

Canadian Break-Out Session Niagara BiNational Region

**Presented by
Jim Milway, Executive Director
The Institute for Competitiveness and Prosperity**

**Niagara-on-the-Lake
September 27, 2002**

- This is a copy of the breakout presentation given by James Milway in Niagara-on-the-Lake on September 27, 2002. It was one of the afternoon breakout sessions of the day long roundtable - Growing Knowledge Clusters in Niagara BiNational: Higher Ed and Industry in Partnership.
- This document provides an outline of the presentation and is incomplete without the accompanying oral commentary and discussion. It represents work in progress based on research conducted by the Institute for Competitiveness and Prosperity.
- Much of the material is from the Institute's first and second Working Papers which can be viewed at our Web site, www.competeprosper.ca
- The Web site also provides more information on the Institute and the Task Force on Competitiveness, Productivity, & Economic Progress.
- We ask that you acknowledge the Institute as the source if you use the material from this presentation.

Measuring Ontario's Prosperity

Drawing on our work to date

- **Productivity and competitiveness drive economic progress**

Mapping the performance gap

Hamilton and St. Catharines Cluster Data

Component parts of GDP per Capita

GDP Per Capita:

$$\frac{\text{Potential labour force}}{\text{Population}} \times \frac{\text{Jobs}}{\text{Potential labour force}} \times \frac{\text{Hrs Worked}}{\text{Jobs}} \times \frac{\text{GDP}}{\text{Hrs Worked}}$$

Profile

Utilization

Intensity

Productivity



Source: Adapted from Baldwin, J., Maynard, J.P., and Wells, S.(2000). "Productivity Growth in Canada and the United States." *Isuma*. Vol. 1, No. 1 (Spring 2000). Ottawa: Policy Research Initiative

Why GDP per capita?

- **Measures value added in economy**
 - **How well Ontarians convert natural, capital and labour resources into products and services of value to consumers in Ontario and around the world**
 - **ties into productivity, key part of Task Force mandate**
- **Per capita element enables comparisons over time and across jurisdictions**
- **Most commonly used measure – thereby allowing comparisons between jurisdictions**
- **Correlates closely with other proposed measures GNP, Personal Income, Personal Disposable Income**

Canada Among Leading Nations

GDP per Capita at Purchasing Power Parity (PPP) in \$US (2000)

Rank	Country	GDP per capita at PPP
1	United States	\$35,619
2	Norway	\$30,166
3	Switzerland	\$30,138
4	Ireland	\$29,174
5	Denmark	\$29,061
6	Canada	\$27,998
7	Netherlands	\$27,836
8	Austria	\$27,001

Note: Only countries with population over 3.8 million are included here. If all countries were included, Canada would rank 8th.
Source: OECD Main Accounts, National Data; CANSIM

Ontario Fares Well Among Leading Nations

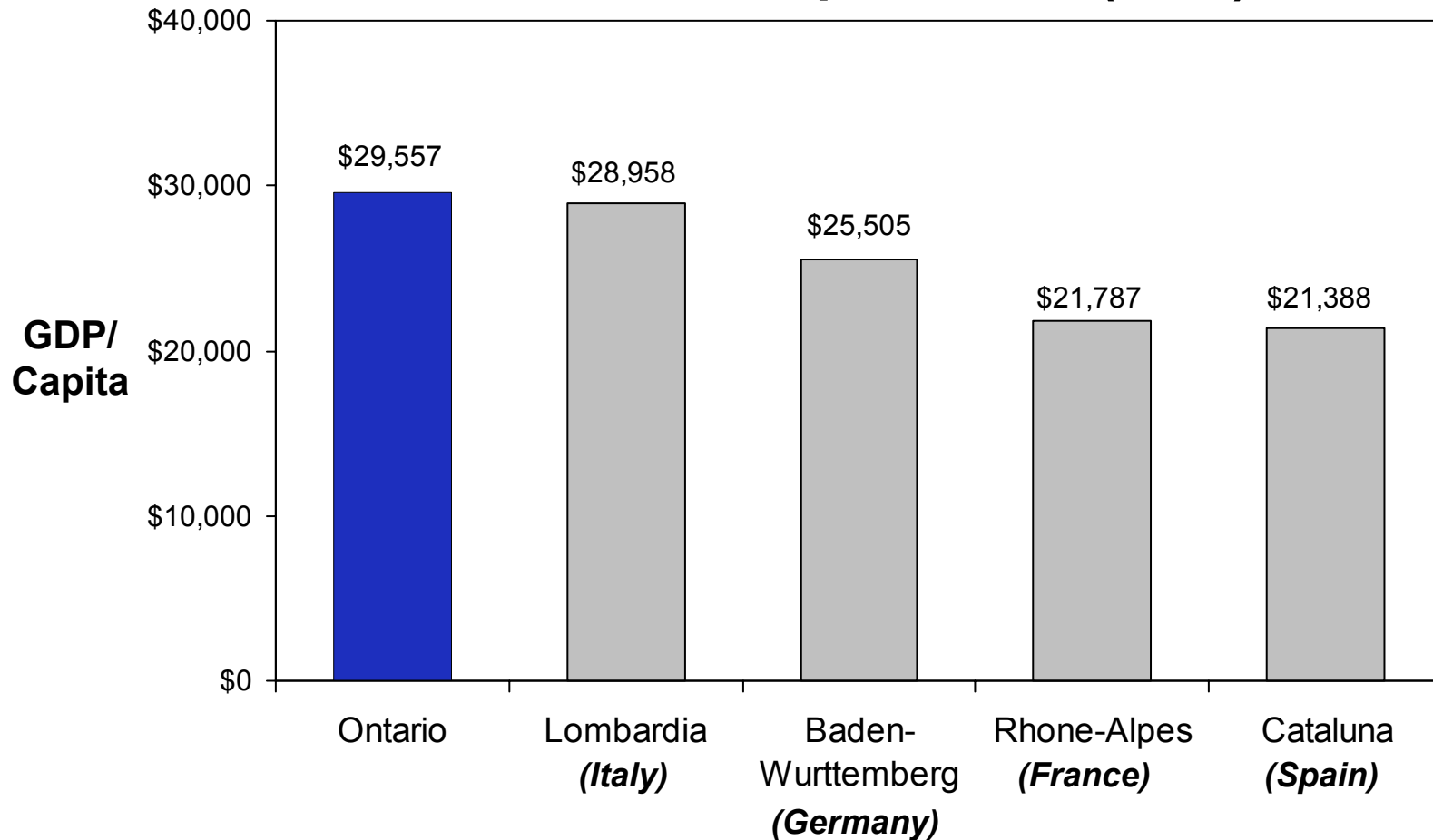
GDP per Capita at Purchasing Power Parity (PPP) in \$US (2000)

