



Clackamas County Economic Landscape ***Emerging Trends Update***

2017 update

Prepared 6/9/2016

Clackamas County's Economic Contribution is Rising

Regional (9 county) GDP =

\$153 Billion per year (2015)

Down from \$167 B in 2014 and \$165 B in 2013

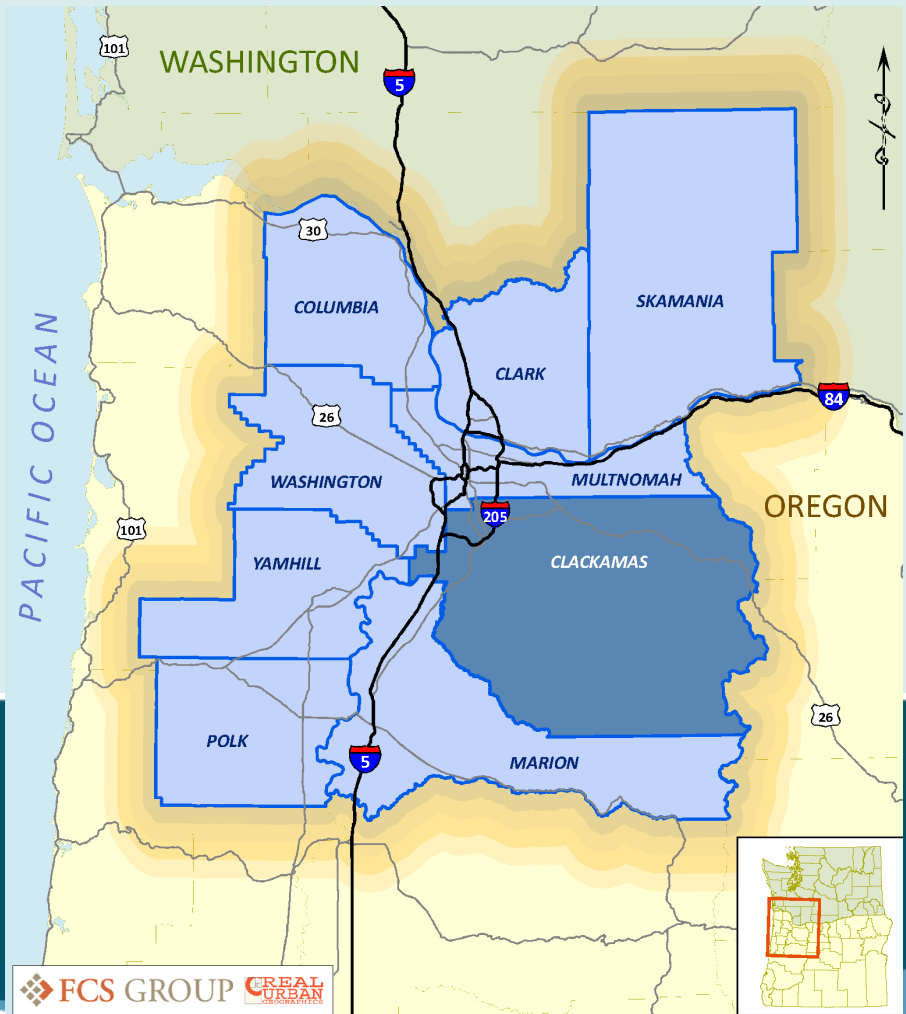
Clackamas County GDP =

\$18.8 Billion (2015)

Up from \$17.6 B in 2014 and
\$18.1 B in 2013

= 12% of Regional GDP

Source: IMPLAN models, adjusted to 2017 real dollars.



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

What Defines Key Cluster?

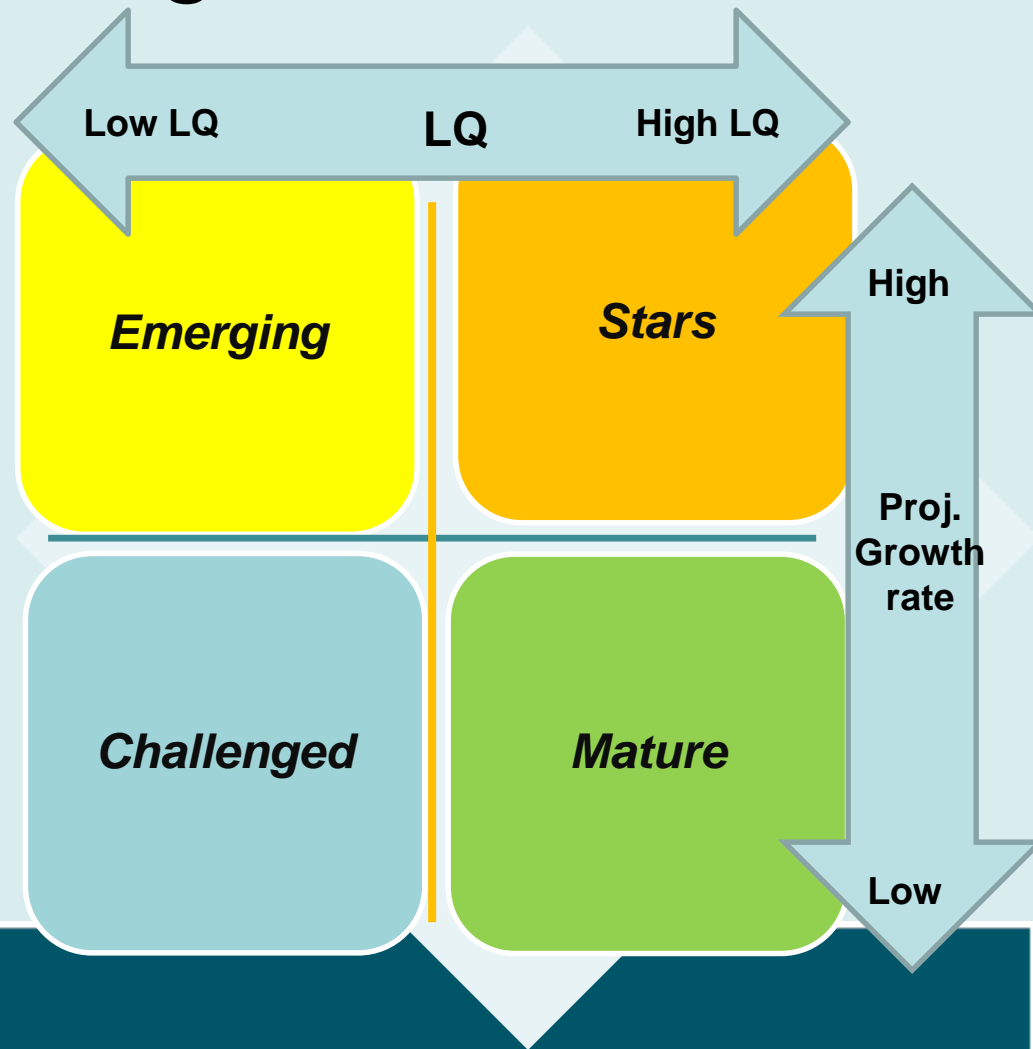
- Location Quotient (LQ) > 1 or approaching 1*
 - Greater presence within Clackamas County relative to the region
 - Concentration of similar businesses & supply chains
 - Increasing propensity to locate in Clackamas County
- Strong Economic Contribution
 - Key clusters account for about 50% of county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

** LQ determination was made during 2006*

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.

