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** = IMPact for PLANning (economic input/output model)
- **IMPLAN Sectors**: up to 536 detailed industry or commodity types (i.e., sector #6, Greenhouse, Nursery & Floriculture Production)
- **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.
Direct Impacts

Direct spending by employers

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

Indirect Impacts

(backward linkages)

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

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

- High Projected Job Growth
- Low Average Wage

Clusters:
- Agriculture and Food Production
- Health Care
- Professional Business Services
- Trucking and Distribution
- Food & Beverage Processing
- Wholesale Trade
- Advanced Manufacturing - Metals & Machinery
- Wood Product Manufacturing
- Advanced Technology - High Tech
- Nurseries & Greenhouses

FCS Group
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

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
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. 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.)

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

Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data.
High Tech, 2014 Impacts

Indirect Impacts
Regional

6,037 jobs
$640 M in GDP

Direct Impacts
Clackamas County

7,084 jobs
$2,059 M in GDP

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

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.

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

Annual Economic Output by Location

Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data
Advanced Mfg. – Metals & Machinery
2014 Impacts

Direct Impacts
Clackamas County
(production cost, direct employee compensation, tax & fee payments)
7,583 jobs
$776 M in GDP

Indirect Impacts
Regional
4,541 jobs
$445 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 Structural, Oregon Iron Works, Benchmade, Blount Intl.
- Growth areas: cutlery, handtools, metal tanks and specialty coatings

* Includes primary metals, fabricated metals, machinery manufacturing.

Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data
Professional Business Services
2014 Impacts

Direct Impacts
Clackamas County

- 36,927 jobs
- $4,032 M in GDP

Indirect Impacts
Regional

- 19,148 jobs
- $1,601 M in GDP

Induced Impacts
Regional

- 16,885 jobs
- $1,343 M in GDP

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

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.)

* Includes trucking, warehousing and storage businesses

Annual Economic Output by Location

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

* Includes food processing and beverage manufacturing businesses.

Annual Economic Output by Location

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)

*Includes agriculture and animal production for food and medicinal purpose, and support activities.
Wood Product Manufacturing
2014 Impacts

Direct Impacts
Clackamas County

Indirect Impacts
Regional

823 jobs
$84 M in GDP

Induced Impacts
Regional

728 jobs
$59 M in GDP

851 jobs
$79 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

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

Source: FCS GROUP & Real Urban Geographics based on IMPLAN and Oregon Employment Dept. data.
### Health Care, 2014 Impacts

<table>
<thead>
<tr>
<th>Category</th>
<th>MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Impacts</strong></td>
<td><strong>Clackamas County</strong></td>
</tr>
<tr>
<td></td>
<td>(production cost, direct employee compensation, tax &amp; fee payments)</td>
</tr>
<tr>
<td><strong>Indirect Impacts</strong></td>
<td>4,391 jobs $406 M in GDP</td>
</tr>
<tr>
<td><strong>Induced Impacts</strong></td>
<td>8,479 jobs $674 M in GDP</td>
</tr>
</tbody>
</table>

**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

Direct Impacts
Clackamas County

Indirect Impacts
Regional

6,150 jobs total
$542 M in GDP total

Induced Impacts
Regional

3,442 jobs
$254 M in GDP

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)
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.
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