

**Recession Hits Hard.**

**Are Green Jobs the Solution?**

**4<sup>th</sup> Congressional District Quarterly Meeting**

*August 15, 2009*

*Nick Beleiciks*

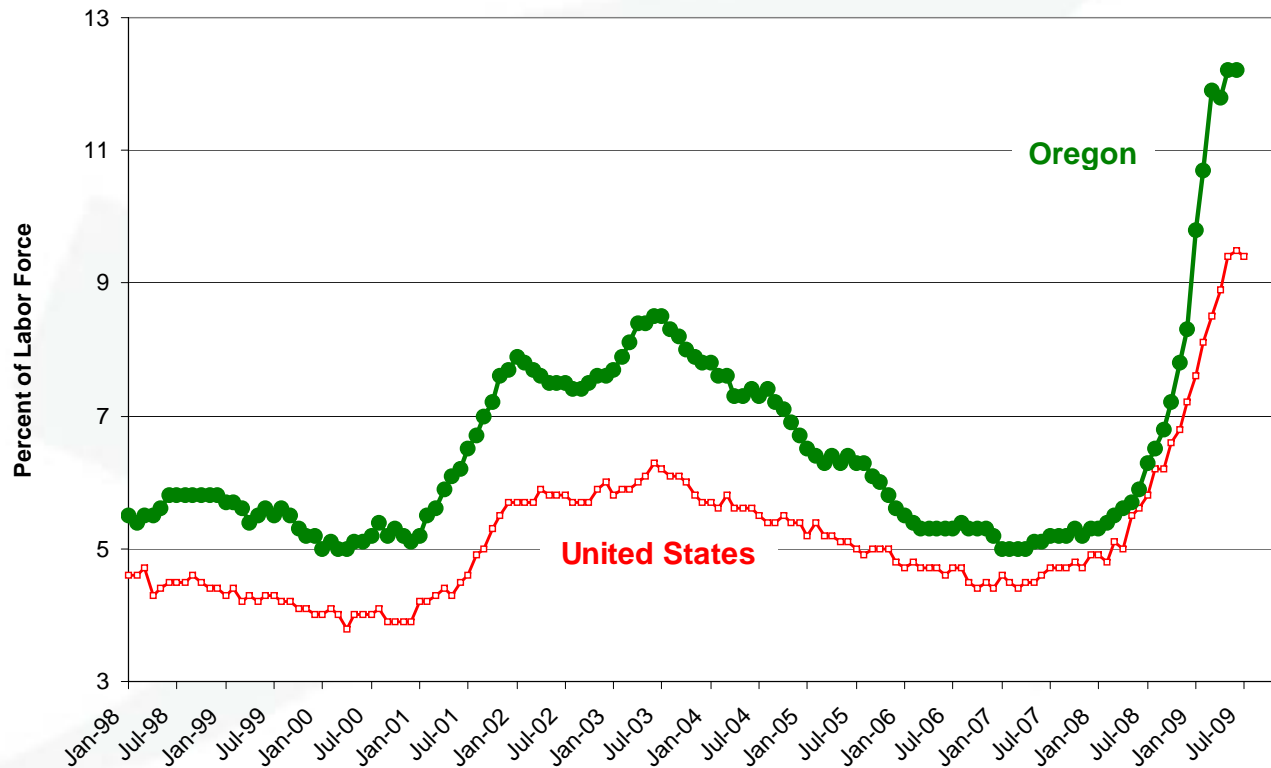
**Support Business & Promote Employment**

[www.WorkSourceOregon.org](http://www.WorkSourceOregon.org)



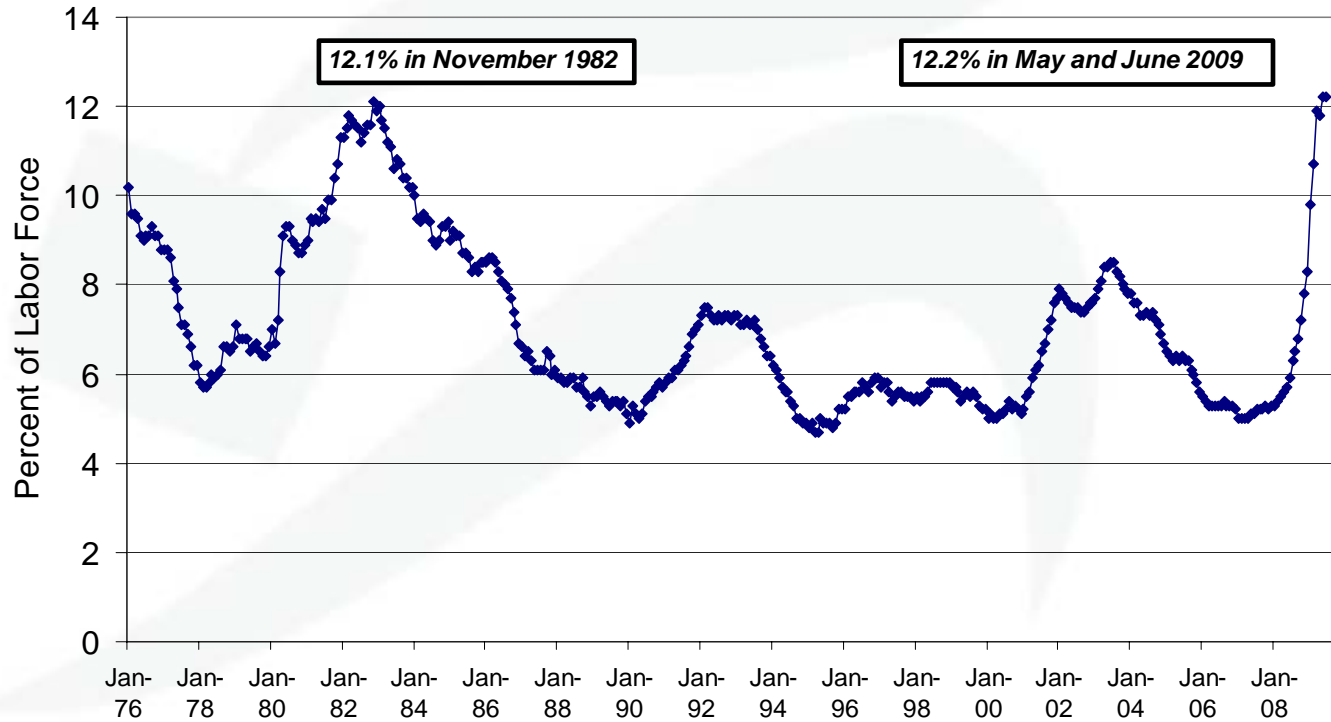
# Oregon's unemployment rate is the highest level ever (since comparable records began). *(But the pace of increases has slowed ...)*

Seasonally Adjusted Unemployment Rates, 1998 to Present



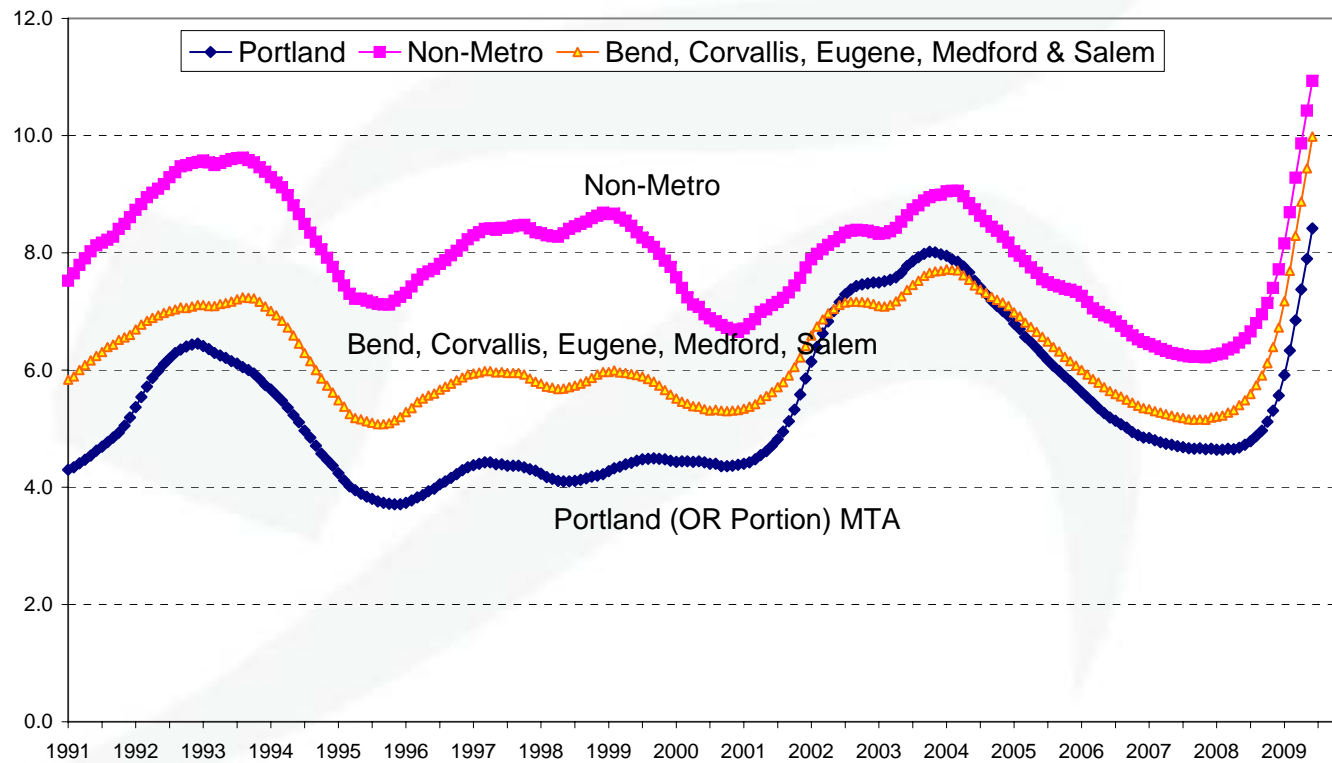
We've now (fractionally) exceeded the highest unemployment rate of the early 1980s recession.

### Oregon's Seasonally Adjusted Unemployment Rate -- the Long-Term View



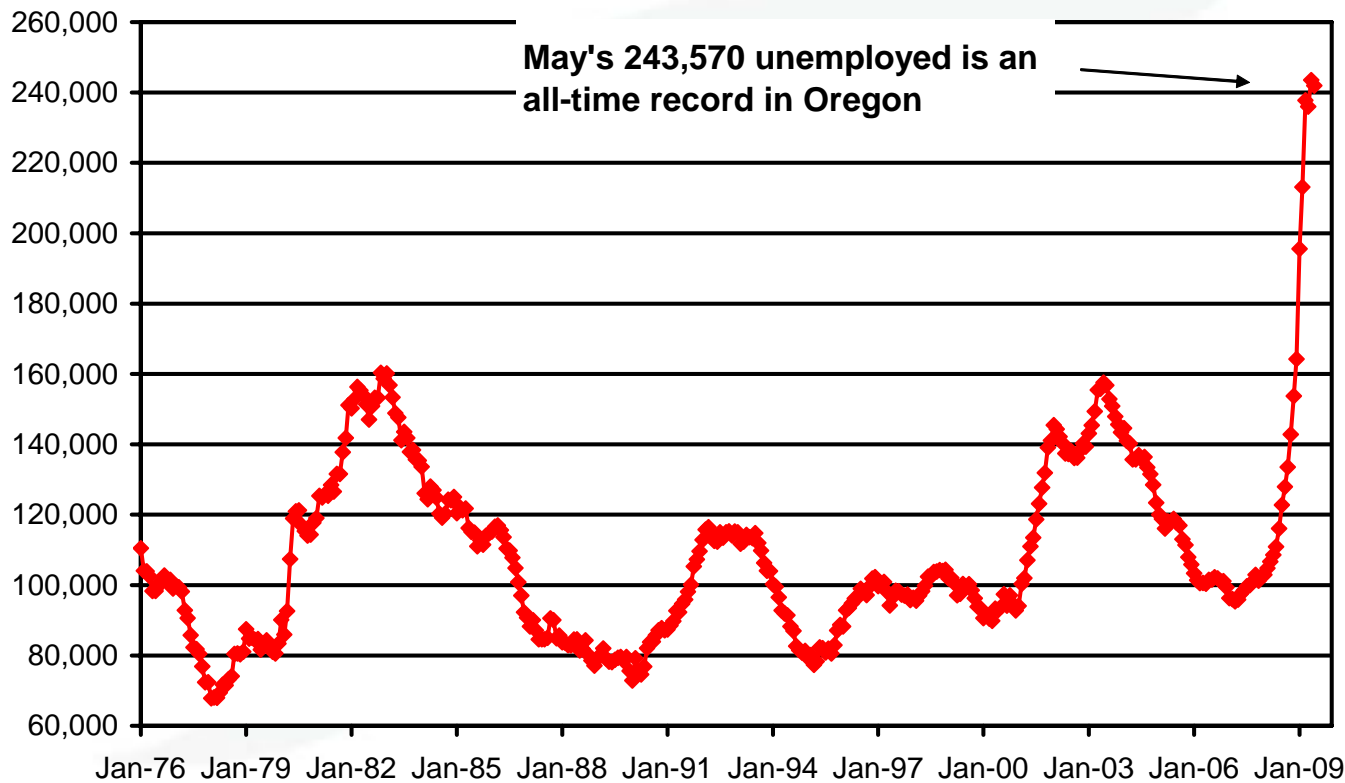
# Unemployment rates are up across all types of geographic areas.

