# Oregon's WC Rate Ranking Study

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## The goal: relevant comparisons

- There are several WC rate and cost comparisons out there.
- But they aren't all useful for the same things.
- This should not surprise anyone.

## Comparison tools: what are you shopping for?

## WC rate or cost data: major sources in the U.S.

- US Bureau of Labor Statistics (BLS)
- National Academy of Social Insurance (NASI)
- Oregon's WC Rate Ranking study
- National Council on Compensation Insurance (NCCI)

## Uses for employer cost data

*Aggregate comparisons over time:*

- US Bureau of Labor Statistics (BLS)
- National Academy of Social Insurance (NASI)

*Across states in a single year:*

- Oregon's WC Rate Ranking study
- National Council on Compensation Insurance (NCCI)

## Oregon's Rate Ranking study

- The 2014 study is the 15th in the series
- Done every even-numbered year since 1986

## Oregon's rates in 1986: the reason we started doing the study

- Rapid rate increases (+14.2% in '85, +26.7% in '86)
- Other studies incomplete; lacked data on contiguous states
- We thought we could do a better, more comprehensive study
- Results: Oregon was 6th highest in 1986

## The trouble with averages

## Which store has the least expensive groceries?

- Average cost per grocery bag?

PROBLEMS:

- Stores carry different kinds of items
- Bags aren't all the same size
- Customer demographics vary among stores

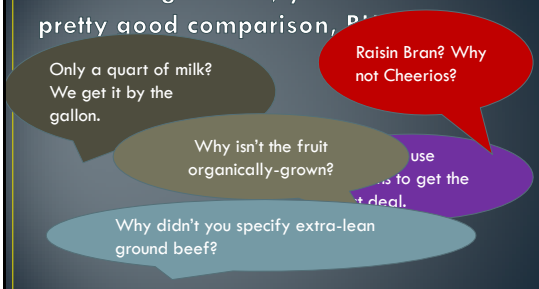
The underlying problem: simple averages are often a poor tool for comparison
*even if they're accurate.*

- Averages often vary due to factors other than what we want to compare.
- An invalid comparison might be misleading, and worse than no comparison at all.

Fixing the problem: level the playing field, by standardizing what we don't want to measure.

- Specify the date of the comparison
- Standardize the types of items compared
- Standardize the brands compared (or substitute, if necessary)

After doing all that, you would have a pretty good comparison, B




Nobody would agree that it was perfect.

## Simple averages don't work well for comparing across states

- Variation in hazard mix skews averages.
- We need to measure rates for comparable employers–
  - in a single risk classification, or
  - the same mix of risks.
- Simple averages can be useful for tracking within one state over several years. But they are the wrong tool for comparisons across states.

## Getting to *comparable* averages

### Goals of the Oregon Rate Ranking

- Produce an average rate comparison, controlling for hazard mix
- Include all 50 states plus D.C.
- Report findings within the study year

## The realities of interstate rate comparison

- ✓ States' economies, and mixes of hazards, are different
- ✓ There's no single comprehensive, national data source
- ✓ Different codes to classify risks
- ✓ Different underwriting bases
- ✓ Assessment mechanisms differ, for both administration and special funds

## Methods for the Oregon Study

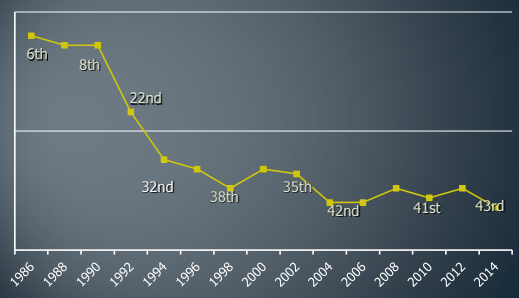
- Survey of all 50 states plus D.C.
- States report factors for voluntary-market manual rates, as of Jan.1 of the study year
- 50 classes with highest Oregon losses
- NCCI classification codes used (states do their own crosswalk)
- Weighted average by Oregon payrolls (the Index Rate)

## Accolades

- *"One of the most respected and widely accepted benchmarking efforts has been Oregon's."* Barrett & Greene, Governing magazine
- *"The State of Oregon has provided a reliable comparison of premiums paid by comparable employers…"* John Burton and Daniel Mont, National Academy of Social Insurance
- IAIABC 2006 Research Award