Rank	Country	GDP per Capita at PPP
1	United States	\$35,619
	Ontario	\$30,420
2	Norway	\$30,166
3	Switzerland	\$30,138
4	Ireland	\$29,174
5	Denmark	\$29,061
6	Canada	\$27,998
7	Netherlands	\$27,836
8	Austria	\$27,001

Source: OECD Main Accounts, National Data; CANSIM; Institute for Competitiveness & Prosperity analysis

Ontario versus “The Four Motors”

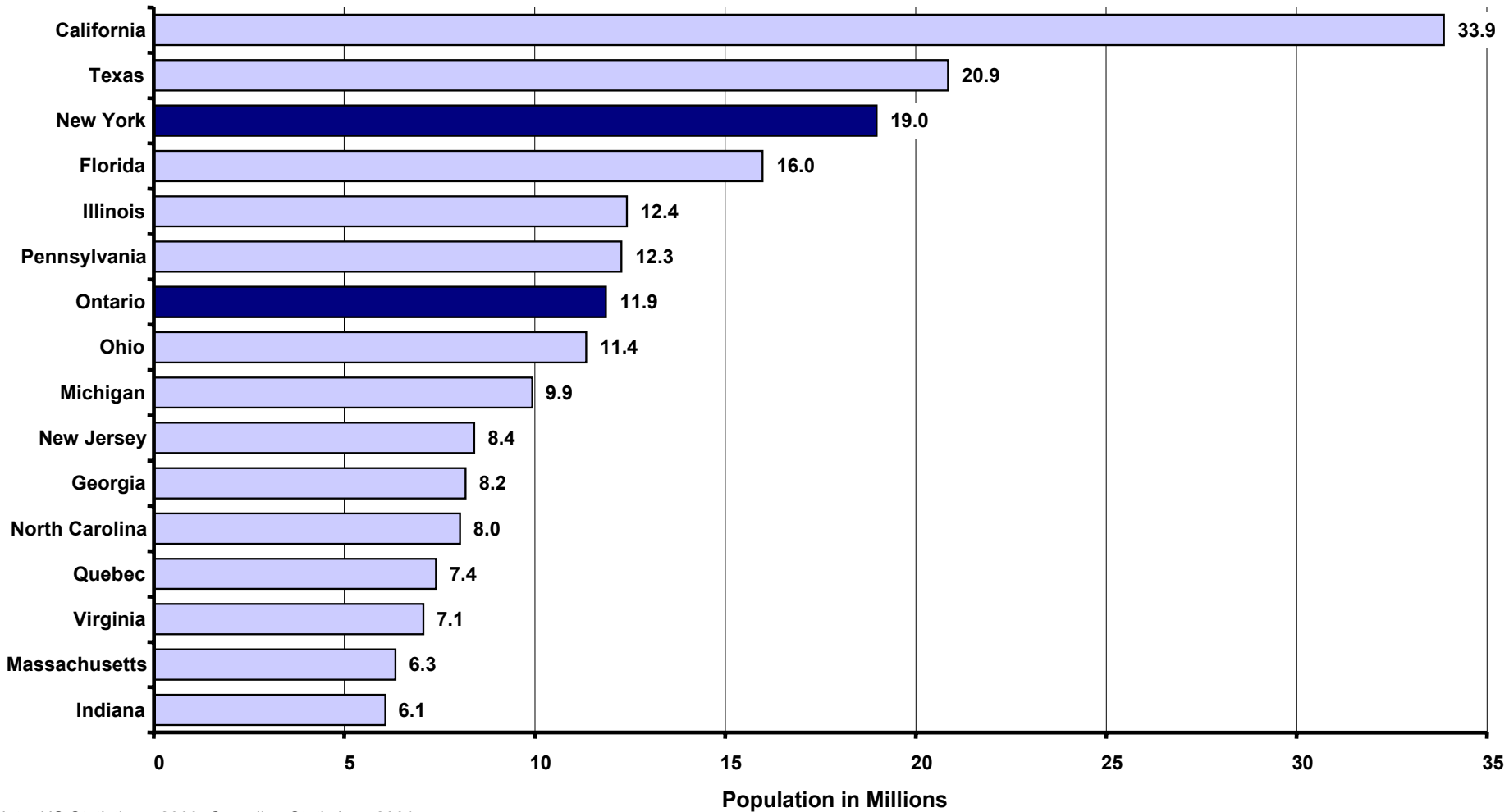
GDP Per Capita, 1999 (PPP)