**Oregon 12 Month Moving Average Unemployment Rate  
Portland vs. Rest of Oregon**



For now, at least, seasonally adjusted unemployment seems to be leveling off.

Oregon Total Unemployment  
Seasonally Adjusted

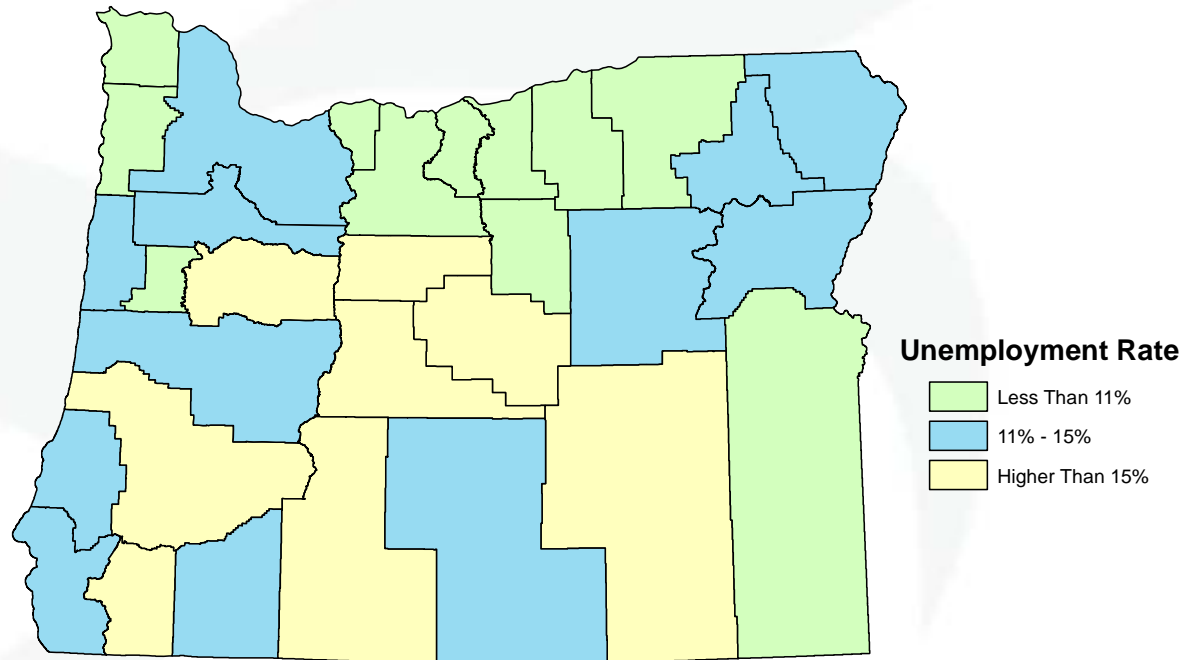


*But leveling off at a quarter-million unemployed is nothing to celebrate.*



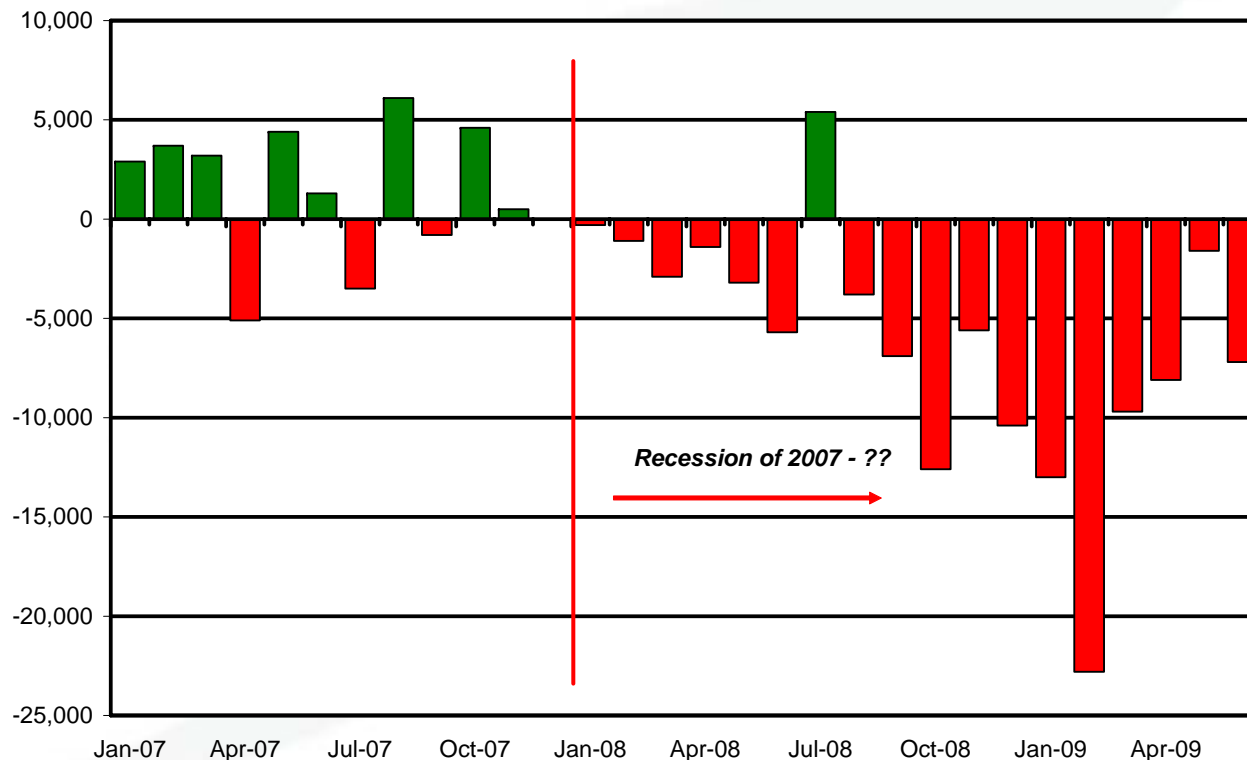
## Unemployment rates are well into double digits across almost all of Oregon.

**Oregon: Seasonally Adjusted Unemployment Rates by Area  
June 2009 (Preliminary Estimates)**



## May's employment numbers were the best since July 2008. June saw higher losses.

Oregon's Monthly Job Growth/Decline  
seasonally adjusted

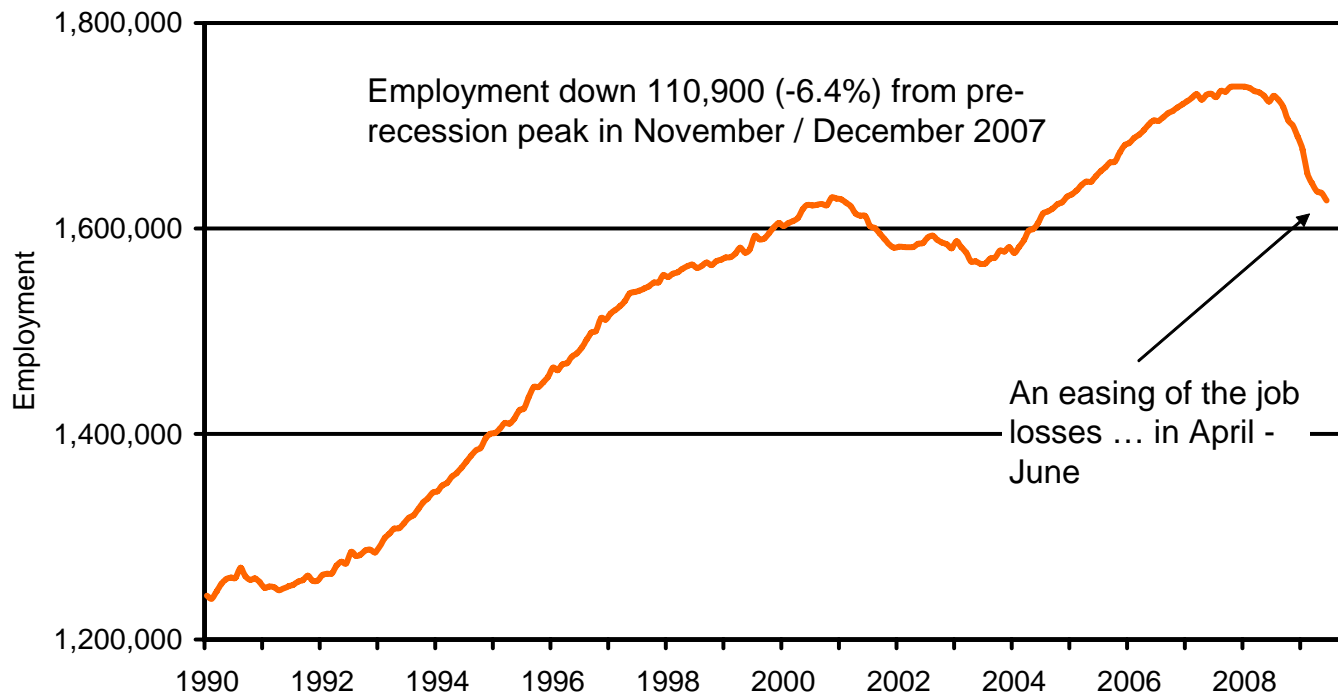


- Down 18 of the past 19 months
- But job loss picture somewhat better in last four months.
- (Still losing ... but not losing as many.)



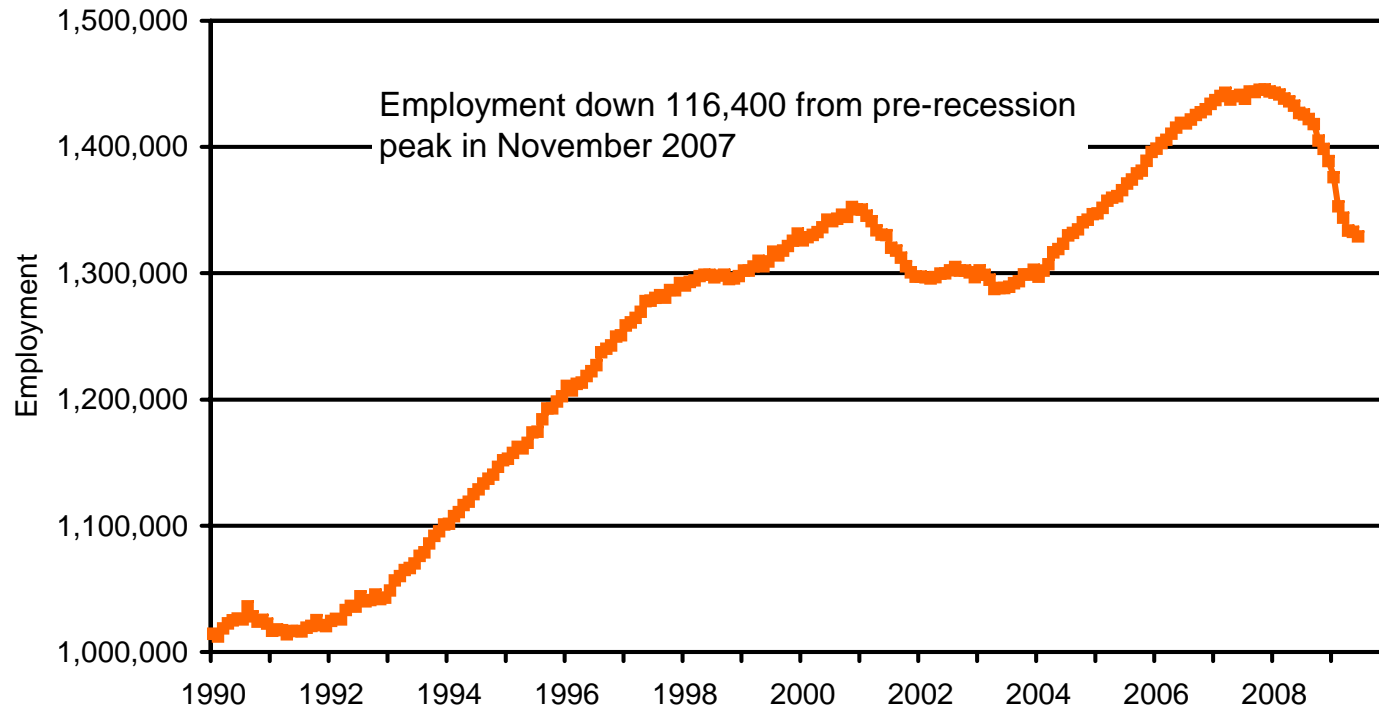
The pace of job losses has eased ... but we've not actually added (net) jobs in any month, yet.