## Study findings: trends over time

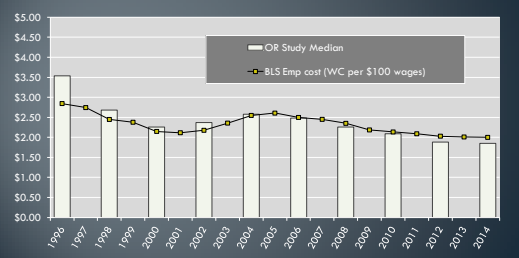
## Findings: Oregon's ranking over time



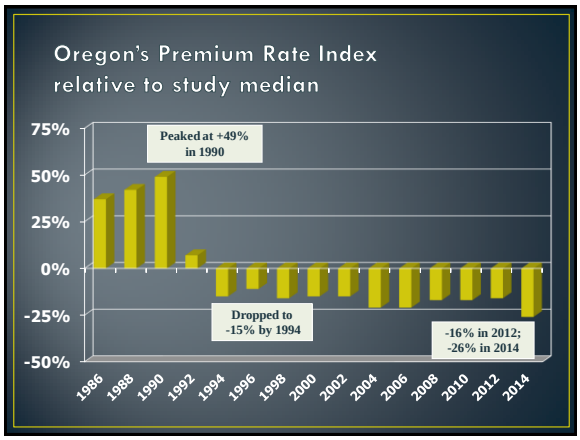

## A useful time series?

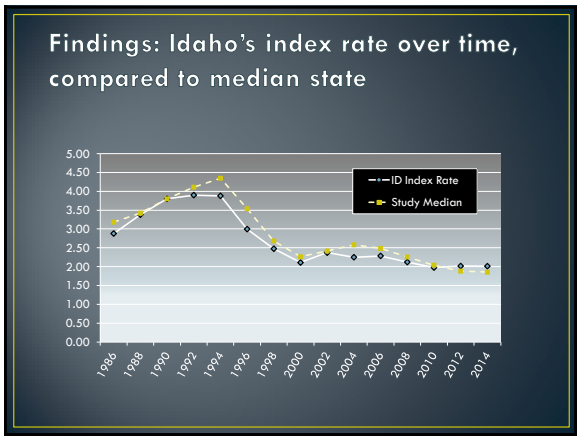
- Comparability issues: Classes and payroll weights change over time. But the effects of class changes are typically minor.
- How does the study's median index rate do as a national benchmark?

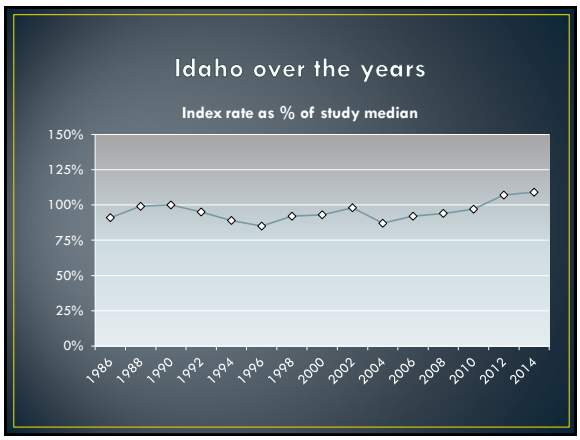
## Last 10 Oregon Studies: Median Index Rate tracks closely with BLS Employer Costs




Note: BLS data are through 2nd Quarter 2014


Oregon's Premium Rate Index relative to study median
75%
50%
25%
0%
-25%
-50%
Peaked at +49% in 1990
Dropped to -15% by 1994
-16% in 2012; -26% in 2014
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014


Findings: Idaho's index rate over time, compared to median state
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
ID Index Rate
Study Median
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014


Idaho over the years
Index rate as % of study median
150%
125%
100%
75%
50%
25%
0%
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014

## Some things to keep in mind

1. Compares rates for employers who purchase insurance in the voluntary market
2. Uses only those cost factors that apply to all employers
3. Reflects administrative and special fund assessments, but only when they're part of premiums

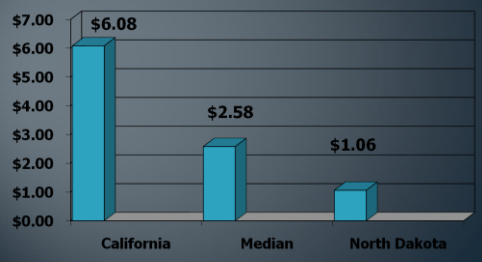
## The ranking isn't a diagnostic tool…

"Well, here's your problem, Mr. Schueler."

