Performance Measures in Economic Development

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Glen Weisbrod

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Competitive Cities Conference

Presentation

1. General Overview
   Approaching Evaluations

2. Cases: Rating Your Area
   Assessing Performance of Economic Development in Cities and Regions

3. Cases: Evaluating Your Programs
   Assessing Performance of Economic Development Programs
Approaching the Evaluation

- Define Objectives
  - Audience/audiences?
- Organize Approach
  - Choose measures matching client data, surveys, interviews, benchmarks
- Collect Data
  - Baseline, programmatic, regional
- Manage Data
  - Database, spreadsheets
- Analyze
  - Pick performance indicators to match audiences
- Tell A Story
  - Remember the audiences!

Issues: Define Your Objectives

- There are separate needs for internal (diagnostic) and external (report to investors) measurement
- Build off of a logical case of Need → Action → Results
- Keep expectations reasonable w/ Intermediate Results
- Don’t go overboard with too many Indicators
Choosing the Right Perspective

- **Economy**
  - Performance
  - Gaps
  - Opportunities
- **Capacity**
  - Facilities
  - Workforce
  - Services
- **Intervention**
  - Marketing
  - Capacity
  - Targeting Actions
- **Achievements**
  - Intermediate progress
  - Business impact
  - Mix
- **Result**
  - Jobs, Income
  - Standard of living

Compared to Another Location (Benchmark) -- or -- Compared to Own Potentials (Targets)

Full Performance Indicators

- **Economy**
  - Labor force
  - Jobs
  - Business Activity
- **Capacity**
  - Industrial parks
  - Infrastructure
  - Education
  - Regulations, taxes
- **Intervention**
  - Training
  - Marketing
- **Achievements**
  - Enrolled
  - Placed
  - Inquiries
  - Follow-up
- **Result**
  - Jobs, Income
  - Local Services

LEVEL -- & -- QUALITY -- & -- UTILIZATION
Rating Your Area:

MTC: Index Indicators

Corporate sales
Publicly-traded companies
Occupations and wages
Median household income
Manufacturing exports
New businesses
IPOs and M&As
Corporate headquarters

R&D expenditure
Investment capital
Federal R&D expenditure
High school dropout rates
university enrollment
Population growth rate
Migration
Median price of homes
Housing starts

Benchmarking Comparisons

- See how Mass. performs compared to other states
- several indicators compared with national average or with composite measure of 8 competitive Leading Technology States (LTS)
- In 2005, California, Connecticut, Illinois, Minnesota, New Jersey, New York, North Carolina, Pennsylvania were chosen
- Monitors impact innovation in key industry clusters in state’s economy
<table>
<thead>
<tr>
<th>Economic Impact</th>
<th>Index Indicator</th>
<th>Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster Employment</td>
<td>7 of 9 clusters lost jobs compared to LTS; R&amp;D industry jobs grew 21% in 4 years</td>
<td>Consolidation in IT cluster, flat job growth in healthcare tech.</td>
</tr>
<tr>
<td>Corporate Sales</td>
<td>Annual rate 3.8%, avg. among LTS</td>
<td>IT related sales dropped, healthcare tech. sales grew by 163%</td>
</tr>
<tr>
<td>Jobs and Wages</td>
<td>Among large categories only healthcare has grown (7%)</td>
<td>Overall job decline in the state</td>
</tr>
<tr>
<td>Median Income</td>
<td>Growth slowed in 2003 and declined in 2004</td>
<td>Follows similar decline among LTS</td>
</tr>
<tr>
<td>Manu. Exports</td>
<td>Second to MN but declined as share of GSP</td>
<td>Continued decline in MA</td>
</tr>
</tbody>
</table>

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A Comparison Between the Socio-Economic Performance of Canada’s Technology Triangle

- Population growth
- Migration
- GDP growth
- Employment growth
- Participation rate
- Employment rate
- Unemployment rate
- Employment income
- Median income

