

Using Community Economic Analysis Tools to Inform Your Economic Development Strategy

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Agenda

- Setting the Context
- OMAFRA's CEA Tools
- Examples from Eastern Ontario
- Hidden Treasures from Stats Canada

Economic Development 101

- Economic Development is a process that influences the growth and well being of a community through such means as job creation, job retention, improved tax base and a reasonable life quality. (EDAC)

Spectrum of Economic Development Activity

**Area
Redevelopment**

**Business
Retention**

**Business
Attraction**

**Business
Development**



**Workforce
Development**

**Planning, Infrastructure,
Servicing**

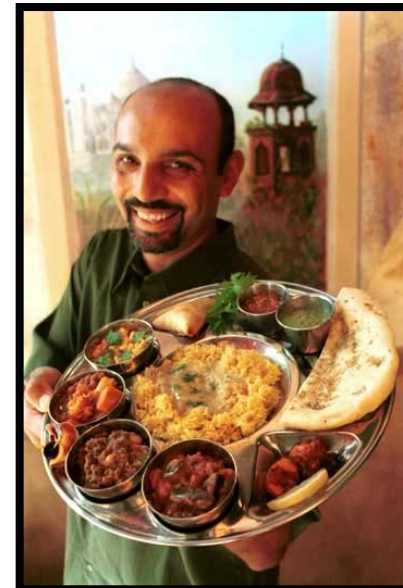
**Community Development
& Quality of Life**

Economic Development Strategy

Now that you've seen the buffet...



...what *should* you be putting on your plate?



Economic Development Strategy

- What do other organizations already do?
- What do other levels of government do?
- What activities clearly don't make sense for us?
- What are our unique assets/strengths?
- What key external trends are emerging?
- What resources do we require and what are we realistically prepared to provide?

Begin with a clear understanding of the structure of, and dynamics at play within, your economy.

Local Intelligence

CEA Tools/Statistics

OMAFRA's CEA Tools (Limitations)

- Based on Census Data (Time lag)
- 20% Sample for some data
- Subjective Responses on Census
- Data does not account for productivity or efficiency

OMAFRA's CEA Tools

- Socio-Economic Data
- Labour Flow
- Competitive Advantage Analysis
 - Location Quotients
 - Shift Share Analysis

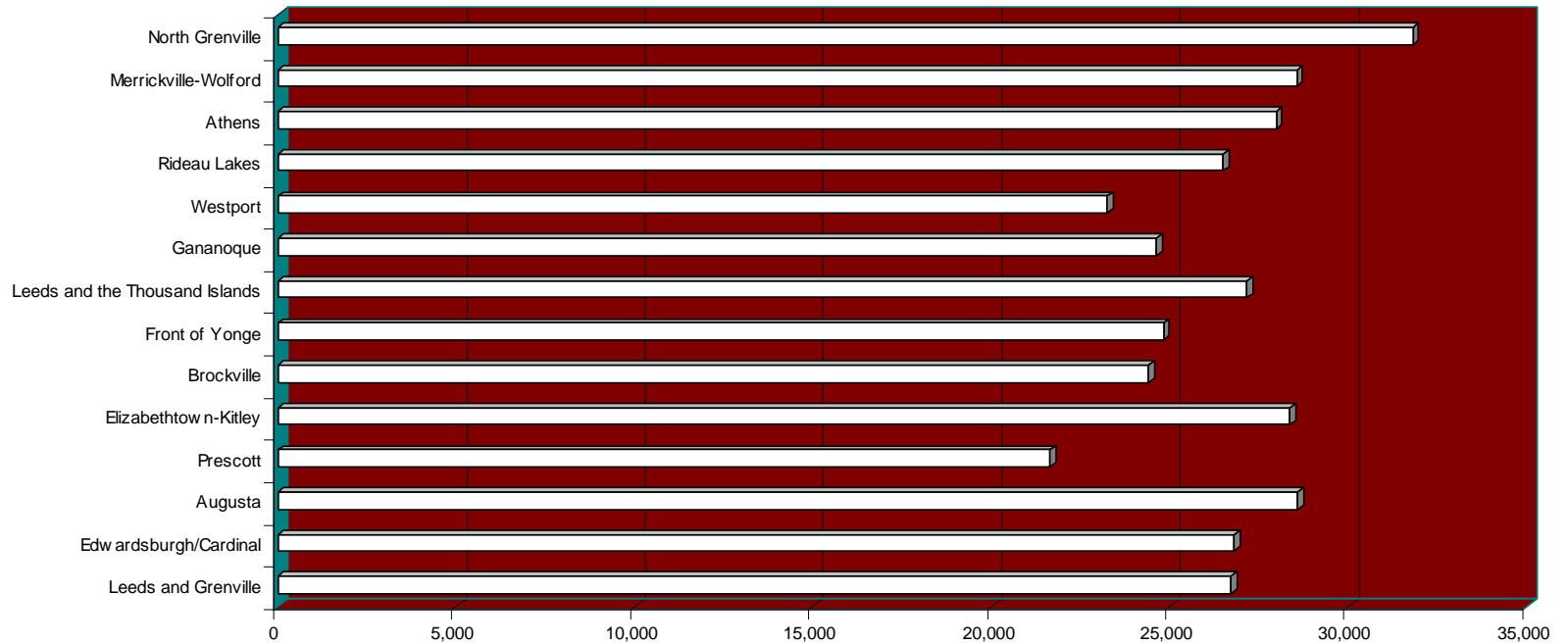
Note that OMAFRA has numerous additional analysis tools to support project-specific initiatives (e.g. BR+E, Downtown Revitalization, etc.)