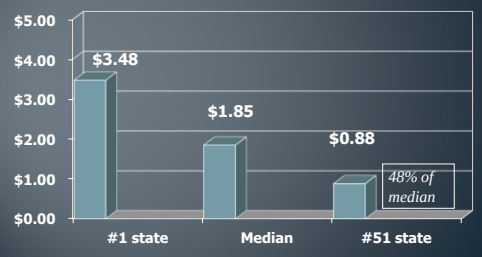
## Four factors drive changes across studies in states' index rates:

- Premium rate changes
- Expense factor and assessment changes
- Changes in the set of classifications used
- Changes in payroll mix within classifications

## 2004 study
## the Range of Index Values

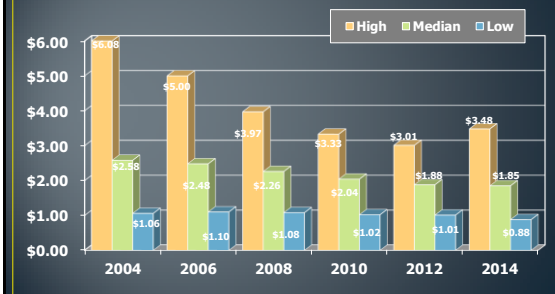



## 2014 study
## the Range of Index Values



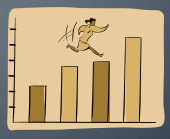

Note: results are preliminary

## 2004 – 2014: Range of Index Values

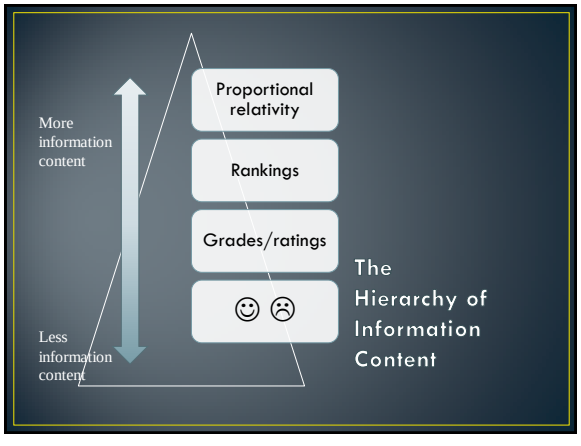


## A race to the middle?

- In 2004, there were 13 states within plus or minus 10 percent of the study median.
- In 2014 there were 21. This makes it more likely that small differences will affect rank values.

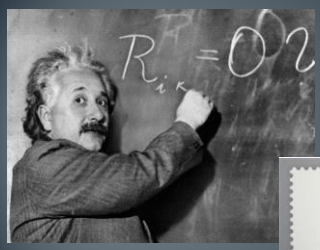


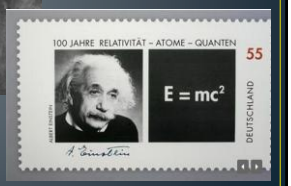
## Philosophical musings




## The Hierarchy of Information Content

## Relativity rules!






## 2014 study findings by state

## 2014: more costly rates

(above 110% of median; 13 states)

| State | % 2014 median | 2014 Rank |
|---|---|---|
| California | 188% | 1 |
| Connecticut | 155% | 2 |
| New Jersey | 152% | 3 |
| New York | 148% | 4 |
| Alaska | 145% | 5 |
| Oklahoma | 137% | 6 |
| Illinois | 127% | 7 |
| Vermont | 125% | 8 |
| Delaware | 125% | 9 |
| Louisiana | 120% | 10 |
| Montana | 119% | 11 |
| New Hampshire | 118% | 12 |
| Maine | 116% | 13 |