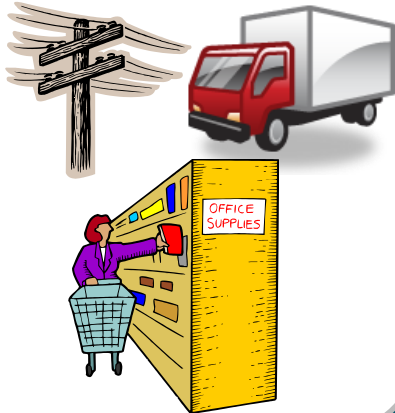


Understanding Impacts using IMPLAN

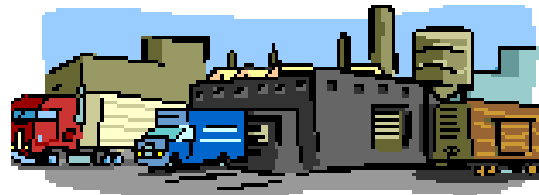
Indirect Impacts

(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)



Clackamas County Key Clusters*

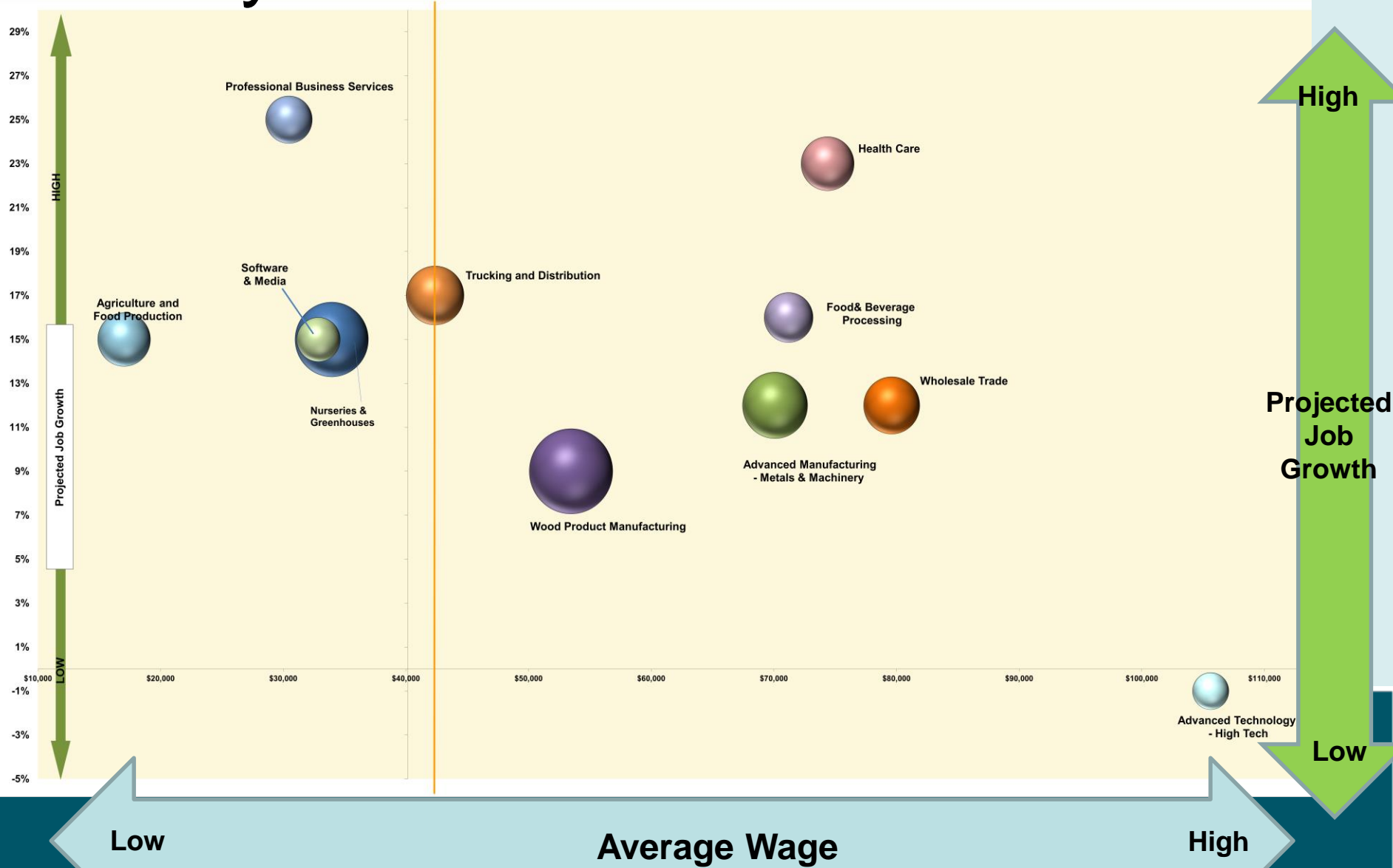
- Professional Business Services
 - *Corp. HQ, legal, insurance, engineering, finance (excl. banking, advertising)*
- High Tech Manufacturing
- Wholesale Trade
- Health Care
- Advanced Manufacturing – Metals & Machinery
 - *includes primary & fabricated metals and machinery mfg.*
- Software & Media Production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

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

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.

Key Cluster Characteristics

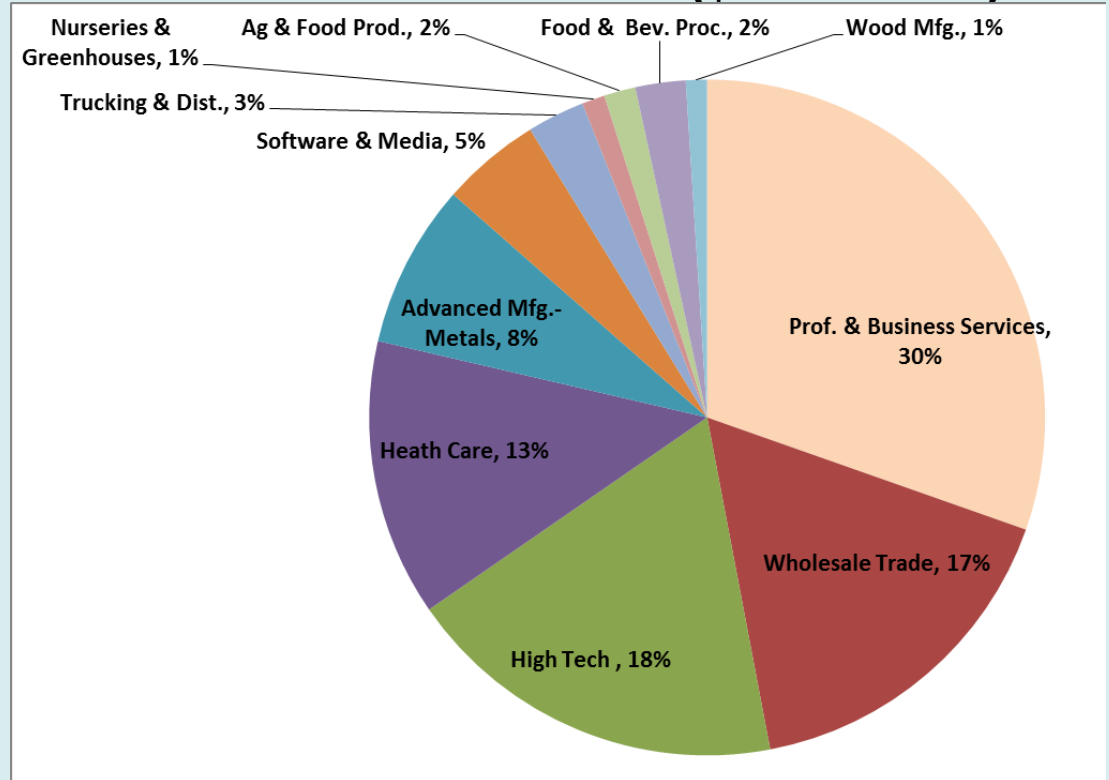


Key Cluster Characteristics



Clackamas County's Clusters

Distribution of Annual GDP (\$10.3 Billion)



Key Clusters in Clackamas County:

- ✓ Create \$10.3 billion in direct annual GDP
- ✓ Generates 55% of total direct GDP in County
- ✓ Employ 43% of the Job base
- ✓ Avg. covered payroll of \$51,251 in key clusters is 22.7% above county average

