

4-9-2010

## Rebuilding Distressed Regions: Problem Diagnosis and Tracking

Randall W. Eberts

*W.E. Upjohn Institute for Employment Research, [eberts@upjohn.org](mailto:eberts@upjohn.org)*

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### Citation

Eberts, Randall W. 2010. "Rebuilding Distressed Regions: Problem Diagnosis and Tracking." Presented to PEI Provincial Government Labour Market Department, Prince Edward Island, Canada, April 9.

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# Rebuilding Distressed Regions: Problem Diagnosis and Tracking

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*Presentation to:*  
**PEI Provincial Government Labour Market Department**

*Randall W. Eberts*  
*W.E. Upjohn Institute for Employment Research*

9 April 2010

# Headlines

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- Newspapers filled with headlines about mass layoffs and their impacts on regions and communities
- Financial and auto sectors are hit particularly hard by the current recession
- In US, President Obama has appointed an “Auto Czar” to focus on rebuilding communities devastated by the collapse of the auto industry
- How can distressed communities begin to rebuild?
- What tools and methods should they use to understand their situation, develop a strategic plan for future growth, and monitor progress?

# Problems Facing Distressed Regions

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- Mass layoffs
- Business closings
- Brain drain
- General outmigration
- Decline in innovations/entrepreneurship
- Increased need for social and basic services
- Decline in tax base to support services, including education and basic infrastructure

# Problems Facing Distressed Regions (cont'd.)

- Underutilized assets
  - Land: abandoned/vacated sites
  - Physical: abandoned/vacated buildings  
deteriorating underutilized roads, water systems  
redistribution of land use
  - Human: underutilized skills  
skill mismatch
  - Social: declining community values  
declining leadership  
declining social adhesion/solidarity
  - Financial: declining financial base to invest in future  
growth

# Principles of Rebuilding

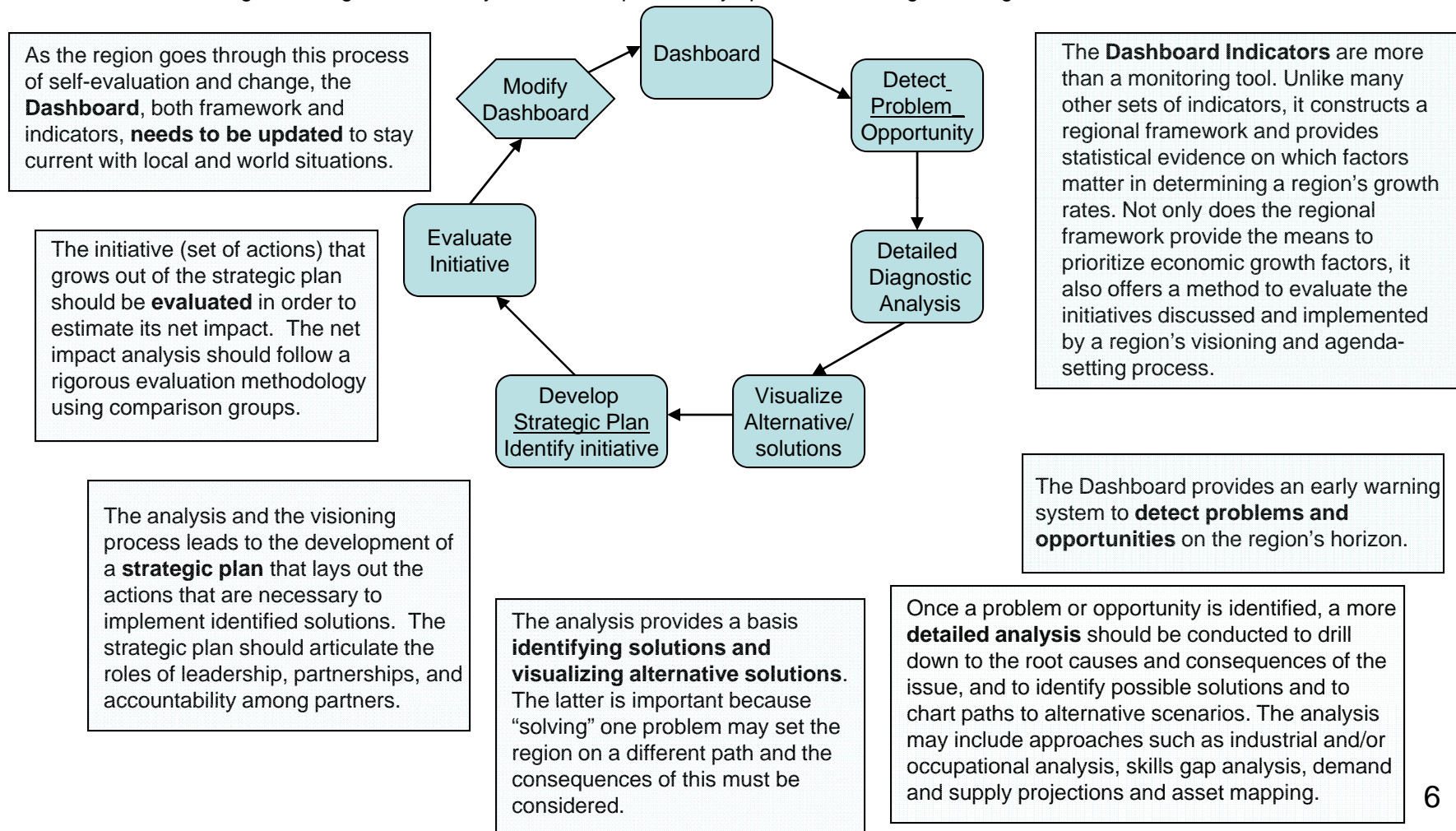
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Successful regions and successful businesses share similar principles for rebuilding/surviving/thriving in challenging economic times