## 2014: middle ground
(90% to 110% of median; 21 states)

| | | |
|---|---|---|
| Idaho | 109% | 14 |
| Washington | 108% | 17 |
| South Carolina | 108% | 17 |
| Pennsylvania | 108% | 17 |
| New Mexico | 108% | 20 |
| Rhode Island | 107% | 20 |
| Minnesota | 107% | 20 |
| Missouri | 107% | 21 |
| Tennessee | 105% | 22 |
| Wisconsin | 104% | 23 |
| Iowa | 101% | 24 |
| South Dakota | 100% | 25 |
| Hawaii | 100% | 27 |
| North Carolina | 100% | 27 |
| Florida | 98% | 28 |
| Alabama | 97% | 29 |
| Nebraska | 96% | 30 |
| Wyoming | 95% | 31 |
| Georgia | 95% | 32 |
| Ohio | 94% | 33 |
| Michigan | 91% | 34 |

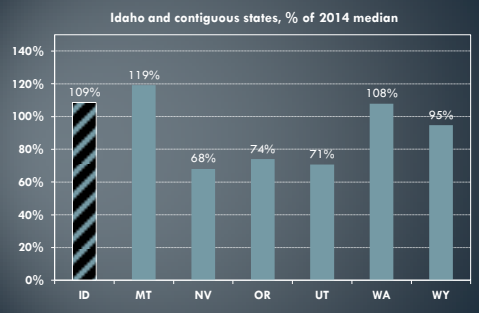
## 2014: lower rates
(under 90% of median; 17 states)

| | | |
|---|---|---|
| Maryland | 88% | 35 |
| Texas | 87% | 36 |
| Arizona | 86% | 37 |
| Mississippi | 85% | 38 |
| Kansas | 83% | 39 |
| Kentucky | 82% | 40 |
| Colorado | 81% | 41 |
| West Virginia | 74% | 43 |
| Oregon | 74% | 43 |
| Utah | 71% | 45 |
| District of Columbia | 70% | 45 |
| Nevada | 68% | 46 |
| Massachusetts | 63% | 48 |
| Virginia | 63% | 48 |
| Arkansas | 58% | 49 |
| Indiana | 57% | 50 |
| North Dakota | 47% | 51 |

## Eight states with the largest changes in % of Study Median, 2012 to 2014

| | |
|---|---|
| CA | 33% |
| DE | 31% |
| MO | 21% |
| VT | 15% |
| *rising* | |
| *falling* | |
| MT | -14% |
| AK | -15% |
| KY | -22% |
| IL | -24% |

## Relative to neighboring states




## Some frequently asked questions

## Q: Do higher rates mean that a system is less cost effective?

- No, effectiveness involves meeting other program objectives.
- A system that encourages safe workplaces, delivers adequate benefits and quality medical care, promptly resolves disputes, and maximizes return to work might well be relatively costly, but nevertheless provides value for the money.

## Q: The actual average premium for my state is different from the index rate that Oregon computes. How come?

- The study index rate is comparable across states within each study. There's no intent to produce an actual average rate for each state.

## Q: Why not add a benefit ranking so we can compare both costs and benefits?

- Benefits are far too complex to be boiled down to a single measure. For example, the IAIABC/WCRI law comparison includes 66 different benefit attributes:
  - 5 for Medical benefits
  - 18 for Temp Total benefits
  - 8 for Perm Total benefits
  - 20 for Perm Partial benefits, and
  - 15 for Fatal benefits

## Q: Why isn't there an adjustment to reflect differences in the cost of living in different states?

- There is. But it's an implicit adjustment, since premium rates are based on $100 units of payroll, and average wages are generally higher in high-cost areas.
- Comparison to available state-level data shows very little relation between rates and cost of living.

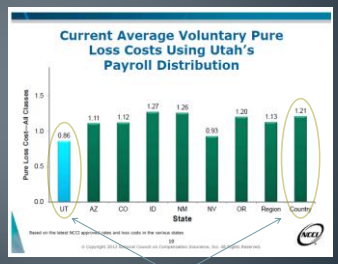
## Q: Since you weight your averages using Oregon payrolls, doesn't it just apply to Oregon?

- Oregon's class mix is actually quite similar to the Country-wide mix in the largest classifications. So a "national" mix would affect the rankings very little.
- But let's test that a little further.