Seasonally Adjusted Employment in Oregon  
Total Nonfarm Payroll: 1990 - 2009



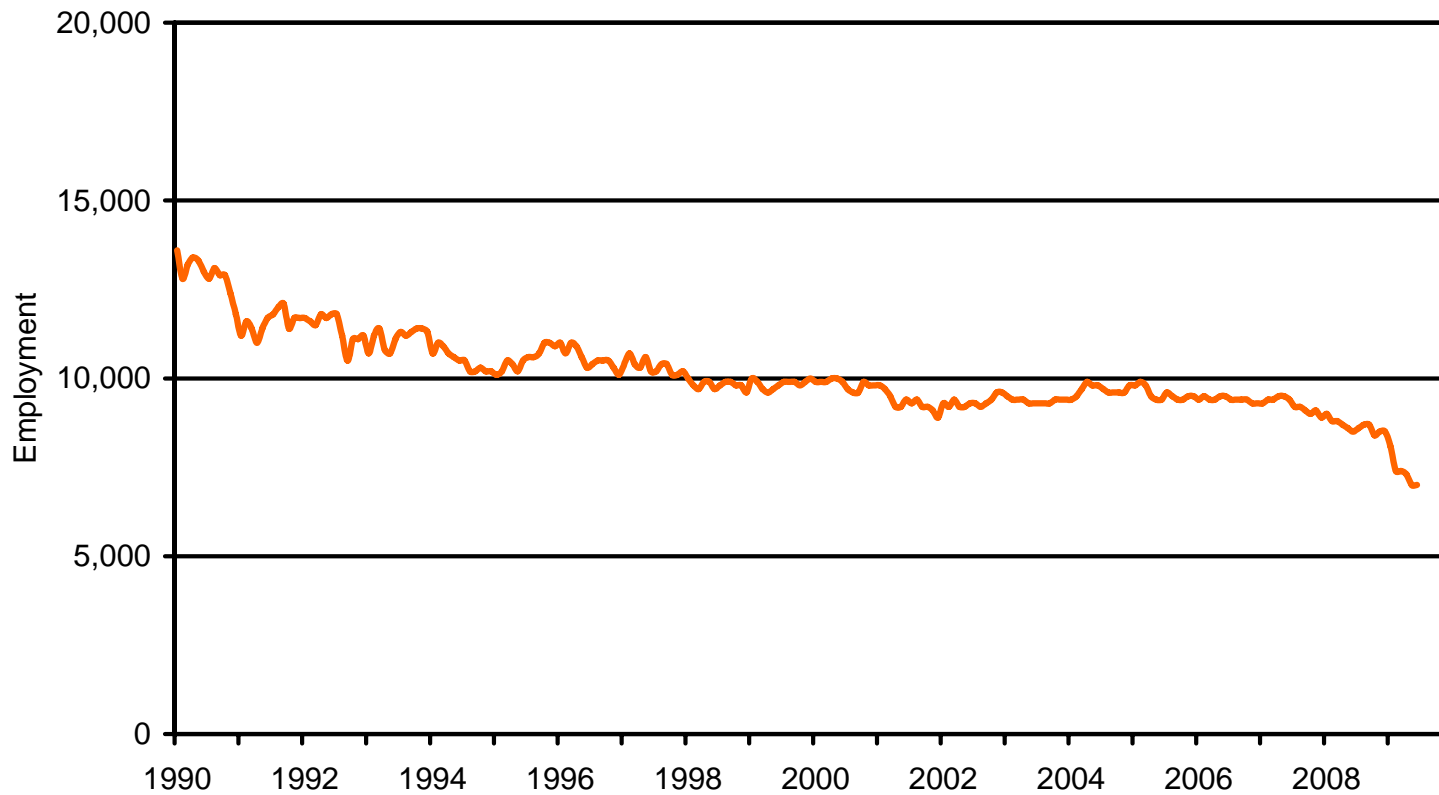
**More than 100,000 private sector jobs have been lost ... but the losses might be nearing an end.**

**Seasonally Adjusted Employment in Oregon  
Total Private Sector: 1990 - 2009**



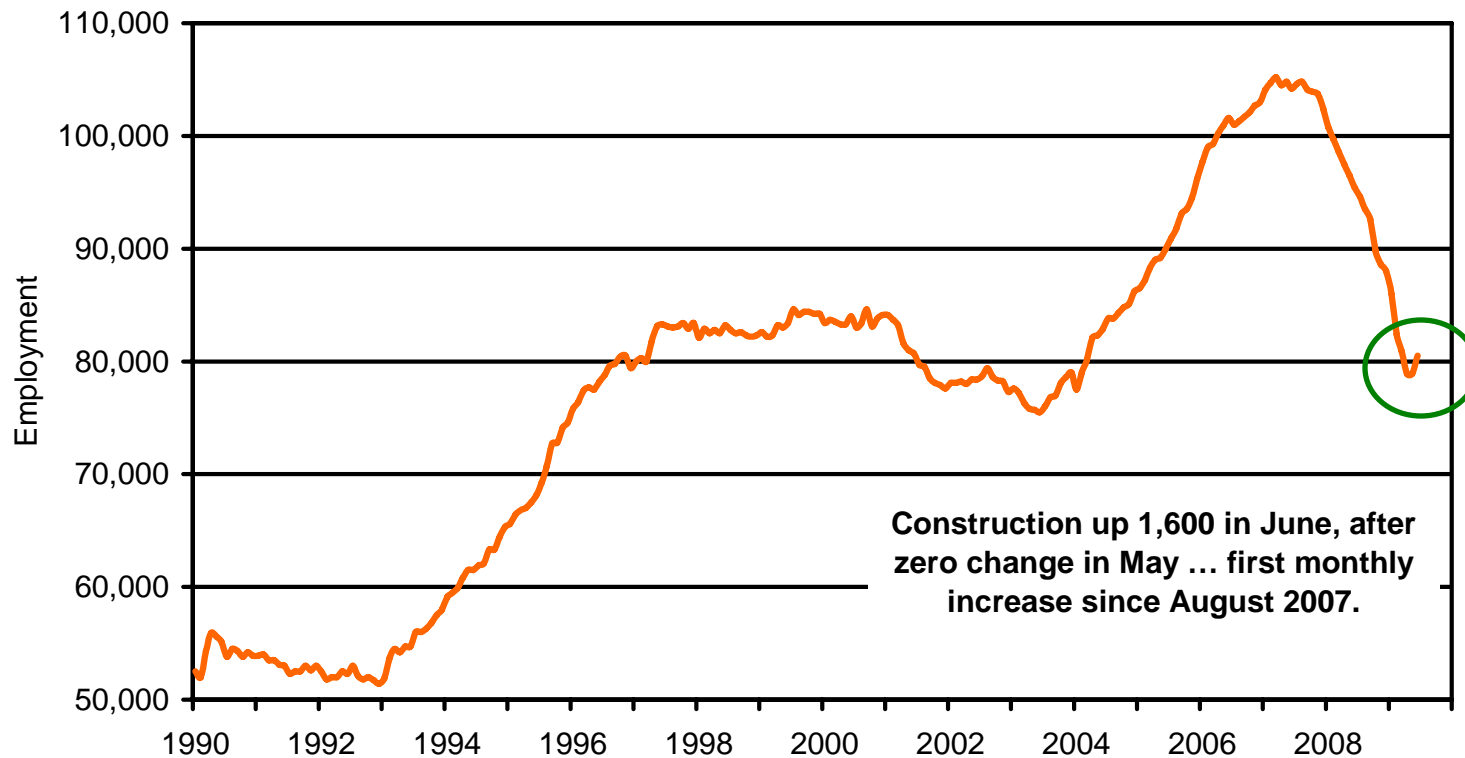
## The steady downward trend of logging continues ...

**Seasonally Adjusted Employment in Oregon  
Mining and Logging: 1990 - 2009**



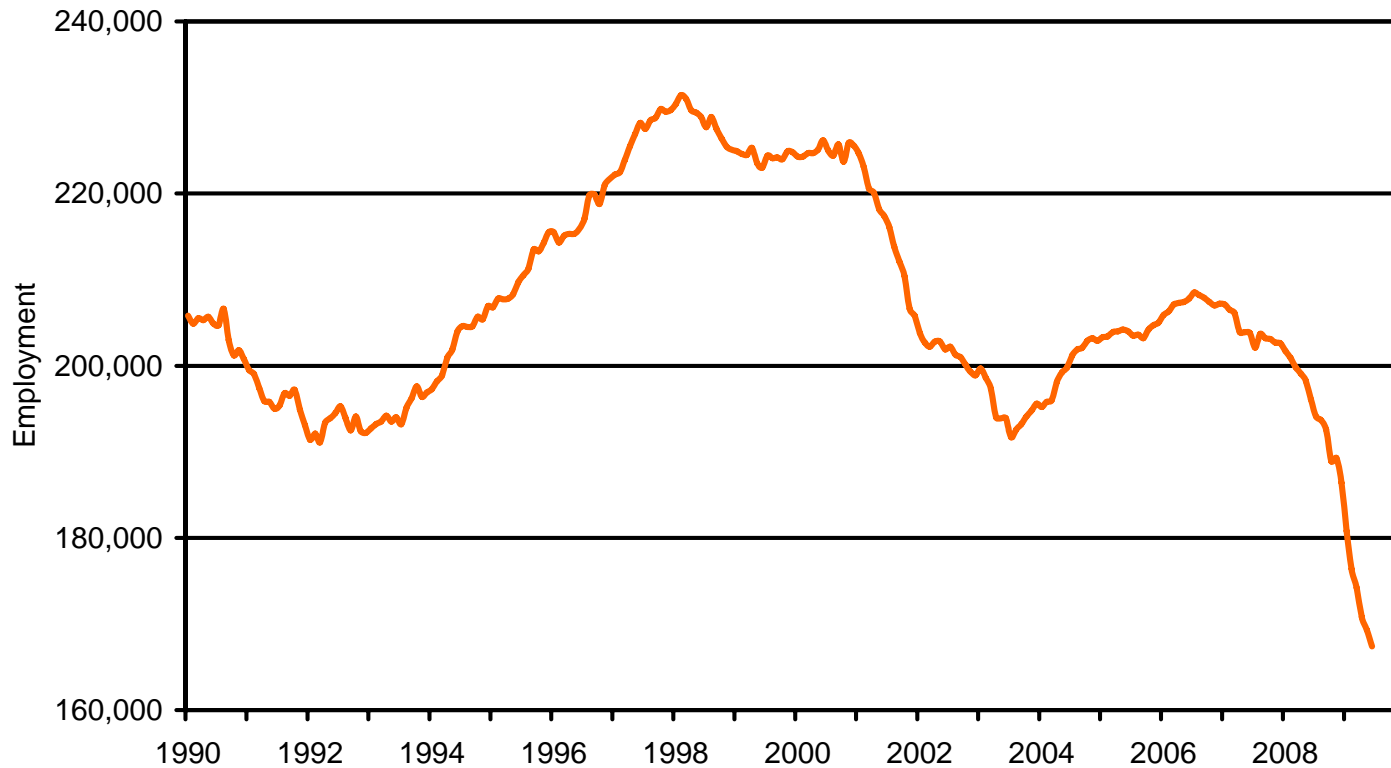
# Finally! Actual employment growth in construction!

**Seasonally Adjusted Employment in Oregon  
Construction: 1990 - 2009**



But the news is not as good in manufacturing.

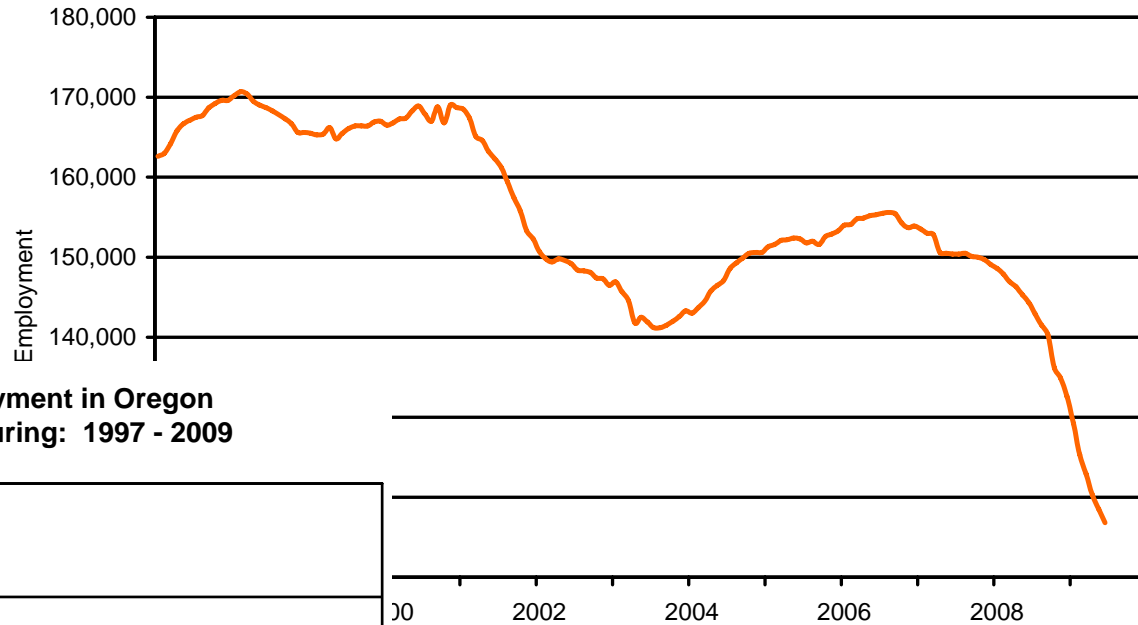
Seasonally Adjusted Employment in Oregon  
Manufacturing: 1990 - 2009



# The big losses have come in durable goods manufacturing

...