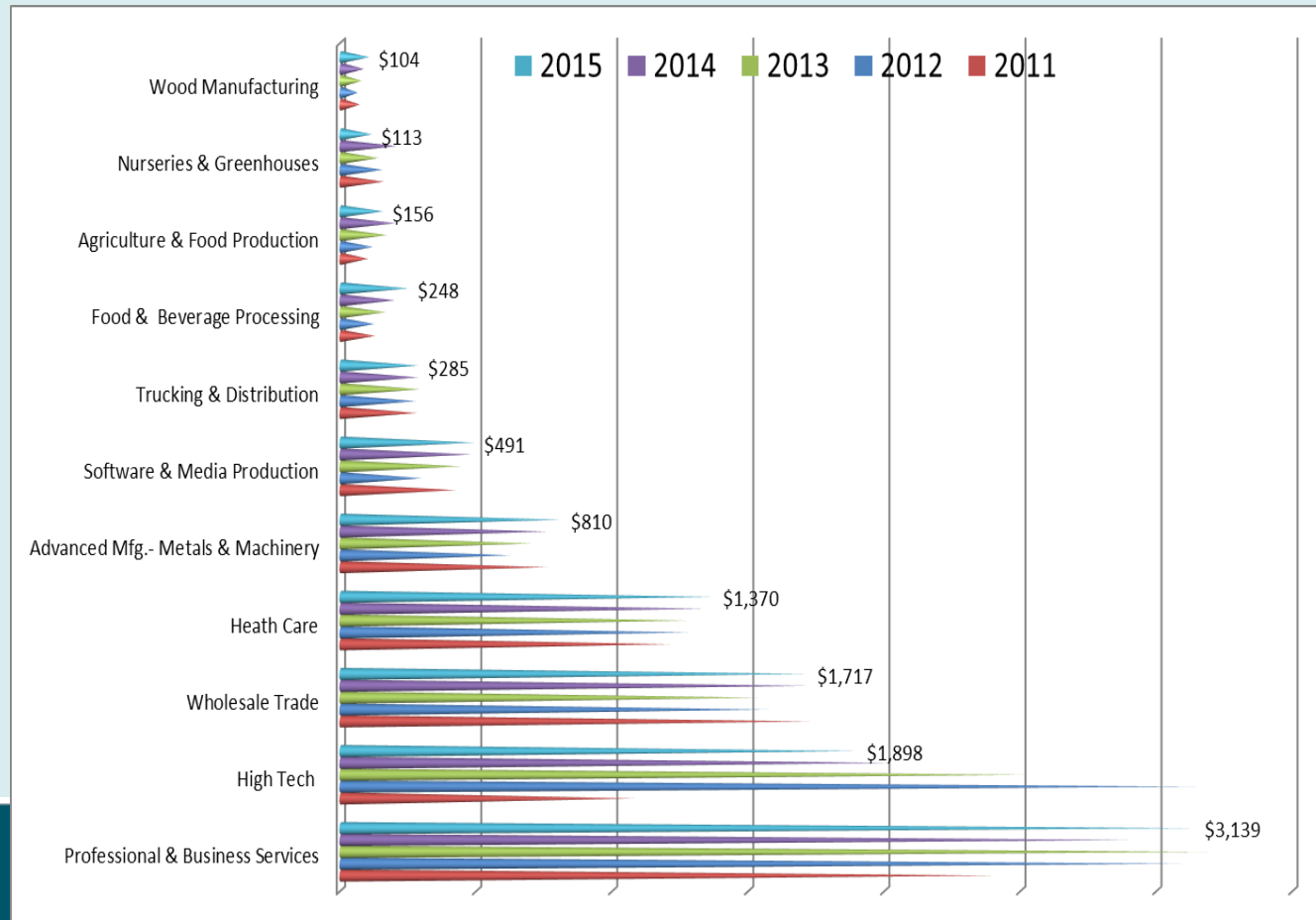
Source: FCS GROUP based on 2015 IMPLAN data, adjusted to 2017 dollar values.

Clackamas County Clusters:

Annual Direct GDP (millions)

Overall GDP increased between 2014 and 2015

Fastest GDP growth occurring in: Advanced Manufacturing: Metals & Machinery, Professional Business Services, Wood Manufacturing, and Food & Beverage Processing



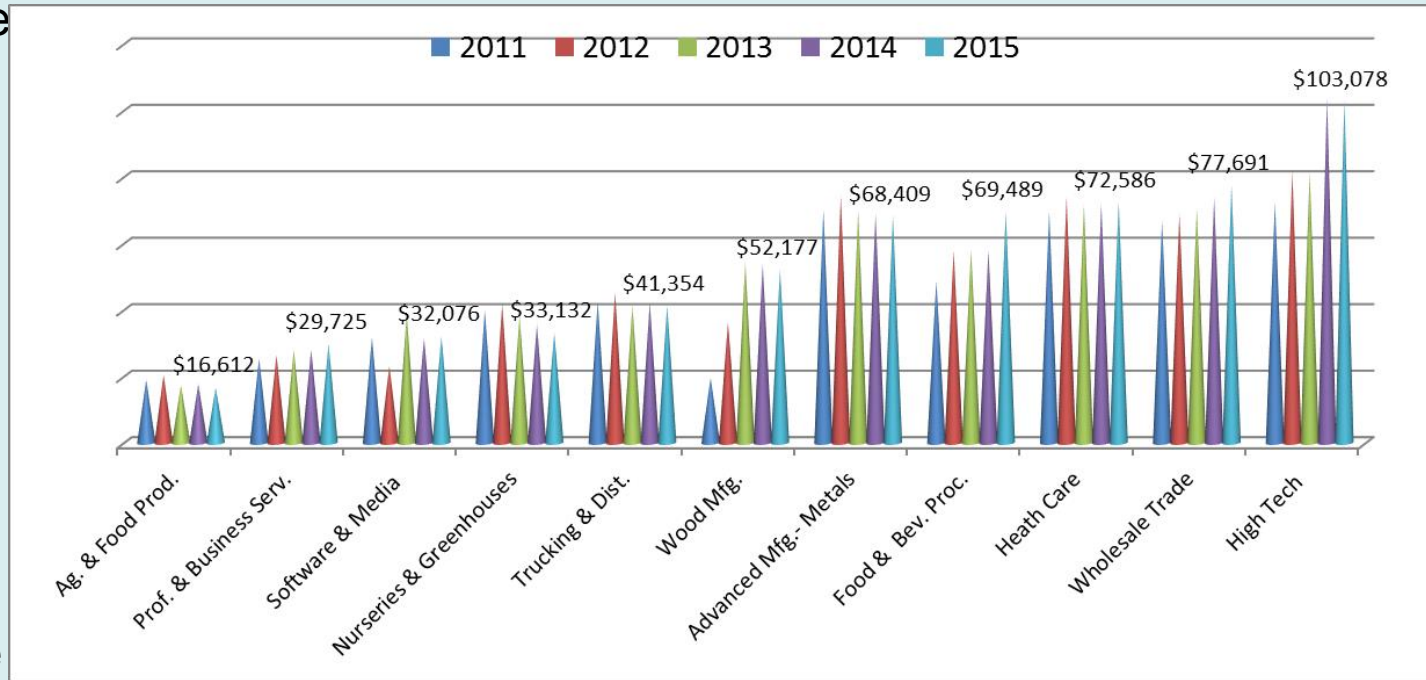
* Source: IMPLAN data, adjusted to 2017 dollars.

Clackamas County Clusters: Average Compensation Levels*

Avg. Emp. Compensation rose significantly between 2014 and 2015.

Avg. Comp. in Clackamas County was 21% below Regional avg.

Most key clusters pay above average compensation



* Source: IMPLAN data adjusted to 2017 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

