

Oregon Benchmark Comparators

Comparators enhance Oregon Benchmarks by adding context to what is often seen as arbitrary numbers. While the longitudinal data reported by the Progress Board tells how benchmarks change over time, comparators highlight how Oregon is doing in a broader sense. It answers the question of how the state is doing compared to others.

The purpose of this analysis is to evaluate benchmark comparison data and recommend improvements. This paper includes the history of comparators, an inventory of current comparators, a review of the comparator data presentation, and recommendations for the Progress Board to consider.

In summary, three changes are recommended for the benchmark comparators. First, add a narrative to provide a greater depth of understanding; second, include a disclaimer to explain the comparator limitations; third, add consistency to the linked source material, which will increase ease of use and transparency.

History of Benchmark Comparators

The Progress Board has used Oregon's ranking as benchmarks since the first report to the legislature in 1991. However, comparator statistics were absent until the Oregon Shines II task force (1997) recommended adding regional and national context to the benchmarks.¹

The 1999-2001 benchmark performance reports included a paragraph for each 'core' benchmark for "How Oregon Compares to Others." This brief summary often included a table or graph of Oregon, Washington, and the US average. WA served as the regional comparison proposed in Oregon Shines II.

From 2003 through 2006, the biennial publication included comparison tables on all benchmarks where data was available. This approach no longer designated 'core' benchmarks. Comparator information was constrained to brief tables due to the new report layout of four benchmarks analyses per page.

The format once again changed when individual benchmark analyses moved online in 2007. Comparators continue to be in table format; yet, the constraints on size in place in the printed publication are no longer present. Additional comparator information such as source web addresses is also included.

¹ Chapter 10 of Oregon Shines II describes the modifications to the Oregon Benchmarks that included adding comparator data.

Comparator Inventory

The comparator inventory analyzed both the benchmark quality as well as quantity. Quality was determined through evaluating how closely aligned the benchmark comparator was to the overall benchmark data. The rankings ranged from being identical data sources as benchmarks, to comparator data that offers data of dubious comparability.² Additionally, a search for possible replacement comparators transpired.

Currently, 102 of the 156 benchmarks indicators have comparators. Fifty-three indicators rated as having comparators of excellent quality (rated as four or five star). Nine comparators (one star) have poor ratings due to significant concerns regarding their benchmark comparability.

Searches for new and replacement comparators were fruitless. For all benchmarks, the current comparator is deemed to be the best available. This was the case for all comparators regardless of quality. Obtaining data for comparators is a challenge. Benchmarks often are set to gage Oregon's progress by incorporating state level program or measure data. This data is not available for state-by-state comparison. This forces the board to find the best available comparator data that captures the essence of what the benchmark measures even though it may not be a direct comparison.

Comparison Data Presentation

WA and the US continue to be the most prominent comparisons made. This, as mentioned prior, is in accordance with the Oregon Shines II guiding principle of "when available, the national or regional norms" will be consulted.

A table format displays comparator data on the website and yearly data is typically used. Each comparator has a data series of various lengths. Some measures display data of the last two consecutive years; others display data at ten-year increments. This inconsistency exists because each benchmark's comparator is evaluated independently with little consideration of how these aggregate into the overall benchmark report or differ from one measure to the next. The frequency of updates, the length of data available, as well as their format varies greatly from one comparator to another.

Comparators also have hotlinks listed for indicators with a web presence. These may lead directly to a data table or to the source homepage. This lack of consistency can be confusing when users follow the link and are still unclear of the precise data source. Additionally, board staff calculates some comparators. It is not articulated anywhere that these calculations were required for the construction of the measure.

² Appendix A describes the quality metric developed as well as lists the benchmarks grades.

Evaluation

For this analysis, an evaluation criterion was developed for all proposed comparator changes. Each comparator alternative was evaluated against:

1. User satisfaction – The purpose of the project is to improve the value of comparators. Changes need to increase the ease of use either by clearly delineating sources; ensuring the data that they are searching for is easily available, and displaying it in a manner that facilitates quick referencing.
2. Maintenance and Implementation Costs – Given limited resources, any improvement to the comparators must have minimal impact on cost.
3. FTE Constraints – With a single data analyst responsible for the website, any improvements would need to be quickly implemented and workable.