### Seasonally Adjusted Employment in Oregon Durable Goods Manufacturing: 1997 - 2009

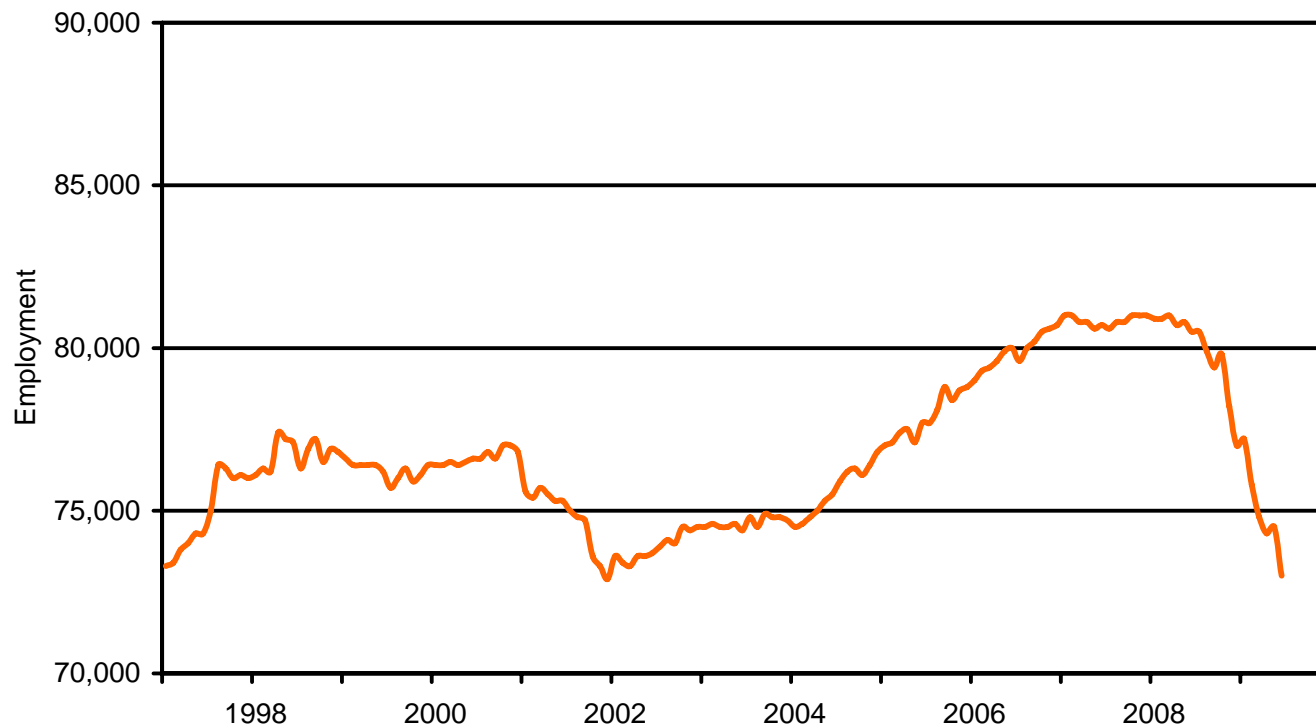


### Seasonally Adjusted Employment in Oregon Nondurable Goods Manufacturing: 1997 - 2009



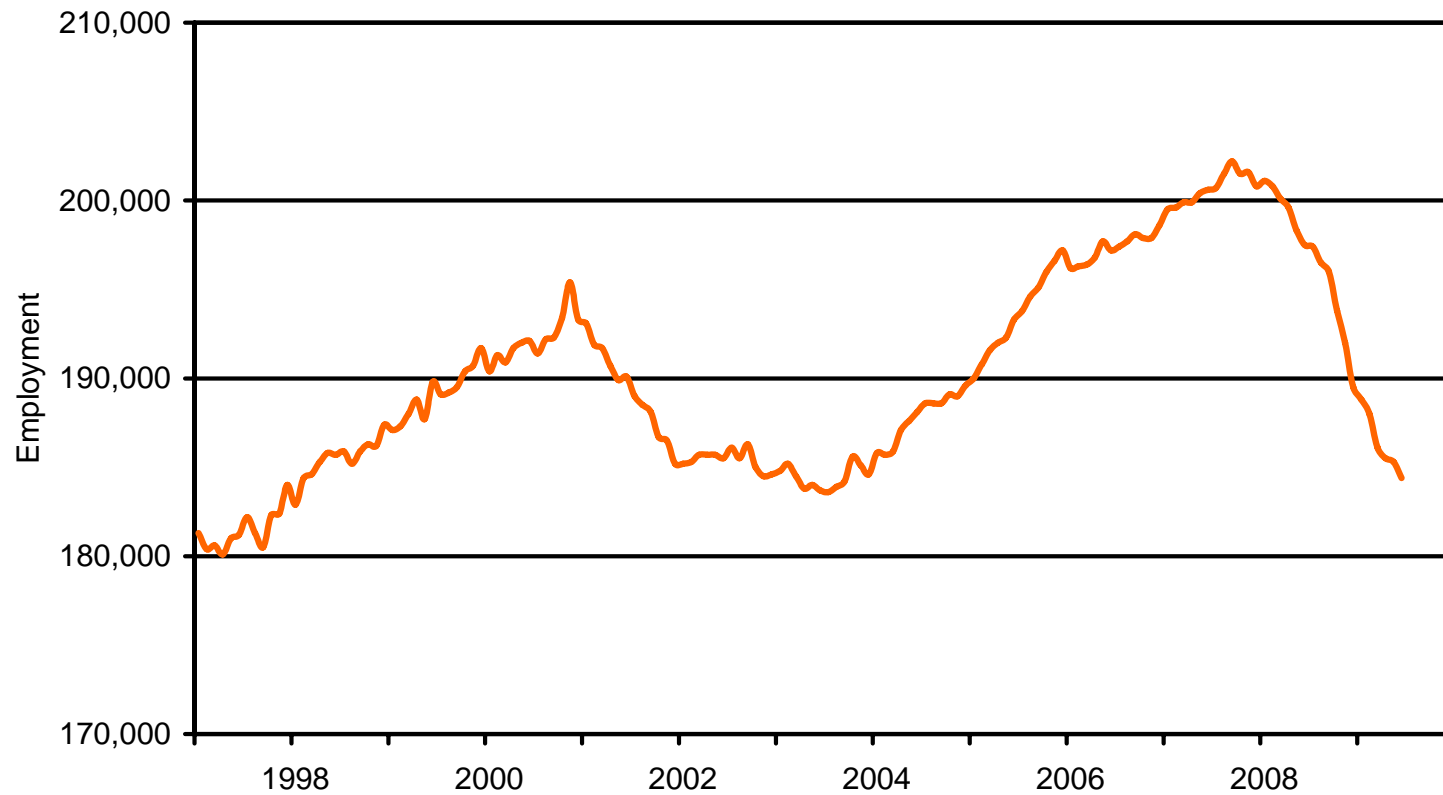
## Wholesale trade looked a little hopeful in May. It didn't last.

Seasonally Adjusted Employment in Oregon  
Wholesale Trade: 1997 - 2009



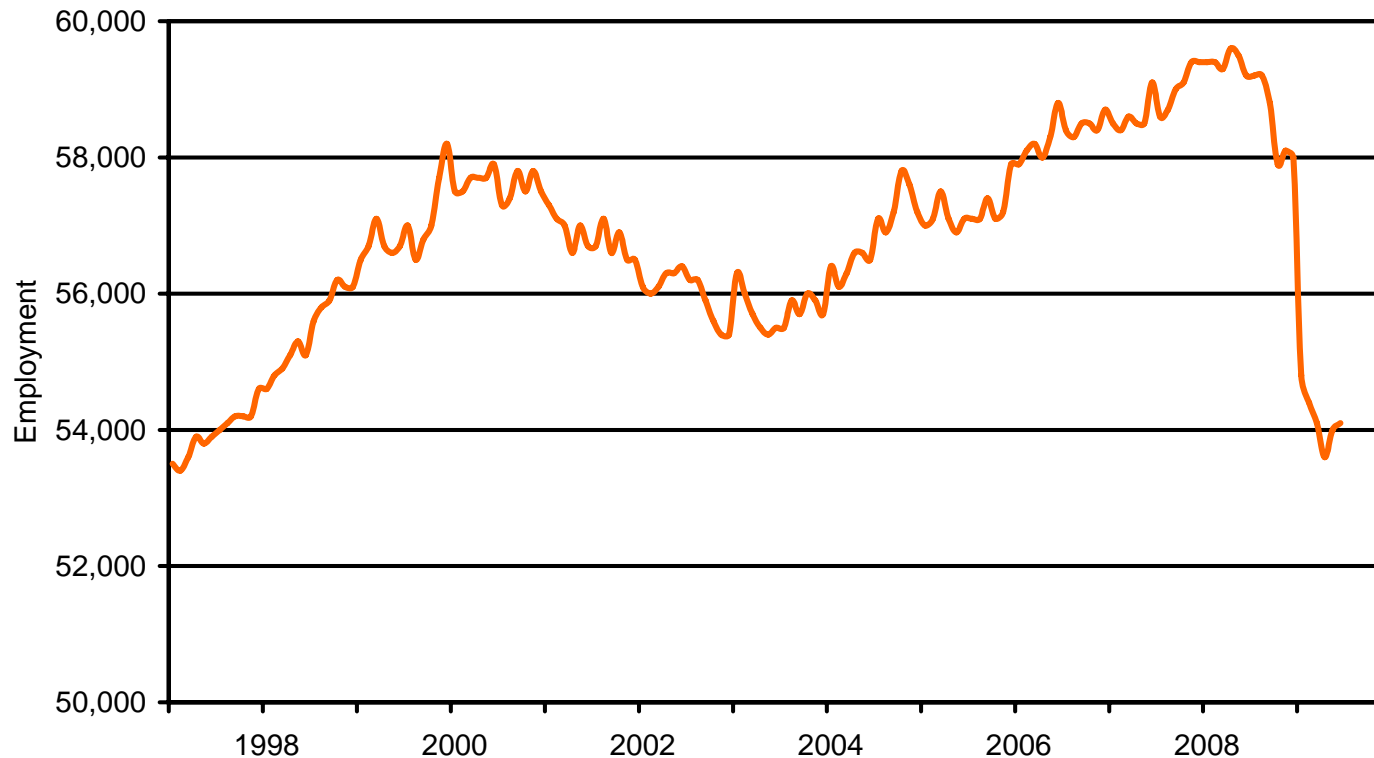
## Retail's free fall may have ended – or at least, eased.

Seasonally Adjusted Employment in Oregon  
Retail Trade: 1997 - 2009



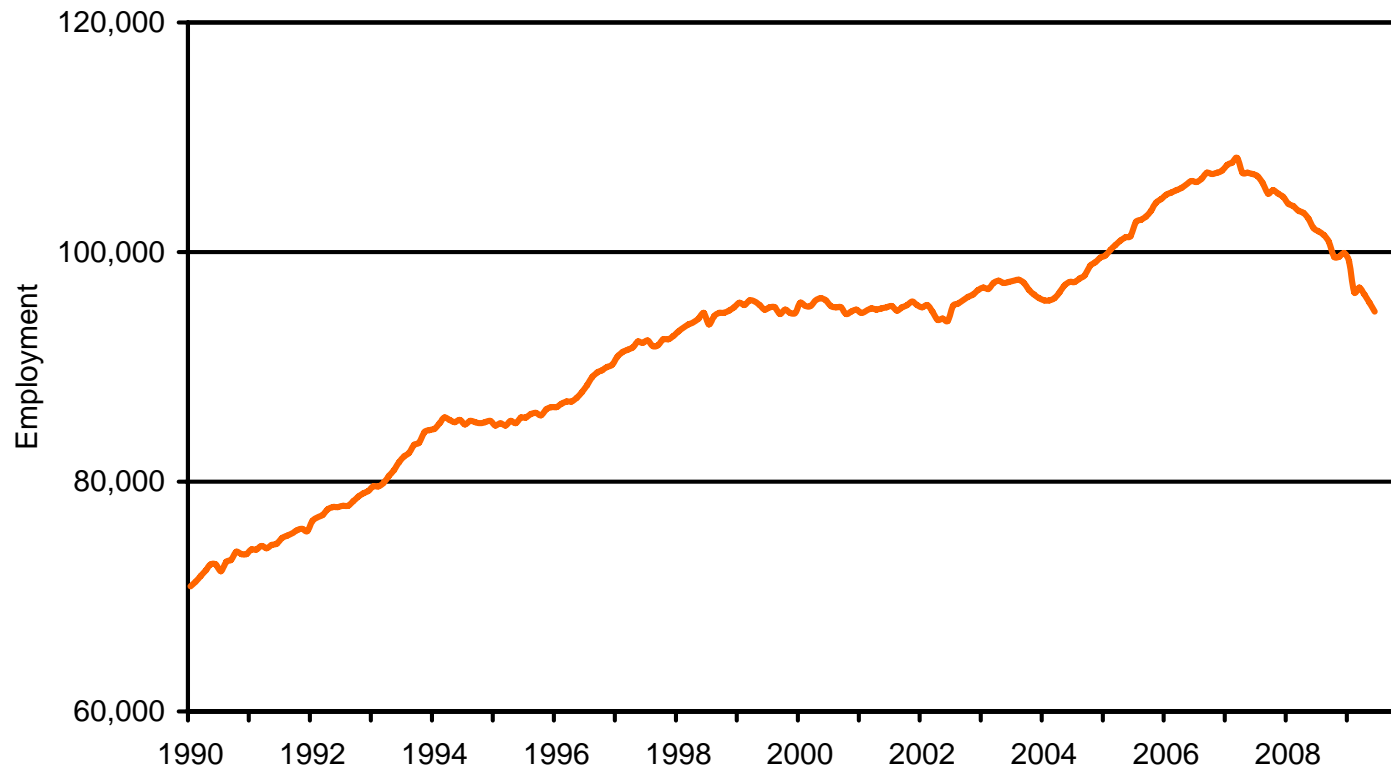
The transportation, warehousing, and utilities sector has taken a huge hit (though the last two months were a bit more hopeful).

