Portland Economic Value Atlas
Market Scan

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Economic Value Atlas: Objective

Promoting equitable opportunity for people and businesses while continuing to design and build “great places”
Core Challenges

Formal disconnect between local economic ambitions and regional infrastructure planning

Lack of formal evaluation criteria for cross-sectoral infrastructure investments
1. Economic Development, Evolved
2. Market Scan
3. Moving Forward
Traditional Approaches Disrupted

Relocations Are Rare

- 3% of US state-level job creation from external firm relocations (1995-2013)
  
  **Source:** Center on Budget and Policy Priorities

M&A Increasingly Common

- 87% Mergers and acquisitions FDI Capital Inflows (1992-2008)
  
  **Source:** BEA

Major Projects In Decline

- 50% Expansions and relocations of 50+ jobs or $1M+ investment (2000-12)
  
  **Source:** Conway Data

Middle Market Opportunity

- 1% of firms created grew from 10 to 30 employees on average (2009-2014)

  **Source:** Gary Kunkle analysis of NETS data
New Pressure: Inclusive Growth

The economy is experiencing increasing job polarization and a declining middle class

Change in employment by occupation, 1980-2010
OCCUPATIONS RANKED BY MEAN WAGE

U.S. average pre-tax income, 2014 dollars

Source: Mandelman and Zlate

Source: Piketty, Saez and Gucman
Manufacturing and Productivity
Productivity gains from automation are driving job losses, but most firms are lagging in productivity

Manufacturing Output and Employment
1980-2015 (1980=100)

- Output
- Employment

5 jobs/$M output

25 jobs/$M output


Firm Level Productivity
Manufacturing, 2000-2015

- Top 100 firms
- Rest of firms

Source: OECD

Source: Brookings
Global activity: Exports

- **27%** Share of GDP Growth (2009-2014)
- **2%** Share of US exporters
- **67%** Share of US export value

Source: Brookings, Census
Global activity: Foreign Direct Investment

- 87% FDI capital inflows from M&A (1992-2008)
- 35 vs 53 average Middle Market employees in FDI firms at time of entry (Greenfield vs M&A)
- 2x jobs created from expansions as from new establishments

Source: Brookings, Census
Startups and Scale-ups

Startup rates are in a multi-decade decline and fewer startups are able to scale


- Firm Entry
- Firm Exit

Share of Startups Growing to 50 Jobs in 1 Year

1.6% 1989
1% 2012
38% decline

“If American entrepreneurship is facing a crisis, it is not in the rate of creation of high-growth startups or the initial funding of those firms, but in the potential of those firms to scale in a meaningful way over time.”

Source: Guzman and Stern

Source: Hathaway and Litan
The Response
Economic development is shifting and broadening its approach

Changes In Economic Development Practice

Scale-up and middle market emphasis
Know your firms
Truly unique specializations
Economic development is shifting and broadening its approach.

**The Response**

Extending Beyond Traditional Practice

- **Inclusive growth**
- **Workforce & talent**
- **Infrastructure**
Spatial Mismatch
The intersection of workforce, infrastructure, and inclusion

- Regional incentives for developments in low unemployment areas that are inaccessible to high unemployment areas

- Example: $1 million in TIF funding for Amazon warehouse 25 miles from Minneapolis (2 hours one way via transit)
An effective Economic Value Atlas...

Regional Objectives

Quantifiable Criteria

Infrastructure
1. Economic Development, Evolved
2. Market Scan
3. Moving Forward
People

Businesses

Places

Networks
Businesses
Portland Is Achieving Competitive Economic Growth ...
... and Led by Focus Clusters and Other Tradable Industries

Gross Regional Product

- **Gross Regional Product (GRP)**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Earnings</th>
<th>Property Income</th>
<th>Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CleanTech + Green Cities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer + Electronics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Sciences + Technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metals + Machinery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software + Media</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sporting Equipment + Apparel + Design</td>
<td></td>
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</tbody>
</table>

**Share of All Tradable Industry GRP:** 45%
Portland Businesses: Growing Older + Outward-Facing

- Employment at Young Firms: -7.5% (2005 - 2015)
- Direct Export-Supported Jobs: 77,790 (2015)
- FDI Share of MSA Employment: 4.8% (2011)
Jobs Cluster, But the Region is Expansive
Portland’s Job Growth Is Closer to the Pack
Focus Clusters’ Employment Is Diverse + Healthy

Establishments

- CleanTech + Green Cities
- Computer + Electronics
- Health Sciences + Technology
- Metals + Machinery
- Software + Media
- Sporting Equipment + Apparel + Design

Competitive Effect

- 45%
- 40%
- 35%
- 30%
- 25%
- 20%
- 15%
- 10%
- 5%
- 0%

Establishments: Blue
Competitive Effect: Orange
Focus Clusters’ Jobs Are Extremely Productive

- CleanTech + Green Cities
- Computer + Electronics
- Health Sciences + Technology
- Metal + Machinery
- Software + Media
- Sporting Equipment + Apparel + Design
- Tradable Goods
- Tradable Services
- Local Services

Per Worker

- $0
- $50,000
- $100,000
- $150,000
- $200,000
- $250,000
- $300,000
- $350,000
- $400,000

