportation infrastructure helps connect us. Our statewide transportation landscape includes 23 marine ports, 87,643 miles of roads, 2,400 miles of rail, seven commercial airports and 7,669 bridges. Over 11,000 public transit stops dot the state, including those that connect cities and towns over long distances and those for local buses and trains.<sup>22</sup> In 2017, this network moved over \$300 billion of commodities into, across or out of Oregon, and this value is expected to grow significantly in coming years.<sup>23</sup>

Our transportation systems connect us to each other in ways that make them relevant for our economy and for each of the other focus areas we explore in this report. They also connect us with natural places and play a significant role in shaping the health of our environment.

But as much as transportation can connect us, it has also been a source of lasting division. The construction of the nation's highway system in the 1950s and 1960s tore through numerous Black communities, creating walls between neighbors that persist today.<sup>24</sup> *The Oregonian* has taken a deep dive into a still-reverberating example from Oregon's history: the destruction of Black-owned homes and businesses in Portland's Albina district to make way for Interstate 5.<sup>25</sup> Or we could look further back in time to the Oregon Trail, which brought nonnative white settlers west in great numbers while carving a new path through the landscape's established travel patterns.

Similar histories from across the nation have lasting legacies today. For example, national research shows that people of color are disproportionately more likely to live near highways and in areas with higher exposure to pollution from our nation's leading sources of emissions, including exhaust from cars and trucks.<sup>26</sup> And while transportation constraints are a cause of missed medical appointments for millions of Americans, the rates are higher in neighborhoods that are more reliant on public transportation, which are most often communities of color.<sup>27</sup>

Thanks to estimates from the Oregon Office of Rural Health, we can also see how transportation times to reach medical services vary dramatically across our state's geography. Although their analysis is specific to health care access, similar stories can be told about travel times for other basic needs like jobs and groceries.<sup>28</sup>

The Office of Rural Health constructs estimates by looking at the time required to get from the largest town in each of Oregon's 128 health care service areas to the nearest available clinic officially recognized by OHA for providing high-quality, patient-centered care. The average travel time statewide is 13.1 minutes, with longer trips required in rural and frontier areas. Estimated travel times extend as high as 75 minutes one way for Jordan Valley and 53 minutes for Swisshome/Triangle Lake.<sup>29</sup> These are already long trips, but they could be thought of as minimums since the analysis does not take into account additional factors like whether residents have access to a car.

On this note, as Oregon's population grows older — a particularly pronounced trend in many rural areas of the state — shared ride services and public transit become increasingly important alternatives for access. And while on-demand, accessible transit options exist in some areas, those who rely on these services — including Oregonians with mobility challenges — experience significant cost and time burdens from doing so. In rural parts of the state without access to these resources, residents report feeling essentially required to own a vehicle or to move.<sup>30</sup> ■



Open Signal



## Exploring Connection Points

### BUILT ENVIRONMENT + EDUCATION



Digital learning is increasingly wired into lesson plans and schools, and 95% of public schools nationally now offer students digital devices (laptops, Chromebooks or tablets) if needed.<sup>31</sup> In part because of the pandemic, the percentage of U.S. school districts with adequate broadband has risen by 57% since 2020.<sup>32</sup>

Today's recommended bandwidth for school connectivity is a minimum of 1 megabit per second (Mbps) per student. In Oregon, 3 out of 4 school districts meet that benchmark. Internet costs for districts vary wildly from \$0.03 monthly/Mbps in Gresham to \$15 in Paisley and Vernonia, which contributes to challenges in meeting the benchmark.<sup>33</sup>

*Want to explore further? Turn to **Education**, page 32.*

### BUILT ENVIRONMENT + HOUSING



As we think about what makes up our built environment, we might consider everything from cables for high-speed internet and roads for transportation (like those we discuss above) to single family homes and apartment buildings. In this report, we have held housing as a separate focus area given its current critical importance for community well-being in Oregon. We can also see that housing has complex connections with other built aspects of our communities. The availability and usefulness of affordable housing depends on access to reliable internet, transportation infrastructure, water services and other necessities.<sup>34</sup> Our experiences of our homes can be shaped by whether there are convenient, safe walking paths in our neighborhood. As cities across the country consider growing needs for housing, planners are increasingly considering the potential of underutilized office space.<sup>35</sup>