**Seasonally Adjusted Employment in Oregon  
Transportation, Warehousing, Utilities: 1997 - 2009**



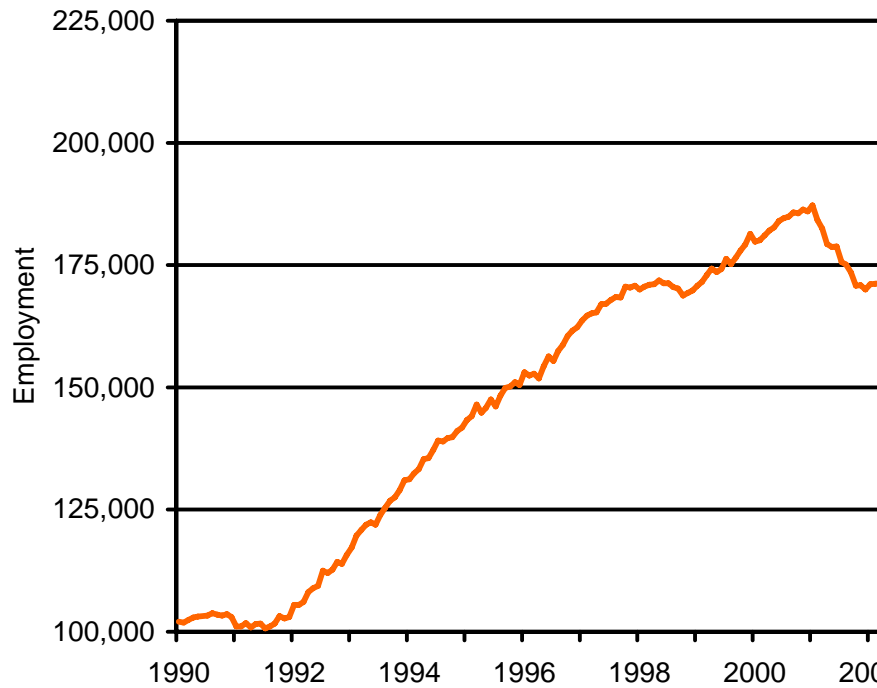
## Financial services employment has fallen to levels not seen since 2002 ...

Seasonally Adjusted Employment in Oregon  
Financial Activities: 1990 - 2009



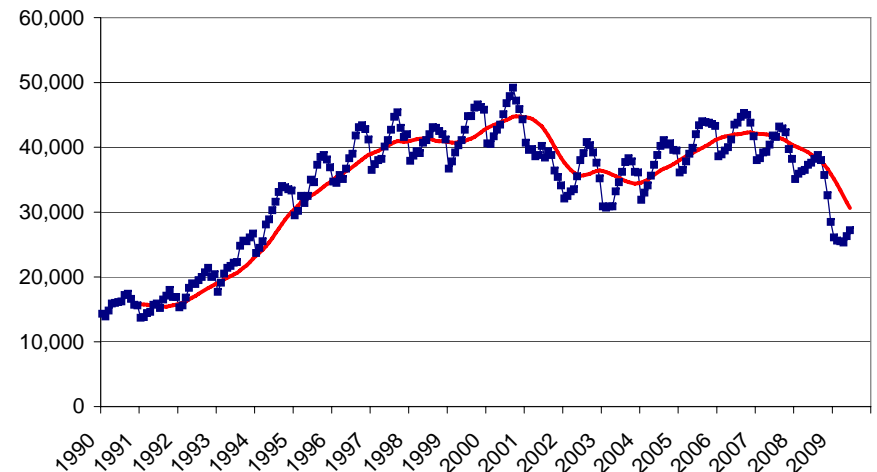
# A slow economy doesn't need as many services ... including not needing as many temp workers.

### Seasonally Adjusted Employment in Oregon Professional and Business Services: 1990 - 2009



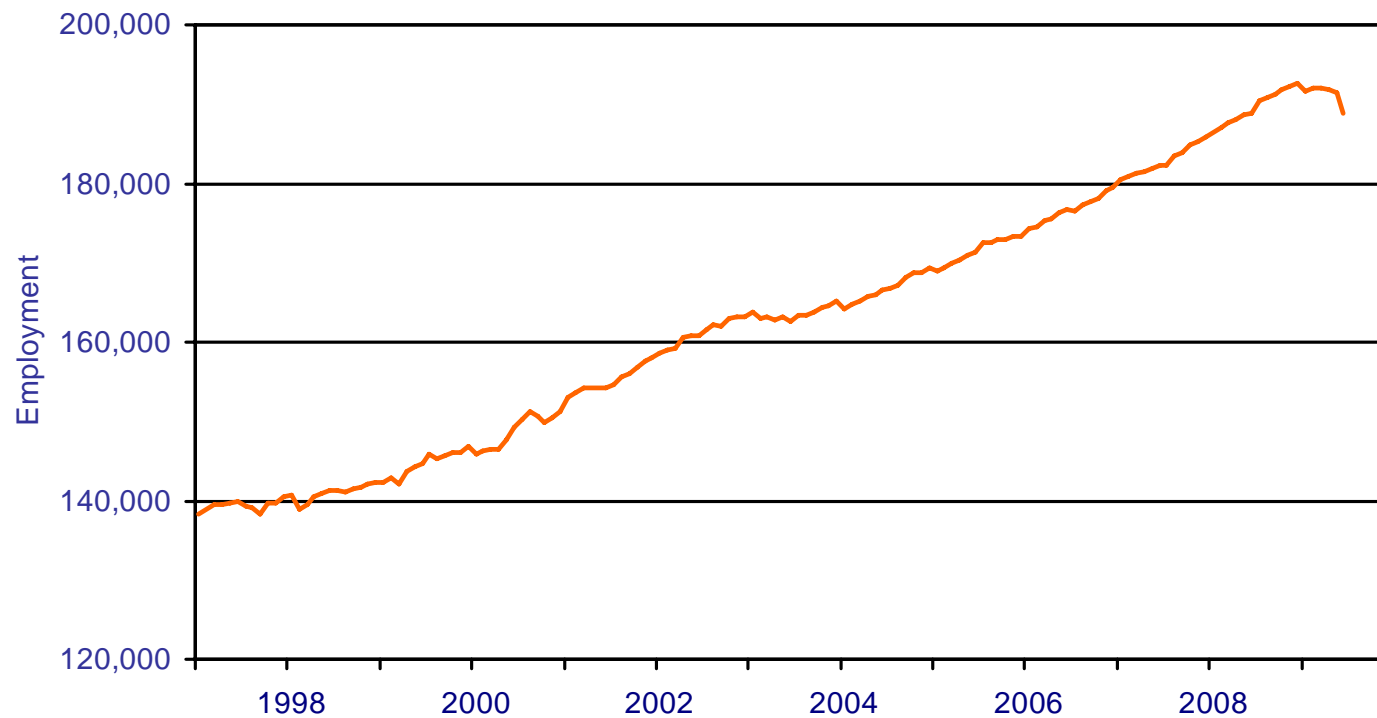
*Employment services ... down 10,400 over the year.*

### Employment Services Oregon Employment: 1990-2009



## Even health services employment is down 3,700.

Seasonally Adjusted Employment in Oregon  
Health and Social Services: 1997 - 2009