- **Vision**
  - Know your core assets and their potential for growth
- **Understanding of regional dynamics**
  - Keen understanding of core assets, their contribution to growth, and their challenges and opportunities
- **Strategic planning**
  - Align resources and activities around a common vision
- **Manage by fact:**
  - emphasize results and adding value
  - Track agreed upon indicators
  - Hold parties accountable
- **Trust and confidence among partners--solidarity**
- **Valuing human capital**
  - Focus on worker talent
- **Agility**
  - Monitor regional performance to make adjustments to gaps and mismatches
  - Ensure that institutions/agencies can respond quickly to local needs
- **Strong leadership:**
  - Positioning for future competitiveness and driving short-term results
  - Creating conditions for other people to contribute
  - Set high expectations and hold people/institutions accountable

## Critical Paths in Preparing a Diagnostic For Strategy Design

The strategic planning process should be seen as an on-going effort to understand the dynamics of the local labor market, to provide an early warning system of problems and opportunities developing in the region, to initiate action to respond to the identified issues, and to gauge how the region fits into a constantly changing world in which it competes. It is a process that continually updates the knowledge and reconnaissance of the region and leads to initiatives that improves its competitive position in the global economy. The process begins and ends with a system of indicators that are well-grounded in a sound understanding of the workings of its regional economy and that are periodically updated as the region changes.



# Example: WIRED Process

Develop regional identity by understanding its economic/cultural/historical attributes that forms a cohesive region

Identify and develop strong Leadership

SWOT analysis

Base strategic plan on careful analysis

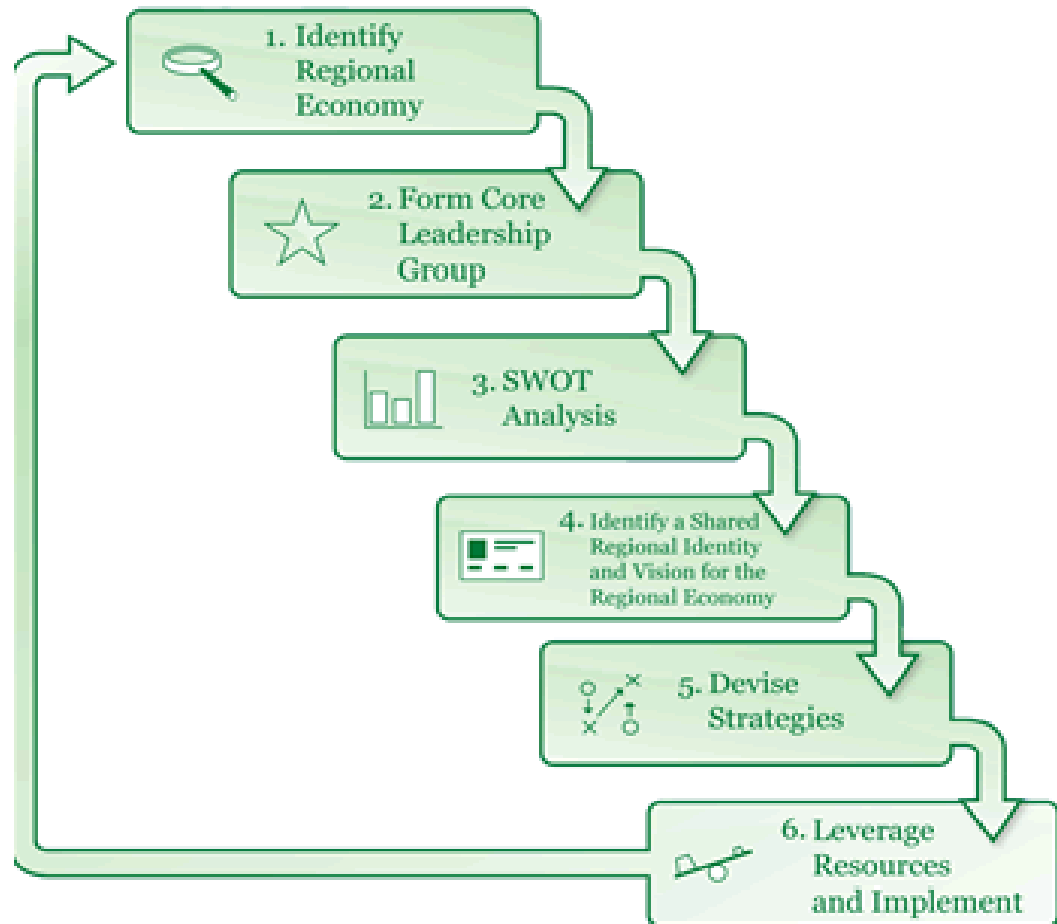
Ground vision in reality

Nurture human capital and align skill sets with business needs

Ensure agility to respond to needs

Manage by facts

## Workforce Innovation in Regional Economic Development



Source: USDOL/ETA/WIRED website



# SWOT Analysis

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- **Understand the dynamics of regional growth**
  - Industrial cluster analysis—industrialization economies/diversification
  - Supply chains
  - Competitiveness/locational advantages
  - Skill cluster analysis—stock and extent of transferable skills across industries
- **Assess a region's strengths, weaknesses, opportunities and threats (SWOT) before developing a comprehensive regional economic strategy**
  - The analysis should thoroughly consider a region's attributes including existing assets, natural resources, current business climate and demographics, educational institutions, skill sets of workers, businesses' demand for skills
- **Assess existing infrastructures (physical, virtual, governmental and educational) and cultural and social attributes (collaboration, innovation and entrepreneurship) that will be critical to success**
  - Assessment must be measured against benchmarks such as graduation rates; SAT & ACT scores; Census, NSF and BLS data; quality of Higher Education (media rankings and endowments; and also look at investments made in educational institutions that nurture talent