Source: Statistics Canada; Eurostat

Select States and Provinces for Comparison

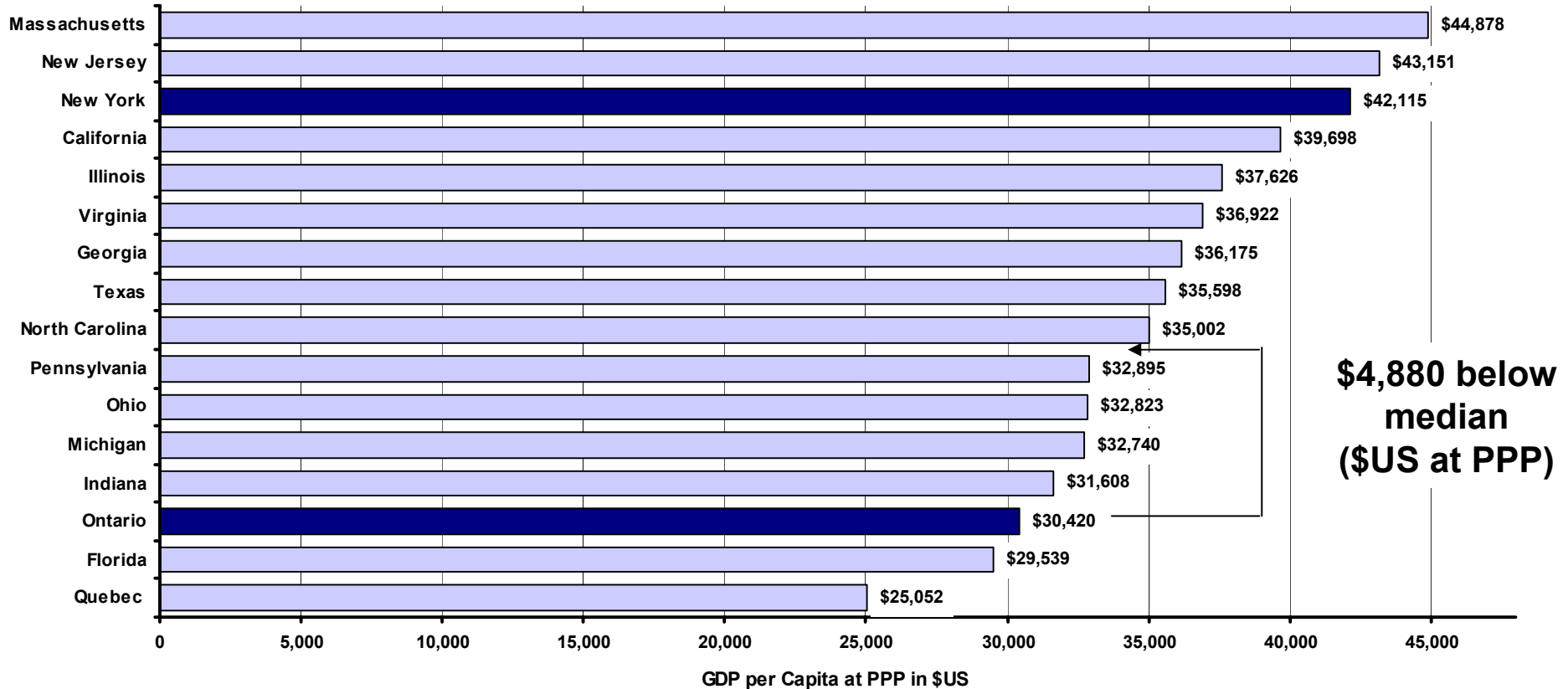
States and Provinces with Population over 6 Million



Note: US Statistics – 2000; Canadian Statistics - 2001
Source: Statistics Canada (Census 2001); US Census Bureau (Census 2000)

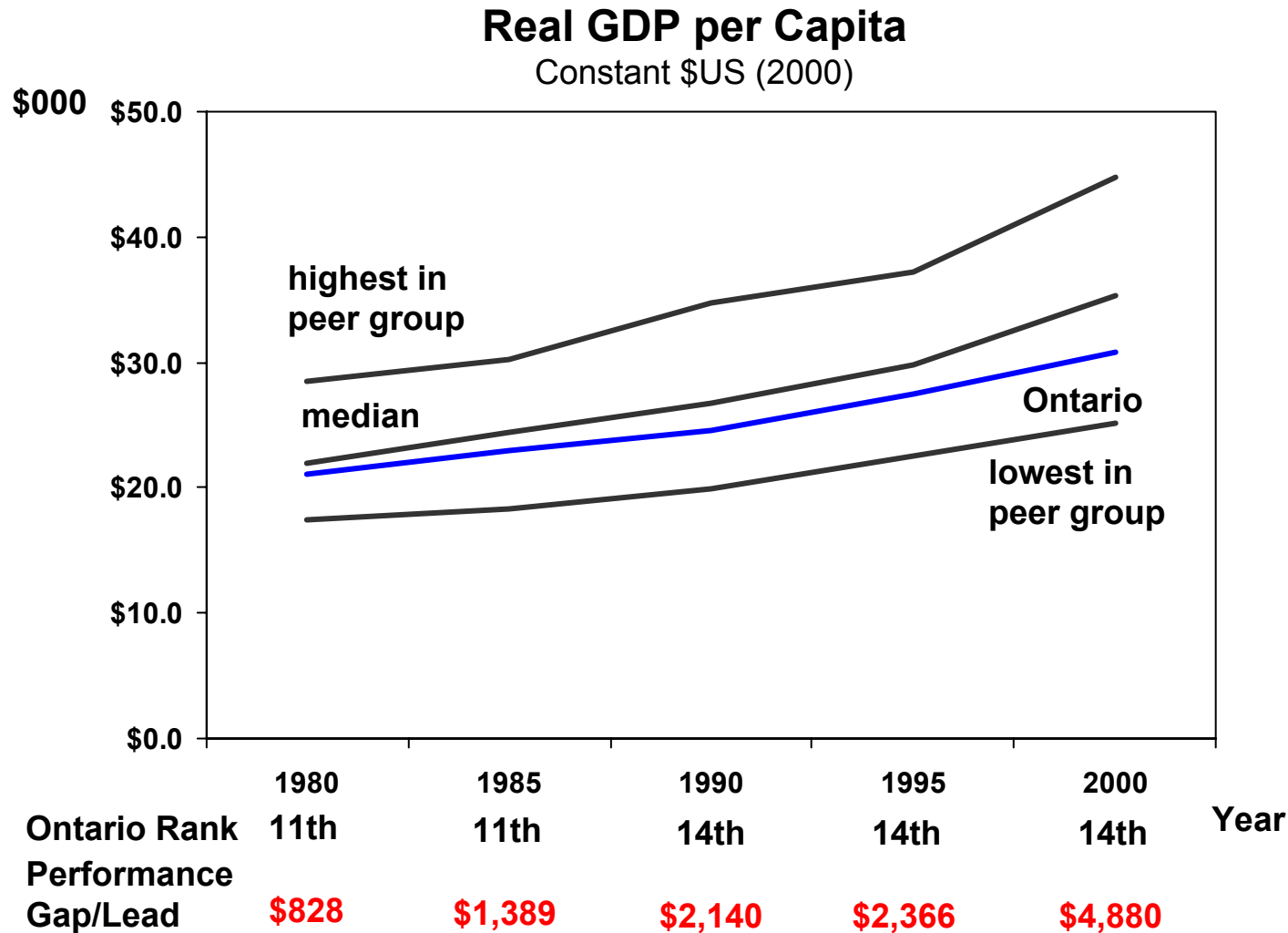
Ontario in a North American Context

GDP per Capita for Select States and Provinces (2000) (Provinces at Purchasing Power Parity in \$US)



