

Clackamas County Economic Landscape Emerging Trends Update

2016 update

Prepared 6/9/2016

Clackamas County's Economic Contribution

Regional (9 county) GDP =

\$167 Billion per year (2014)

*up from \$165 B in 2013 but down from
\$183 B in 2012*

Clackamas County GDP =

\$17.6 Billion (2014)

*Down from \$18.1 B in 2013 and
\$18.1 B in 2012*

11% of Regional GDP

Source: IMPLAN model.



Definitions

- **IMPLAN** = **IMP**act for **PLAN**ning (economic input/output model)
- **IMPLAN Sectors**: up to 536 detailed industry or commodity types (i.e., sector #6, Greenhouse, Nursery & Floriculture Production)
- **NAICS**: North American Industrial Classification System; industry classification system utilized by Oregon Employment Dept. and US Bureau of Labor Stats.
- **Employment**: IMPLAN includes full and part-time job estimates; Oregon Emp. Dept. estimates “covered employment” with reported unemployment insurance
- **Direct vs. Secondary Employment**: see following graphic
- **Employee Compensation**: IMPLAN includes total payroll costs, labor income, and benefits. Oregon Emp. Dept. estimates labor income/payroll only.
- **Traded Clusters** or Traded Sectors: industries that derive the majority of sales from outside the PMSA.

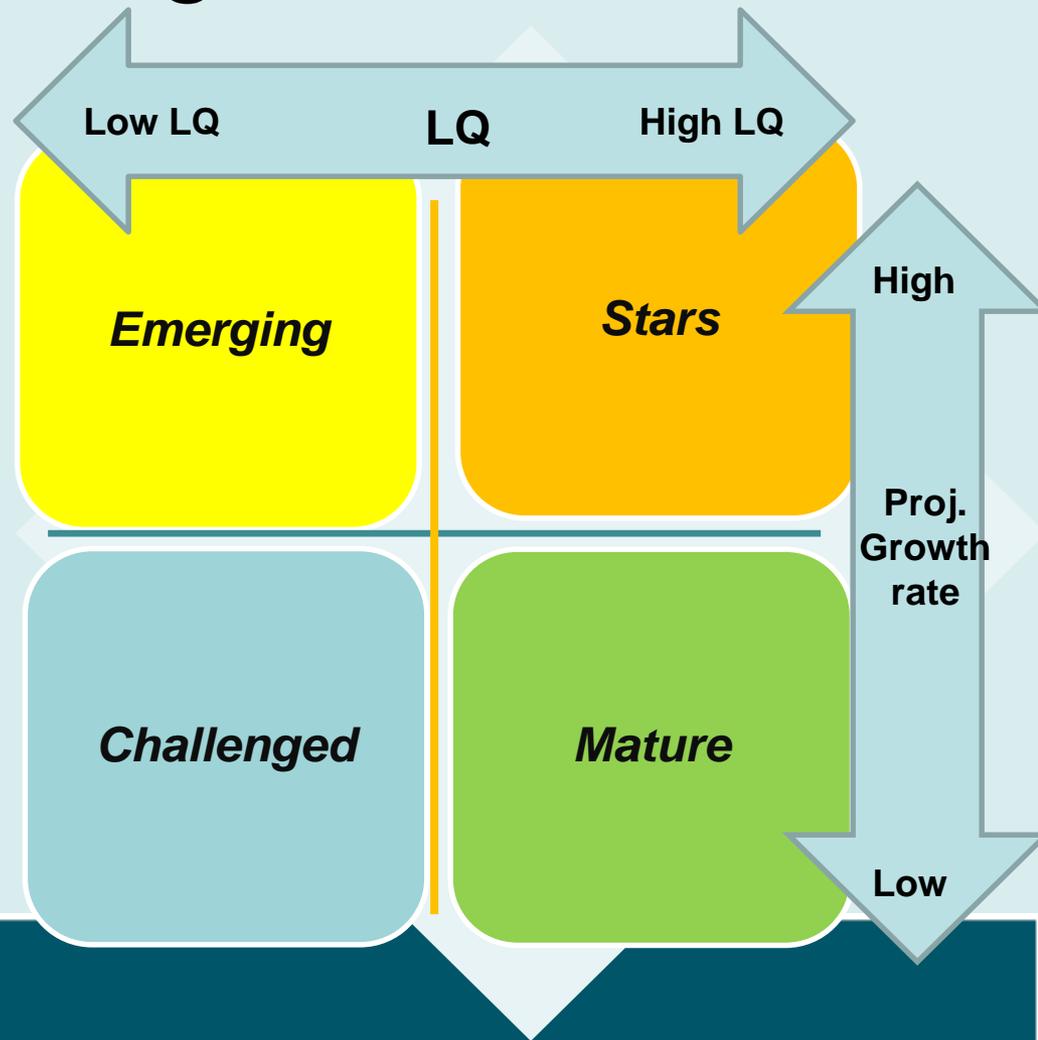
Definitions

- **Location Quotient:** propensity of the industry to be produced in Clackamas County vs. the PMSA (9 county) region. A LQ of 1.0 means that the cluster propensity to locate in Clackamas County is equal to the average for the entire 9-county region.
- **Gross Domestic Product (GDP) or Valued Added:** annual contribution of an industry, measured by employee compensation, proprietor income, other income and tax payments
- **Output:** annual gross sales less ending year inventory and depreciation

Understanding LQs

- Location Quotients

- Propensity of jobs to locate in Clackamas County in comparison to the entire Regional PMSA.
- Reflects relative size and growth based on 10-yr. job growth forecast and direct wages paid.
- Four categories: Stars, Emerging, Mature and Challenged.

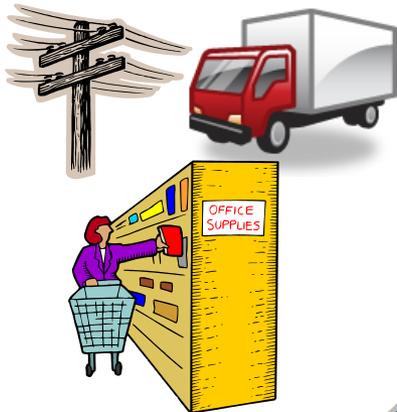


Understanding Impacts using IMPLAN

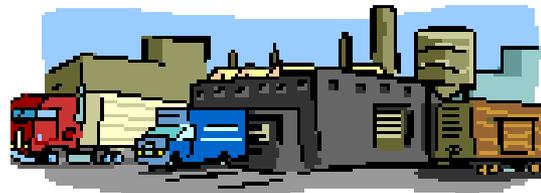
Indirect Impacts

(backward linkages)

(supply-chain inputs, such as utilities, supplies, parts, materials, transport. and vender services)



Direct Impacts



Direct spending by employers

(production cost, direct employee compensation, tax & fee payments)



Induced Impacts

(forward linkages)

(household consumption spending)



What Defines Key Cluster?

- Location Quotient (LQ) > 1 or approaching 1*
 - Greater presence within Clackamas County relative to the region
 - Concentration of similar businesses & supply chains
 - Increasing propensity to locate in Clackamas County
- Strong Economic Contribution
 - Key clusters account for about 50% of county GDP

** LQ determination was made during 2006*

Clackamas County Key Clusters*

- Professional Business Services
 - *Corp. HQ, legal, insurance, engineering, finance (excl. banking, advertising)*
- High Tech Manufacturing
- Wholesale Trade
- Health Care
- Advanced Manufacturing – Metals & Machinery
 - *includes primary & fabricated metals and machinery mfg.*
- Software & Media Production
- Transportation & Distribution
- Agriculture & Food Production
- Food & Beverage Processing
- Nurseries and Greenhouses
- Wood Manufacturing