# Strategies

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- Strategies for regional economic and workforce development must be "SMART" - Specific, Measurable, Achievable, Realistic and with a Timeline
- A region's strategy must account for its:
  - Infrastructure (including roads, buildings, and technology)
  - Investment (availability of risk capital)
  - Available talent
  - Social capital and institutional assets: schools, universities, etc.
- Develop strategies that spur transformation by focusing on:
  - Supporting existing businesses
  - Building innovation (through R & D and intellectual property formation)
  - Bringing innovation to market
  - Identifying new industries/recognizing potential in existing ones
  - Developing new markets
  - Creating new initiatives for capital creation
- Develop and nurture partners among businesses and intermediaries
  - Workforce development, economic development, educational institutions
  - Social capital: leadership, community identity and regional solidarity

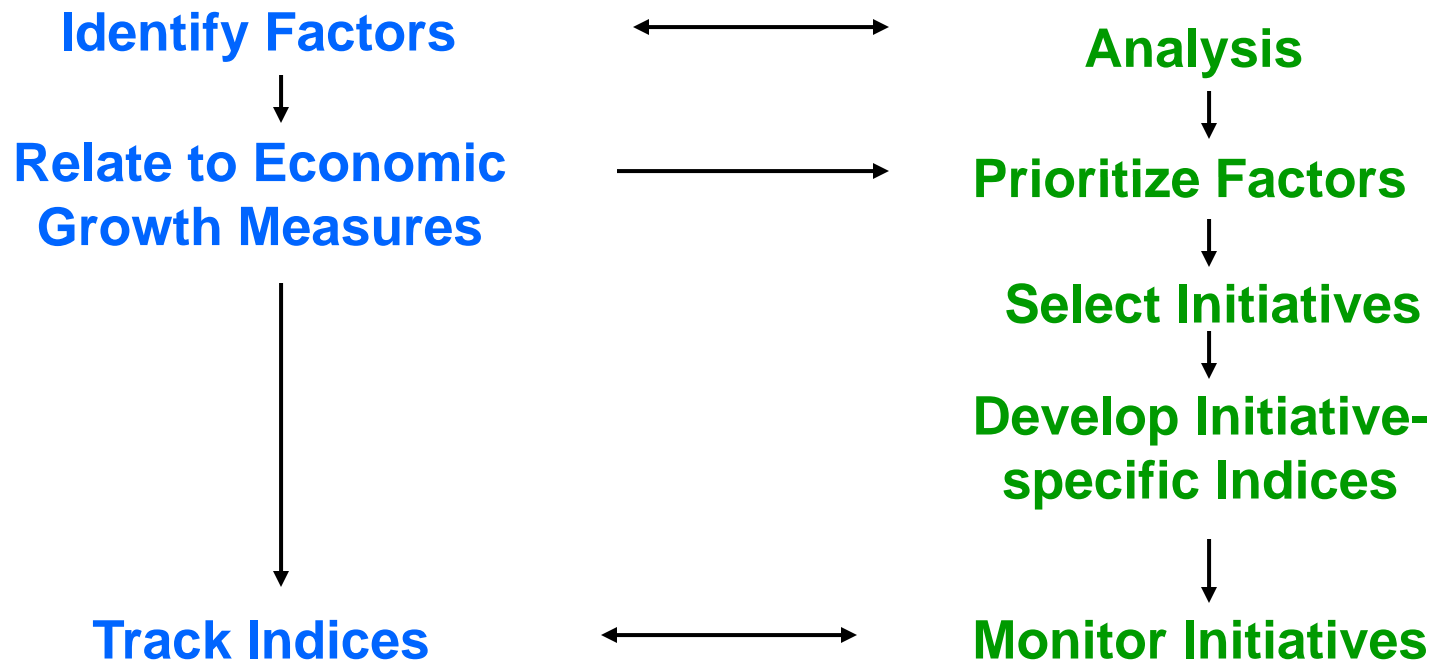
# Decision Steps

Tracking regional economic progress and developing strategic plans are complementary and should be pursued simultaneously