Source: OECD Main Accounts, National Data; CANSIM II; US Department of Commerce, BEA (June 2002); Institute for Competitiveness & Prosperity analysis

Ontario's performance sine 1980



Source: OECD; Statistics Canada; US Department of Commerce, BEA; Institute for Competitiveness & Prosperity analysis
 Note: 1980 data used for Ontario and Quebec based on 1981 results

Measuring Ontario's Prosperity

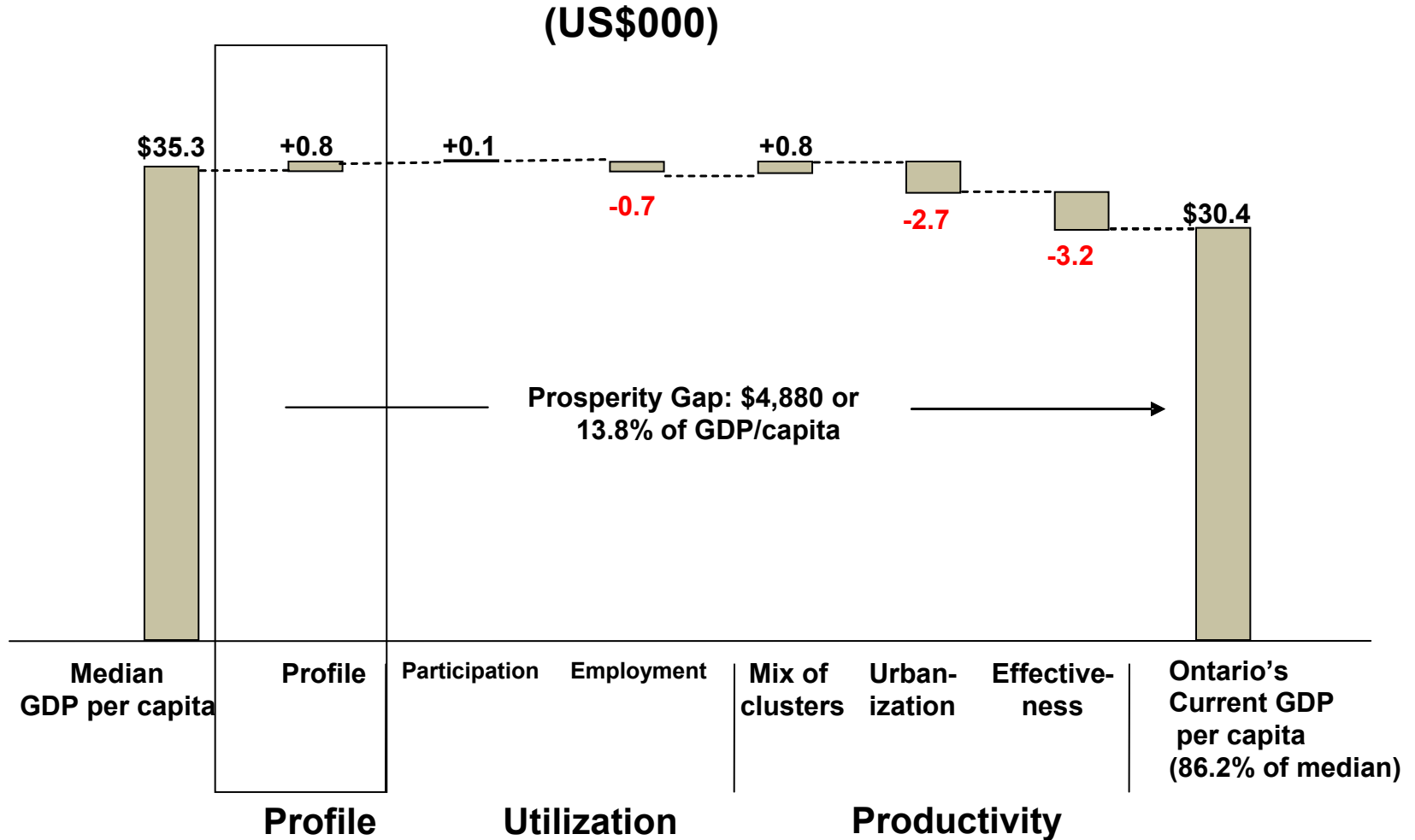
Drawing on our work to date

Mapping the performance gap

- **Ontario's GDP per capita trails the peer group median by \$6,000, largely as the result of lower productivity or effectiveness**