2015 Impacts

Indirect Impacts Regional

7,683 jobs
\$714 M in GDP

Direct Impacts Clackamas County



11,996 jobs
\$1,717 M in GDP

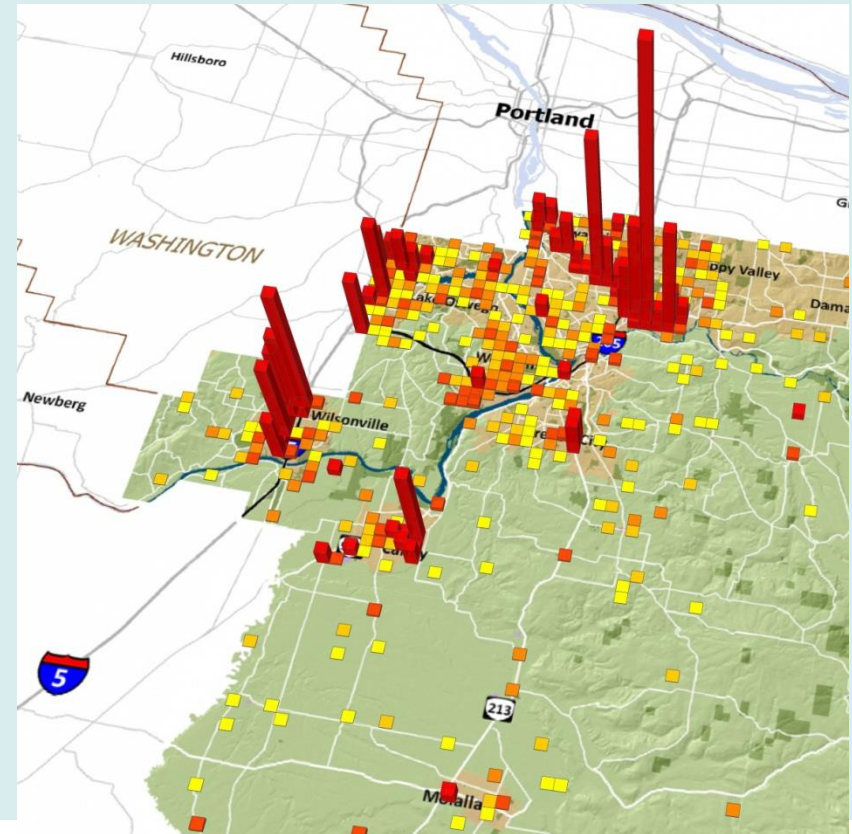
Induced Impacts Regional

10,043 jobs
\$803 M in GDP

Total Impact on Region: 29,722 jobs; \$3,234 M in GDP

Wholesale Trade*

- Essentially unchanged in 2015
- Avg. compensation: \$77,691
- Employment: 11,996
- Annual GDP: \$1.7 billion
- Slight decrease since 2014 (1.63 to 1.51) LQ steady and “mature”
- 12 firms in County Top 100 (Kroger, Sysco, Pacific Sea Food, Unified Grocers, 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 Manufacturing

2015 Impacts

Indirect Impacts Regional

4,827 jobs
\$480 M in GDP

Direct Impacts Clackamas County



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

7,179 jobs
\$1,898 M in GDP

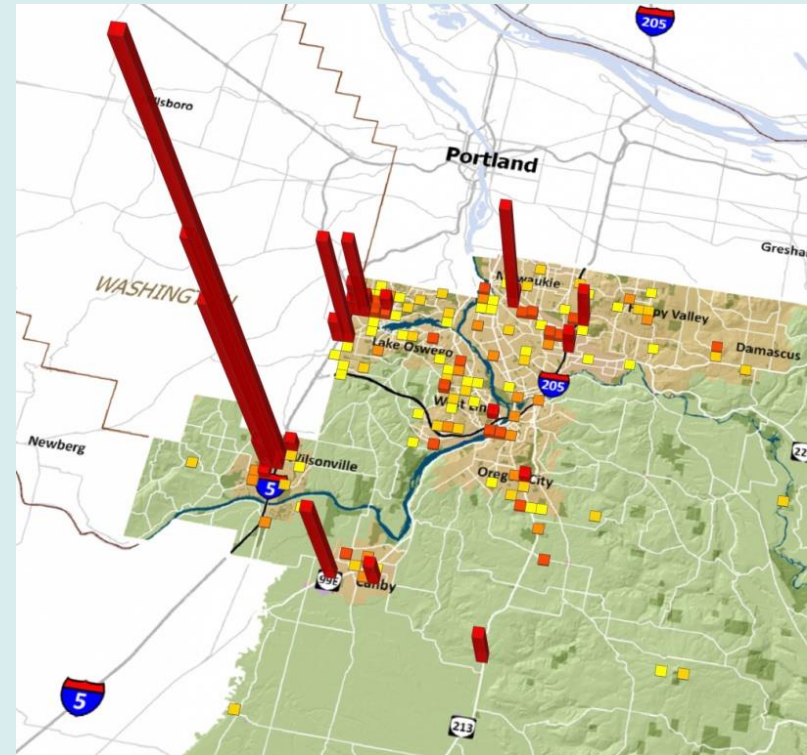
Induced Impacts Regional

7,106 jobs
\$568 M in GDP

Total Impact on Region: 19,112 jobs; \$2,946 M in GDP

High Tech Manufacturing*

- Slight rebound in high tech employment with GDP continuing to slide between 2014 and 2015
- Avg. compensation: \$103,078
- Employment: 7,179
- Annual GDP: \$1.9 billion
- LQ rebounding slightly (0.63 from 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

2015 Impacts

Indirect Impacts Regional

4,902 jobs
\$480 M in GDP

Direct Impacts Clackamas County



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

7,691 jobs
\$810 M in GDP

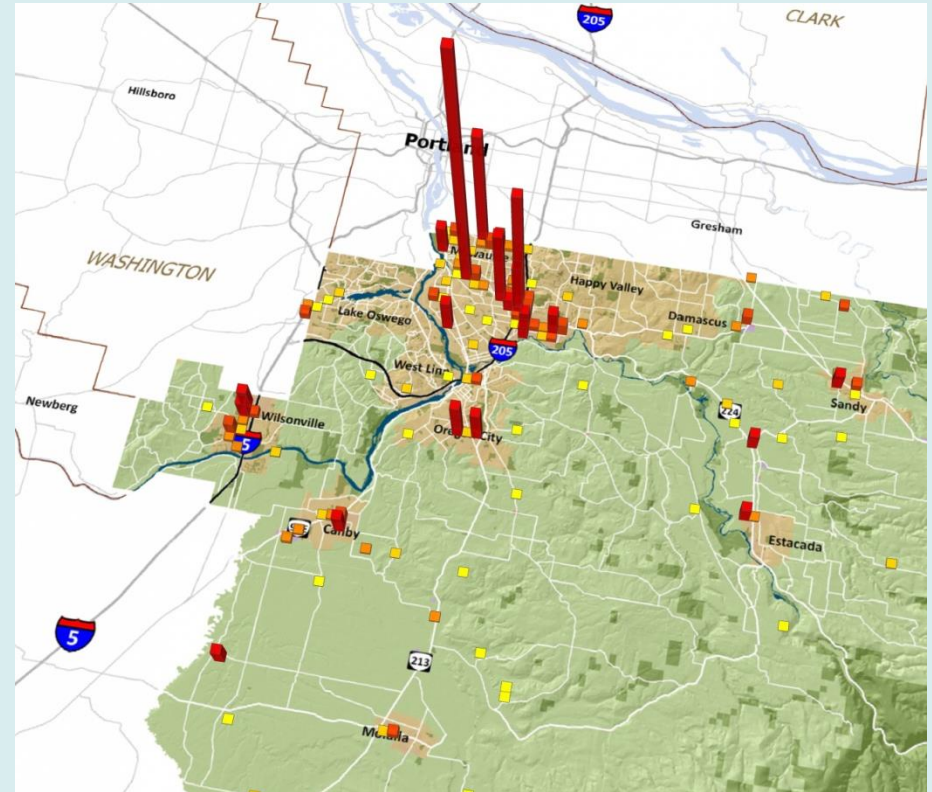
Induced Impacts Regional

5,881 jobs
\$470 M in GDP

Total Impact on Region: 18,474 jobs; \$1,760 M in GDP

Advanced Mfg. – Metals & Machinery*

- Continued growth in jobs and GDP
- Avg. compensation: \$68,409
- Employment: 7,691
- Annual GDP: \$810 million
- LQ still very high
- 5 firms in County Top 100 (PCC, Oregon Iron Works, Benchmark, Blount Intl., Vigor Works)
- 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