Jobs in CleanTech + Green Cities and Computer + Electronics are extremely productive, with earnings reaching up to $350,000 per worker.
Median Earnings Are Relatively Flat and Mixed by Race

Median Wage Growth 2005 - 2015

+0.3%

White  Asian  Black  Hispanic
Metro-Scale Living Standards Look Strong ...
... but Place-Based Costs Are High

<table>
<thead>
<tr>
<th>City</th>
<th>Housing Costs</th>
<th>Transportation Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Diego, CA</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td>Portland, OR-WA</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Hartford, CT</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Denver, CO</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Baltimore, MD</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>San Jose, CA</td>
<td>30%</td>
<td>70%</td>
</tr>
</tbody>
</table>
Spatial Mismatch Is Growing Unequally

Jobs within Median Commute Distance

- All Residents
- White Residents
- Black Residents
- Hispanic Residents
- Asian Residents
Networks
Portland’s Modal Leadership

Bar chart showing modal leadership in various cities, with bars representing Carpool, Public Transit, Walked, and Bicycle.
Portland’s Counties Exchange Workers Throughout the Region

Inter-county Commuting Share:
- Portland MSA: 48%
- Clackamas: 66%
- Washington: 47%
- Multnomah: 34%
Portland Freight Dashboard

International Trade Share

- U.S.: 15.1%
- Portland Metro: 13.6%

Total Exported Goods

- $9.8 b

Total Goods Trade

- $140.0 b
  - 28th of Top 100 Metros

Top Trading Partners

<table>
<thead>
<tr>
<th>Rank</th>
<th>Partner</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Seattle</td>
<td>12%</td>
</tr>
<tr>
<td>2</td>
<td>Salem</td>
<td>5.9%</td>
</tr>
<tr>
<td>3</td>
<td>Los Angeles</td>
<td>5.2%</td>
</tr>
<tr>
<td>4</td>
<td>China</td>
<td>4.2%</td>
</tr>
<tr>
<td>5</td>
<td>Non-Metro Oregon</td>
<td>3.3%</td>
</tr>
<tr>
<td>6</td>
<td>Non-Metro Washington</td>
<td>2.4%</td>
</tr>
<tr>
<td>7</td>
<td>Mexico</td>
<td>2.1%</td>
</tr>
<tr>
<td>8</td>
<td>San Jose</td>
<td>2%</td>
</tr>
<tr>
<td>9</td>
<td>Eugene-Springfield</td>
<td>2%</td>
</tr>
<tr>
<td>10</td>
<td>Canada</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Top 10 Totals: 40.9%

Source: Brookings MetroFreight Series and Export Nation 2013
Portland Freight Dashboard

Trade Balance

- Agricultural Products
- Stones / Ores
- Energy Products
- Chemicals / Plastics
- Wood Products
- Textiles
- Metals
- Machinery / Tools
- Electronics
- Transportation Equipment
- Precision Instruments
- Furniture
- Waste
- Mixed Freight

Trade Balance: $34bn
19th of Top 100 Metros

Source: Brookings Metro-to-Metro
Portland Commercial Aviation Dashboard

Total Passengers (mil)

<table>
<thead>
<tr>
<th>Year</th>
<th>Passengers (mil)</th>
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<tbody>
<tr>
<td>2004</td>
<td>24.6</td>
</tr>
<tr>
<td>2014</td>
<td>29.1</td>
</tr>
</tbody>
</table>

International Share

- **6.4%**

27 among 35 GMM Metros

Local OD Passengers

- **94.8%**

Top OD Partner Regions (k)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>Passengers (k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Los Angeles</td>
<td>2,373</td>
</tr>
<tr>
<td>2</td>
<td>San Francisco</td>
<td>2,103</td>
</tr>
<tr>
<td>3</td>
<td>Las Vegas</td>
<td>1,186</td>
</tr>
<tr>
<td>4</td>
<td>Chicago</td>
<td>1,093</td>
</tr>
<tr>
<td>5</td>
<td>Phoenix</td>
<td>1,091</td>
</tr>
<tr>
<td>6</td>
<td>Seattle</td>
<td>1,061</td>
</tr>
<tr>
<td>7</td>
<td>Denver</td>
<td>1,005</td>
</tr>
<tr>
<td>8</td>
<td>San Diego</td>
<td>1,004</td>
</tr>
<tr>
<td>9</td>
<td>San Jose</td>
<td>975</td>
</tr>
<tr>
<td>10</td>
<td>Sacramento</td>
<td>855</td>
</tr>
</tbody>
</table>

Top 10 Share of Airport 43.8%

Source: Brookings analysis of SABRE data
What’s Next?
Mapping: Economic Activity and Networks
77% Share of Goods-Producing Workers Commuting into Hillsboro
1. Economic Development, Evolved
2. Market Scan
3. Moving Forward
Implications

Mixed Growth

Place Matters
Core Question:
How can infrastructure continue to support Portland’s economic competitiveness?
Flexible measurement to connect outcomes

Formalize Business and People Goals

Create Place and Network Benchmarks

Develop Criteria to Judge Proposals
Portland Economic Value Atlas
Market Scan

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