* *Shown in order of annual GDP contribution to Clackamas County*

Key Cluster Characteristics



Other Defined Clusters

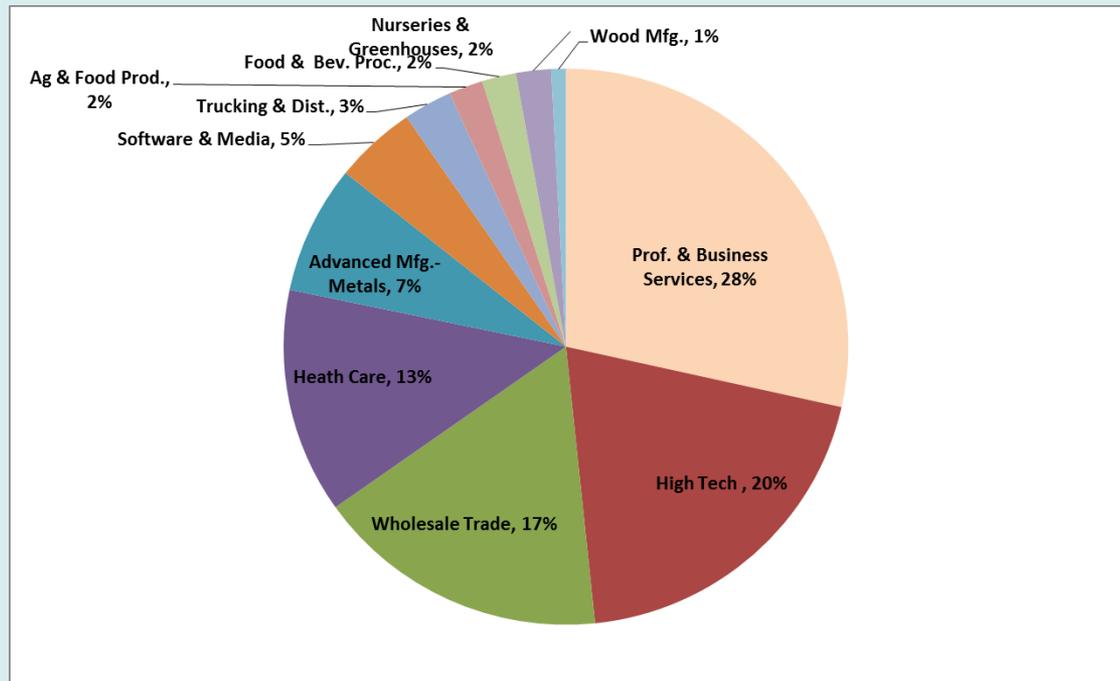
- **Leisure, Hospitality and Tourism:** Large level of employment but relatively low wages /output; spread among many sectors (e.g., retail, entertainment, lodging, etc.) County continues to develop tourism in related efforts.
- **Natural Resources and Mining** – low location quotient in County.
- **Retail:** Serves local population; lower wages & economic output, and is part of tourism cluster.
- **Construction:** Primarily serves local population and job growth; not usually considered as a traded sector (but could be emerging as one).
- **Education** – Important for workforce development and serving local population; but not currently a major traded sector.

Clackamas County's Clusters

Distribution of Annual GDP (\$10.5 Billion)

Key Clusters in Clackamas County:

- ✓ Create \$10 billion in direct annual GDP
- ✓ Generates 57% of total direct GDP in County
- ✓ Employ 44% of the Job base
- ✓ Avg. covered payroll of \$46,828 in key clusters is 33.7% above county average



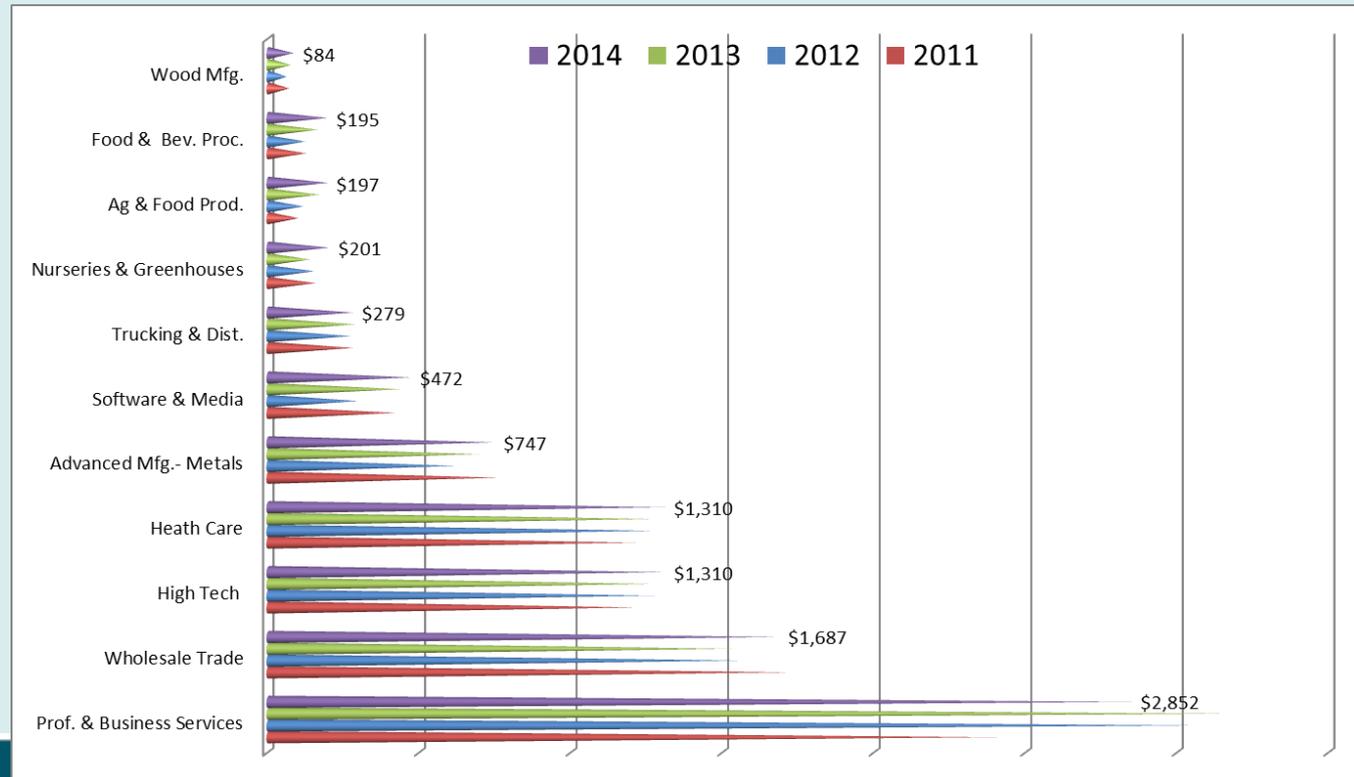
Source: FCS GROUP based on 2014 IMPLAN data

Clackamas County Clusters:

Annual Direct GDP (millions)

Overall GDP decreased between 2013 and 2014

Fastest GDP growth occurring in: Wholesale Trade, Nurseries & Greenhouses, and Advanced Manufacturing – Metals & Machinery



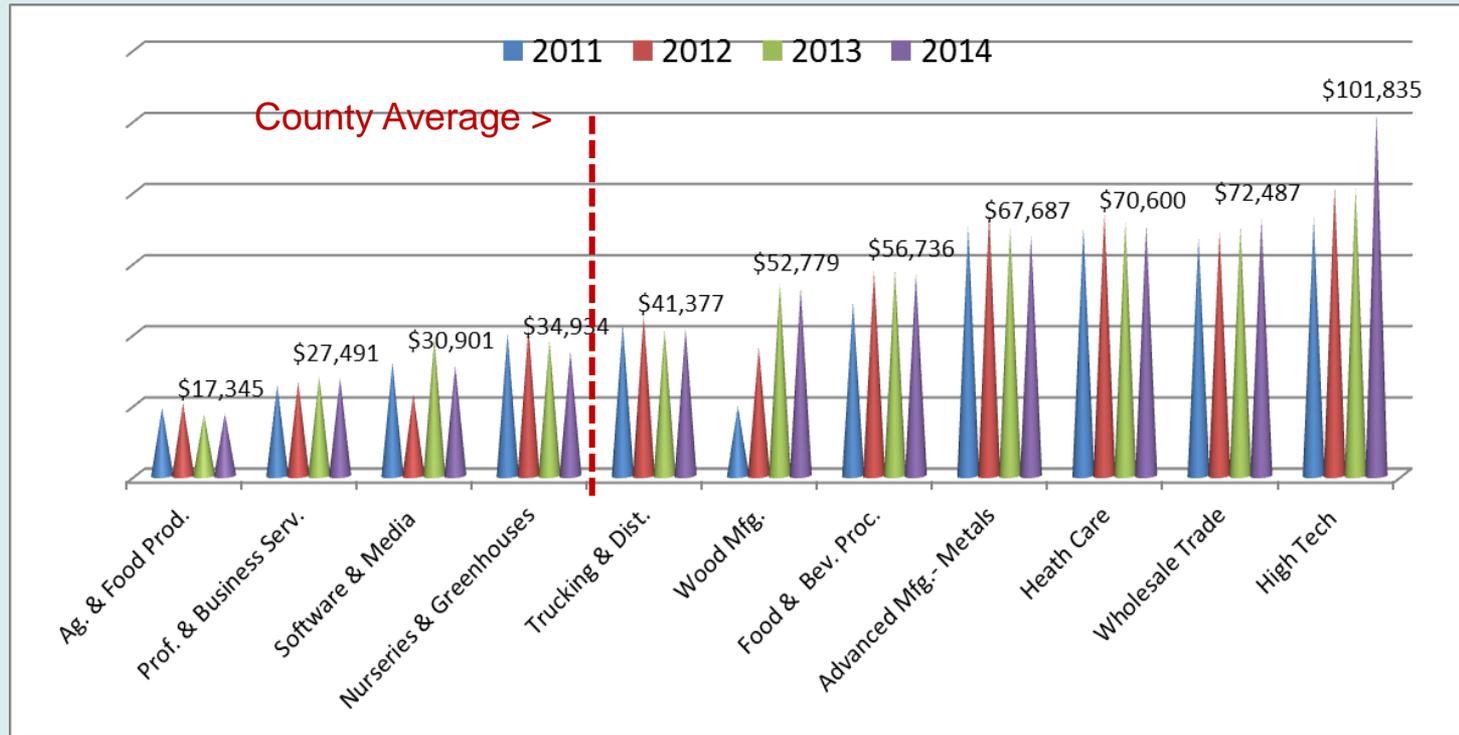
* Source: IMPLAN data, adjusted to 2016 dollars.