I. Options Not Meeting Evaluation Criteria

1. Use of Additional Comparator States

States other than WA can serve as comparators. There are various comparator data sets available for all 50 states. For example, the US Bureau of Economic Analysis website contains such tables. They have various economic data for all 50 states with rankings. According to the data, while Oregon is reasonably similar to WA, it also ranked closely to CO, NV and UT for contributions to the National GDP. This could serve as a source to determine a few economically similar states. Those additional states would further frame Oregon's progress towards its economic benchmarks.

While additional comparisons would contribute to greater value for some users, we believe resource constraints make this option unfeasible. The use of other states for comparison will require that a selectee must first define the best measure of similarity among states. Since OR is not similar to any state in all areas that the benchmarks cover, selection of states would need to be made at least at the benchmark category level. For example, while UT is similar to OR based solely on their GDPs, their environmental stewardship programs may not be comparable.

In addition to resource limitations, the selection of multiple comparators may contribute to more confusion for users rather than less. If different states are used for different benchmarks, it leads the user to question the selection criteria. A clear explanation of each categorical criterion would need to be publically available to explain why these specific comparators are used.

2. Display all Available Tables

An alternative to the selection of multiple comparator states is the inclusion of tables that include all fifty states in the comparator data. The availability of all states for comparison may enhance the users experience by providing all the information and then allow users to make their own assumptions about similarities. This approach avoids the value-laden task of identifying best available state comparators.

There are however, several negative aspects to this approach. While the availability of all state information may be beneficial to some, others may find it daunting to search through large tables or spreadsheets to find the pertinent data. One alternative is to keep the current format of the graphs and include optional pop ups with the entire tables. The user then has access to all the information should they need it. However, both of these approaches would require a significant upgrade to the website along with increased quality assurance done by the data analyst. If additional resources become available this option may provide the most benefit to benchmark users.

3. Use Online Resources to Expand Offerings

The utilization of website resources such as Swivel may enable OPB to offer the user added flexibility to construct their own bar, line, and pie charts. Swivel is a free service that allows users to download data into spreadsheets for analysis. Individual users can sort and filter according to their own needs. This site allows easy manipulation of data, which is custom to the users needs, and this may be an opportunity around the cost constraints of the boards own website.

While there is great potential, we believe this option is infeasible due to the lack of quality control of source data. The board would not have control of the third party site content, so reliability of the site remaining both active and accurate is a concern. A disclaimer would be required but would likely be insufficient in the eyes of users if we implicitly adopted third-party websites and they found inaccurate data. The risk to the benchmark credibility is too great to until the technology matures.

II. Analysis Recommendations

We recommend the implementation of the following changes to the benchmark comparators. Each of the three recommendations exceeds the minimum criteria above and will greatly improve the interconnection of benchmark and comparator data.

1. Narratives

Narratives were present in the benchmark reports through 2001. Currently, comparators are displayed online only through charts, the source, and a link if it is available. The addition of a narrative would provide specific information about the data, its limitations, and what it means in context to the benchmark.

The accommodation of narratives is simple if it happens in conjunction with annual benchmark updates. There will be no additional cost to the board for narratives because there are no limitations for text on benchmarks.oregon.gov.

2. Disclaimer

At present, it is not immediately clear to the layperson why the comparator measures and benchmarks are not identical. The board should add a general narrative to the benchmark report page. A brief explanation about the lack of standardization, the data limitations, and the comparators purpose of complementing but not replacing the longitudinal benchmark data should be included. This change would cost nothing

and only require a small investment of time.






3. Consistent Linkages

As stated prior, often the data origins are unknown to the user because in house calculations are not identified. In addition, some comparators do not have links or the URL's do not lead directly to the data sets. Users then wade through another website in order find the information.

Tables should link to the source along with a narrative explaining where the data came from and why/if alterations occurred. Additionally, links should always be included. They should always lead directly to the table or contain a description for easily accessing the source information. This change will take minimal time and will greatly increase transparency.

Appendix A – Comparator Rating Scale

Comparators evaluated on a scale of five stars. The rating scale is as follows:

	Comparators have the same data source and they are current with the benchmark.
	Comparators have the same data source but they are not current with the benchmark
	Comparators have similar data sources but they differ slightly from the benchmark
	Comparators have different, multiple data sources, or intermittent timelines but they have the same general foci as the benchmark. Comparators have different data sources and different foci than the benchmark, but it remains somewhat comparable.
	Comparators have different data sources and different foci than the benchmark, but it remains somewhat comparable.