*Over-the-year:*

*Ambulatory:*  
**+400**

*Hospitals:*  
**+1,000**

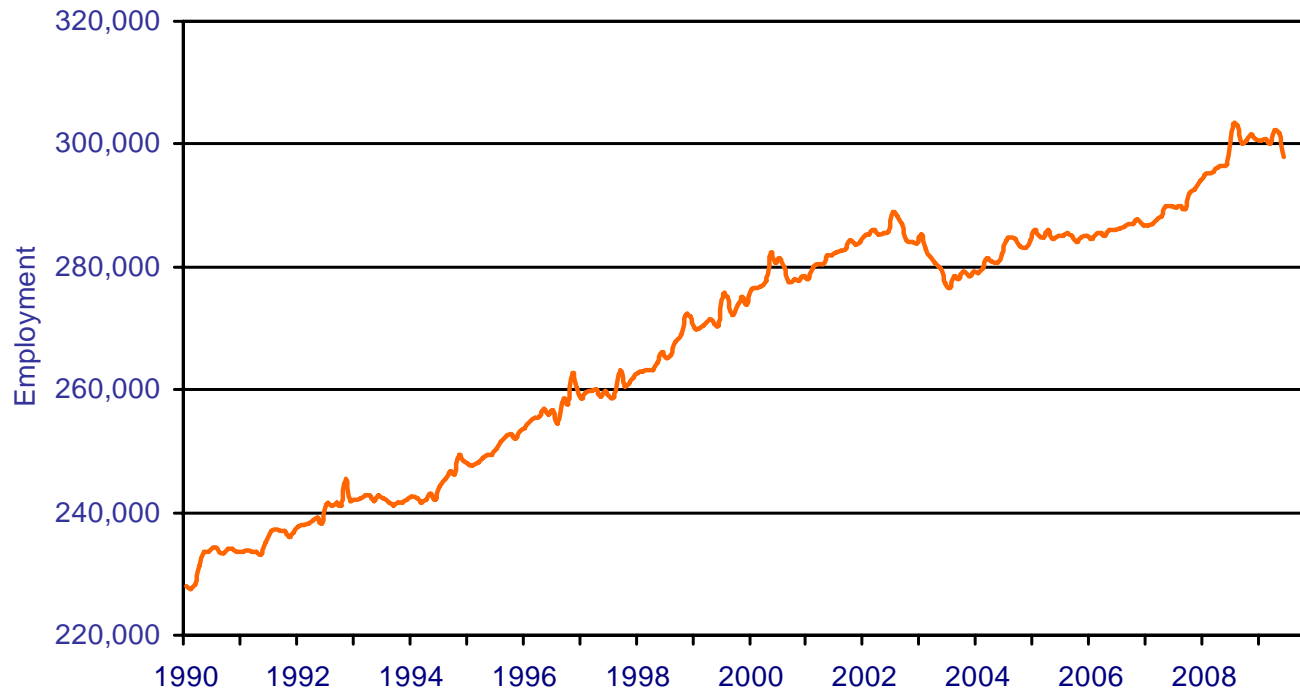
*Nursing and  
residential:*  
**+700**

*Social services:*  
**-1,400**



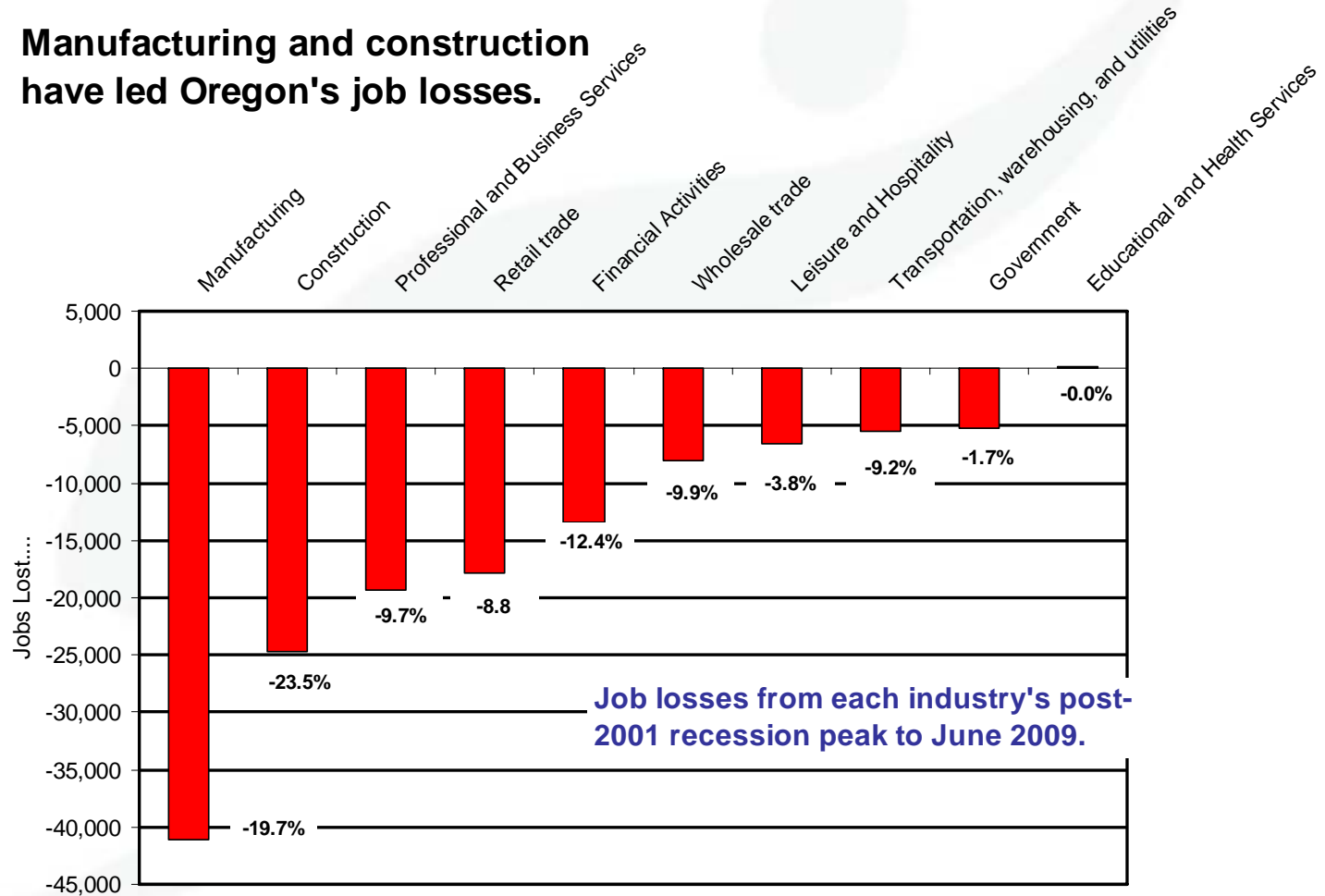
**Government employment has declined slightly, and will likely drop more as budget cycles feel the recession's impact.**

**Seasonally Adjusted Employment in Oregon  
Government: 1990 - 2009**



# The Recession At A Glance

**Manufacturing and construction  
have led Oregon's job losses.**



**To give perspective, job losses in the early 1980s recession were essentially twice as bad as what we've seen so far!**

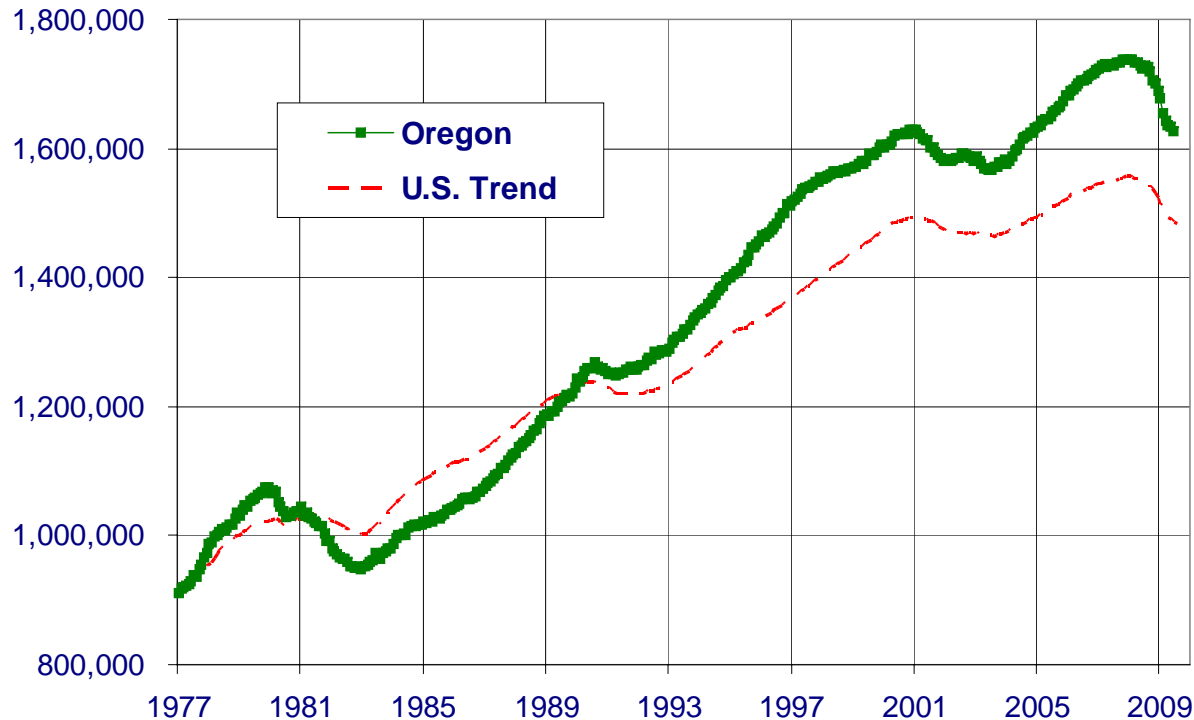
- This recession's peak-to-current job loss
  - -6.4% = -110,900 ,
- 2001-3 recession peak-to-trough job loss
  - -4.0% => -69,500 from our November-December 2007 peak
- Early 1980s recession peak-to-trough job loss
  - -11.1% => -192,900 from our November-December 2007 peak

*1980s data not strictly comparable due to lack of seasonally adjusted data, but Feb '80 to Feb '83 gives sense of magnitude*



By the way, while it's easy to focus on the doom and gloom right now, if we take the long-term view, Oregon's had a pretty great track record of creating jobs.

**Oregon and US Employment Trends \***  
**1977 to Current: US Trend Indexed to January 1977**

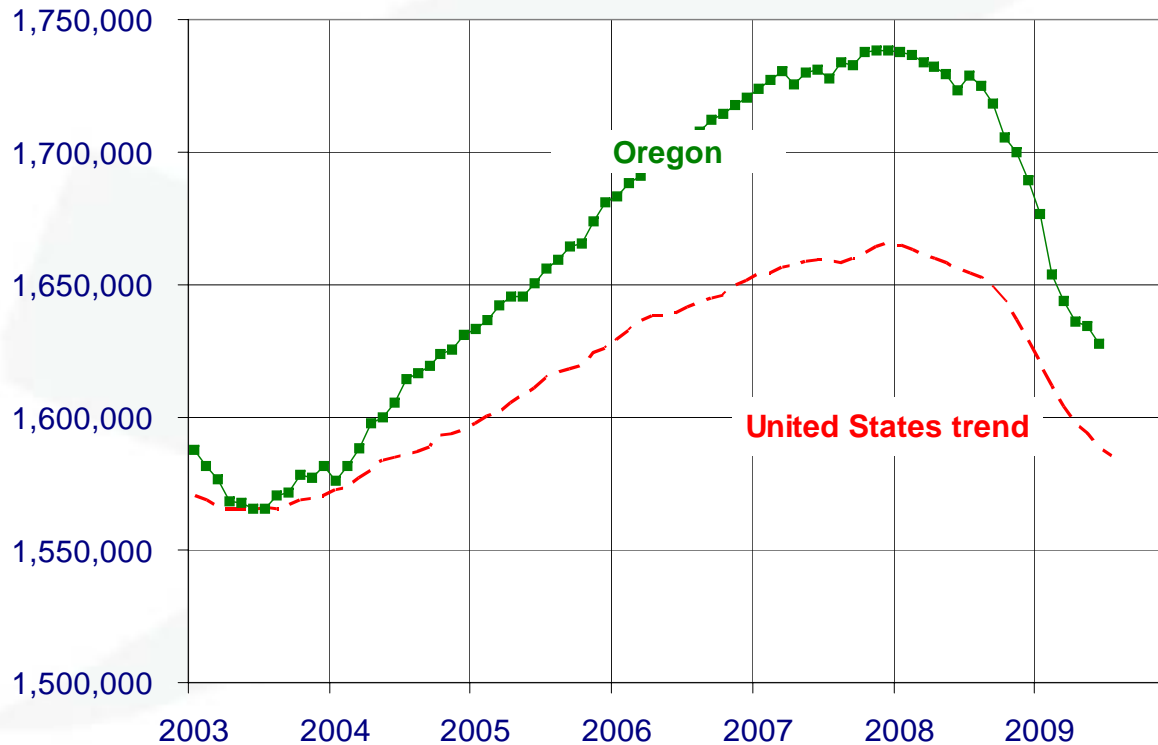


\* Seasonally Adjusted



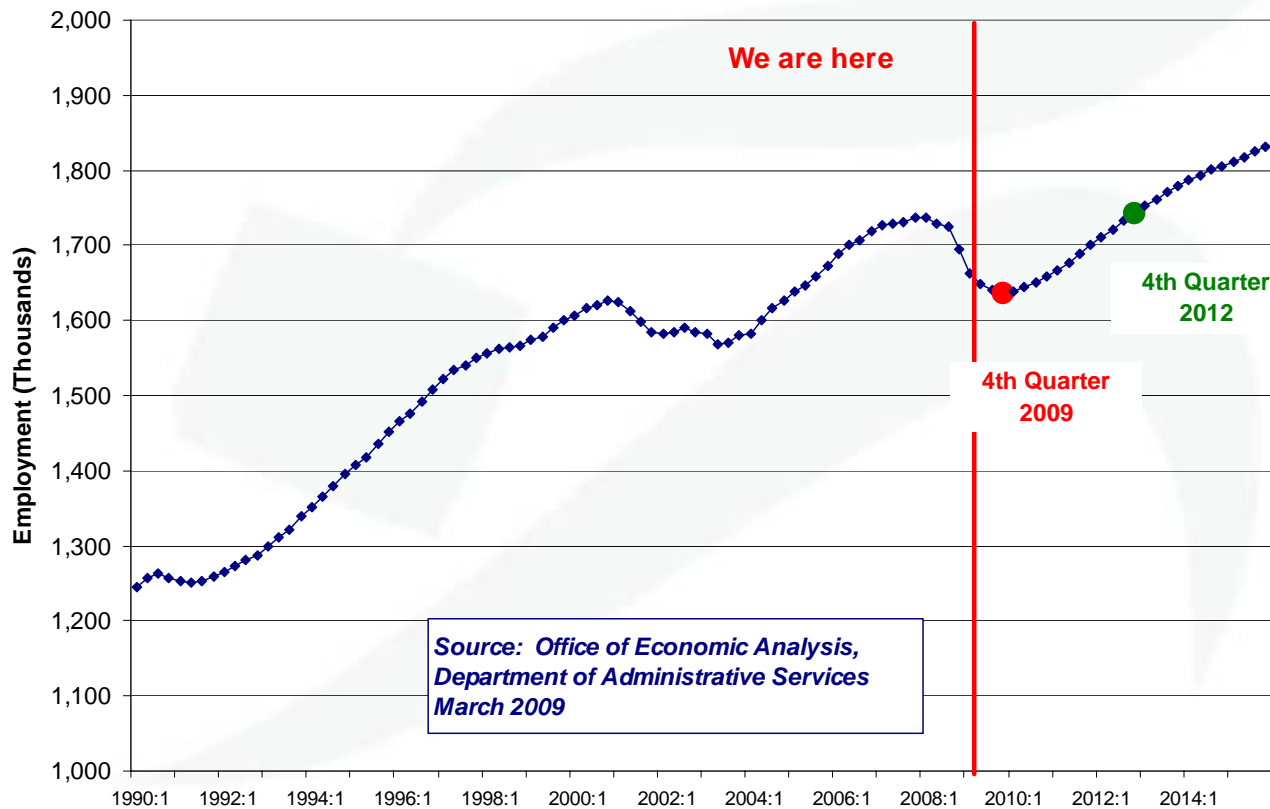
**We've tended to grow faster than the US in the good times, but lose more jobs (relative to our size) in the tough times.**

**Oregon and US Employment Trends  
2003 to Current: US Trend Indexed to July 2003**



Where do we go from here? Job losses continue until the last quarter of this year; we don't regain pre-recession employment levels until the end of 2012.

Moving Beyond Recession ... Oregon Total Employment



So how much will “green jobs” help us move toward recovery?