Clackamas County Clusters: Average Compensation Levels*

Avg. Emp. Compensation rose slightly between 2013 and 2014.

Avg. Comp. in Clackamas County was 21% below Region

Most key clusters pay above average compensation



* Source: IMPLAN; adjusted to 2016 dollars. Note, IMPLAN calculates employment compensation based on total payroll and benefits divided by covered and non-covered employment; which is different than average payroll calculated by Oregon Employment Dept based on covered workers and reported payrolls.

Wholesale Trade

2014 Impacts

Indirect Impacts Regional

7,799 jobs
\$722 M in GDP

Direct Impacts Clackamas County



12,004 jobs
\$1,938 M in GDP

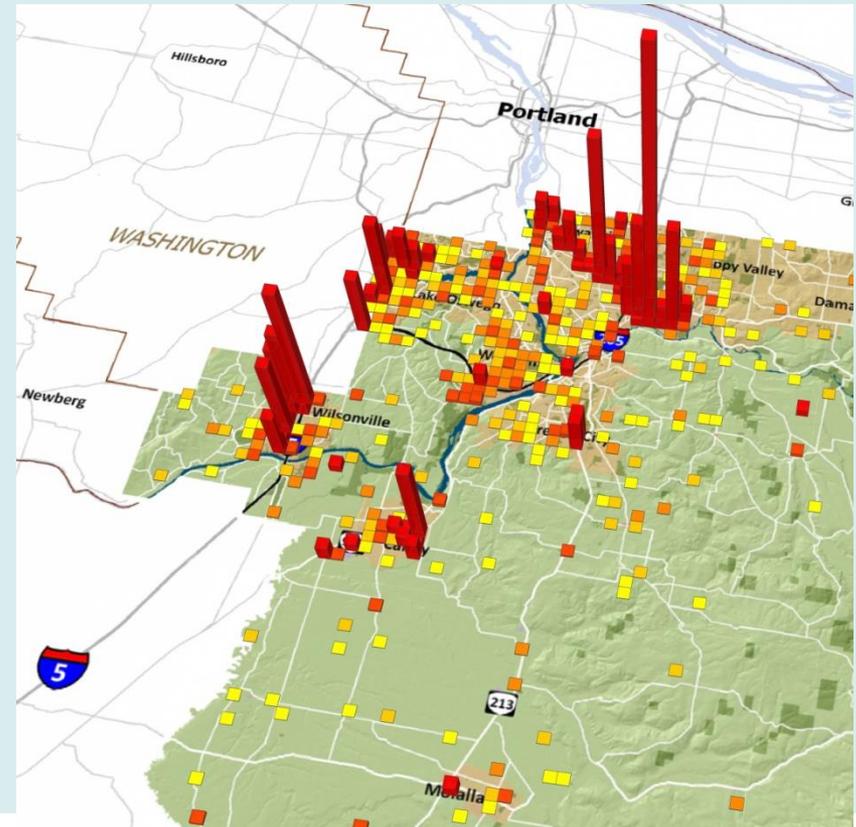
Induced Impacts Regional

9,806 jobs
\$780 M in GDP

Total Impact on Region: 27,784 jobs; \$3,440 M in GDP

Wholesale Trade*

- Good rebound in 2014
- Avg. compensation: \$72,487
- Employment: 12,004
- Annual GDP: \$1.7 billion
- Slight increase since 2013 (1.55 to 1.63) LQ steady and “mature”
- 11 firms in County Top 100 (Kroger, Sysco, Pacific Sea Food, Orepac Building Products, etc.)



Annual Economic Output by Location

Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data.

* Includes firms, agents and brokers engaged in sale of goods to retailers.

High Tech, 2014 Impacts

Indirect Impacts Regional

6,037 jobs
\$640 M in GDP

Direct Impacts Clackamas County



(production cost, direct
employee compensation, tax
& fee payments)

7,084 jobs
\$2,059 M in GDP

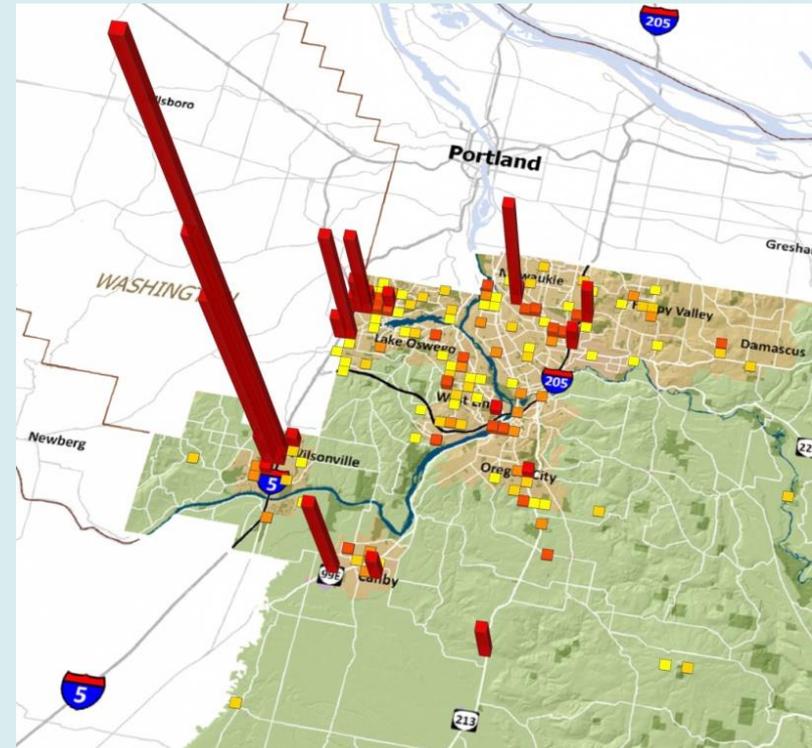
Induced Impacts Regional

7,096 jobs
\$565 M in GDP

Total Impact on Region: 20,216 jobs; \$3,264 M in GDP

High Tech*

- Evident decline in Clackamas County high tech jobs and GDP between 2012 and 2014, but strong wage growth
- Avg. compensation: \$101,835
- Employment: 7,083
- Annual GDP: \$2 billion
- LQ now well below 1.0 (at 0.53)
- 8 firms in County Top 100 (Xerox, TYCO Electronics, Flir Systems, Rockwell Collins Mentor Graphics)
- Emerging Opportunities: computer components, audio/video equip., battery mfg., and wire & cable mfg.



Annual Economic Output by Location

Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data

* Includes manufacturing of computer parts and electronic devices, software design, and computer systems programming.