2009 Inventory of OBM's with Comparators

Benchmark	Comparator Organization	Quality of Comparator (5stars = Best)
1. Percent of Oregon jobs outside the I-5 corridor and Deschutes County	CFED	★
2. Oregon's national rank in traded sector strength (1 = best)	CFED	★★★★★
3. Oregon's national rank for new Employer Identification Numbers per 1000 workers.	SMALL BUSINESS ADMIN	★★★★★
4. Net job growth (in thousands)	BUREAU OF LABOR STATS	★
4a. urban counties	Oregon Employment Department	★★★★★
6. Oregon's national rank in economic diversification (1st = most diversified)	Bureau of Economic Analysis	★★★★★
7a. Research & Development: industry (public/private)	National Science Foundation (NSF), provided by OECD	★★★★★
7b. Research & Development: academia	Same	★★★★★
8. Oregon's national rank in venture capital investments (measured in 1000 dollars per state GDP)	OECD	★★★★★
9. Oregon's national rank in the cost of doing business (1st = lowest)	Moody's Cost of Doing Business Report	★★★★★
9a. labor costs	Moody's	★★★★★
9b. energy costs	Moody's	★★★★★
9c. tax costs	Moody's	★★★★★
11. Per capita personal income as a percent of the U.S. per capita income (U.S.=100%)	US Bureau of Economic Analysis, Regional Economic Information System, Table CA1-3	★★★★
11a. metropolitan as a percent of metropolitan U.S.	Same	★★★★★
11b. non-metropolitan as a percent of non-metropolitan U.S.	Same	★★★★★
12. Pay Per Worker: Overall	US Bureau of Economic Analysis, Regional Economic Information System, Table CA34	★★★★★
12a. Pay Per Worker: urban	Same	★★★★★
12b. Pay Per Worker: rural	Same	★★★★★
13a. Income Disparity: ratio	ACS	★★★★★
13b. Income Disparity: national rank (1st = smallest gap)	ACS	★★★★★
14. Percent of covered Oregon workers with earnings of 150% or more of the poverty level for a family of four	CFED	★★★
15a. Unemployment: annual rate	Bureau of Labor	★★★★★
15b. Unemployment: as a percent of U.S. unemployment rate	Bureau of Labor	★★★★★
16. Percent of total exports traded with non-primary partners. (Primary partners are Canada, Japan and South Korea.)	US Census Bureau, reported by Global Trade Information Service	★★★★★
18. Percent of children entering school ready to learn	US Department of Health & Human Services, Head Start Bureau and US Census Bureau	★
19a. Third Grade: reading	NCES	★★★
19b. Third Grade: math	NCES	★★★
20a. Eighth Grade: reading	NCES	★★★
20b. Eighth Grade: math	NCES	★★★
22. Percent of students who drop out of grades 9 - 12 without receiving a high school diploma or GED.	NCES	★★★★★
23. Percent of Oregon adults (25+) who have completed high school or equivalent	ACS	★★★★★
24. Percent of Oregon adults (25+) who have completed some college	ACS	★★★★★
26a. Percent of Oregon adults (25+) who have completed: bachelor's degree	ACS	★★★★★
26b. Percent of Oregon adults (25+) who have completed: advanced degree	ACS	★★★★★
28a. Usage of Computers: Percent of adults who use a computer or related electronic device to create docs/graphics or analyze data	TAXPAYER NETWORK	★★★★
28b. Usage of Computers: Percent of households with computers who access the Internet	TAXPAYER NETWORK	★★★★