## Two different approaches to control for hazard mix

| Oregon Study data | NCCI Advisory Forum data |
|---|---|
| States' manual rates | Loss costs (pure premium) |
| Benchmark is median rate | Benchmark is adjusted Countrywide (Normalizes CW to state mix) |
| 51 jurisdictions | 27 jurisdictions (2012) |
| Constant classification set (50 classes) | Class set varies by state of interest |
| Constant payroll mix (OR) | State payroll mix |

## NCCI Forum presentations: adjusted CW, using state payroll weight, can be a benchmark

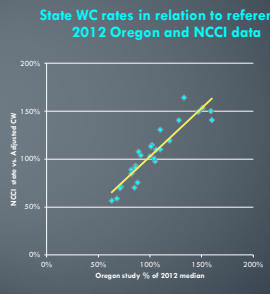



UT 0.86 / CW 1.21 = 71% of benchmark

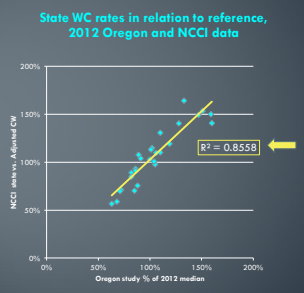
## Oregon's study has a comparable figure: % of study median

| 2012 Ranking | 2010 Ranking | State | Index Rate | Percent of study median | Effective Date |
|---|---|---|---|---|---|
| 40 | 33 | West Virginia | 1.55 | 82% | November 1, 2011 |
| 41 | 43 | Kansas | 1.54 | 82% | January 1, 2012 |
| 42 | 31 | Mississippi | 1.49 | 79% | March 1, 2012 |
| 43 | 47 | Colorado | 1.42 | 76% | January 1, 2012 |
| 44 | 44 | Massachusetts | 1.37 | 73% | September 1, 2011 |
| 45 | 45 | Utah | 1.35 | 72% | December 1, 2011 |
| 46 | 21 | Nevada | 1.33 | 71% | March 2, 2011 |
| 47 | 48 | District of Columbia | 1.28 | 68% | November 1, 2011 |
| 48 | 47 | Virginia | 1.20 | 64% | April 1, 2011 |

## Comparing the states with both measures




## Linear regression: R-squared is above .85



Thus, there are different ways of controlling for hazard mix, but they lead to very similar results.

## Largest classifications in the study

| Code | Description |
|---|---|
| 8810 | Clerical Office Employees NOC |
| 8742 | Salespersons - Outside |
| 8868 | COLLEGE: Professional Employees & Clerical |
| 8832 | Physician and Clerical |
| 9079 | Restaurant NOC |
| 8017 | STORE: Retail, NOC |
| 8833 | Hospital: Professional Employees |

These top 7 Oregon classes are all in the top 10 classes in NCCI country-wide payrolls. Together, they represent over 75% of the payroll weight in the study.

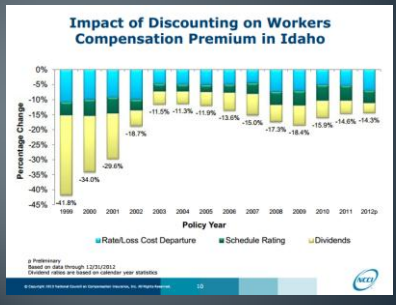
## Q: My state's pure premium rates went down since the last ranking, but its new ranking is higher. How can that be?

- The study incorporates additional employer cost factors, including insurer expenses and state administrative assessments. These may trend differently than pure premiums alone.
- A state with smaller declines than others may see its relative rank go up.

## Q: What about factors like discounts, experience mods, dividends, etc?

- These factors apply to individual employers, not the state as a whole, so we can't use them.
- The available data aren't consistent or timely for all states.
- Based on NCCI data, however, it is likely that there is more discounting in the ID market than typical. This would mean that net employer costs would be somewhat lower than our study estimates.

## NCCI preliminary data show larger discounting for Idaho (countrywide about 4.5%)




## Q: Why don't you include self-insurers' costs?

- States regulate self-insurers differently, so their costs aren't reported consistently.
- We focus on employers who are purchasing insurance, so we can treat them comparably.

## Some observations

- The decline in rates in most states that began after 2004 has slowed, but generally continued through 2014.
- The gap between the low-cost and high-cost states has been shrinking since 2004. Although this trend reversed somewhat in 2014, this factor diminishes the significance of rank values.
- States can track rates over time with the "% of study median" figure, which is less volatile than ranks.

## Oregon WC Research Publications on the web

WC Rate ranking reports

http://bit.ly/9mG3hs

All WC research topics

http://bit.ly/ceos42

## *Thank you*

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