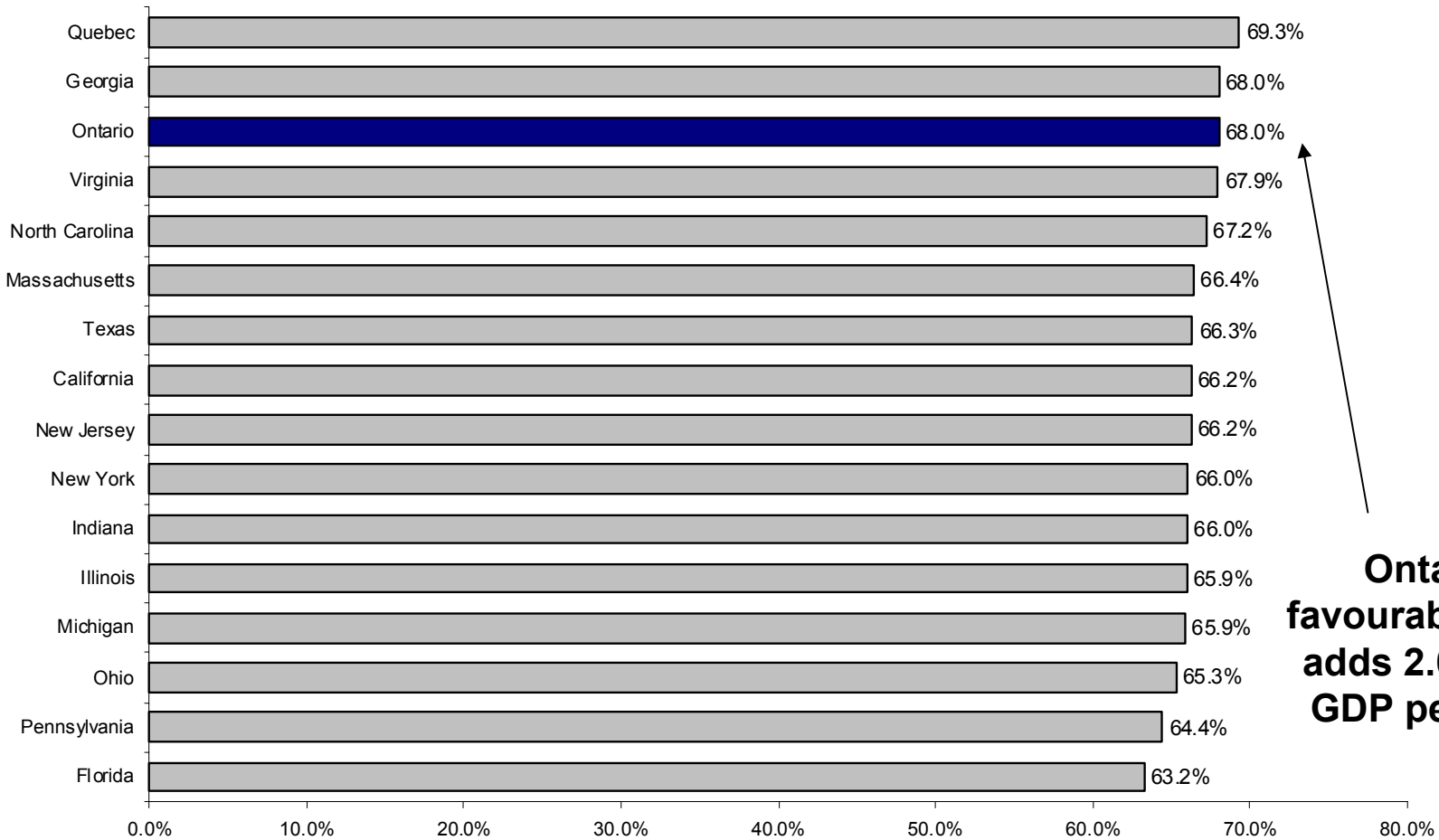
Hamilton and St. Catharines Cluster Data

Mapping the prosperity gap



Source: Statistics Canada, Bureau of Economic Analysis, Institute for Competitiveness and Prosperity
 Note: Median comprises 16 North American jurisdictions with populations that exceed 6 million

Working Age Population as % of Total Ontario and Selected North American Jurisdictions