## Dashboard Development

## Economic Development Agenda

### Define Growth Measures



# What is a Dashboard?

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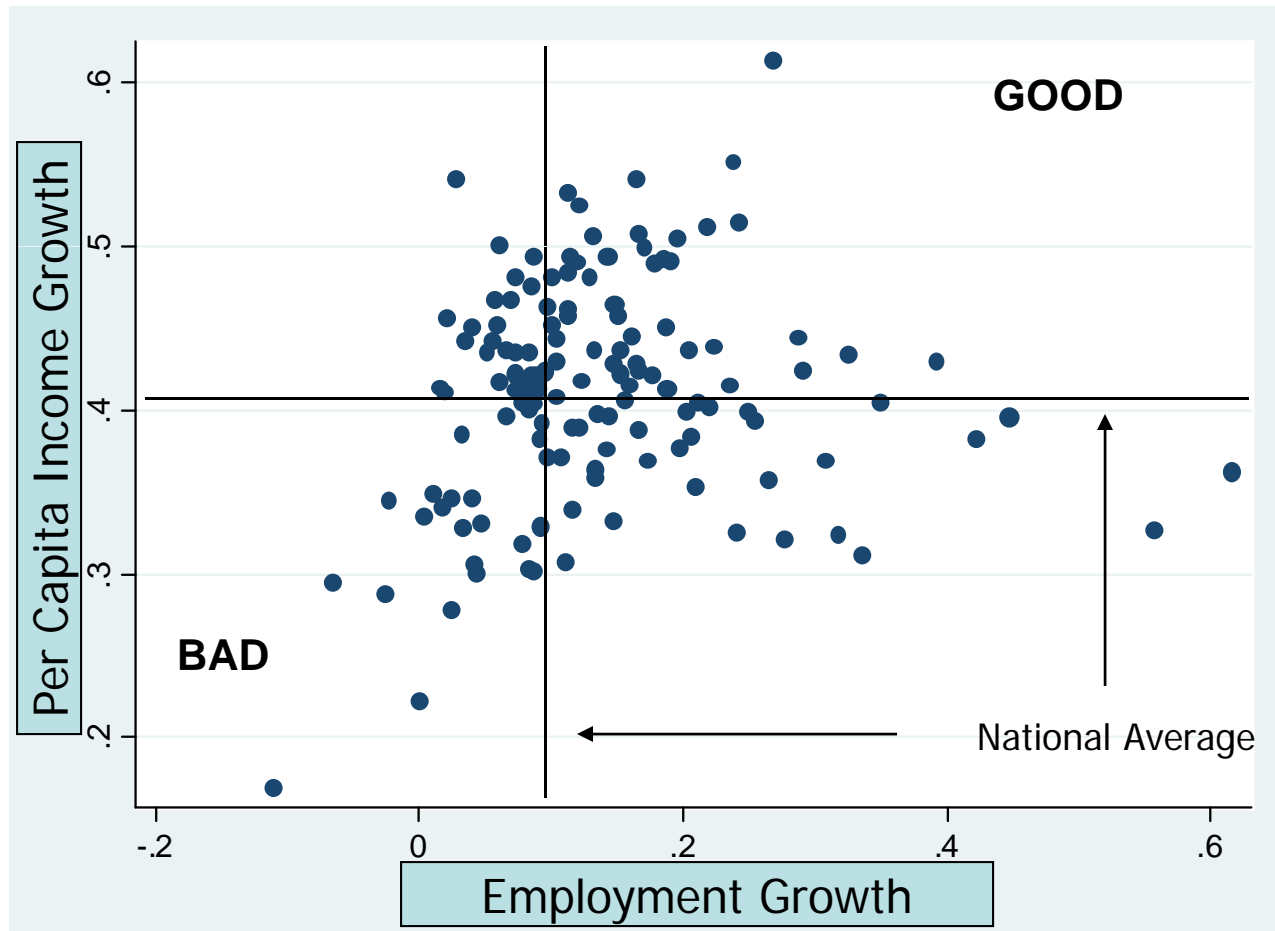
- A set of factors strongly associated with metropolitan economic performance
- Provides a framework for understanding the regional economic process and for prioritizing initiatives
- Tracks the progress of regional strategies

# Measures of Economic Growth

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- **Per capita personal income**
  - Approximates regional standard of living
- **Employment**
  - Measures job opportunities
- **Gross Metropolitan Product**
  - Value added output; comprehensive measure of regional economy
- **Productivity**
  - GMP per employee; approximates regional competitiveness

# Regional Well-Being



# Methodology: Identify Factors

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- Assembled data on over 40 variables that measure regional economic and social characteristics for 136 metropolitan areas with population between 300,000 and 3.5 million
- Conducted a factor analysis to reduce the number of variables to a smaller set of related factors
  - Too many indicators obscure what's important for economic growth
  - Allowed the “experience of regions” through statistical analysis to identify the relationship among the various variables
- Identified factors and named them