Socio-Economic Data

- Population growth
 - Income Levels (Individual and Family)
 - Education Levels
 - Demographic Breakdowns (% Youth etc.)
 - Unemployment Rates
 - Value of Dwellings
 - Etc.
-
- Possible metrics for assessing progress on your community and economic development goals and objectives (Assessing economic vitality)
 - Offers insight into the skill sets of the resident labour force
 - Assess target population for proposed economic activity
 - Community Profile

Socio-Economic Data

Median Individual Income, 2005



[Census Trends](#) > [Geography selection](#) >

Selected trend data for Gananoque (T) , 2006, 2001 and 1996 censuses

[Change table view](#)

Select a topic

Topic:

Select a geography

Geographic level:

Province/territory:

CSD:

Subtopic	Census year		
	2006	2001	1996
Population			
Total population count ¹	5,285	5,167	5,217
Age and sex			
% of the population aged 0 to 14 years	15.2	17.2	17.7
% of the population aged 15 to 64 years	63.4	60.8	61.0
% of the population aged 65 years and over	21.4	21.9	21.4
Median age ²	44.2	42.4	39.5
Ratio of age groups 0 to 14 years to 65 years and over ³	0.7	0.8	0.8

Socio-Economic Data

Statistics Canada Link:

<http://www12.statcan.ca/english/census06/data/trends/searchgeo.cfm?T=CSD&Prov=35>

Labour Flow: where people live and work

- Labour Flow Analysis provides a picture of the movement of labour into and out of a municipality by comparing the number of jobs in a given industry within the municipality with the size of the resident labour force in the same industry

Labour Flow: where people live and work

- Offers insight into the skill sets of both the resident labour force and the labour force that commutes into your community.
 - Indicates what human resources are available for economic development.
 - Opportunities for creating jobs which meet the needs of local residents.
 - Opportunities for training that increase the skill levels of the local labour force (that are not currently filling local positions).
 - Identifies markets that would be most productive for job recruitment or the advertisement of local services and products.
 - Opportunities for regional cooperation on economic development initiatives-shouldn't ignore the need to cooperate regionally on job creation efforts .