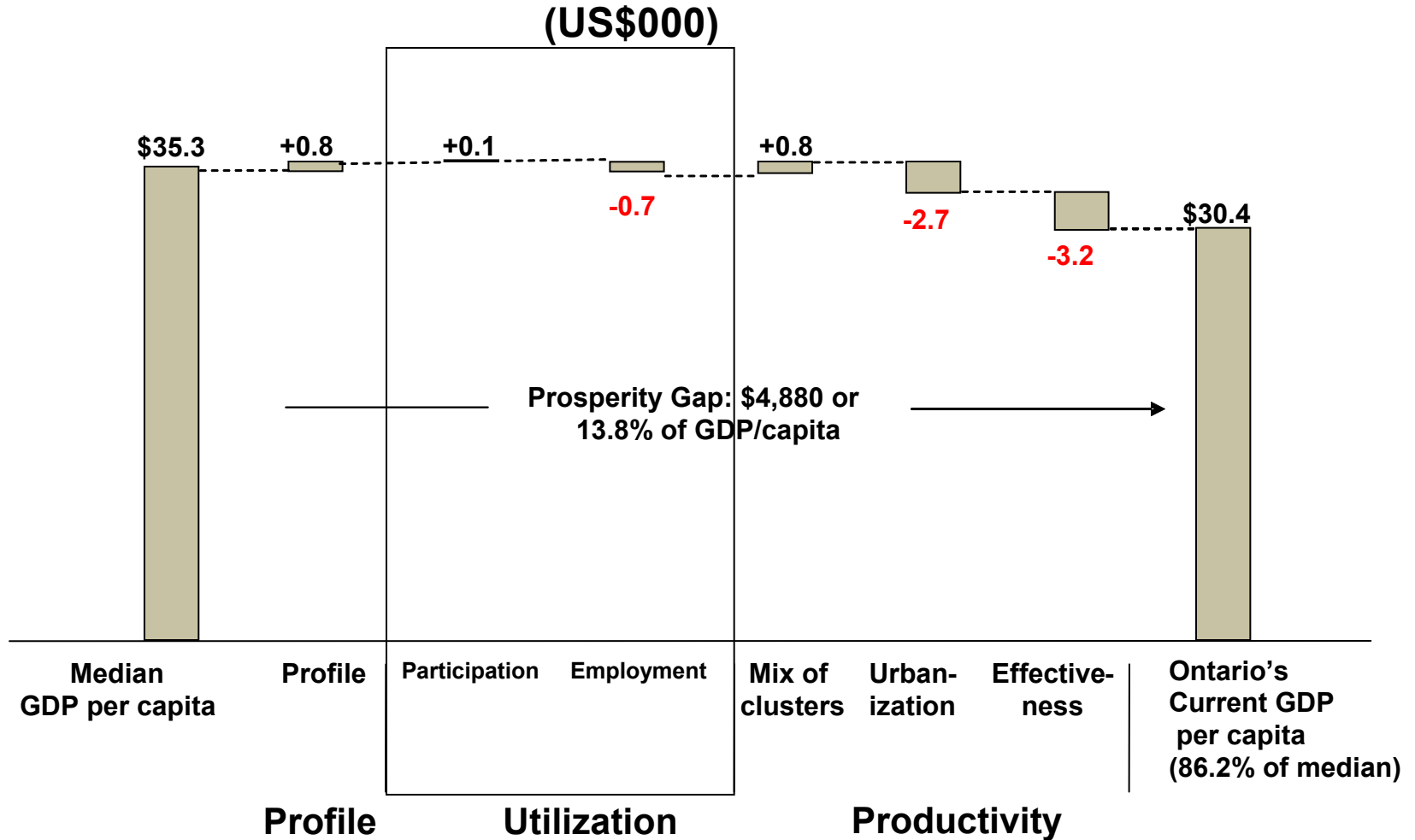


Ontario's favourable profile adds 2.6% to its GDP per capita

Source: Statistics Canada, 2001 Census; U.S. Census Bureau, Census 2000

Working Age (15-64) Population as % Total Population

Mapping the prosperity gap



Source: Statistics Canada, Bureau of Economic Analysis, Institute for Competitiveness and Prosperity
 Note: Median comprises 16 North American jurisdictions with populations that exceed 6 million

Utilization: Participation & Employment Rates

Participation rate **x** **Employment rate** **=** **Utilization**

**Workers + Job
seekers**

x

**Employed
people**

=

**Employed
people**

**Working Age
Population**

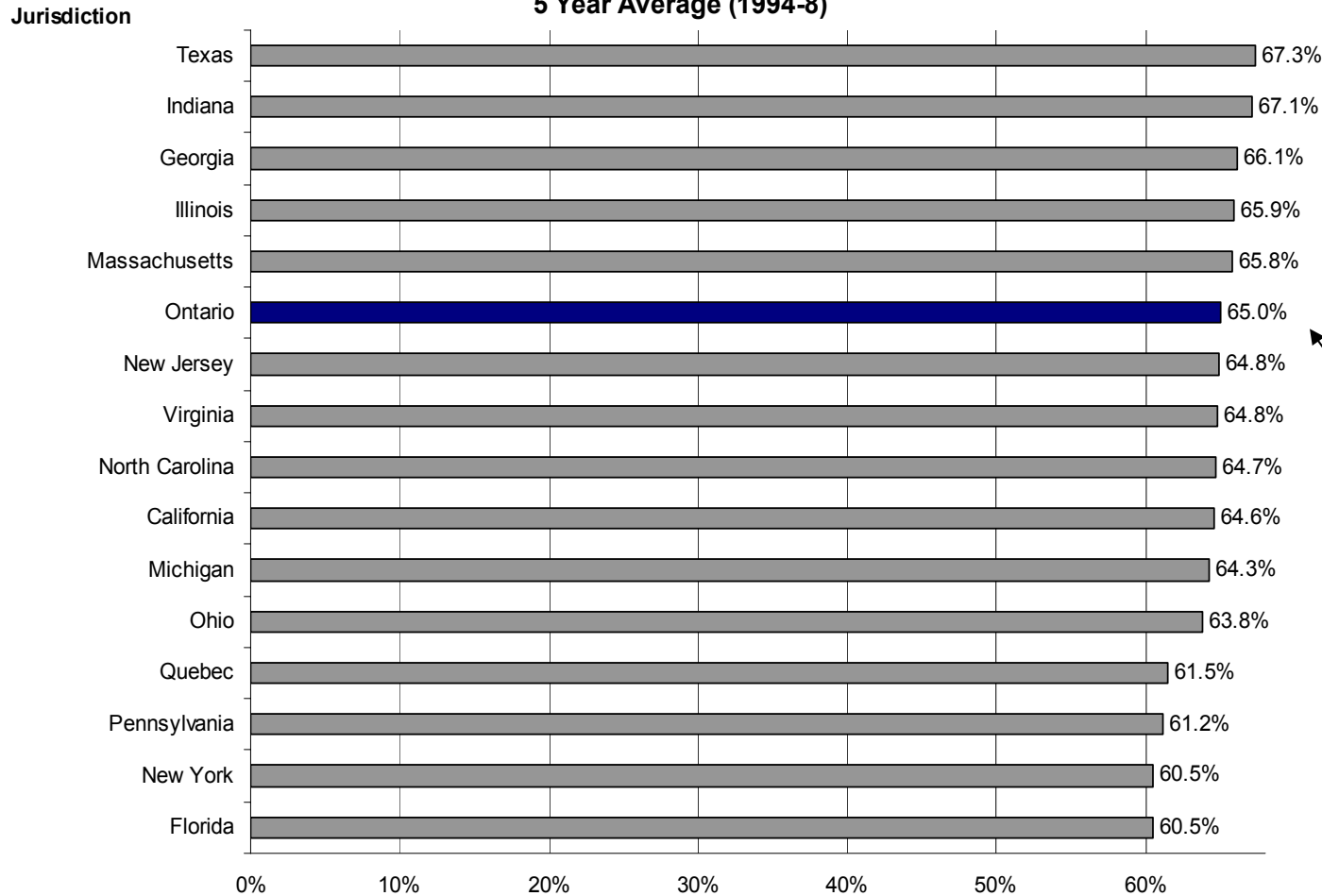
**Workers + Job
Seekers**

**Working
Aged
Population**

Ontario's Participation Rate is a strength

Participation Rates 5 Year Average (1994-8)

Participation Rates
5 Year Average (1994-8)