Advanced Mfg. – Metals & Machinery

2014 Impacts

Indirect Impacts Regional

4,541 jobs
\$445 M in GDP

Direct Impacts Clackamas County



(production cost, direct
employee compensation, tax
& fee payments)

7,583 jobs
\$776 M in GDP

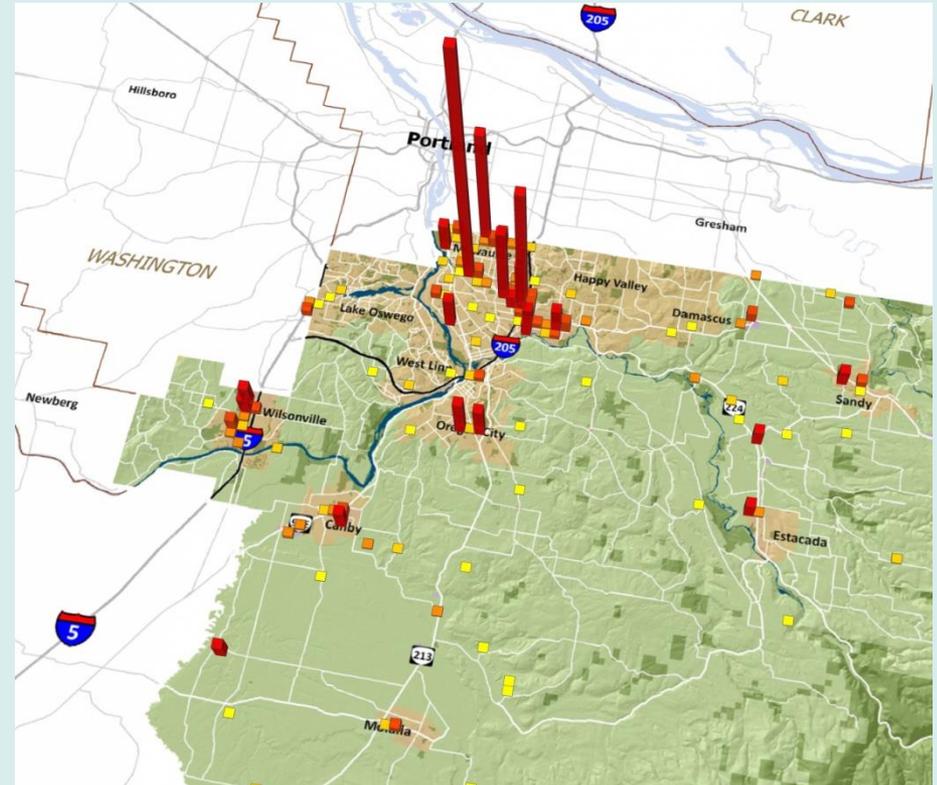
Induced Impacts Regional

5,283 jobs
\$421 M in GDP

Total Impact on Region: 17,407 jobs; \$1,642 M in GDP

Advanced Mfg. – Metals & Machinery*

- Continued growth in jobs and GDP
- Avg. compensation: \$67,687
- Employment: 7,583
- Annual GDP: \$746 million
- LQ still very high
- 4 firms in County Top 100 (PCC Structurals, Oregon Iron Works, Benchmade, Blount Intl.
- Growth areas: cutlery, handtools, metal tanks and specialty coatings



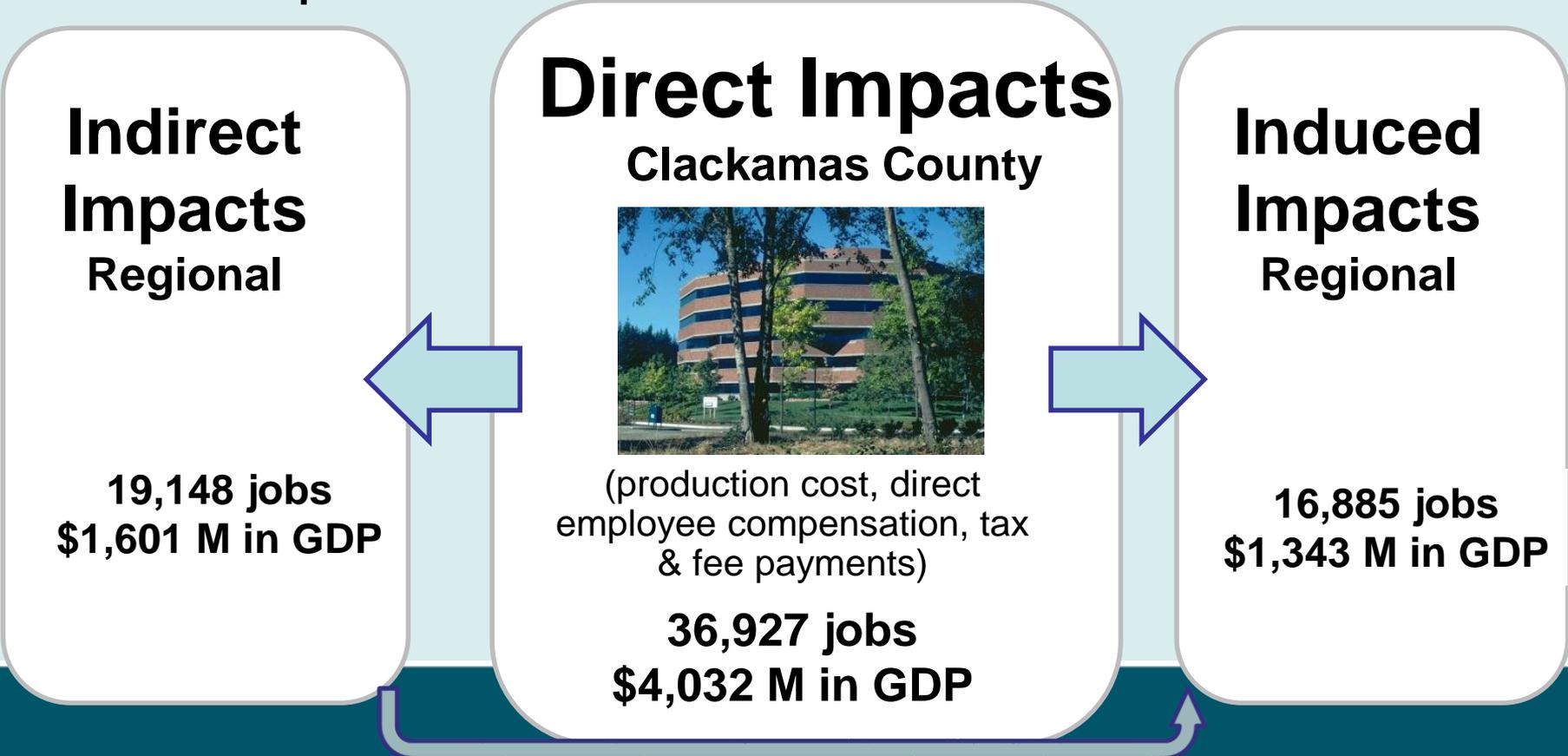
Annual Economic Output by Location

Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data

* Includes primary metals, fabricated metals, machinery manufacturing.