2009 Inventory of OBM's with Comparators

Benchmark	Comparator Organization	Quality of Comparator (5stars = Best)
30. Percent of Oregonians 16 and older who volunteer time to civic, community or nonprofit activities in the last twelve months	Corporation for National and Community Service	★★★★★★
31a. Voting: Percent	George Mason University	★★★★
31b. Voting: National Rank	George Mason University	★★★★★★
34. National ranking for state and local taxes and charges as a percent of personal income (1st = lowest burden) TOTAL	Oregon Legislative Revenue Office	★★★★★★
34a. Taxes	Oregon Legislative Revenue Office	★★★★★★
34b. Charges	Oregon Legislative Revenue Office	★★★★★★
35. Governing magazine's ranking of public management quality	PEW CENTER	★★★★★★
36. State general obligation bond rating (Standard and Poor's)	STANDARD AND POORS	★★★★★★
37. Oregon adults participating in the arts at least once annually	National Endowment for the Arts	★★★★
39. Pregnancy rate per 1,000 females - ages 15-17	National Campaign to End Teen Pregnancy	★★★★
40. Percent of babies whose mothers received prenatal care beginning in the first trimester	Kaiser Family Foundation	★★★★
41. Infant mortality rate per 1,000 live births	United Health Foundation	★★★★
42. Percent of two-year-olds who are adequately immunized	CDC	★★★★★★
44. Percent of Oregonians 18 and older who report that they do not currently smoke cigarettes.	National Center for Chronic Disease Prevention & Health Promotion	★★★★★★
45. Preventable Death: Years of life lost before age 70 (rate per 1,000)	United Health Foundation	★★★★
46. Percent of adults whose self-perceived health status is very good or excellent	National Center for Chronic Disease Prevention & Health Promotion	★★★★
50a. 8th Grade Substance Abuse (alcohol)	US: Monitoring the Future Study and WA	★★★
50b. 8th Grade Substance Abuse (illicit drugs)	US: Monitoring the Future Study and WA	★★★
50c. 8th Grade Substance Abuse (cigarettes)	US: Monitoring the Future Study and WA	★★★
53b. Tobacco Abstinence During Pregnancy	US: Monitoring the Future Study and WA	★★★★★★
54. Percent of Oregonians with household incomes below 100% of the Federal poverty level	US Census Bureau	★★★★★★
54a. 0-17	US Census Bureau	★★★★★★
54b. 18-64	US Census Bureau	★★★★★★
54c. 65+	US Census Bureau	★★★★★★
55. Percent of Oregonians without health insurance	US Census Bureau	★★★★
56. Number of Oregonians that are homeless on any given night (per 10,000)	US Census Bureau	★★★
57. Percent of current child support due that is paid within the month that it is due.	Oregon Department of Justice	★★★★★★
58a. food insecure (limited access to enough food for all household members to live a healthy, active life)	USDA	★★★★★★
58b. food insecure with hunger (at least one member must go hungry)	USDA	★★★★★★
60. Oregonians with Disabilities who Work	US Census Bureau	★★★★★★
61a. Oregonians with Physical Limitations living in poverty	US Census Bureau	★★★★★★
61b. Oregonians with Cognitive Limitations living in poverty	US Census Bureau	★★★★★★
62. Overall reported crimes per 1,000 Oregonians	FBI	★★★
62a. person crimes	FBI	★★★★
62b. property crimes	FBI	★★★★
62c. behavior crimes	FBI	★★★
63a. Juvenile Arrests (person crimes)	US Department of Justice	★★★
63b. Juvenile Arrests (property crimes)	US Department of Justice	★★★
64. Percent of grade 9-12 students who report carrying weapons in the last 30 days	CDC	★★★★★★
68a. Traffic Congestion (Portland metro)	ODOT	★★★★
68b. Traffic Congestion (Salem & Eugene)	US CENCUS BUREAU, ACS	★★★

2009 Inventory of OBM's with Comparators

Benchmark	Comparator Organization	Quality of Comparator (5stars = Best)
69a. Drinking Water (Population)	EPA	★★★★★
69b. Drinking Water (Systems)	EPA	★★★★★
70. Percent of Oregonians who commute during peak hours by means other than driving alone	US CENCUS BUREAU, ACS	★★★★
71. Vehicle miles traveled per capita in Oregon metropolitan areas for local, non-commercial trips	US DOT	★★★★
72a. Road and Bridge Condition (State roads)	US DOT	★★★★
72b-i. Road and Bridge Condition (state bridges)	US DOT	★★★★
73. Percent of households that are owner occupied	ACS	★★★★
74a. Affordable Housing: renters	Oregon Housing and Community Services	★★★★
74b. Affordable Housing: homeowners	Oregon Housing and Community Services	★★★★
77. Carbon dioxide emissions as a percentage of 1990 emissions (1990=100%)	ENERGY INFORMATION ADMINISTRATION	★
78a. Net gain or loss of wetland acres in any given year: freshwater	USGS	★
78b. Net gain or loss of wetland acres in any given year: estuarine	USGS	★
79a. Stream Water Quality: significantly increasing trends in water quality	WA DOE	★★★★
79b. Stream Water Quality: significantly decreasing trends in water quality	WA DOE	★★★★
81. Agriculture Lands	USDA	★★★★
81a. Agriculture Lands: cropland	USDA	★★★★
81b. Agriculture Lands: other ag land	USDA	★★★★
82. Percent of Oregon's wild land forest in 1974 still preserved for forest use	Heinz Center	★★★★
83a. Timber Harvests - public lands	Oregon Department of Forestry	★★★★
83b. Timber Harvests - private lands	Oregon Department of Forestry	★★★★
84. Pounds of municipal solid waste land filled or incinerated per capita	CFED	★
91. Acres of state-owned parks per 1,000 Oregonians	National Assoc State Park Directors	★★