# Dashboard Factors

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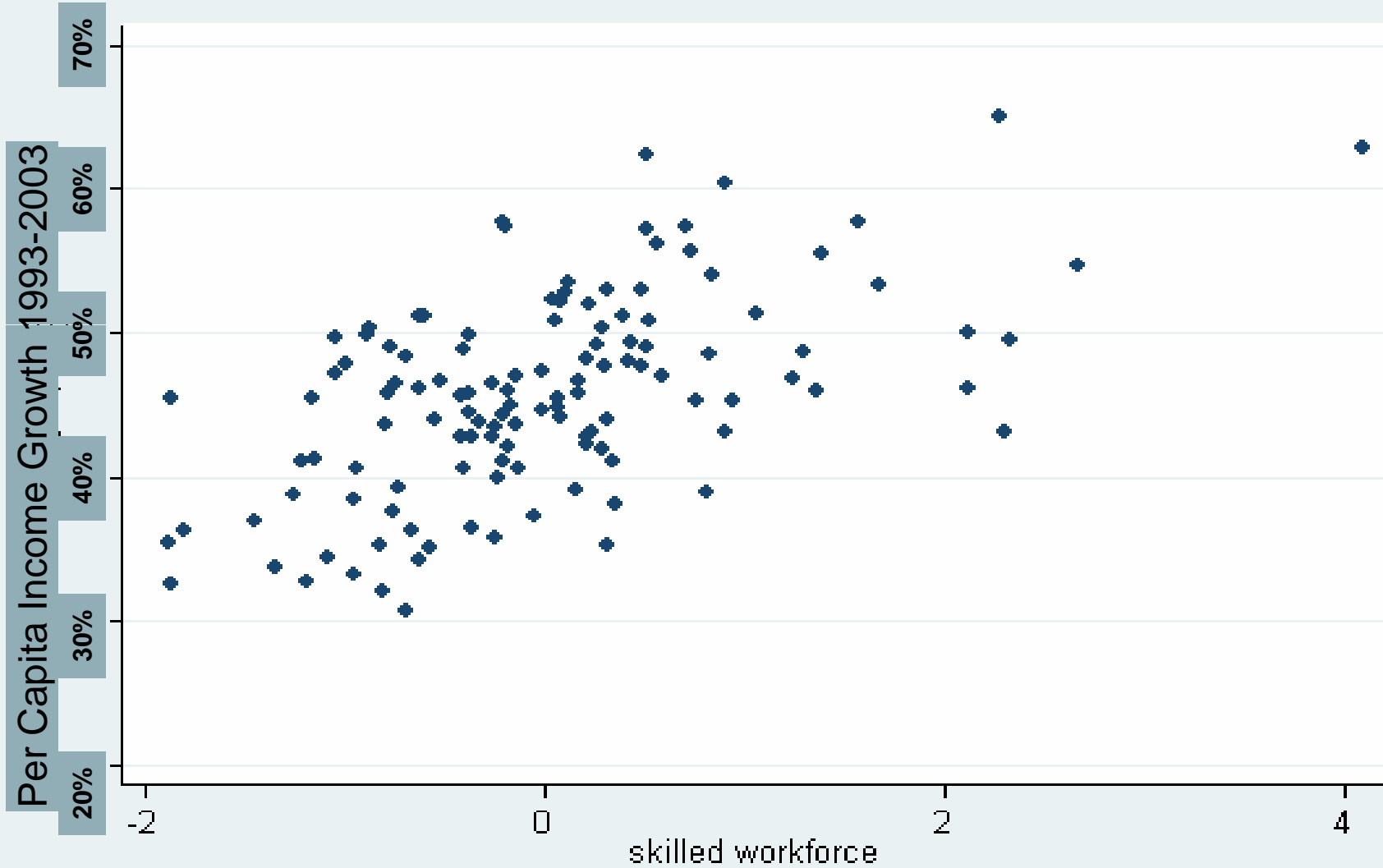
- Skilled Workforce and R&D
- Technology Commercialization
- Racial Inclusion & Income Equality
- Business Dynamics
- Urban Assimilation
- Individual Entrepreneurship
- Locational Amenities
- Urban/Metro Structure
- Legacy of Place



# Impact of Factors on Regional Economic Growth

Factor	Per Capita Income	Employment	GMP	Productivity
Skilled Workforce and R&D	✓			✓
Technology Commercialization	✓		✓	✓
Racial Inclusion & Income Equality	✓	✓	✓	✓
Urban Assimilation		✓	✓	✓
Legacy of Place (negative)		✓	✓	✓
Business Dynamics		✓	✓	
Individual Entrepreneurship		✓	✓	
Locational Amenities	✓			
Urban/Metro Structure		✓	✓	

# Per Capita Income Growth and Skilled Workforce are Highly Correlated



Skilled Workforce and R&D Index

# Per Capita Income Growth and Skilled Workforce are Highly Correlated



# Skilled Workforce and R&D Indicators

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- % of population in professional occupations
- % of population with graduate/professional degree
- % of population with bachelor's degree
- Industry R&D per employee
- SBIR & STTR awards per employee
- Population dependency (-)
- University R&D per employee

**Lesson:** Improving educational attainment and enhancing research capacity is linked to regional competitiveness (per-capita income and productivity)

# Rank of MSAs According to **Skilled Workforce and R&D**, 2000 and 2005

Metro Areas	2000 Rank	2005 Rank
Ann Arbor, MI	1	1
Durham, SC	2	2
San Jose-Sunnyvale-Santa Clara, CA	3	3
Lancaster, PA	109	104
ABE, PA	90	80
Harrisburg, PA	69	57
Pittsburgh, PA	68	55
Reading, PA	114	106
Scranton, PA	121	113
York, PA	112	114
Canton, OH	119	117
Des Moines, IA	45	37
Flint, MI	125	124
New Haven, CT	17	13
Peoria, IL	102	102
Wichita, KA	84	91

# Technology Commercialization Indicators

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- Venture capital per employee
- Number of patents per employee
- Cost of living index

**Lesson:** Product innovation that attracts investment capital is tied to economic growth (per capita income, output, and productivity)

# Rank of MSAs According to Technology Commercialization, 2000 and 2005

Metro Areas	2000 Rank	2005 Rank
San Jose-Sunnyvale-Santa Clara, CA	1	1
Bridgeport-Stamford-Norwalk, CT	2	2
Durham, NC	17	3
Lancaster, PA	89	48
ABE, PA	30	34
Harrisburg, PA	92	68
Pittsburgh, PA	43	91
Reading, PA	67	78
Scranton, PA	130	53
York, PA	80	89
Canton, OH	91	97
Des Moines, IA	87	102
Flint, MI	95	81
New Haven, CT	18	26
Peoria, IL	53	22
Wichita, KA	118	130

# Racial Inclusion and Income Equality Indicators

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- % of black population
- Isolation Index for black population
- Income inequality
- Share of students at schools with more than 70% free lunches
- Violent crime rate

**Lesson:** Overall economic growth (all 4 measures) is hindered when a large portion of the population is isolated or of low income