Professional Business Services

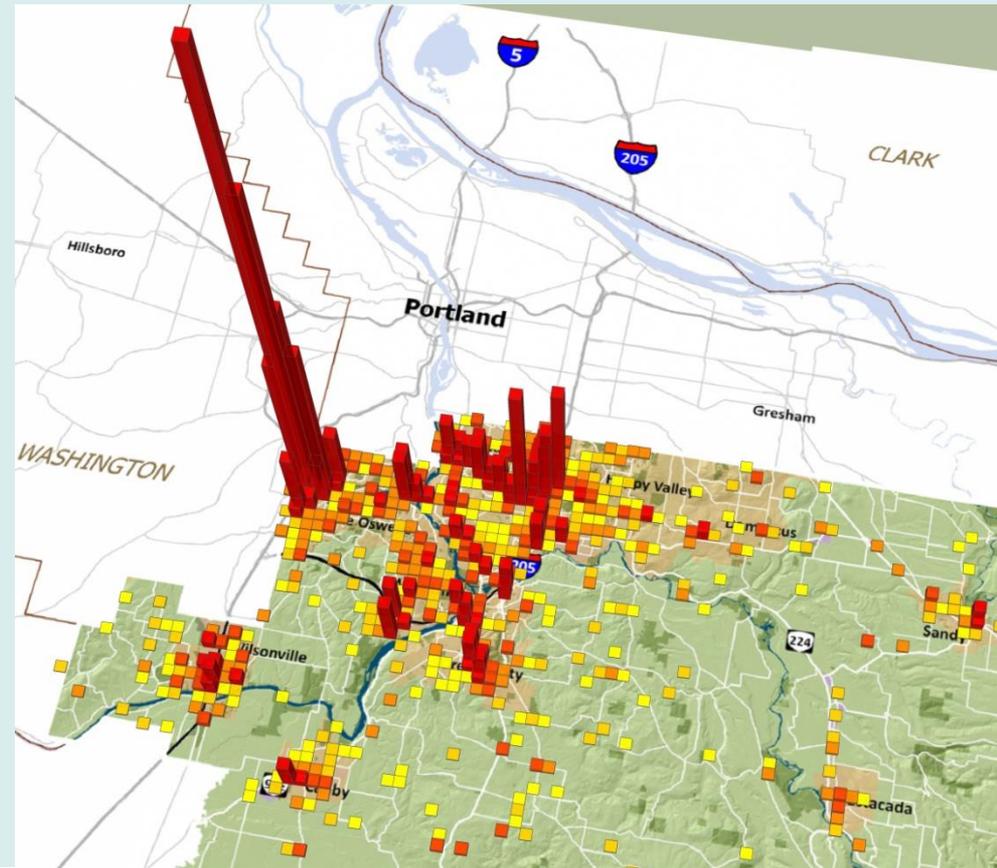
2014 Impacts



Total Impact on Region: 72,961 jobs; \$6,976 M in GDP

Professional Business Services*

- Significant job growth in recent years
- Avg. compensation: \$27,491
- Employment: 36,928
- Annual GDP: \$2.9 billion
- LQ decreased (1.32 to 1.09) but still healthy
- 3 firms in County Top 100 (Aequitas Capital Management, Huron Consulting, Princeton Property Mgmt.)



* Includes legal, eng., accounting, marketing, insurance, sales, real estate, computer systems; excludes commercial banking

Annual Economic Output by Location

Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data

Nurseries & Greenhouses

2014 Impacts

Indirect Impacts Regional

448 jobs
\$26 M in GDP

Direct Impacts Clackamas County



3,427 jobs
\$220 M in GDP

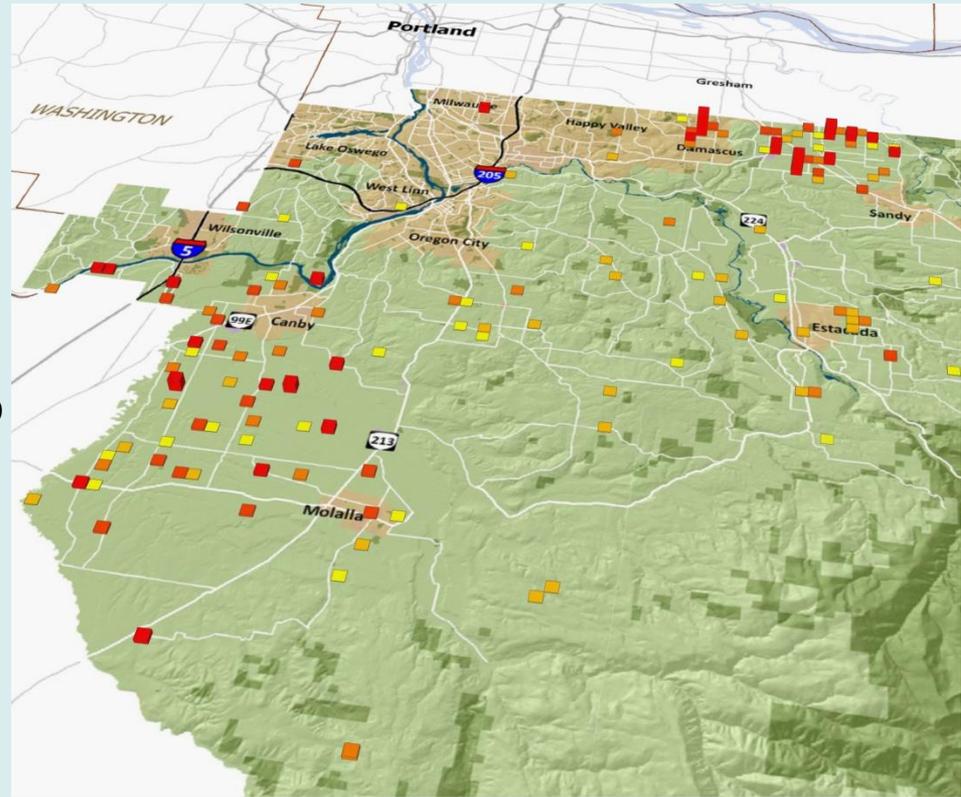
Induced Impacts Regional

1,118 jobs
\$89 M in GDP

Total Impact on Region: 4,993 jobs; \$335 M in GDP

Nurseries and Greenhouses

- Very hard hit by recession and still recovering
- Avg. compensation: \$34,934
- Employment: 3,427
- Annual GDP: \$201 million
- Significant LQ gain (from 2.17 to 2.75) between 2013 and 2014
- 2 firm in County Top 100 (J. Frank Schmidt & Son Co., Early Morning LLC)
- Primarily rural impacts
- Legal hemp/marijuana may help this cluster



Annual Economic Output by Location

Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data.

* Includes production of landscaping trees, shrubs and seedlings, herbs, flowers and related products.

Trucking & Distribution

2014 Impacts

Indirect Impacts Regional

1,970 jobs
\$176 M in GDP

Direct Impacts Clackamas County



(production cost, direct
employee compensation, tax
& fee payments)

4,233 jobs
\$338 M in GDP

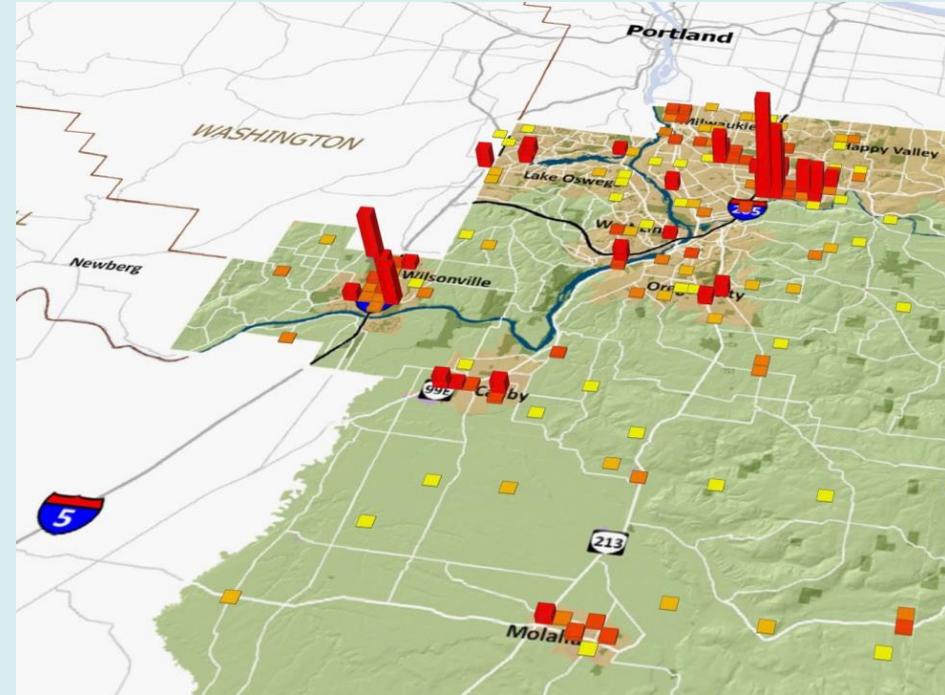
Induced Impacts Regional

2,464 jobs
\$148 M in GDP

Total Impact on Region: 8,667 jobs; \$710 M in GDP

Trucking & Distribution*

- Retained significant gains from 2013
- Avg. compensation: \$41,377
Employment: 4,233
- Annual GDP : \$279 million
- LQ holding steady, (1.69 in 2013 and 2014) “mature”
- 5 firms in County Top 100 (Distribution Inc., Interstate Distributor Co, Safeway Dist. Center, Rite Aid Dist. Center, Gordon Trucking etc.)