# The Greening of Oregon's Workforce

*Jobs, Wages, and Training*

Support Business & Promote Employment

[www.WorkSourceOregon.org](http://www.WorkSourceOregon.org)



## Purpose: to determine workforce implications of green jobs.

- Responding to requests about “clean tech” and “green” from many customers, particularly the Oregon Workforce Investment Board.
- Goals:
  - Identify industries and occupations that contribute to Oregon’s green economy
  - Identify education and skill requirements for green jobs
  - Estimate green employment levels
  - Estimate green wage levels
  - Develop projections of green employment



## Perhaps the hardest thing was just defining a green job ...

- Of several competing terms – e.g., green, clean tech, sustainable, and renewable – we chose “green” because it is a widely used term (e.g., WA study)
- There are competing views of “green” in Oregon, such as including high wages, benefits, and job advancement in the definition
  - We decided not to exclude low-wage jobs or those without benefits or advancement opportunities
  - We will collect wage data and track it over time



## ... but we did it.

- For our survey, a green job is one that provides a service or produces a product in any of the following categories:
  1. Increasing energy efficiency
  2. Producing renewable energy
  3. Preventing, reducing, or mitigating environmental degradation
  4. Cleaning up and restoring the natural environment
  5. Providing education, consulting, policy promotion, accreditation, trading and offsets, or similar services supporting any of the other categories

*Note: we wanted one or more of these things to be an “essential function” of the job.*



## We surveyed Oregon businesses ...

- In early 2009, surveyed 10,500 employers in all industries across the state
- We asked them the following:
  - How many jobs in 2008 included green activities as an essential part of the job
  - The minimum education required for these jobs
  - The types of special training, certification, or other requirements that exist for these jobs
  - The wages associated with these jobs
  - How many of these jobs they expect to have in 2010

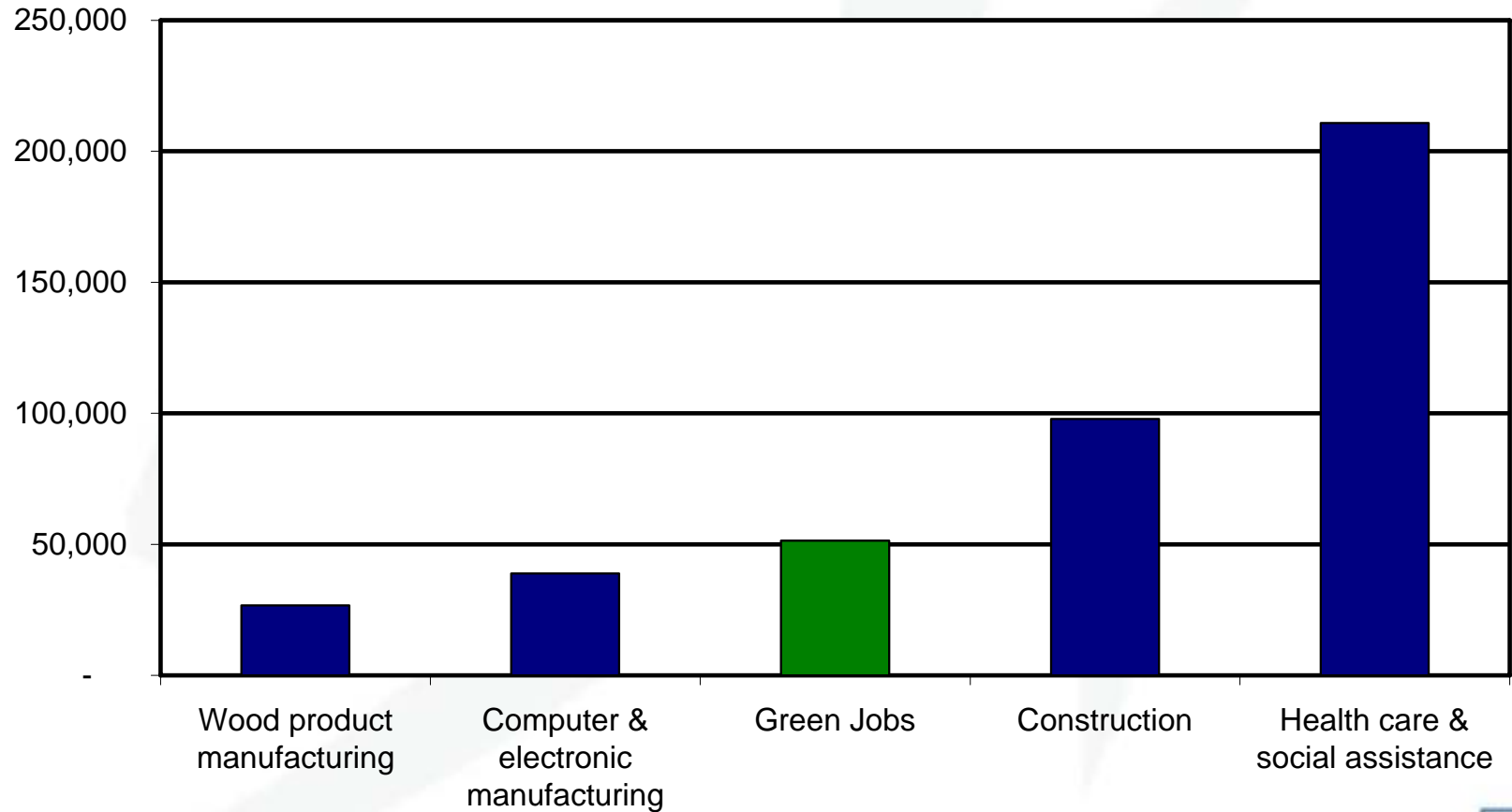


## Key Finding: Oregon has roughly 50,000 green jobs.

- 51,402 green jobs in 2008, spread across...
  - 5,025 employers
  - all major industry groups
  - 226 different occupations
- Represents about 3 percent of the employment in the private sector and state and local government
- To give perspective ... this is roughly the same as the number of employees working in Oregon's private hospitals.



## Oregon's Green Jobs Relative to Other Industries, 2008



Source: Oregon Employment Department, Quarterly Census of Employment and Wages (QCEW)



## Construction, wholesale and retail trade, and administrative and waste services account for about half of Oregon's green jobs.

<b>Industry</b>	<b>Green Jobs</b>	<b>Portion of All Green Jobs</b>
Construction	8,676	17%
Wholesale and Retail Trade	8,315	16%
Administrative and Waste Services	7,074	14%
Natural Resources and Mining	5,762	11%
Professional and Technical Services	5,411	11%
State and Local Government	5,063	10%
Manufacturing	4,228	8%
Leisure and Hospitality	2,260	4%
Other Services	1,555	3%
Educational and Health Services	1,353	3%
Transportation and Warehousing	573	1%
Utilities	403	Less Than 1%
Information	354	Less Than 1%
Management of Companies and Enterprises	252	Less Than 1%
Financial Activities	123	Less Than 1%
<b>Total</b>	<b>51,402</b>	<b>100%</b>



## Key Finding: Many green jobs are in blue collar occupations.

<b>Occupational Group</b>	<b>Green Jobs</b>	<b>Portion of All Green Jobs</b>
Construction and Extraction	10,381	20%
Production	6,512	13%
Farming, Fishing, and Forestry	5,838	11%
Transportation and Material Moving	5,255	10%
Architecture and Engineering	4,360	8%
Life, Physical, and Social Science	4,135	8%
Building and Grounds Cleaning and Maintenance	2,877	6%
Sales and Related	2,437	5%
Installation, Maintenance, and Repair	2,233	4%
Management	1,639	3%
Office and Administrative Support	1,570	3%
Protective Service	1,032	2%
Education, Training, and Library	790	2%
Business and Financial Operations	683	1%
Food Preparation and Serving Related	513	1%
Arts, Design, Entertainment, Sports, and Media	480	1%
Other	667	1%
<b>Total</b>	<b>51,402</b>	<b>100%</b>



## Eleven occupations had at least 1,000 green jobs.

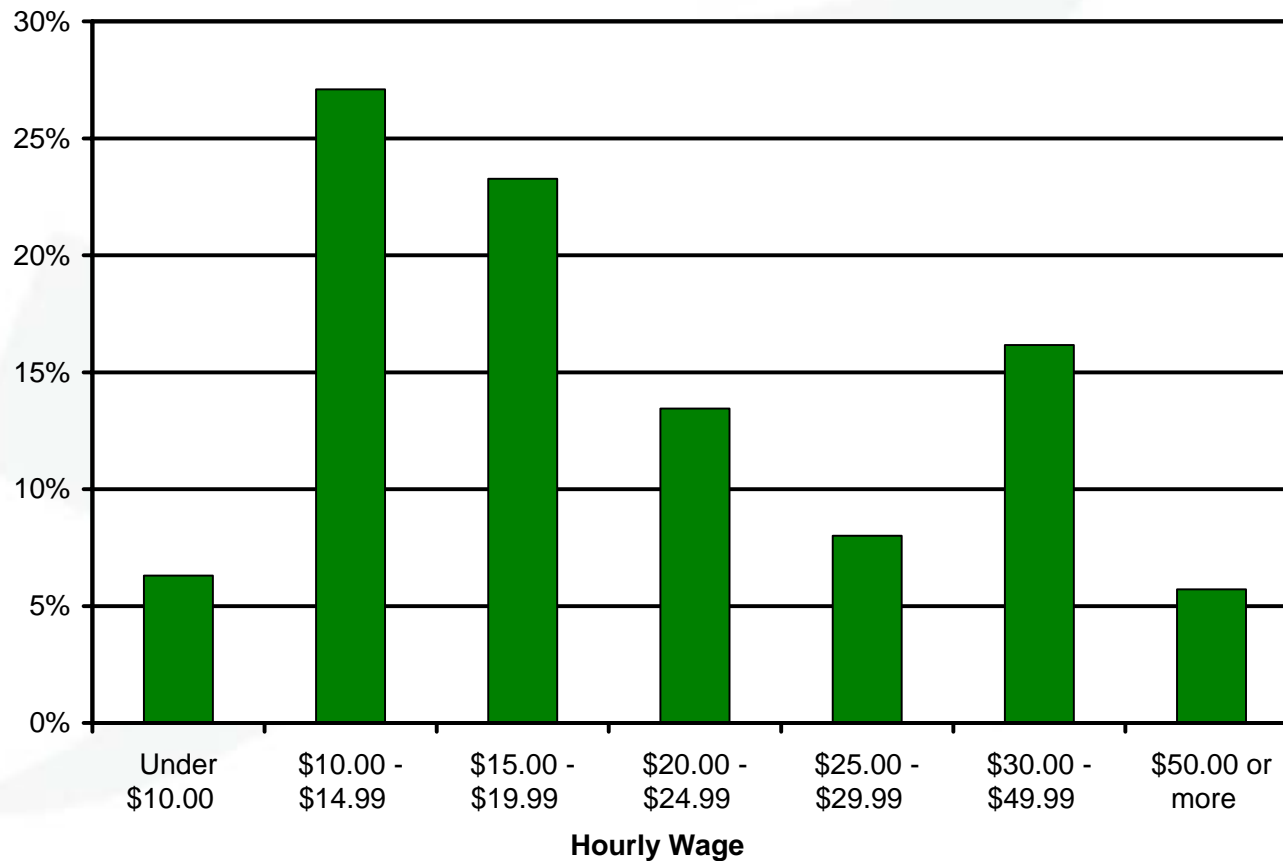
### Top 11 Occupations with More Than 1,000 Green Jobs Examples of Green Work From the Oregon Green Jobs Survey

Occupation	Selected Green Job Description and Employer
Carpenters (4,025 jobs)	"home weatherization" - local community action center "energy efficiency construction" - temp agency
Farmworkers and Laborers (3,189 jobs)	"herbsman" - 100% organic dairy "Assistant grower" - organic nursery
Truck Drivers (2,337 jobs)	"compost truck driver" - waste management company "truck drivers" - biomass company
Hazardous Materials Removal Workers (2,123 jobs)	"asbestos abatement worker" - remediation business "special waste technician" - at county waste center
Landscaping and Groundskeeping Workers (2,044 jobs)	"riparian crew leader" - local watershed restoration "restoration of native plants" - forestry consulting firm
Civil Engineers (1,889 jobs)	"civil inspector" - wind energy firm "LEED AP Project Engineer" - construction company
Production Workers (1,728 jobs)	"paper machine tender" - mill making 100% recycled paper "processing recycling" - oil recycler
Freight, Stock, and Material Movers (1,628 jobs)	"sorter" - recycling company "auto parts dismantler" - auto salvage yard
Retail Salespersons (1,149 jobs)	"sells systems, customer care" - solar panel retailer "retail manager" - organic nursery
Biological Technicians (1,115 jobs)	"Coho life cycle monitoring" - local watershed "fisheries technician" - tribal government
Fire Fighters (1,021 jobs)	"rehab after fires, forest hazard fuel reduction" - environmental consulting firm