2009 Inventory of OBM's without Comparators

Benchmark
4b. Net Job Growth (Rural)
5. Oregon's concentration in professional services relative to the U.S. concentration in professional services. (U.S.=100%) (New Data Series)
10a. Percent of permits issued within the target time period or less: air contaminant discharge
10b. Percent of permits issued within the target time period or less: wastewater discharge
17. Percent of Oregonians who speak a language in addition to English
21. Percent of high school graduates who earn regular diplomas (CIM and Non-CIM) who attain a Certificate of Initial Mastery
25. Percent of Oregon adults (25+) who have an Associates degree or other occupation-related credential
27. Percent of adult Oregonians with intermediate and higher literacy skills
29. Percent of Oregonians in the labor force who received at least 20 hours of skills training in the past year
32. Percent of Oregonians who feel they are a part of their community
33. Percent of Oregonians who demonstrate knowledge of Oregon's main revenue source and main expenditure category.
38. Percent of Oregonians served by a public library which meets minimum service criteria
43a. New HIV infections in Oregonians aged 13 and over by year of initial diagnosis:number
43b. New HIV infections in Oregonians aged 13 and over by year of initial diagnosis:rate per 100,000
47. Percent of families with incomes below the state median income for whom child care is affordable
48. Number of child care slots available for every 100 children under age 13
49. Percent of Oregon teens who report positive youth development attributes:
49a. 8th graders
49b. 11th graders
51. Substantiated number of child abuse victims, per 1,000 under 18, total
51a. Substantiated neglected/abused (excluding threat of harm category)
51b. Substantiated threat of harm
52. Substantiated elder abuse rate per 1,000 Oregonians age 65 & older
53a. Percent of pregnant women who report not using alcohol
59. Percent of seniors (over 65) living outside of nursing facilities
65. Percent of paroled adult offenders convicted of a new felony within three years of initial release
66. Percent of juveniles with a new criminal referral to a county juvenile department within 12 months of the initial criminal offense
67a. Emergency Preparedness (% Oregon communities with geologic hazard data and prevention activities in place)
67b. Emergency Preparedness (% Oregon counties with emergency operations plans meeting minimum criteria)
74. Percent of Oregon households below median income spending 30% or more of their income on housing (including utilities)
75. AIR QUALITY - NATIONAL STANDARDS
75a. Number of days in cities when air is unhealthy for sensitive groups
75b. Number of days in cities when air is unhealthy for all groups
76a. Percent of Oregonians at risk from toxic air pollutants that contribute to cancer
76b. Percent of Oregonians at risk from toxic air pollutants that contribute to respiratory problems
79c. Stream Water quality: good to excellent condition
80. Percent of key streams meeting minimum flow rights:
80a. 9 or more months a year
80b. 12 months a year
85. Percent of hazardous substance sites cleaned up:
85a. non-tank sites
85b. regulated tanks
85c. heating oil tanks
86. Percent of monitored freshwater species not at risk: (state, fed listing)
86a. -salmonids
86b. other fish
86c. other organisms (amphibs, molluscs)
87. Percent of monitored marine species not at risk: (state, fed listing)
87a. fish
87b. shellfish
87c. other (mammals only - plant data N/A)
88. Percent of monitored terrestrial species not at risk: (state, fed listing)
88a. Vertebrates
88b. invertebrates
88c. plants
89. Percent of land in Oregon that is a natural habitat, TOTAL
89a. forest
89b. shrub land
89c. grassland
89d. wetland/riparian
90. Number of most threatening invasive species not successfully excluded or contained since 2000