Labour Flow: where people live and work

- Stats Canada Census employment data from 2006
- Data is available at the both the CD (Census Division) level (upper tier) and at the CSD (Census Sub-Division) level (lower tier or single tier)
- Data is available at both the 2-digit (sector) and 4-digit (industry group) NAICS (North American Industry Classification System) level

NAICS Sectors

Agriculture, Forestry, Fishing	Real Estate, Rental & Leasing
Mining & Extraction	Professional, Scientific & Technical
Utilities	Management of Companies
Construction	Admin., Waste & Remediation
Manufacturing	Education
Wholesale Trade	Health Care & Social Assistance
Retail Trade	Arts, Entertainment, & Recreation
Transportation & Warehousing	Accommodation & Food
Information & Cultural	Other Services (Private)
Finance & Insurance	Public Administration

NAICS Structure

Sector	33	Manufacturing
Subsector	333	Machinery Mfg
Industry Group	3331	Agriculture, Construction, and Mining Machinery Mfg
NAICS Industry	33311	Agricultural Implement Mfg
National	333112	Home Lawn and Garden Equipment Mfg



Labour Flow: where people live and work

Example...



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STATISTICS CANADA

CANADA'S NATIONAL STATISTICAL AGENCY

[Census](#) > [2006 Census: Data products](#) > [Topic-based tabulations](#) >









Commuting Flow Census Subdivisions: Sex (3) for the Employed Labour Force 15 Years and Over Having a Usual Place of Work of Census Subdivisions, Flows Greater than or Equal to 20, 2006 Census - 20% Sample Data

Census subdivisions (CSDs)

Gananoque, T (Ont.) Filter by province or territory

Place of residence Place of work

Commuting flow for persons working in Gananoque, T

Place of residence / Place of work ¹	Sex (3)		
	Total	Male	Female
 	 	 	 
Gananoque (T) / Gananoque (T)	1,340	580	755
Leeds and the Thousand Islands (TP) / Gananoque (T)	1,285	545	735
Kingston (CY) / Gananoque (T)	435	245	185
Front of Yonge (TP) / Gananoque (T)	90	30	55
Rideau Lakes (TP) / Gananoque (T)	75	15	55
Frontenac Islands (TP) / Gananoque (T)	75	30	45
Brockville (CY) / Gananoque (T)	60	40	15
South Frontenac (TP) / Gananoque (T)	50	35	15
Elizabethtown-Kitley (TP) / Gananoque (T)	45	40	10
Athens (TP) / Gananoque (T)	25	0	20

Note:

¹ Shows commuting flows between census subdivisions for employed persons having a usual place of work. The

Labour Flow (Commuting Pattern) Data

Statistics Canada Link:

<http://www12.statcan.ca/english/census06/data/topics/ListProducts.cfm?Temporal=2006&APATH=3&THEME=76&FREE=0&GRP=1>

Competitive Advantage Analysis

Identifying Key Sectors: The Driving Forces of the Local Economy

- Location Quotients
- Shift-share

- The analysis can be based on either **place of work** (# of jobs in the community in a given sector) or **place of residence** (# of people resident in the community who work in the sector, but not necessarily within the community)

Competitive Advantage Analysis

- Census employment data from 2001-2006
- Data is available at the both the CD (Census Division) level (upper tier) and at the CSD (Census Sub-Division) level (lower tier or single tier)
- Data is available at both the 2-digit (sector) and 4-digit (industry group) NAICS (North American Industry Classification System) level

Competitive Advantage Analysis

- **Location Quotient Analysis**

- Measures the relative concentration of each industry in your local economy compared to a reference area (in our case, Ontario).
 - In theory, those local sectors where the proportion of employment exceeds the provincial proportion are considered to be export-oriented and therefore part of the economic base.

$$\text{LQ} = \frac{\text{\% of local employment in sector A}}{\text{\% of provincial employment in sector A}}$$

Location Quotient Example

Rural Ville, 2006 (pop. 6,000)

Retail Trade

Total Local jobs: 3000

local jobs in Retail: 600

% local jobs in Retail: 20%

% provincial jobs, Retail: 20%

Location Quotient =

$$20\% \div 20\% = 1$$

Mining

Total Local jobs: 3000

local jobs in Mining: 150

% local jobs in Mining: 5%

% Ontario jobs, Mining: 0.1%

Location Quotient =

$$5\% \div 0.1\% = 50$$

(Note that the values used in the above example are not based on actual Census data)