Annual Economic Output by Location

Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data

* Includes trucking, warehousing and storage businesses

Food & Beverage Processing

2014 Impacts

Indirect Impacts Regional

3,576 jobs
\$313 M in GDP

Direct Impacts Clackamas County



2,205 jobs
\$177 M in GDP

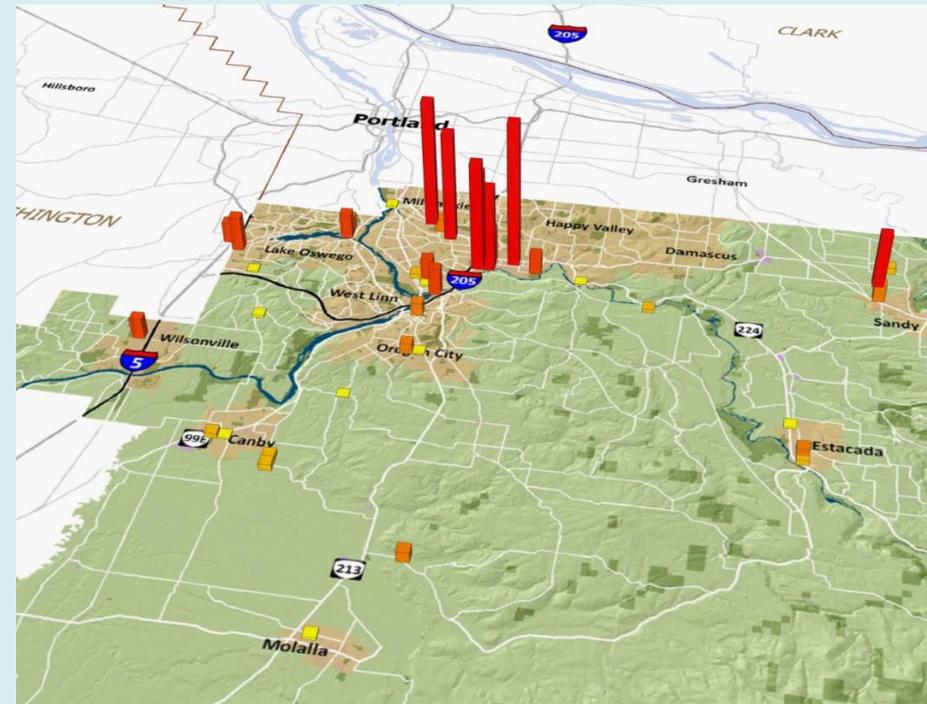
Induced Impacts Regional

1,962 jobs
\$156 M in GDP

Total Impact on Region: 7,743 jobs; \$646 M in GDP

Food & Beverage Processing*

- 2014 saw continued strong growth in this sector in Clackamas County
- Avg. compensation: \$56,736
- Employment: 2,205
- Annual GDP: \$195 million
- Significant LQ growth (.86 to 1) brings industry out of “challenged” status
- 3 firms in County Top 100 (Bob’s Red Mill Natural Foods, Nature Bake, Fred Meyer Bakery)
- Opportunities: animal food, and snack food manufacturing



Annual Economic Output by Location

* Includes food processing and beverage manufacturing businesses.

Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data

Agriculture & Food Production

2014 Impacts

**Indirect
Impacts**
Regional

785 jobs
\$57 M in GDP

Direct Impacts
Clackamas County



5,561 jobs
\$286 M in GDP

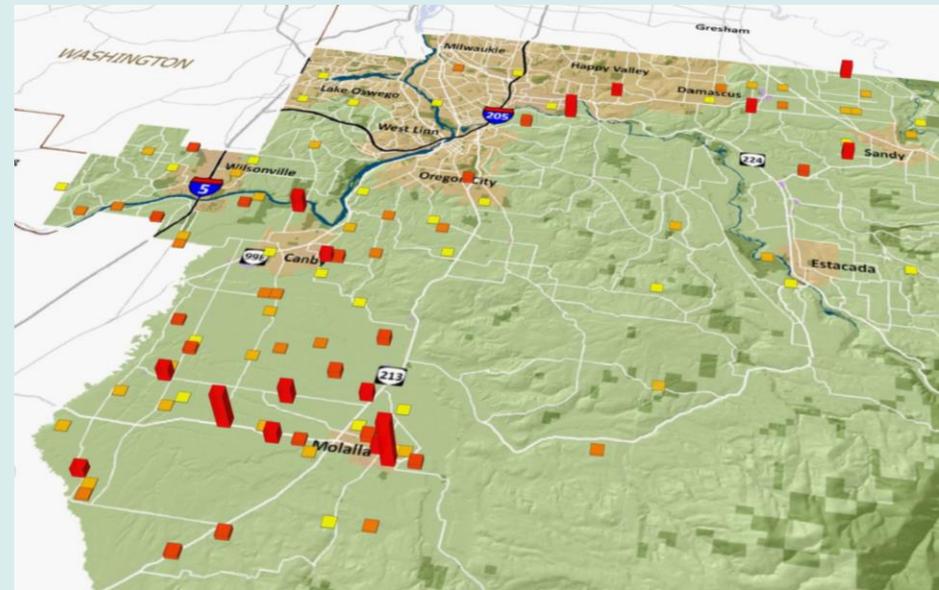
**Induced
Impacts**
Regional

1,307 jobs
\$104 M in GDP

Total Impact on Region: 7,653 jobs; \$447 M in GDP

Agriculture and Food Production*

- 2014 set a two-decade record for jobs and GDP in this Cluster
- Employment: 5,561
- Average Compensation: \$17,345
- GDP: \$197 million
- LQ is trending up (1.3 to 1.56 between 2013 and 2014)
- Major concentrations in rural areas. Important rural and urban interface
- 3 firms in County Top 100 (Willamette Egg Farms, Santos Labor and Forestation, Ezequiel Labor Contractor)



Annual Economic Output by Location

*Includes agriculture and animal production for food and medicinal purpose, and support activities.

Wood Product Manufacturing 2014 Impacts

Indirect Impacts Regional

823 jobs
\$84 M in GDP

Direct Impacts Clackamas County



851 jobs
\$79 M in GDP

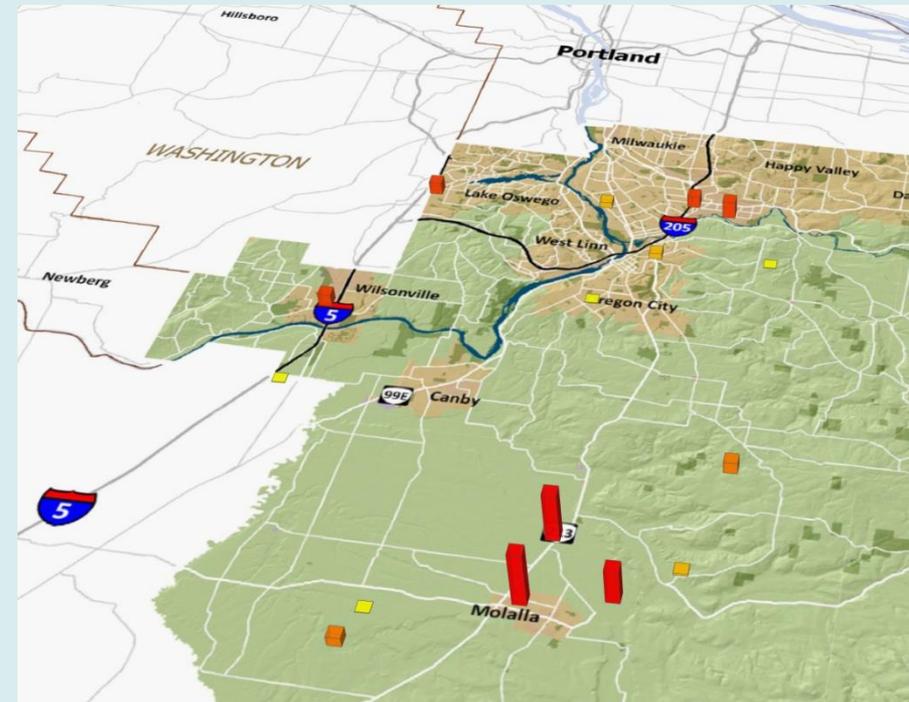
Induced Impacts Regional

728 jobs
\$59 M in GDP

Total Impact on MSA: 2,401 jobs; \$220 M in GDP

Wood Product Manufacturing*

- Cluster still struggling but improved in 2014
- Avg. compensation: \$52,779
- Employment: 851
- Annual GDP: \$84 million
- Mature industry with shrinking LQ
- 1 firm in County Top 100 (Brentwood Corp.)
- Primarily rural impacts



Annual Economic Output by Location

* Includes firms making products, such as trusses, cabinets, wood furniture, etc.