# Rank of MSAs According to Racial Inclusion and Income Equality, 2000 and 2005

Metro Areas	2000 Rank	2005 Rank
Ogden-Clearfield, UT	5	1
Provo-Orem, UT	1	2
San Jose-Sunnyvale-Santa Clara, CA	29	3
Lancaster, PA	10	8
ABE, PA	14	38
Harrisburg, PA	49	37
Pittsburgh, PA	63	70
Reading, PA	22	20
Scranton, PA	11	22
York, PA	19	33
Canton, OH	40	74
Des Moines, IA	12	27
Flint, MI	122	121
New Haven, CT	70	87
Peoria, IL	92	113
Wichita, KA	37	60

# Business Dynamics Indicators

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Ratio of the number of single-location businesses that opened to the number of single-location businesses that closed

**Lesson:** Increased entrepreneurial activity is associated with growth in employment and output

# Rank of MSAs According to Business Dynamics, 2000 and 2005

Metro Areas	2000 Rank	2005 Rank
Springfield, MA	1	1
Fayetteville-Springdale-Rogers AR-MO	24	2
Las Vegas-Paradise, NV	2	3
Lancaster, PA	56	81
ABE, PA	62	96
Harrisburg, PA	38	95
Pittsburgh, PA	83	128
Reading, PA	30	97
Scranton, PA	116	115
York, PA	93	122
Canton, OH	81	112
Des Moines, IA	65	19
Flint, MI	73	132
New Haven, CT	71	136
Peoria, IL	102	105
Wichita, KA	59	89

# Urban Assimilation Indicators

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- % of Hispanic population
- Share of minority business employment (in total employment)
- % of foreign-born population
- Productivity in information sector
- % of Asian population

**Lesson:** Diversified regions are associated with growing employment, output, and productivity

# Rank of MSAs According to Urban Assimilation, 2000 and 2005

Metro Areas	2000 Rank	2005 Rank
McAllen-Edinburg-Pharr, TX	1	1
El Paso, TX	2	2
Brownsville-Harlingen, TX	3	3
Lancaster, PA	103	106
ABE, PA	72	69
Harrisburg, PA	105	100
Pittsburgh, PA	121	118
Reading, PA	95	77
Scranton, PA	128	117
York, PA	131	133
Canton, OH	136	134
Des Moines, IA	117	111
Flint, MI	104	120
New Haven, CT	32	32
Peoria, IL	113	108
Wichita, KA	53	56

# Individual Entrepreneurship Indicators

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- % self employed
- Share of business establishments with under 20 workers

**Lesson:** The growth of the small business sector is linked to growth in employment and output

# Rank of MSAs According to Individual Entrepreneurship , 2000 and 2005

Metro Areas	2000 Rank	2005 Rank
Brownsville-Harlingen, TX	31	1
Sarasota-Bradenton-Venice, FL	2	2
Naples-Marco Island, FL	1	3
Lancaster, PA	68	86
ABE, PA	76	53
Harrisburg, PA	124	125
Pittsburgh, PA	89	80
Reading, PA	112	130
Scranton, PA	69	98
York, PA	122	133
Canton, OH	100	81
Des Moines, IA	116	121
Flint, MI	84	83
New Haven, CT	57	71
Peoria, IL	109	103
Wichita, KA	90	78

# Locational Amenities

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- Transportation Index
- Arts Index
- Recreation Index
- Health Care Index

**Lesson:** Locational amenities (most constructed amenities) relate to growth in per capita income



# Rank of MSAs According to **Locational Amenities** , 2000 and 2005

Metro Areas	2000 Rank	2005 Rank
Seattle-Tacoma-Bellevue, WA	14	1
Denver-Aurora, CO	5	2
Pittsburgh, PA	9	3
Lancaster, PA	111	111
ABE, PA	88	59
Harrisburg, PA	76	46
Pittsburgh, PA	9	3
Reading, PA	118	87
Scranton, PA	60	77
York, PA	136	124
Canton, OH	110	62
Des Moines, IA	77	34
Flint, MI	112	69
New Haven, CT	34	29
Peoria, IL	85	45
Wichita, KA	75	47

# Urban/Metro Structure

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- Share of city population in MSA population
- Property crime rate

**Lesson:** The connection of a central city to its broader metro area impacts growth of employment and gross metropolitan product

# Rank of MSAs According to Urban/Metro Structure, 2000 and 2005

Metro Areas	2000 Rank	2005 Rank
Poughkeepsie-Newburgh-Middletown, NY	1	1
Naples-Marco Island, FL	20	2
Harrisburg, PA	3	3
Lancaster, PA	5	4
ABE, PA	9	13
Harrisburg, PA	3	3
Pittsburgh, PA	6	8
Reading, PA	23	26
Scranton, PA	2	5
York, PA	4	6
Canton, OH	32	42
Des Moines, IA	82	79
Flint, MI	83	64
New Haven, CT	25	29
Peoria, IL	129	113
Wichita, KA	118	125

# Legacy of Place Indicators

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- Business churning
- Climate
- % of houses built before 1940
- Dissimilarity Index for Black Population
- City poverty ratio
- Number of government units per capita
- Share of manufacturing employment

**Lesson:** Legacy characteristics act as an impediment to economic growth

# Rank of MSAs According to Legacy of Place , 2000 and 2005

Metro Areas	2000 Rank	2005 Rank
Las Vegas-Paradise, NV	136	136
Naples-Marco Island, FL	134	135
Port St. Lucie-Fort Pierce, FL	133	134
Lancaster, PA	5	8
ABE, PA	18	18
Harrisburg, PA	10	15
Pittsburgh, PA	12	11
Reading, PA	1	6
Scranton, PA	4	3
York, PA	3	2
Canton, OH	17	17
Des Moines, IA	44	47
Flint, MI	37	37
New Haven, CT	32	33
Peoria, IL	2	1
Wichita, KA	42	44