Interpreting Location Quotients

LQ > 5 (Very High)	High Level of local dependence
LQ > 1.25 (High)	Export Industry - <i>the driving force of the local economy</i> , sector employs a much greater share of the local workforce than the reference area, produces more goods and services than are consumed locally, which are exported – <i>brings new \$ to the local economy</i>
LQ > .75 and < 1.25 (Ave.)	Self sufficiency - sector's share of local employees is similar to the sector's share in the reference area
LQ < .75 (Low)	Import Industry - sector's share of local employment is much smaller than the reference area's share of employment – <i>leakage to another market (retail goods bought elsewhere, goods are being imported)</i>

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Location Quotients, a simple tool to help identify:

- Provides an understanding of the sectors that have the greatest influence/impact over the local economy (current sources of wealth creation in the region).
- Businesses that make up the export base have likely chosen to locate in the area due to certain competitive advantages. These competitive advantages can be used to attract further investment in the future, in the same or complimentary industries.
- What are the region's economic vulnerabilities that must be recognized and addressed?
- How are service industries performing? Important to ensure a range non-export businesses to redistribute wealth within the local economy, and prevent leakage.



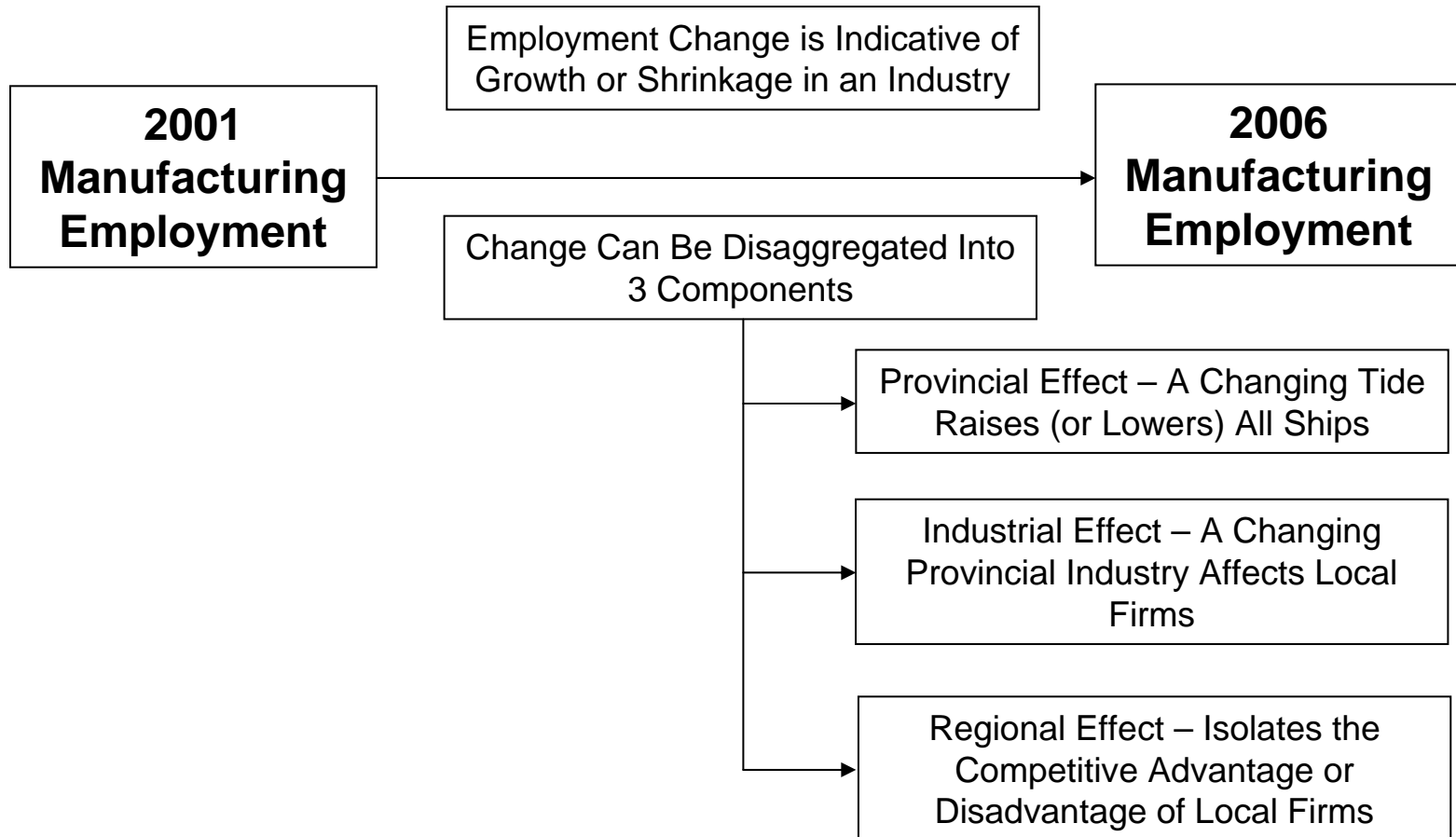
Location Quotients

- Example
- 
- 

Shift Share Analysis

- Shift-share provides a way to account for the competitiveness of a region's industries by providing an estimate of total local employment growth/decline (over a period of time, usually census periods) that is attributable to:
 - 1.growth of the provincial economy (reference area),
 - 2.growth of the sector provincially, and
 - 3.local factors.

Shift Share Disaggregation



Shift Share Analysis

- **Provincial Effect** - The share of local job growth/decline that can be attributed to growth of the provincial economy.
 - Specifically, if the province as a whole is experiencing employment growth, ("a rising tide lifts all boats"), one would expect total provincial growth to exert a positive growth influence on the local area.

Shift Share Analysis

- **Industrial Effect** - The share of local job growth/decline that can be attributed to the region's mix of industries being analyzed.
 - It represents the contribution that a specific industry provincially has made to the change in the number of jobs in the region.