Source: FCS GROUP & Real Urban Geographics based on IMPLA and Oregon Employment Dept. data.

Health Care, 2014 Impacts

Indirect Impacts MSA

4,391 jobs
\$406 M in GDP

Direct Impacts Clackamas County



(production cost, direct
employee compensation, tax
& fee payments)

13,981 jobs
\$1,262 M in GDP

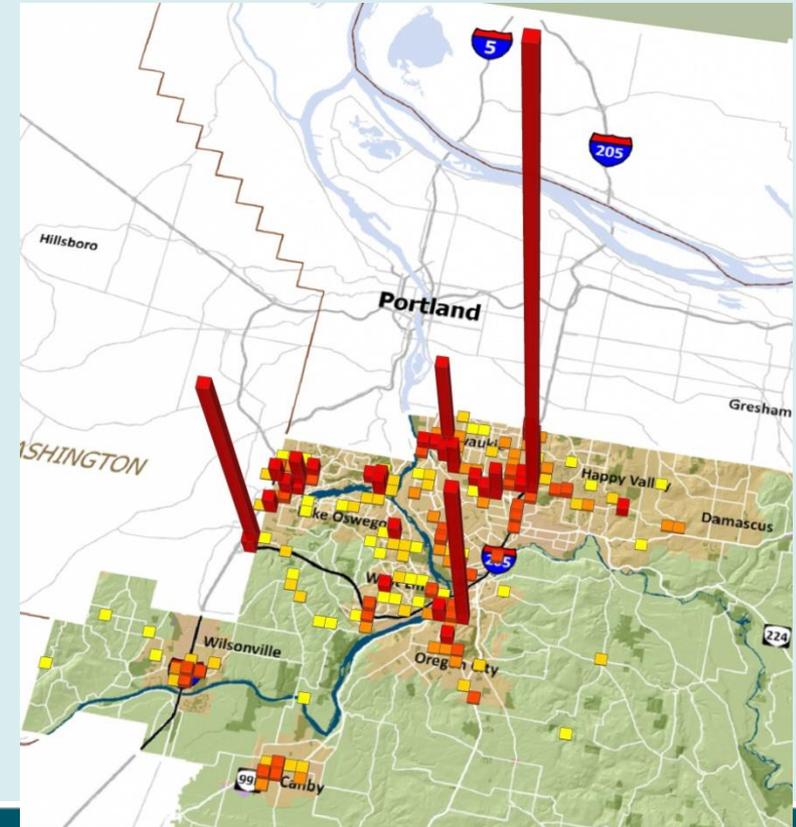
Induced Impacts MSA

8,479 jobs
\$674 M in GDP

Total Impact on Region: 26,851 jobs; \$2,343 M in GDP

Health Care*

- 2014 set a record in jobs for this Cluster in Clackamas County
- Avg. compensation: \$70,600
- Employment: 13,981
- Annual GDP: \$1.3 billion
- Increasing LQ (1.3 to 1.32 between 2013 and 2014)
- 10 firms in County Top 100 (Kaiser, Legacy Meridian Park Hospital, NW Permanente, Providence Hospital, Sunnyside Hospital, etc.)
- Opportunity to intercept trade outflow



*includes hospitals, offices of physicians, dentists, and home health care professionals

Annual Economic Output by Location

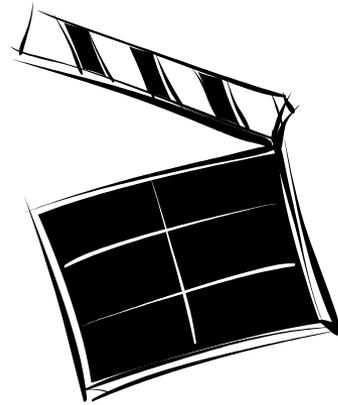
Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data.

Software & Media Production 2014 Impacts

Indirect Impacts Regional

3,442 jobs
\$254 M in GDP

Direct Impacts Clackamas County



6,150 jobs total
\$542 M in GDP total

Induced Impacts Regional

2,741 jobs
\$218 M in GDP

Total Impact on MSA: 12,332 jobs; \$1,014 M in GDP

Software & Media Production

- Includes publishers, motion picture and video industries, broadcasting, advertising, photography, arts/sports agents/promoters and independent artists and computer software.
- Record GDP contribution within this Cluster in 2014
- 2 firms in top 100 (Waggener Edstrom, Autodesk Inc.)
- Top 10 firms in sector account for about 62% of payroll in cluster

- AutoDesk Inc. (software, LO)
- Waggener Edstrom (marketing, LO)
- Thomson Reuters (Software, LO)
- Jeppesen Sanderson (Software, Wilsonville)
- Dark Horse Publishing, (Milwaukie)
- AEC, Inc. (publishing, Sandy)
- Hawksoft Inc (Software, Canby)
- Billups Inc. (Advertising, LO)
- Calypto Systems (Software, Wilsonville)
- Pacific Marketing & Publishing Inc. (Advertising, Milwaukie)

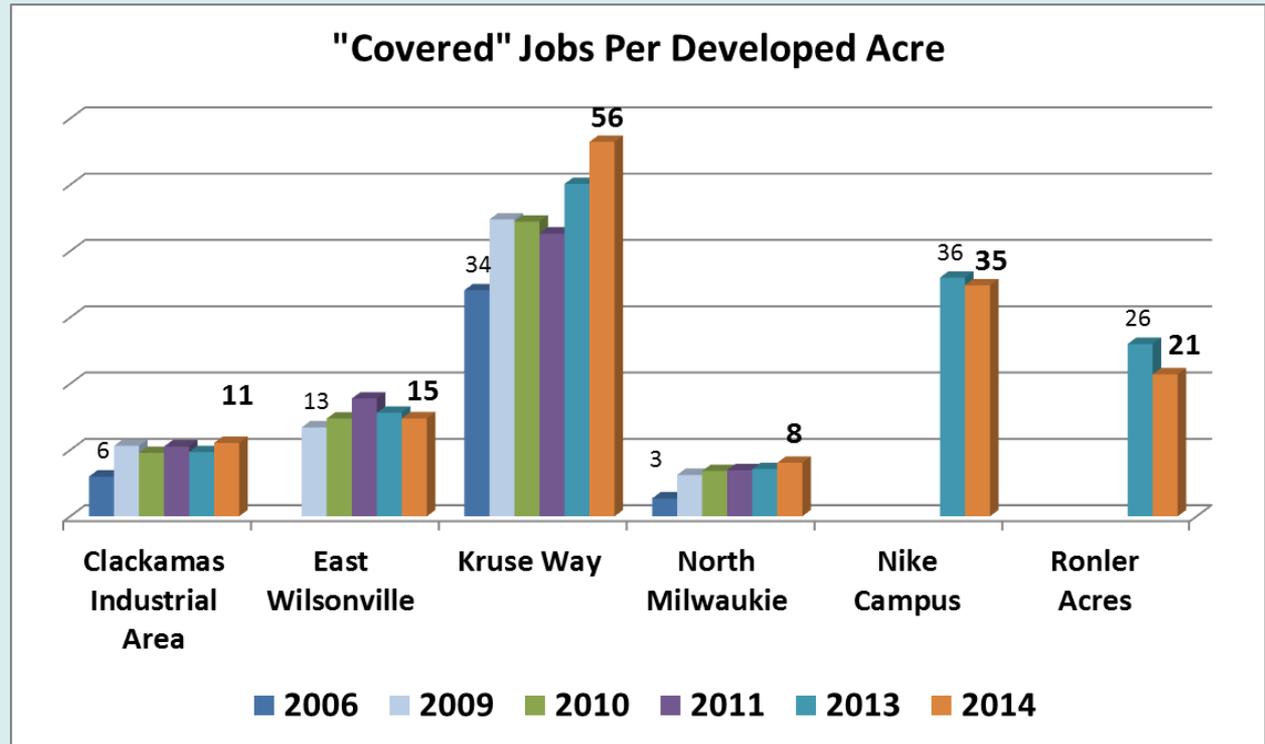


Annual Economic Output by Location

Employment Areas: Job metrics

(Jobs per Developed Acre)

- Jobs per acre increasing in Kruse Way with addition of new commercial center
- Little change in employment density noticed in other employment areas