2015 Impacts

**Indirect
Impacts
Regional**

**17,182 jobs
\$1,473 M in GDP**

**Direct Impacts
Clackamas County**



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

**37,401 jobs
\$3,139 M in GDP**

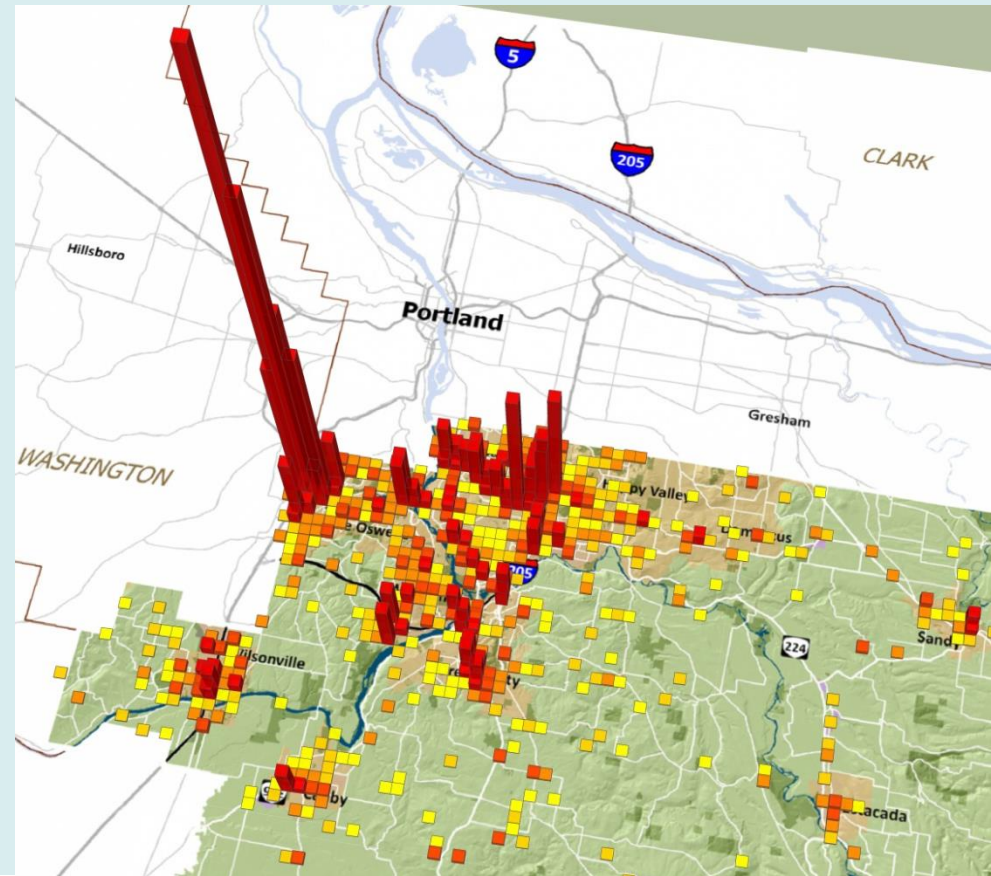
**Induced
Impacts
Regional**

**16,936 jobs
\$1,354 M in GDP**

Total Impact on Region: 71,519 jobs; \$5,966 M in GDP

Professional Business Services*

- Continued, steady job growth continues
- Avg. compensation: \$29,725
- Employment: 37,401
- Annual GDP: \$3.1 billion
- LQ decreased (1.09 to 1.04) but still healthy
- 3 firms in County Top 100 (Huron Consulting, Princeton Property Mgmt., Moda Health)



* 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

2015 Impacts

Indirect Impacts Regional

354 jobs
\$23 M in GDP

Direct Impacts Clackamas County



2,190 jobs
\$113 M in GDP

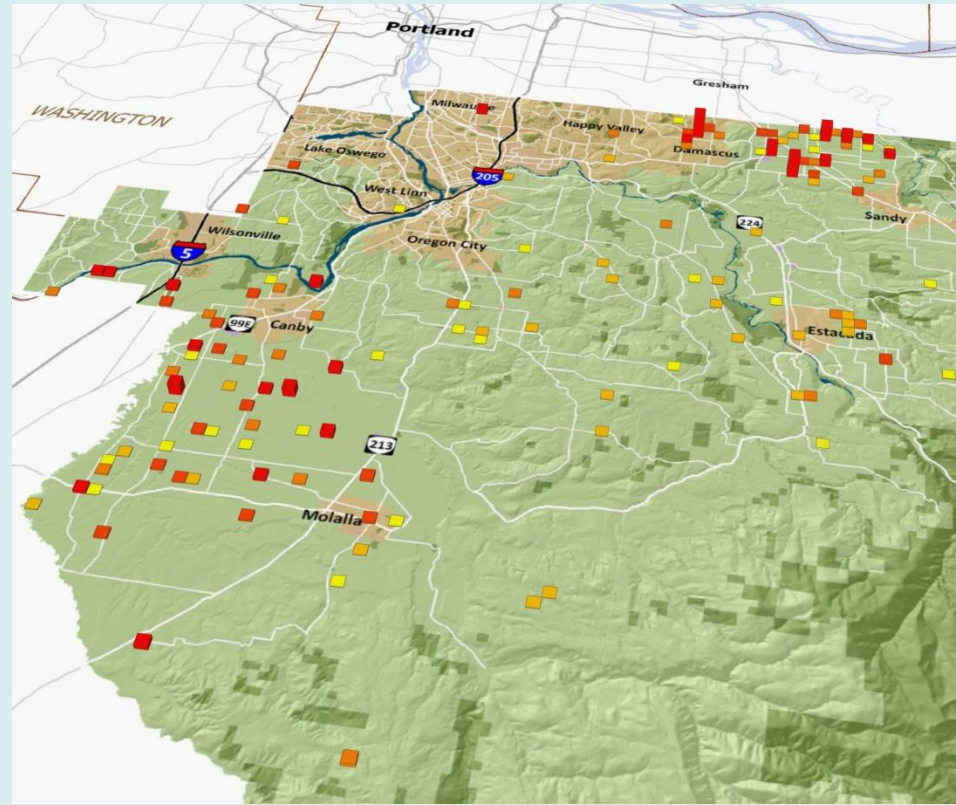
Induced Impacts Regional

757 jobs
\$60 M in GDP

Total Impact on Region: 3,301 jobs; \$196 M in GDP

Nurseries and Greenhouses

- Very hard hit by recession and continuing to decline
- Avg. compensation: \$33,132
- Employment: 2,190
- Annual GDP: \$113 million
- Slight LQ decrease (2.56 from 2.75) between 2014 and 2015
- 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

2015 Impacts

Indirect Impacts Regional

2,132 jobs
\$191 M in GDP

Direct Impacts Clackamas County



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

4,314 jobs
\$285 M in GDP

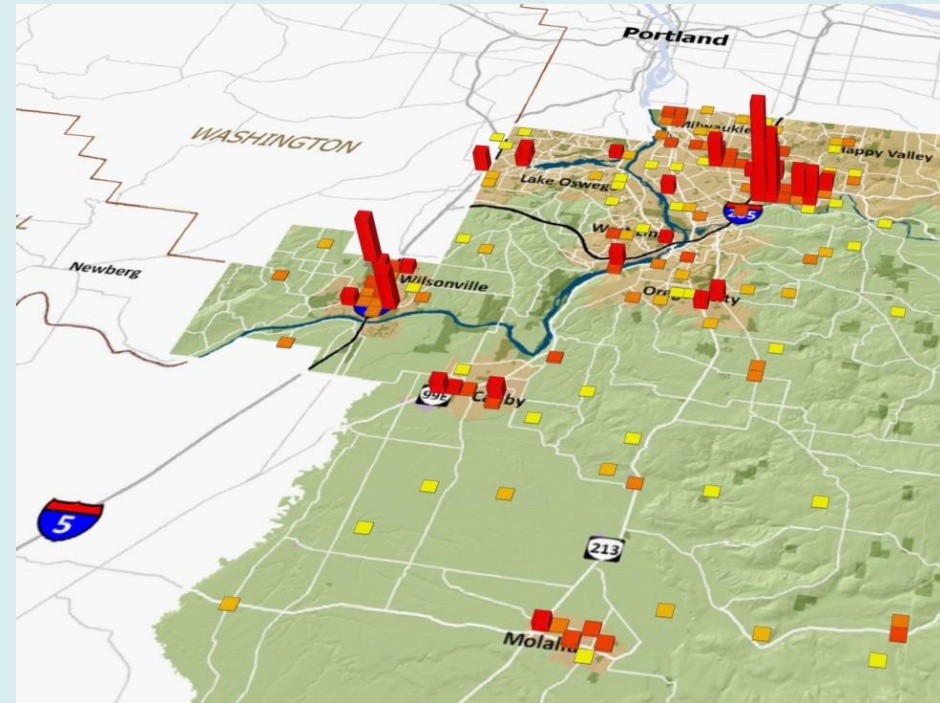
Induced Impacts Regional

2,437 jobs
\$195 M in GDP

Total Impact on Region: 8,883 jobs; \$671 M in GDP

Trucking & Distribution*

- Retained significant gains from recent years
- Avg. compensation: \$41,354
Employment: 4,314
- Annual GDP : \$285 million
- LQ decreased slightly, (1.59 in 2015 from 1.69 in 2014) “mature”
- 6 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