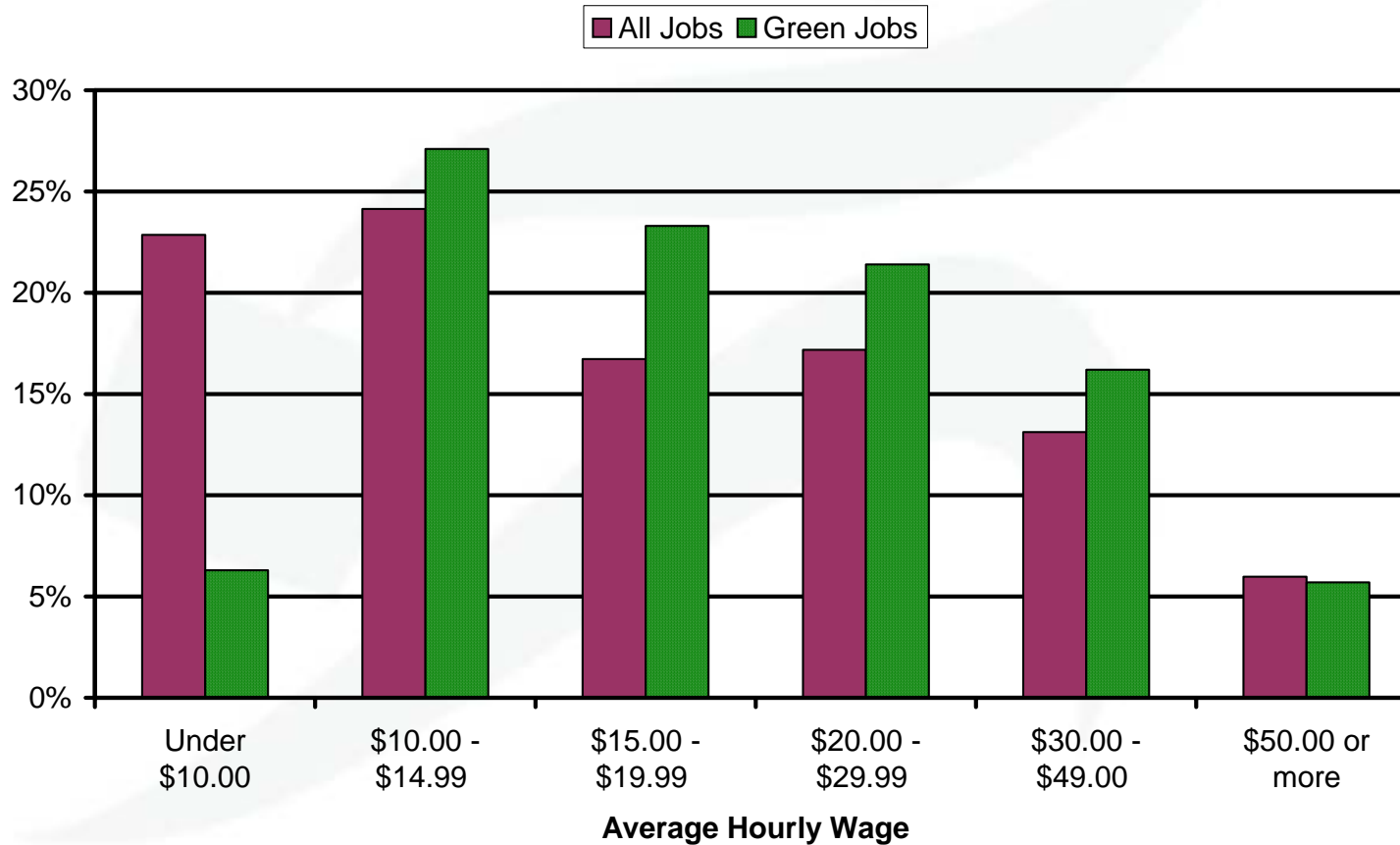
# Green wage levels are spread across a wide spectrum, just like wages of all jobs.

Percent of Green Jobs by Wage Group



## But very few green jobs pay very low wages ...

Percent of Green Jobs and All Jobs by Wage Group



Source: Oregon Employment Department



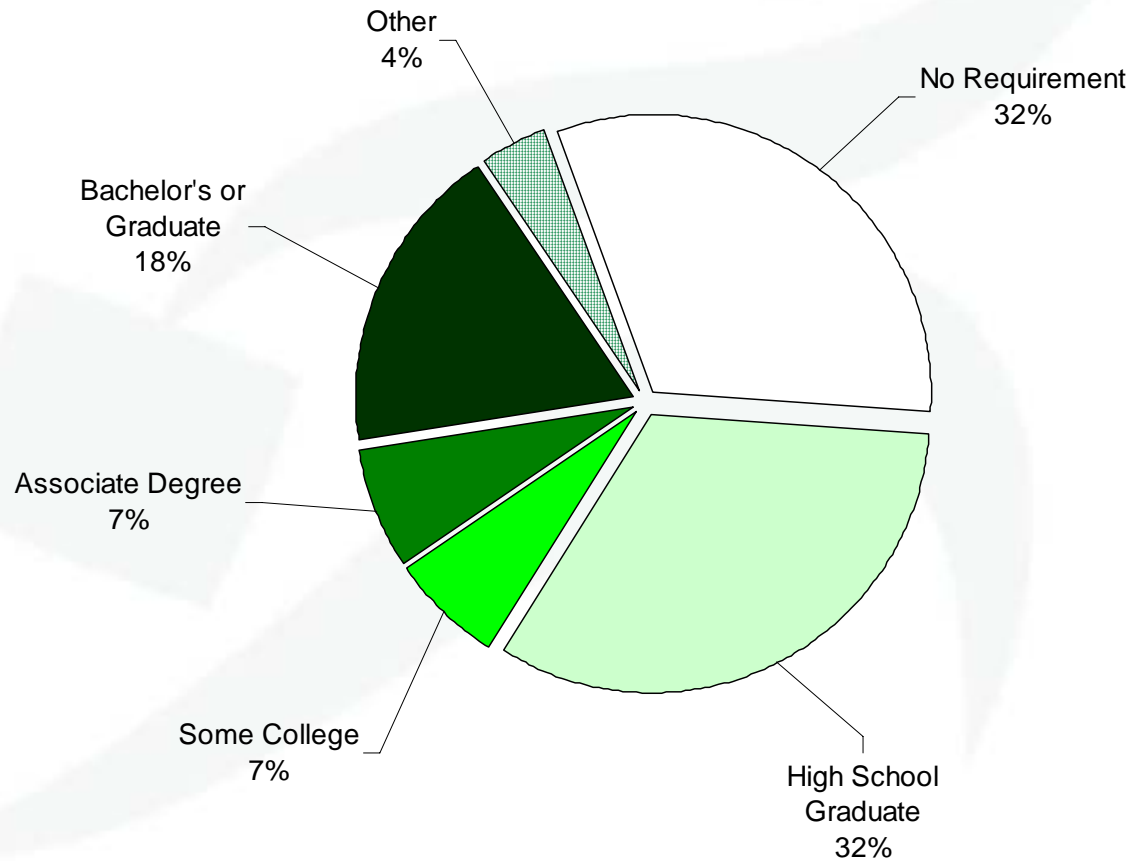
**Key Finding: “On average, green jobs tended toward slightly higher wages than jobs across the entire economy.”**

- Average wage for all jobs: \$19.92 per hour
- Average wage for green jobs: \$22.61 per hour
- Half of all jobs pay \$15.22 or more per hour
- About 2/3 of all green jobs pay \$15.00 or more per hour
- Occupation mix explains some of the difference, but not all



# Key Finding: Two-thirds of green jobs require no education beyond high school.

Green Jobs by Minimum Education Level Oregon, 2008

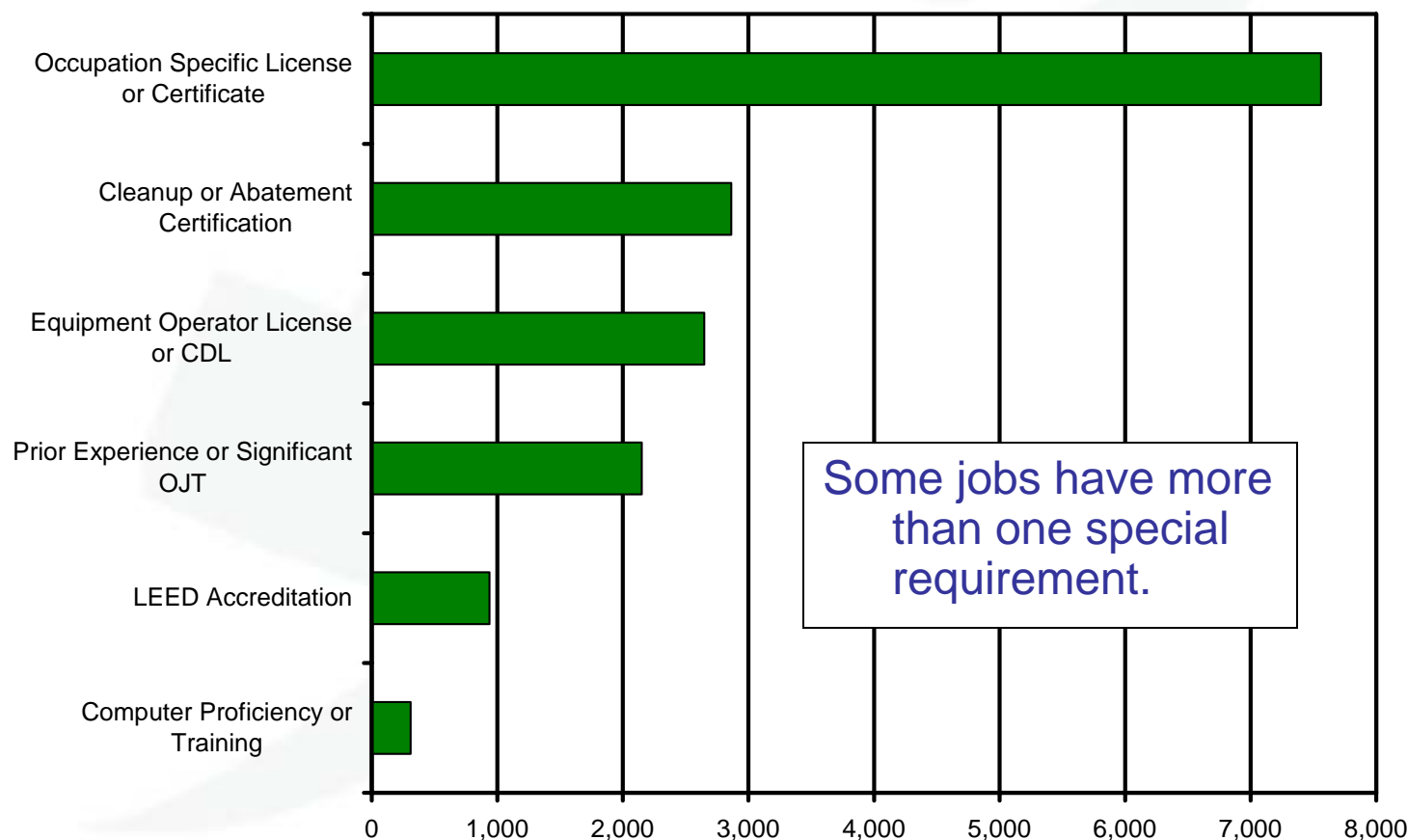


*Where the Minimum Education Level was specified*



## Key Finding: About one-third of green jobs require some kind of special license / certificate.

### Green Jobs by Required License or Certificate



## Key Finding: Employers project a 14% increase in green jobs between 2008 and 2010.

### Employer Projections of Green Jobs by Occupation

<b>Occupational Group</b>	<b>Total Workers 2008</b>	<b>Projected Workers 2010</b>	<b>Change</b>	<b>Percent Change</b>
Farming, Fishing, and Forestry	5,838	7,960	2,122	36%
Transportation and Material Moving	5,255	7,025	1,770	34%
Production	6,512	7,625	1,113	17%
Architecture and Engineering	4,360	5,243	883	20%
Construction and Extraction	10,381	11,077	696	7%
Protective Service	1,032	1,543	511	50%
Life, Physical, and Social Science	4,135	4,338	203	5%
Installation, Maintenance, and Repair	2,233	2,402	169	8%
Education, Training, and Library	790	952	162	21%
Management	1,639	1,791	152	9%
Building and Grounds Cleaning and Maintenance	2,877	3,026	149	5%
Business and Financial Operations	683	797	114	17%
Community and Social Services	157	263	106	68%
Computer and Mathematical	244	301	57	23%
Healthcare Practitioners and Technical	165	178	13	8%
Personal Care and Service	20	27	7	35%
Food Preparation and Serving Related	513	514	1	0%
Legal	81	81	0	0%
Arts, Design, Entertainment, Sports, and Media	480	465	-15	-3%
Office and Administrative Support	1,570	1,376	-194	-12%
Sales and Related	2,437	1,827	-610	-25%
<b>Total</b>	<b>51,402</b>	<b>58,811</b>	<b>7,409</b>	<b>14%</b>



[Nick.J.Beleiciks@state.or.us](mailto:Nick.J.Beleiciks@state.or.us)

[www.QualityInfo.org](http://www.QualityInfo.org)

Our “Greening” report is available on-line at  
<http://www.qualityinfo.org/pubs/green/greening.pdf>

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