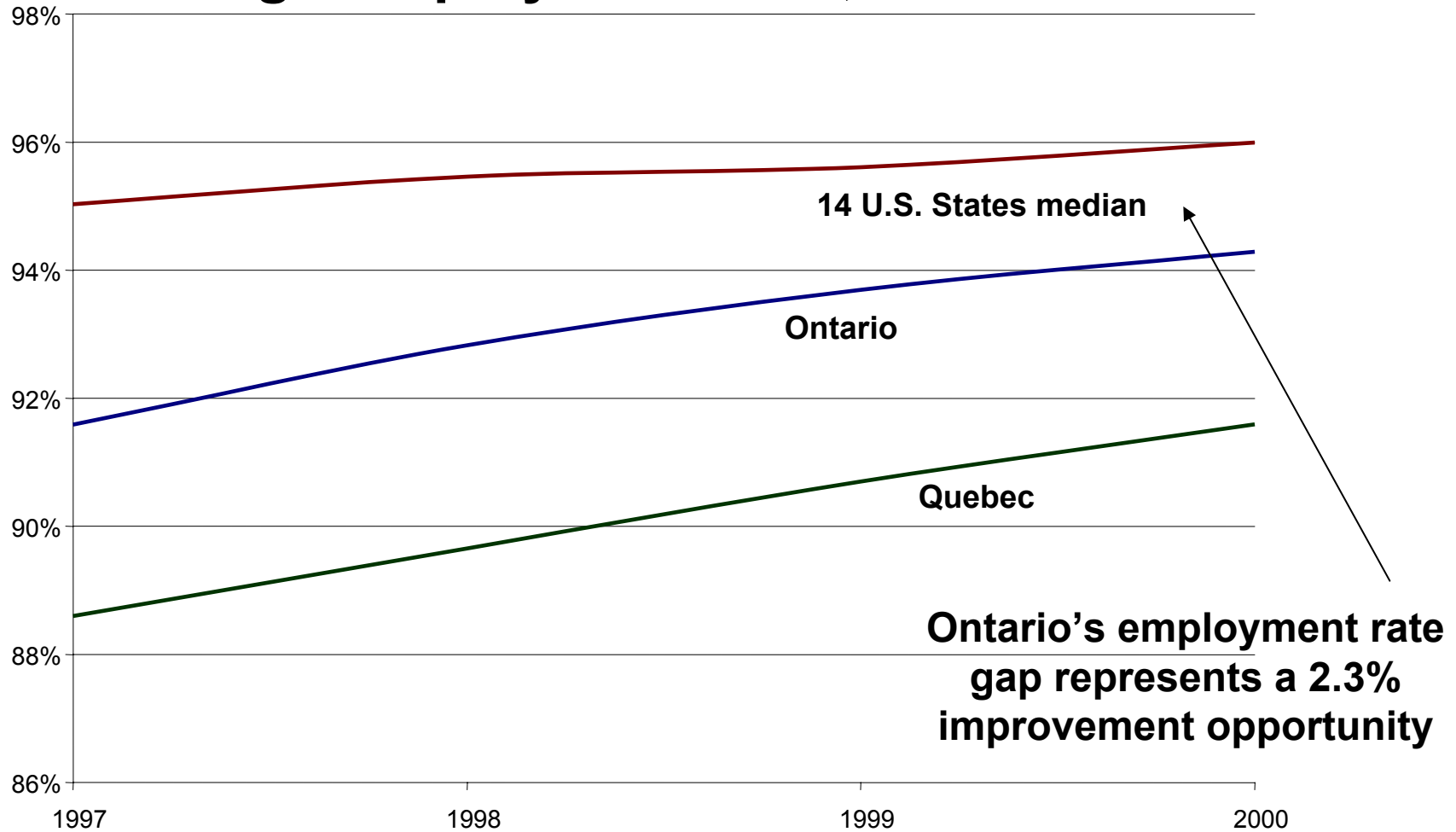


Percentage of people aged 15+ who are working or seeking employment

Ontario's over-performance adds 0.3% to GDP per capita

Source: Statistics Canada, Labour Force Historical Review; Bureau of Labor Statistics, Current Employment Statistics; U.S. Census Bureau, Census 2000.