2015 Impacts

**Indirect
Impacts
Regional**

**4,047 jobs
\$363 M in GDP**

Direct Impacts
Clackamas County



**2,397 jobs
\$248 M in GDP**

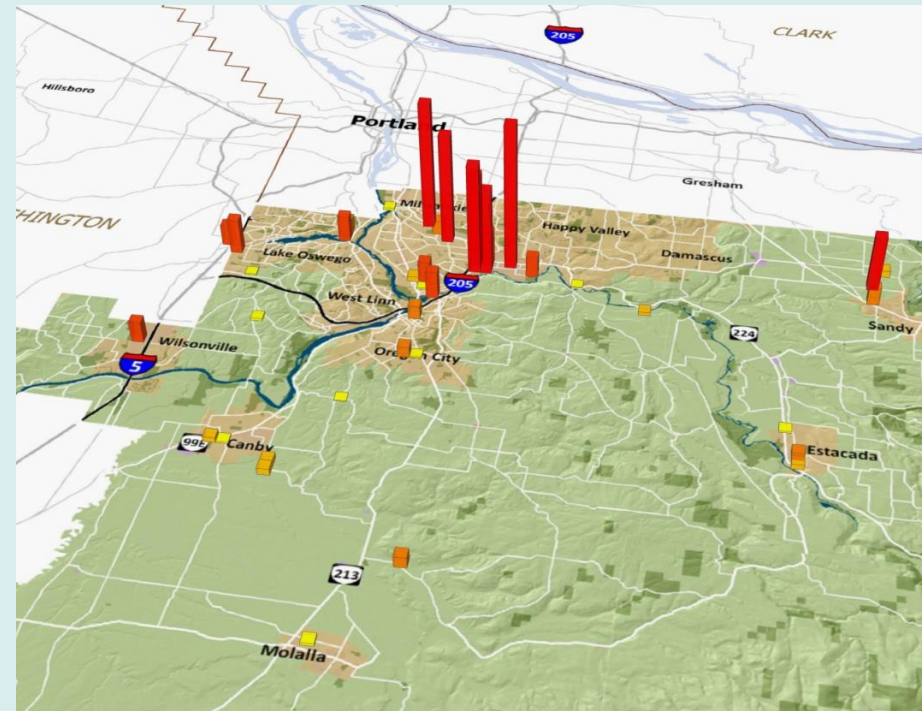
**Induced
Impacts
Regional**

**2,604 jobs
\$208 M in GDP**

Total Impact on Region: 9,048 jobs; \$819 M in GDP

Food & Beverage Processing*

- Strong growth in this sector in 2015 for Clackamas County
- Avg. compensation: \$69,489
- Employment: 2,397
- Annual GDP: \$248 million
- Significant LQ growth (from 1 to 1.14) brings industry out of “challenged” status
- 3 firms in County Top 100 (Bob’s Red Mill Natural Foods, Dave’s Killer Bread, 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

2015 Impacts

**Indirect
Impacts**
Regional

727 jobs
\$62 M in GDP

Direct Impacts
Clackamas County



4,797 jobs
\$156 M in GDP

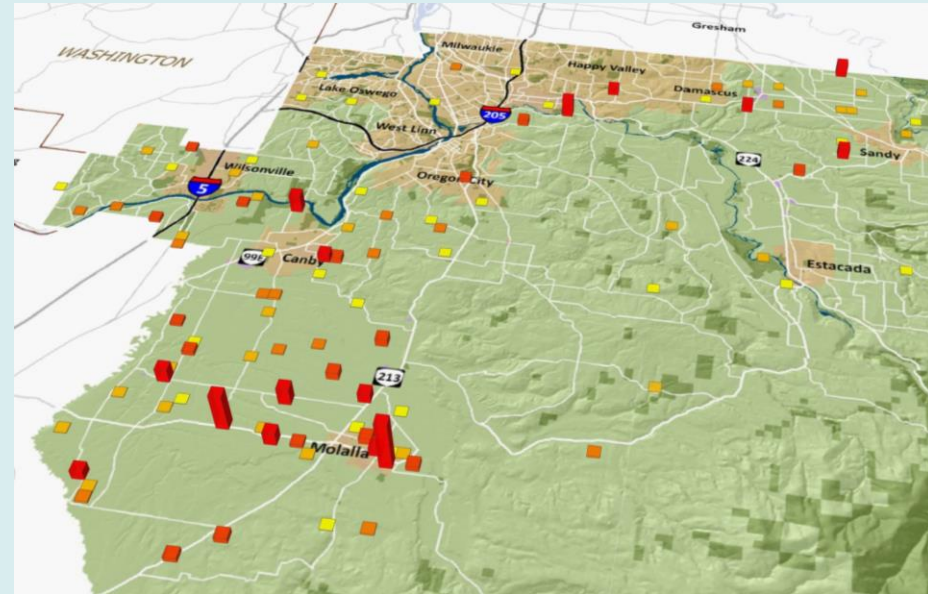
**Induced
Impacts**
Regional

1,003 jobs
\$80 M in GDP

Total Impact on Region: 6,527 jobs; \$298 M in GDP

Agriculture and Food Production*

- 2015 represented a setback for jobs and GDP in this Cluster
- Employment: 4,797
- Average Compensation: \$16,612
- GDP: \$156 million
- LQ took a step back (1.33 from 1.56 between 2014 and 2015)
- Major concentrations in rural areas. Important rural and urban interface
- 1 firms in County Top 100 (Ezequiel Labor Contractor)



Annual Economic Output by Location

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

Wood Product Manufacturing

2015 Impacts

Indirect Impacts Regional

1,026 jobs
\$98 M in GDP

Direct Impacts Clackamas County



890 jobs
\$104 M in GDP

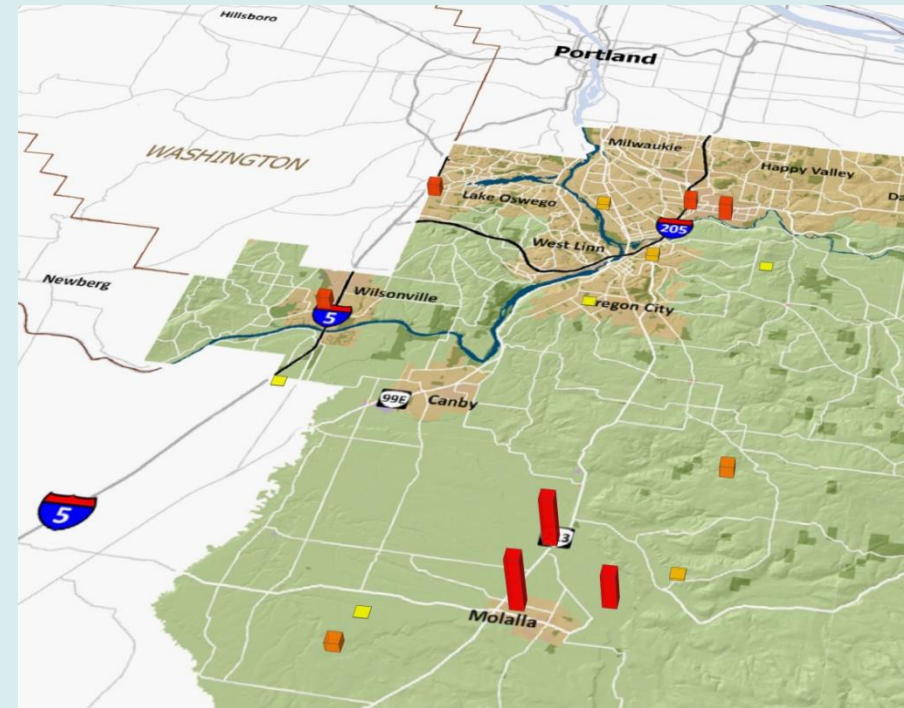
Induced Impacts Regional

923 jobs
\$74 M in GDP

Total Impact on MSA: 2,867 jobs; \$276 M in GDP

Wood Product Manufacturing*

- Cluster still well below peak employment but steadily improving with rising construction spending
- Avg. compensation: \$52,177
- Employment: 890
- Annual GDP: \$104 million
- Mature industry with surging LQ (1.9 to 3.3 between 2014 and 2015)
- 1 firm in County Top 100 (Brentwood Corp.)
- Measurable benefits in rural areas