Social assistance
Employment insurance
Proprietorship growth
Educational attainment
Richard Florida Indices
  - Talent Index
  - Bohemian Index (creativity)
  - Mosaic Index (diversity)
  - Tech-Pole Index (technology)
McGill Institute for Study of Canada

- “Indices of Urban Social, Economic and Cultural Performance in Major Cities in Canada”
- Diversity Indicators - bilingualism, immigration
- Socio-Economic Indicators – unemp., income, transfers
- Education Indicators - degrees, types of jobs
- Social Stability and Social Equality Indicators - age, HH structure, own/rent, M/F jobs, childcare
- Cultural Indicators – artists, librarians, etc.
- Consumption Indicators – spending patterns
- Summary of Rankings for Cities by Indicators

Calgary Economic Performance 2004

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2003</th>
<th>2014</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1,595,659</td>
<td>1,127,098</td>
<td>2.5%</td>
</tr>
<tr>
<td>Working Age Population</td>
<td>882,400</td>
<td>911,600</td>
<td>2.5%</td>
</tr>
<tr>
<td>Labour Force</td>
<td>566,000</td>
<td>580,000</td>
<td>2.2%</td>
</tr>
<tr>
<td>Employment</td>
<td>631,300</td>
<td>569,800</td>
<td>2.5%</td>
</tr>
<tr>
<td>Employment Rate</td>
<td>7.0</td>
<td>7.3</td>
<td>0.4%</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>5.3</td>
<td>5.1</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Labour Force Participation Rate</td>
<td>75.0</td>
<td>75.1</td>
<td>0.1%</td>
</tr>
<tr>
<td>Net Migration</td>
<td>15,000</td>
<td>10,000</td>
<td>46.7%</td>
</tr>
<tr>
<td>Housing Starts</td>
<td>13,642</td>
<td>16,013</td>
<td>2.5%</td>
</tr>
<tr>
<td>MLS Average Residential Home (Sale) Price</td>
<td>211,665</td>
<td>223,124</td>
<td>5.4%</td>
</tr>
<tr>
<td>Value of Building Permits - Total</td>
<td>2,070,256</td>
<td>2,122,915</td>
<td>2.4%</td>
</tr>
<tr>
<td>Inflation Rate</td>
<td>2.6%</td>
<td>2.0%</td>
<td>56.5%</td>
</tr>
<tr>
<td>Industrial Space Inventory*</td>
<td>44,244,114</td>
<td>48,314,441</td>
<td>4.4%</td>
</tr>
<tr>
<td>Office Space Inventory*</td>
<td>44,653,106</td>
<td>44,981,096</td>
<td>0.7%</td>
</tr>
</tbody>
</table>
Greater Vancouver Regional District

- Annual Sustainability Report
- Provides a regional context, policies and plans, and corporate performance

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2002</th>
<th>2003</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>2,103,179</td>
<td>2,126,806</td>
<td>23,627</td>
<td>1.1</td>
</tr>
<tr>
<td>Unemployment</td>
<td>7.8</td>
<td>7.3</td>
<td>-.5</td>
<td>-6.4</td>
</tr>
<tr>
<td>Housing Starts</td>
<td>13,197</td>
<td>15,626</td>
<td>2,429</td>
<td>18.4</td>
</tr>
<tr>
<td>CPI(1992=100)</td>
<td>118.6</td>
<td>121</td>
<td>2.4</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Regional Economic Observer

- Micro-Economic Policy Analysis Branch of the Ministry of Industry in Canada
- A snapshot of economy of provinces
- Uses Real GDP, Inflation, Labour Market, Employment by Industry, Economic Activity, Trade, and Demography

Local Economic Performance / Targeting

Monitor Conditions
1. Economic Performance Gaps
2. Relative Costs
3. Relative Access to Markets
4. Physical Facilities
5. Labor Force
6. Business Climate & Outreach

Assess Opportunities
7. Targeting Prospects for Growth
8. Vulnerable Industries to Support