# Rankings by Dashboard Indicators

## Selected MSAs, 2005

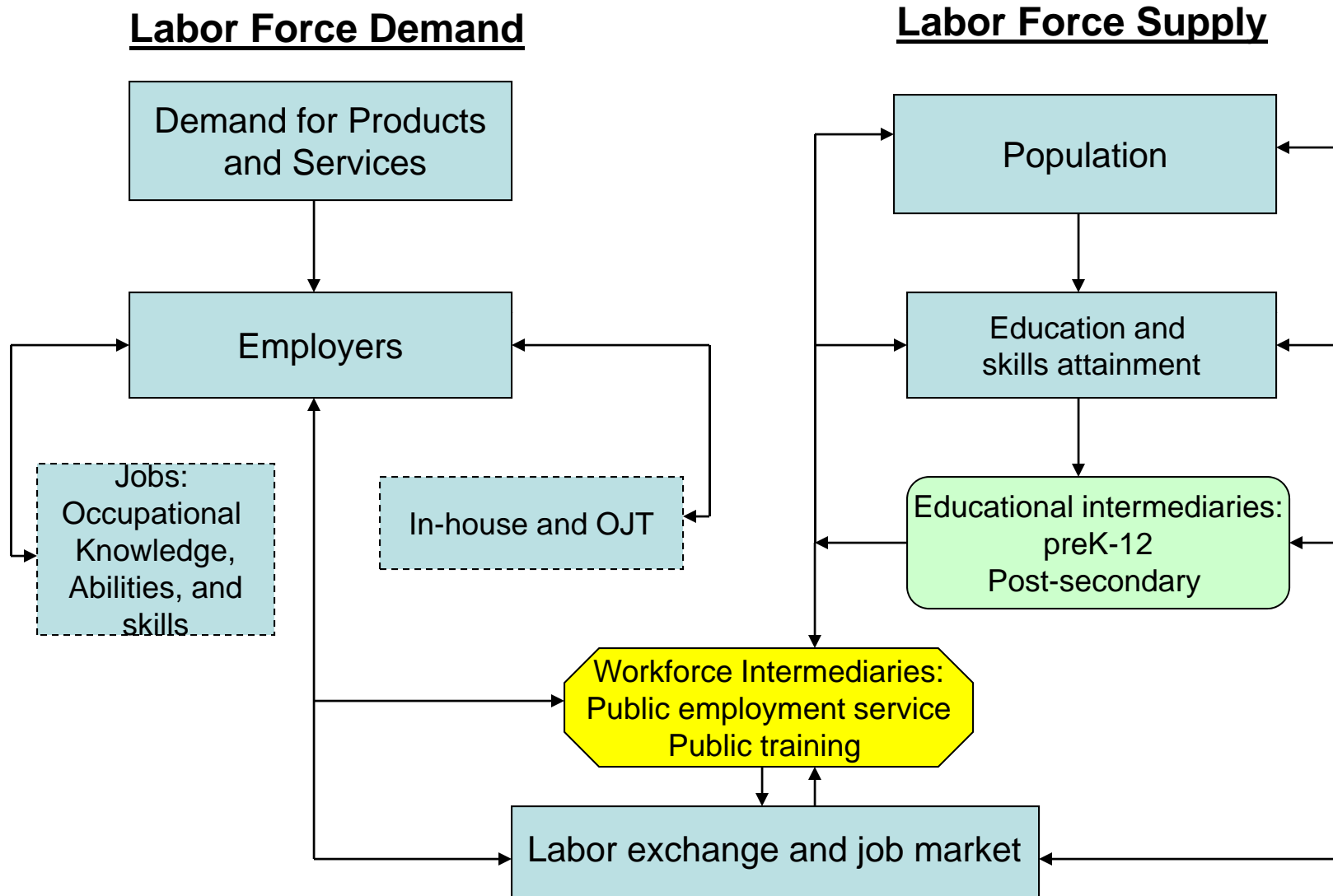
MSA	Skilled Workforce and R&D	Technology Commercialization	Racial Inclusion & Income Equality	Urban Assimilation	Legacy of Place	Business Dynamics	Individual Entrepreneurship	Locational Amenities	Urban/Metro Structure
ABE, PA	80	34	38	69	18	96	53	59	13
Harrisburg, PA	57	68	37	100	15	95	125	46	3
Pittsburgh, PA	55	91	70	118	11	128	80	3	8
Reading, PA	106	78	20	77	6	97	130	87	26
Scranton, PA	113	53	22	117	3	115	98	77	5
York, PA	114	89	33	133	2	122	133	124	6
Lancaster, PA	104	48	8	106	8	81	86	111	4
Canton, OH	117	97	74	134	17	112	81	62	42
Des Moines, IA	37	102	27	111	47	19	121	34	79
Flint, MI	124	81	121	120	37	132	83	69	64
New Haven, CT	13	26	87	32	33	136	71	29	29
Peoria, IL	102	22	113	108	1	105	103	45	113
Wichita, KS	91	130	60	56	44	89	78	47	125

# Developing and Tracking Specific Initiatives

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- Once the relative contribution to growth of the various factors is understood and prioritized, a region can address specific challenges
- Drill down to specific factors and develop strategies that address challenges or deficiencies
- For example, skilled workforce is identified as strongly correlated with growth and thus should be given a high priority
- Flint, Michigan was near the bottom in skilled workforce
  - Strategic plan for a region should then identify the challenges (need to upgrade skills, skill mismatch, brain drain)
  - Identify, enlist, establish proper institutions to partner with business to address these issues
  - Develop system to identify problems and monitor progress