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, 2015 Impacts

**Indirect
Impacts
MSA**

**4,595 jobs
\$433 M in GDP**

Direct Impacts
Clackamas County



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

**14,351 jobs
\$1,370 M in GDP**

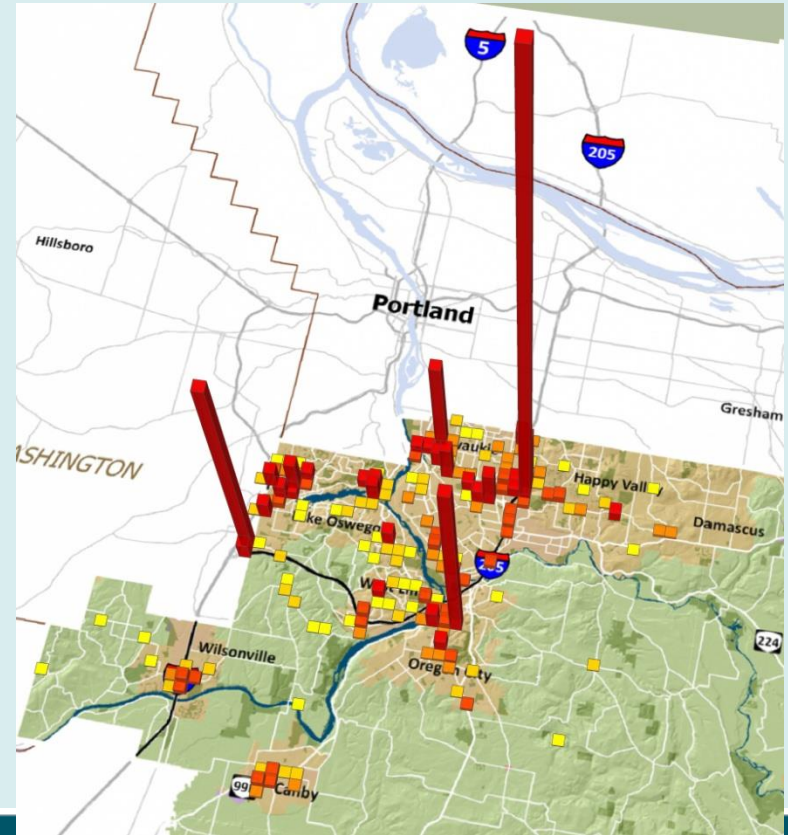
**Induced
Impacts
MSA**

**9,619 jobs
\$769 M in GDP**

Total Impact on Region: 28,565 jobs; \$2,572 M in GDP

Health Care*

- 2015 was another record setting year for health care jobs in Clackamas County
- Avg. compensation: \$72,586
- Employment: 14,351
- Annual GDP: \$1.4 billion
- LQ remains at 1.34
- 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.

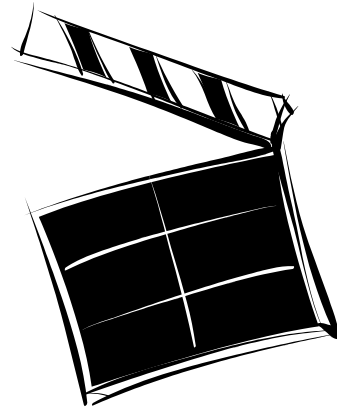
Software & Media Production

2015 Impacts

Indirect Impacts Regional

3,249 jobs
\$249 M in GDP

Direct Impacts Clackamas County



6,171 jobs total
\$491 M in GDP total

Induced Impacts Regional

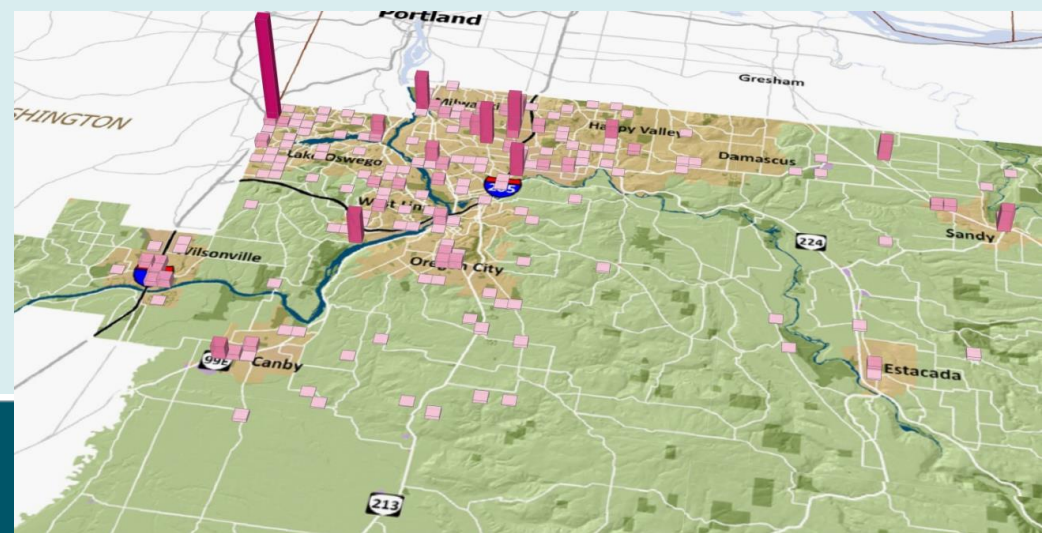
2,906 jobs
\$232 M in GDP

Total Impact on MSA: 12,326 jobs; \$972 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 2015: \$491 million
- 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)
- Dark Horse Publishing, (Milwaukie)
- Oregon Publication Corporation (Publisher, Milwaukie)
- AEC, Inc. (publishing, Sandy)
- Classic Exhibits (Marketing, Milwaukie)
- Pacific Marketing & Publishing Inc. (Advertising, Milwaukie)
- Hawksoft Inc (Software, Canby)

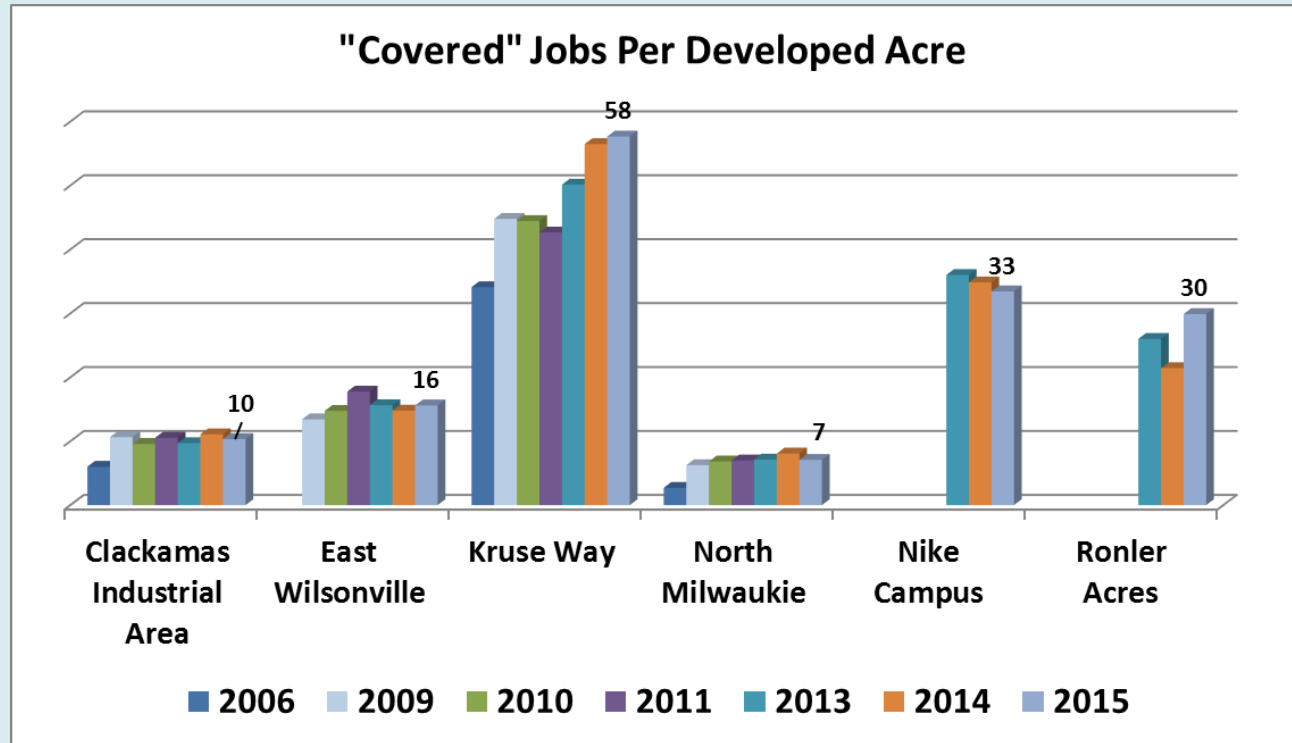


Annual Economic Output by Location

Employment Areas: Job metrics

(Jobs per Developed Acre)