*Want to explore further? Turn to **Housing**, page 64.*

## SECTION 7 ENDNOTES

- 1 Vagliasindi, M., & Gorgulu, N. (2021, October 6). *What have we learned about the effectiveness of infrastructure investment as a fiscal stimulus? A literature review* [Policy Research Working Paper 9796]. World Bank Group. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/178841633526651703/what-have-we-learned-about-the-effectiveness-of-infrastructure-investment-as-a-fiscal-stimulus-a-literature-review>
- 2 Bole, A., Bernstein, A., & White, M.J. (2024). The built environment and pediatric health. *Pediatrics*, 153(1). <https://doi.org/10.1542/peds.2023-064773>
- 3 Mouratidis, K. (2021, August). Urban planning and quality of life: A review of pathways linking the built environment to subjective well-being. *Cities*, 115. <https://www.sciencedirect.com/science/article/pii/S0264275121001293?via%3Dihub>
- 4 United Nations. (2021, October 3). *UN chief promotes “enormous” benefits of greener cities*. UN News. <https://news.un.org/en/story/2021/10/1101992>
- 5 U.S. Environmental Protection Agency. (2024, April 11). *Sources of greenhouse gas emissions*. <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>
- 6 De Souza Briggs, X., & Smith, K. F. (2022, January 27). *How to create shovel-worthy infrastructure: A six-point framework for equitable access to well-being*. American Planning Association. <https://www.planning.org/planning/2022/winter/how-to-create-shovel-worthy-infrastructure/>
- 7 Business Oregon, Oregon Broadband Office. (n.d.). *Funding allocation*. [https://www.oregon.gov/biz/programs/Oregon\\_Broadband\\_Office/funding/Pages/default.aspx](https://www.oregon.gov/biz/programs/Oregon_Broadband_Office/funding/Pages/default.aspx)
- 8 Oregon Broadband Office. (2023, August). *Five-year action plan: Broadband Equity, Access, and Deployment (BEAD) program* [Draft]. [https://www.oregon.gov/biz/Publications/Broadband/DRAFT\\_BEAD5yractionplan.pdf](https://www.oregon.gov/biz/Publications/Broadband/DRAFT_BEAD5yractionplan.pdf)
- 9 Oregon Department of Transportation. (2022, June). *ODOT broadband strategy and implementation plan*. [https://www.oregon.gov/odot/Maintenance/Documents/ODOT-Broadband-Strategy%26ImplementationPlan\\_FINAL\\_6-3-22.pdf](https://www.oregon.gov/odot/Maintenance/Documents/ODOT-Broadband-Strategy%26ImplementationPlan_FINAL_6-3-22.pdf)
- 10 Oregon Broadband Office. (2022). *Community listening sessions summary*. <https://www.oregon.gov/biz/Publications/Broadband/OBO%20Broadband%20Listening%20Sessions%20Summary.pdf>
- 11 Oregon Secretary of State & Oregon Audits Division. (2023, January). *The Oregon Broadband Office must continue to take aggressive steps to close the digital divide and fully meet its statutory duties*. <https://sos.oregon.gov/audits/Documents/2023-02.pdf>
- 12 Muro, M., & Liu, S. (2023, February 7). *As the digitalization of work expands, place-based solutions can bridge the gaps*. Brookings Institution. <https://www.brookings.edu/articles/as-the-digitalization-of-work-expands-place-based-solutions-can-bridge-the-gaps/>
- 13 Strategic Networks Group. (2020). *Oregon statewide broadband assessment and best practices study*. Oregon Business Development Department. <https://www.oregon.gov/biz/Publications/SNGStudy2020.pdf>
- 14 Conroy, T., & Low, S.A. (2022). Entrepreneurship, broadband, and gender: Evidence from establishment births in rural America. *International Regional Science Review*, 45(1), 3–35. <https://doi.org/10.1177/01600176211018749>
- 15 Agricultural and Rural Prosperity Task Force. (2017, October 17). *Report to the president of the United States from the Task Force on Agriculture and Rural Prosperity*. U.S. Department of Agriculture. <https://www.usda.gov/sites/default/files/documents/rural-prosperity-report.pdf>
- 16 Whitacre, B., Gallardo, R., & Stover, S. (2014, December). Broadband’s contribution to economic growth in rural areas: Moving towards a causal relationship. *Telecommunications Policy*, 38(11), 1011–1023. <https://doi.org/10.1016/j.telpol.2014.05.005>
- 17 Strategic Networks Group. (2020). *Oregon statewide broadband assessment and best practices study*. Oregon Business Development Department.
- 18 Oregon Secretary of State & Oregon Audits Division. (2023, January). *The Oregon Broadband Office must continue to take aggressive steps to close the digital divide and fully meet its statutory duties*.
- 19 Atske, S., & Perrin, A. (2021, July 16). *Home broadband adoption, computer ownership vary by race, ethnicity in the U.S.* Pew Research Center. <https://www.pewresearch.org/short-reads/2021/07/16/home-broadband-adoption-computer-ownership-vary-by-race-ethnicity-in-the-u-s/>
- 20 Oregon Broadband Office. (2023, October). *Draft state of Oregon digital equity plan*. [https://www.oregon.gov/biz/Publications/Broadband/Oregon\\_Digital\\_Equity\\_Plan\\_Draft.pdf](https://www.oregon.gov/biz/Publications/Broadband/Oregon_Digital_Equity_Plan_Draft.pdf)
- 21 Ibid.
- 22 Oregon Department of Transportation. (2023, July 13). *Oregon transportation plan*. [https://www.oregon.gov/odot/Planning/Documents/Oregon\\_Transportation\\_Plan\\_with\\_Appendices.pdf](https://www.oregon.gov/odot/Planning/Documents/Oregon_Transportation_Plan_with_Appendices.pdf)
- 23 Oregon Department of Transportation. (2023, March). *Oregon freight plan: An element of the Oregon transportation plan*. [https://www.oregon.gov/odot/Planning/Documents/Oregon\\_Freight\\_Plan\\_2023.pdf](https://www.oregon.gov/odot/Planning/Documents/Oregon_Freight_Plan_2023.pdf)
- 24 Archer, D. (2020, February 18). *White men’s roads through Black men’s homes: Advancing racial equity through highway reconstruction*. *Vanderbilt Law Review*, 73(5), 1259–1330. <https://cdn.vanderbilt.edu/vu-wordpress-0/wp-content/uploads/sites/278/2020/10/19115823/White-Mens-Roads-Through-Black-Mens-Homes-Advancing-Racial-Equity-Through-Highway-Reconstruction.pdf>
- 25 Davis, R. (2023, May 30). *Whitewashing Albina’s destruction*. *The Oregonian*. <https://projects.oregonlive.com/publishing-prejudice/whitewashing-destruction>