Current State

Constraints that might be reduced or overcome

Outreach Targets
Evaluating Your Programs:
INAC Economic Development Programs

- 7 Projects
  (e.g.- employment, land dev., research, advocacy)
  \[\downarrow\]
- 44 Goals
  (e.g.- skills, training, land resources, proposals)
  \[\downarrow\]
- 111 Indicators
  (e.g.- nest steps, initiatives, results, participants)

ARC Programs

- Evaluation of public works/infrastructure
- 13 states, 99 projects
- New jobs, wages
- Tax revenue
- Leveraged investment
- Business vitality/entrepreneurship
- Impact on level of area distressed counties
- Ratios of outcomes per $ of investment
- Relative credit to agency
Performance Measures for Utility Community Development Programs

Handbook and Tools
Funded by Electric Power Research Institute (EPRI)
Implemented by Northeast Utilities (NU)

Developed by
Economic Development Research Group
Ticknor & Associates
Sally Hooks - Ascendix

Survey of Economic Development Allies

<table>
<thead>
<tr>
<th>Types of Programs</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Park</td>
<td>Services Used</td>
</tr>
<tr>
<td>Building Development</td>
<td>Years Utilized</td>
</tr>
<tr>
<td>Leadership Training</td>
<td>Satisfaction</td>
</tr>
<tr>
<td>Organizational Development</td>
<td>Role of Utility</td>
</tr>
<tr>
<td>Community Strategic Planning</td>
<td>Importance to Area Success</td>
</tr>
<tr>
<td>Local Econ Dev Grants</td>
<td></td>
</tr>
</tbody>
</table>
Economic Impacts of OECDD’s Public Works Programs
- OECDD identified 56 projects that closed in 1999 or 2000.
- Enough time for economic impacts to accrue
  - Consistent dataset
  - Potential loss of institutional knowledge

Types of Projects
- Industrial/commercial sites
- Water and sewer systems
- Transportation improvements
- Started in 1998 by Alberta
- Designed to attract and retain leading researchers and graduate students in Information & Communication Technology
- Performance indicators for high quality people, intellectual capital, and economic impact

<table>
<thead>
<tr>
<th>Type of Investment</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCore Investment</td>
<td>$28 M</td>
<td>$35 M</td>
</tr>
<tr>
<td>Directly by Chairs and Profs</td>
<td>$73 M</td>
<td>$102 M</td>
</tr>
<tr>
<td>Research Collaborators</td>
<td>$120 M</td>
<td>$120 M</td>
</tr>
<tr>
<td>Direct Leverage</td>
<td>3.6 times</td>
<td>3.9 times</td>
</tr>
<tr>
<td>Indirect Leverage</td>
<td>7.9 times</td>
<td>7.4 times</td>
</tr>
<tr>
<td>Spin-off Companies</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
• Process consists of inputs, activities, outputs, strategic outcomes and ultimate results
• Has a set of criteria to identify and select quantitative and qualitative performance indicators

- **Validity** – Does the indicator allow you to be precise in measuring the results?
- **Relevance** – Is it relevant to the activity, product or process?
- **Reliability** – Is it a consistent measure over time?
- **Simplicity** – Is the information available and will it be feasible to collect?
- **Affordability** – Can we afford to collect and analyze?
Matrix for the Performance Measurement Plan

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Performance Indicators</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection Methods</td>
<td>Frequency</td>
<td>Persons Responsible</td>
</tr>
</tbody>
</table>

Institute on Governance

- “Means…Ends…Indicators: Performance Measurement in the Public Sector”
- Focused on effect of government on state of society
- Uses Four Types of Measures
  - Input
  - Output
  - Efficiency
  - Outcome
Example for Economic Development

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
<th>Efficiency</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>Private Investment</td>
<td>Costs per Job</td>
<td>Economic Development</td>
</tr>
<tr>
<td>Investment</td>
<td>Number of Jobs</td>
<td>Personal Income and Benefits</td>
<td>Increased Job Opportunities</td>
</tr>
</tbody>
</table>

Inside the Public Sector Organization

Outcomes

Efficiency

The World Outside the Organization

Outputs
THANK YOU

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