- Jobs per acre increased during 2015 in Kruse Way with addition of new Kruse Village commercial center
- Little change in employment density noticed in other employment areas

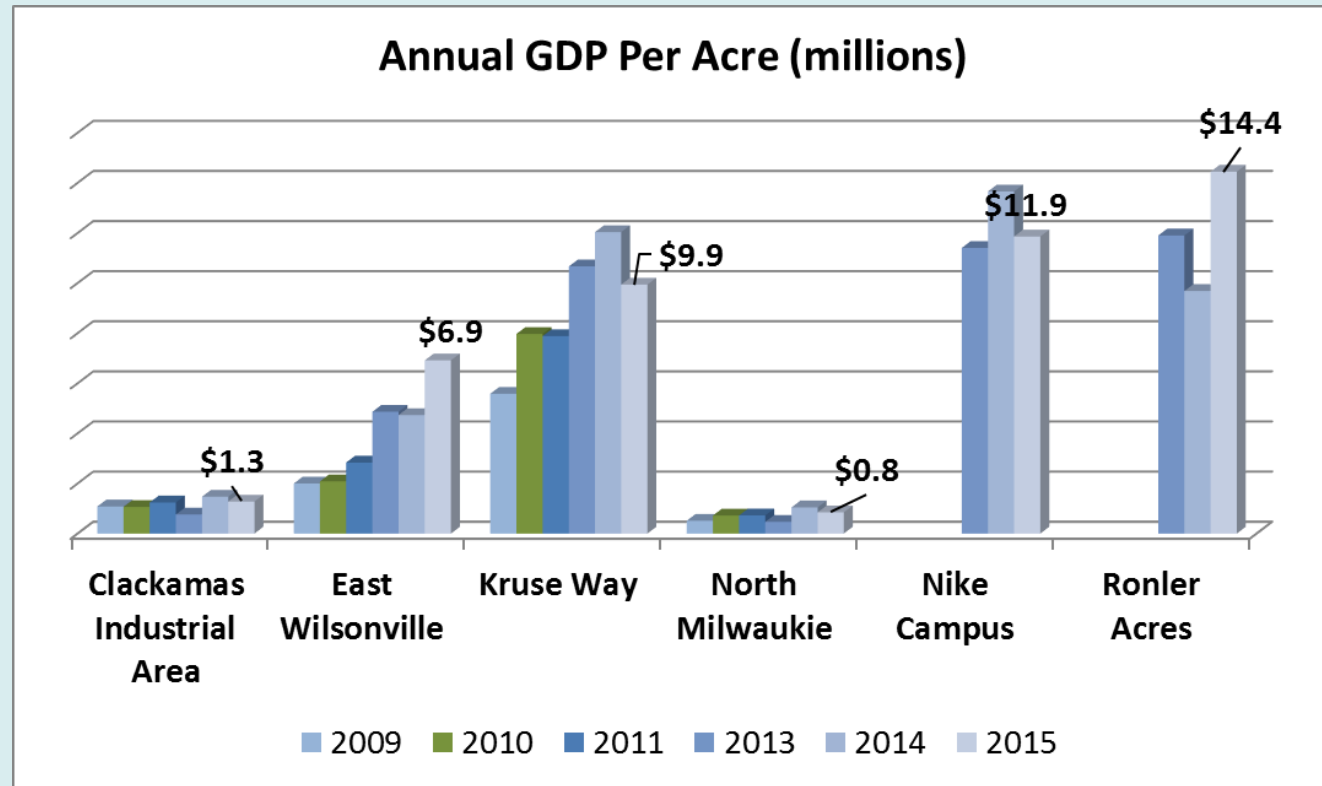


Source: FCS GROUP based on data from the Oregon Employment Department and Metro RLIS data.

Employment Areas: GDP metrics

(GDP in Millions per Acre)

- GDP per developed acre increased in East Wilsonville and Ronler Acres between 2014 and 2015
- GDP/acre declined in other study areas

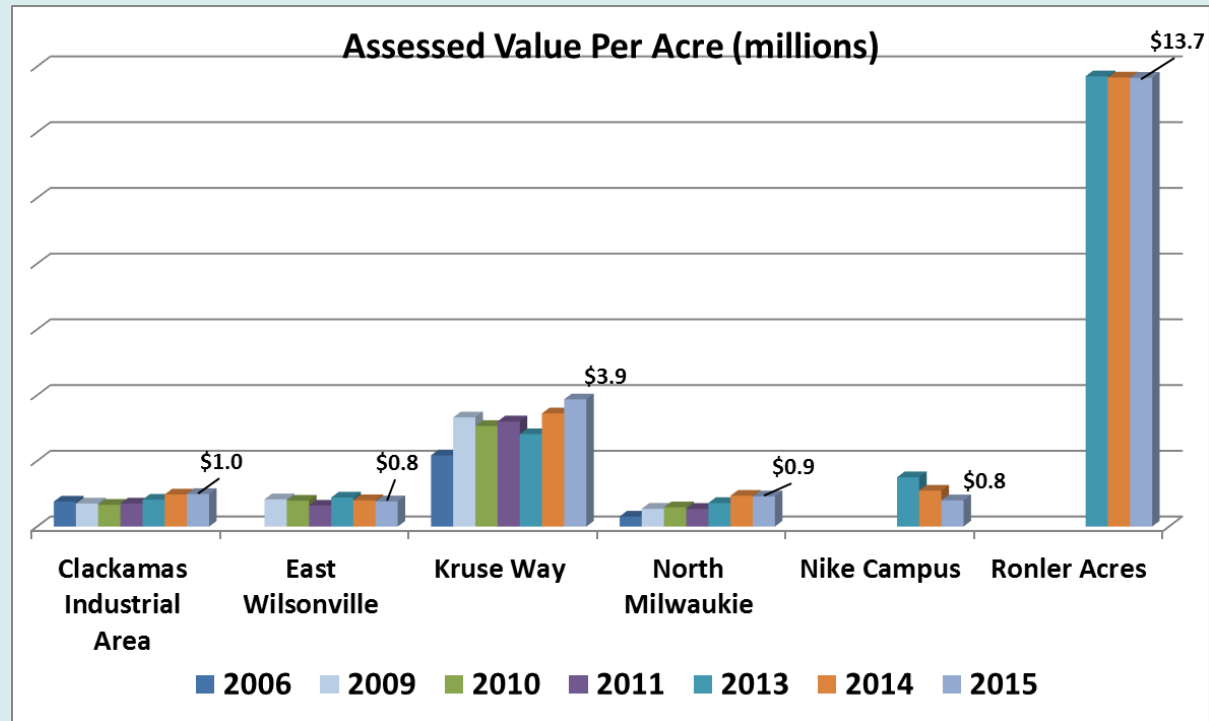


Source: FCS GROUP based on data from the Oregon Employment Department, IMPLAN and Metro's RLIS data.

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)

\$153 Billion GDP; 473 IMPLAN sectors

Clackamas County

\$18.8 Billion GDP; 356 IMPLAN sectors

Key Clusters

\$10.5 Billion GDP; 11 clusters;
178 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

- Clusters make up at least 50% of "GDP" in County
- At least 1 firm in "Top 100"

- "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, government and non-profits.

Process for Focusing on Targeted Industries in Clackamas County
2017 update

Strategies

1. Target outreach on fast growing “gazelle” businesses 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 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