Shift Share Analysis

- **Regional (Residual) Effect** - The share of local job growth/decline that can be attributed to local factors.
 - indicates the extent to which factors unique to the local area have caused growth or decline in regional employment of an industrial group.
- Job growth is usually attributed to some local comparative advantage such as natural resources, linked industries, or favourable local labour situations. The local component aids in identifying a local area's economic strengths and how a region's competitive position can contribute to regional job growth.

Shift Share Analysis

- Shift-share, and the Regional Effect component in particular, can point to industries that enjoy local comparative advantage. It cannot, however identify what the actual comparative advantage is.
 - It is important to identify what factors have contributed to the local area in outperforming provincial growth, for example:
 - Local raw materials or local inputs
 - Transportation methods
 - Local wage rates
 - Influence of local industries
 - University influences
 - Local consumption and savings
 - Other comparative advantages

Shift Share Analysis

Example

Shift Share Analysis

- Shift-share is useful for identifying a region's “strategic” industries with the greatest growth potential
 - Helps to separate the role of local and provincial effects on current local employment trends
 - Ideally, focus on industries with both a positive industrial effect and positive regional effect.

Competitive Advantage Analysis

- The results from the location quotient analysis and shift share analysis must be supplemented with information acquired through the community consultation process to identify industries that possess competitive advantages in the community.
- For industries demonstrating a specialization and competitive advantage, economic development initiatives should relate to business retention, expansion, attraction and creation.
 - The objective is not only to maintain, but also to enhance the competitive positions held by industries in the community.

Pulling it all Together

- Only good analysis enables a community to test its aspirations against the constraints of reality.
 - A good strategy is realistic
 - A good strategy places high priority on those objectives and actions that are feasible and can make a positive difference in the community's well-being.
- There is no magic bullet for economic development
- *There are many resources at your disposal—use them.*

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