# Skilled Workforce



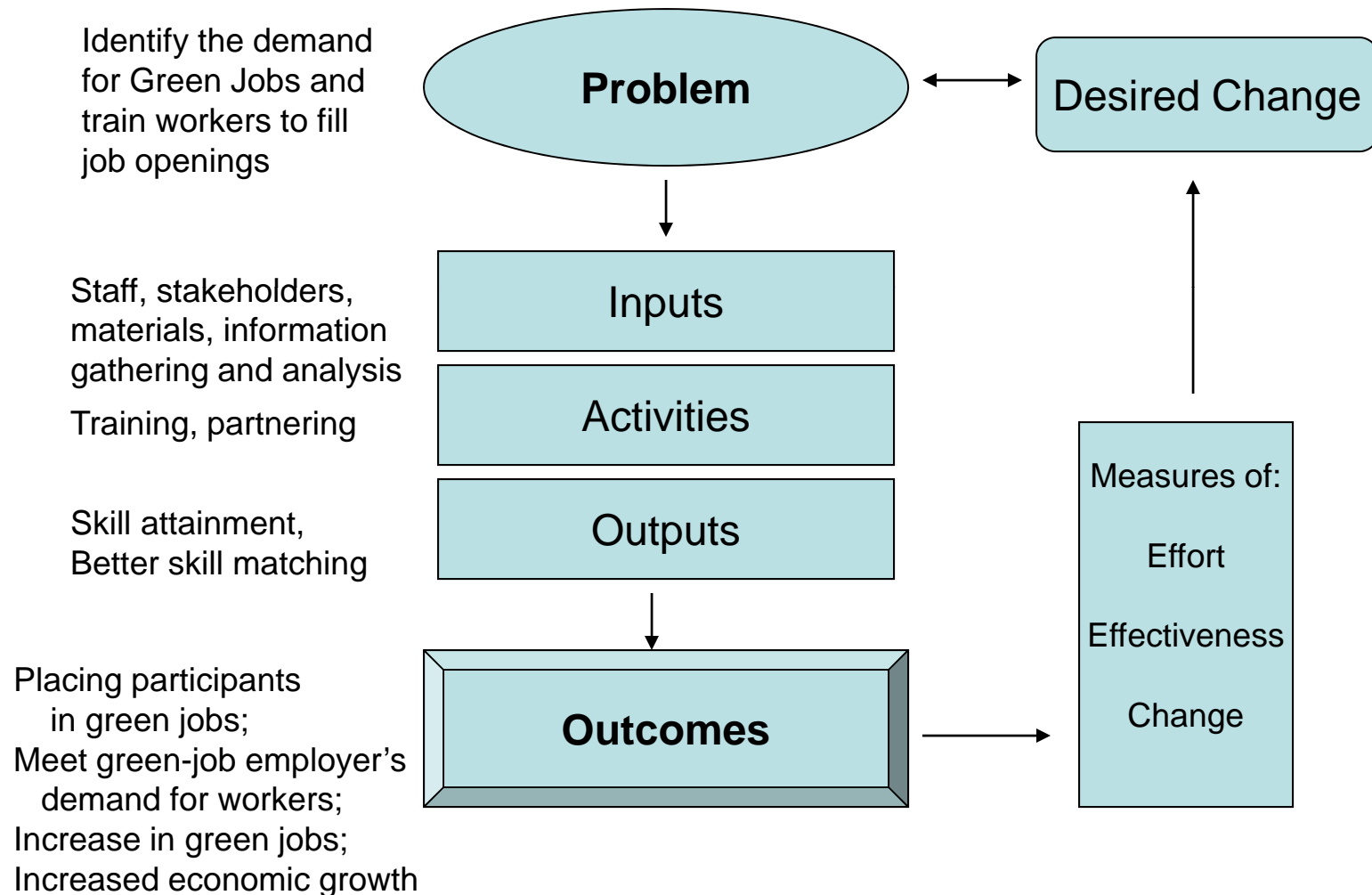


# Labor Market Information System

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- Core labor force and market data
- Demand data
- Occupational supply
- Occupational characteristics
- Education and training information
- Gross flows: openings, expansions, contractions, and closings
- Occupational growth forecasts
- Replacements and new hires

# Michigan's Green Jobs Initiative



# Products/Tools for Analyzing and Monitoring Green Jobs in Michigan

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- Survey of employer expectations
  - Hiring
  - Filling vacancies
  - Unique skills
  - Training
- Analyzing employment data
  - Cluster analysis
  - Job change
  - Wage prospects
  - Competitive analysis
- Tracking job trends among Green businesses
  - Use firm-specific data from UI wage records to follow specific firms over time
- Occupational trends
  - Identifying green-related occupations
  - Characteristics
  - Forecasts
  - Educational and training requirements
  - Career progressions
  - Critical skills and knowledge sets

# Conclusions

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- **Framework for Insights:** Evidence-based approach of developing indicators offers insights for local stakeholders to structure an economic development agenda that focuses on issues and initiatives that are directly related to growth
- **Align Resources:** Helps a region align resources by offering a way to prioritize factors and thus initiatives
- **Tracks Progress:** The indicators allow the region's stakeholders to track their progress in transforming their region not only in terms of economic growth but also with respect to improving its civil society

# Contact Information

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Randall Eberts

*W.E. Upjohn Institute for Employment Research*

*300 South Westnedge Ave.*

*Kalamazoo, MI 49007*

*269-343-5541*

*eberts@upjohn.org*