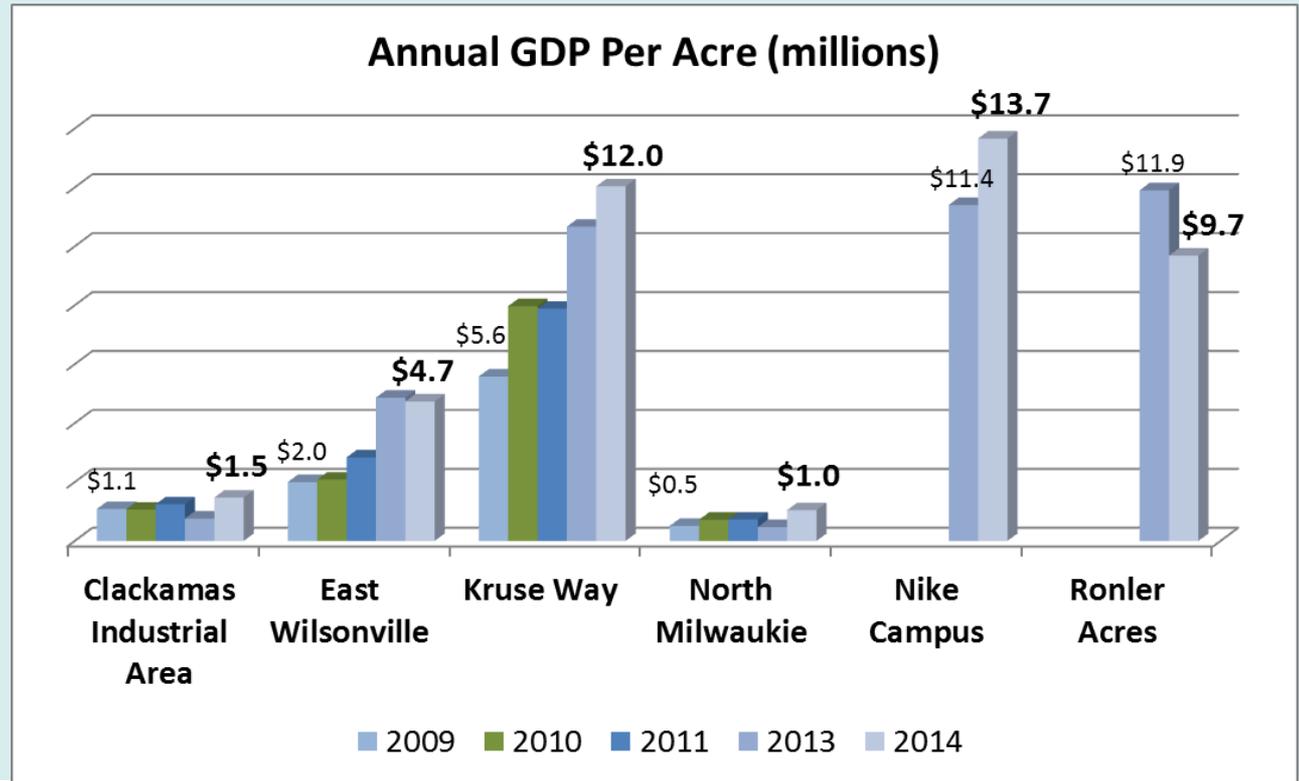


Source: FCS GROUP based on data from the Oregon Employment Department and Metro RLIS data.

Employment Areas: GDP metrics

(GDP in Millions per Acre)

- GDP per acre increased in East Wilsonville, Kruse Way, Clackamas Industrial Area, and Nike Campus; and fell in other areas, between 2011 and 2013.

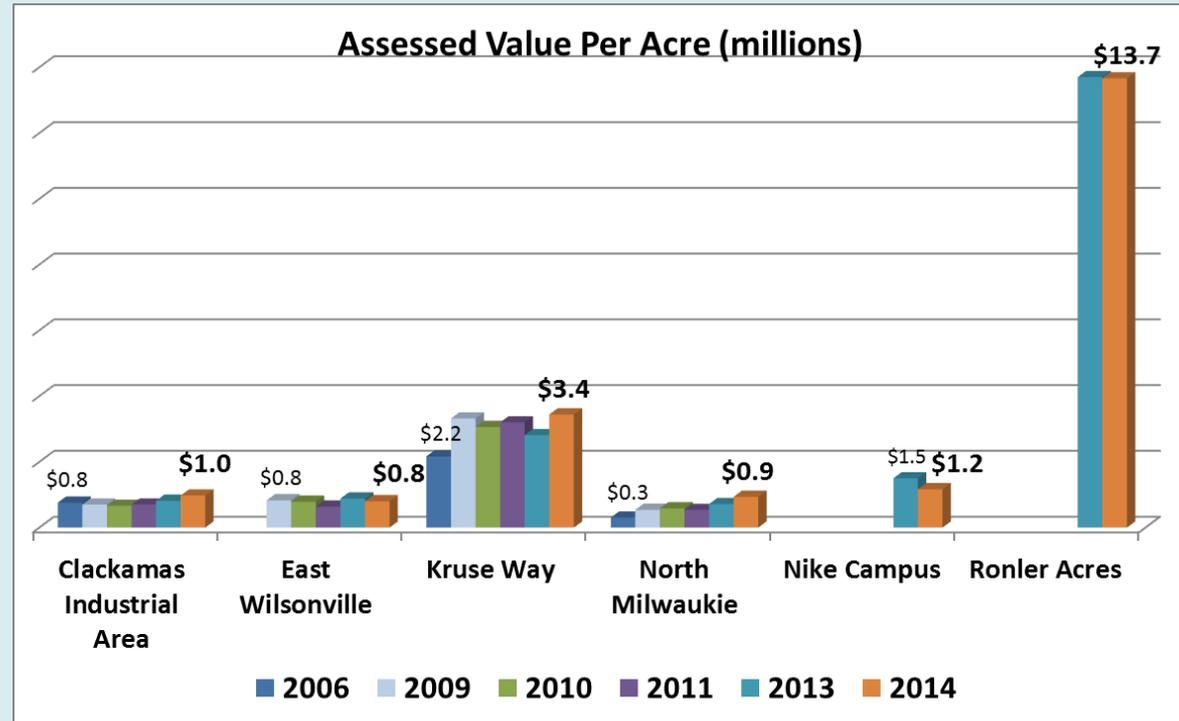


Source: FCS GROUP based on data from the Oregon Employment Department, IMPLAN and Metro's RLIS data.

Employment Areas: AV metrics

(Assessed Valuation in Millions per Developed Acre)

- AV per acre in Clackamas County still highest in Kruse Way
- Ronler Acres recorded highest AV per acre of the study areas
- Relatively low AV rates in North Milwaukie and Clackamas Ind. Area
- County still pursuing strategies to enhance employment in older industrial areas



Source: FCS GROUP based on data from Clackamas and Washington County Assessors

Portland Region

(9 counties)

\$167 Billion GDP; 470 IMPLAN sectors

Clackamas County

\$17.7 Billion GDP; 353 IMPLAN sectors

Key Clusters

\$10 Billion GDP; 11 clusters;
159 IMPLAN sectors

Key Traded Clusters

7 Clusters: Ag.; Food Processing; Metals; High Tech; Wholesale Trade; Nurseries; Wood Mfg.

103 IMPLAN sectors

Target Businesses

Criteria Filters

- LQ > 0.9
- Clusters make up at least 50% of "GDP" in County
- At least 1 firm in "Top 100" (with exception of Wood Product Mfg.)

- LQ > 1.0
- Inter-Regional Exports" account for 50%+ of trade in sector
- Foreign Exports >\$100,000 in sector

- Over 10 workers per firm
- Above National median wage
- Above avg. job growth in sector since 2009
- Plus "Top" employers*

*excludes retail, hotels, banks, congregate care and non-profits.

Process for Focusing on Targeted Industries in Clackamas County

2016 update

Strategies

1. Target fast growing gazelle firms that are locally owned Stage II businesses (10-100 workers) in key clusters that meet criteria
2. Devise retention strategies for large firms (500+ workers) and export growth strategies for Stage II businesses (firms with 10 to 100 workers).
3. Create “Jobs ready” employment sites needed in urban and rural areas
4. Monitor workforce training in line with changing business needs

For additional information please contact:

Clackamas County Business & Economic
Development Department

503-742-4329