- 26 Samuels, G., & Freemark, Y. (2022, November). *The polluted life near the highway: A review of national scholarship and a Louisville case study*. Urban Institute. <https://www.urban.org/sites/default/files/2022-11/The%20Polluted%20Life%20Near%20the%20Highway.pdf>
- 27 Wallace, R., Hughes-Cromwick, P., Mull, H., & Khasnabis, S. (2005). Access to healthcare and nonemergency medical transportation: Two missing links. *Transportation Research Record: Journal of the Transportation Research Board*, 1924(1), 76–84. <https://doi.org/10.1177/036119810519240011>
- 28 Oregon Office of Rural Health. (2021, August). *Oregon areas of unmet health care need report*. <https://www.ohsu.edu/oregon-office-of-rural-health/data-and-publications>
- 29 Ibid.
- 30 Oregon Department of Transportation. (2022, February 18). *Outreach and stakeholder interviews packet*. [https://www.oregon.gov/odot/Planning/Documents/OTP\\_Outreach\\_and\\_Stakeholder\\_Interviews\\_Packet.pdf](https://www.oregon.gov/odot/Planning/Documents/OTP_Outreach_and_Stakeholder_Interviews_Packet.pdf)
- 31 U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. (2023, August). *School pulse panel 2023-2024: Technology*. <https://nces.ed.gov/surveys/spp/results.asp>
- 32 Connect K-12. (2023). *2023 report on school connectivity*. [https://connectk12.org/static/media/Connect\\_K12\\_Connectivity\\_Report\\_2023\\_FINAL.dfc96770.pdf](https://connectk12.org/static/media/Connect_K12_Connectivity_Report_2023_FINAL.dfc96770.pdf)
- 33 Ibid.
- 34 Varn, J. (2018, March 29). *How the infrastructure plans impact affordable housing*. Bipartisan Policy Center. <https://bipartisanpolicy.org/blog/how-the-infrastructure-plans-impact-affordable-housing/>
- 35 Solman, P., & Fecteau, M. (2023, August 8). *How some U.S. cities are converting vacant office spaces into housing*. PBS News Hour. <https://www.pbs.org/newshour/show/how-some-u-s-cities-are-converting-vacant-office-spaces-into-housing>



**The 2024 Tracking Oregon's Progress report was created by OCF's Research and Learning team. Impartial research, equity-driven analysis of pressing issues and evaluation of our own grantmaking are key ingredients of thoughtful philanthropy.**

**The mission of Oregon Community Foundation is to improve the lives of all Oregonians through the power of philanthropy. Since 1973, OCF has worked in partnership with donors, volunteers and nonprofits to strengthen communities in every county in Oregon through grantmaking, scholarships and research. Individuals, families, businesses and organizations can work with OCF to create charitable funds that support causes and organizations that are important to them. Get started at [oregoncf.org](https://oregoncf.org).**

---

■  
**BEND**  
(541) 382-1170

■  
**EUGENE**  
(541) 431-7099

■  
**MEDFORD**  
(541) 773-8987

■  
**PORTLAND**  
(503) 227-6846

■  
**SALEM**  
(503) 779-1927