Average Employment Rate, 1997 - 2000

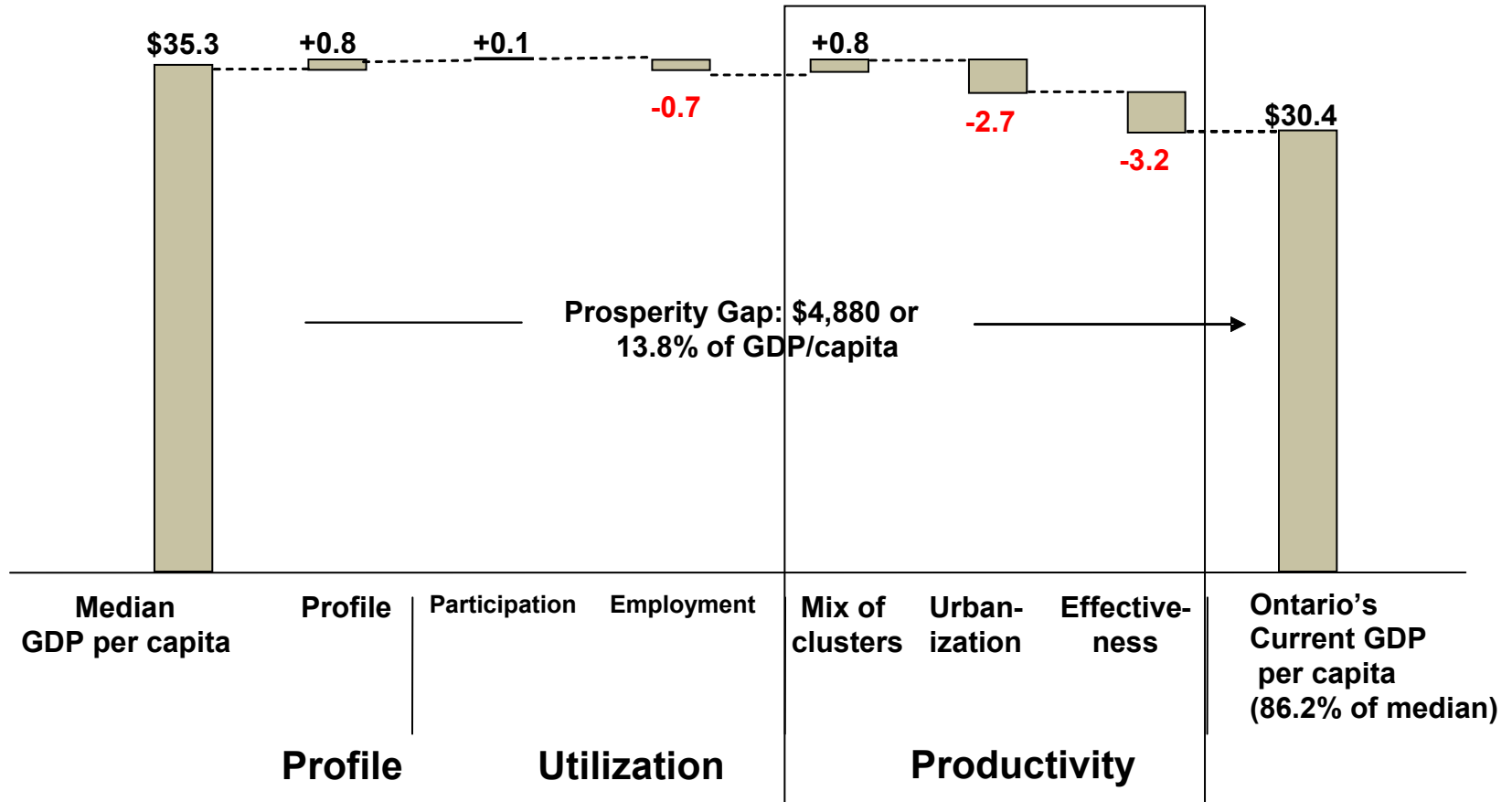


Source: Statistics Canada, Labour Force Survey; Bureau of Labour Statistics

Note: U.S. states figure represents the median employment rate, for each year listed, for the 12 peer group states.

Mapping the prosperity gap

(US\$000)



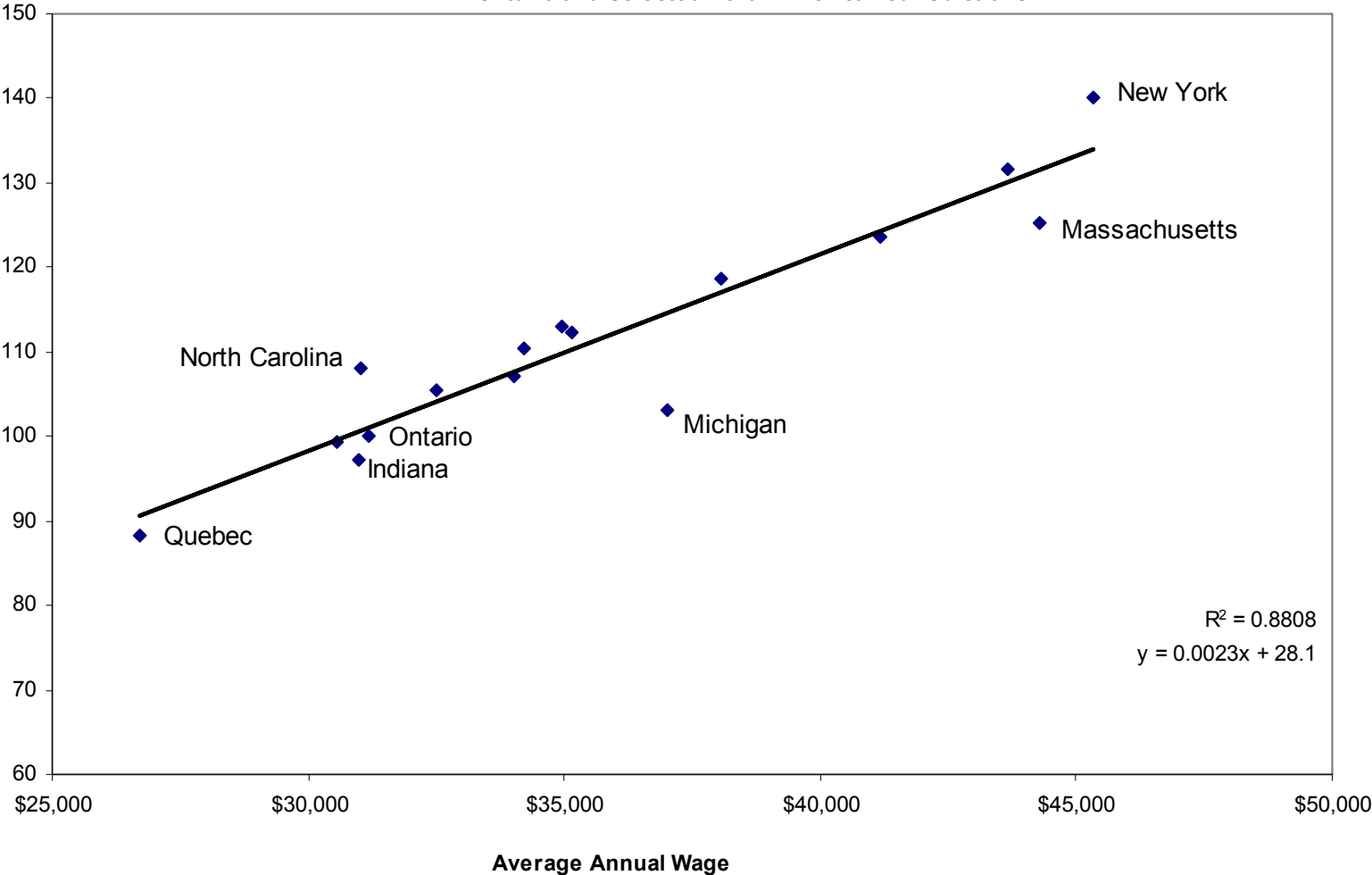
Source: Statistics Canada, Bureau of Economic Analysis, Institute for Competitiveness and Prosperity
 Note: Median comprises 16 North American jurisdictions with populations that exceed 6 million

Annual Wage Correlates Closely with Productivity

Productivity
(Ontario = 100)

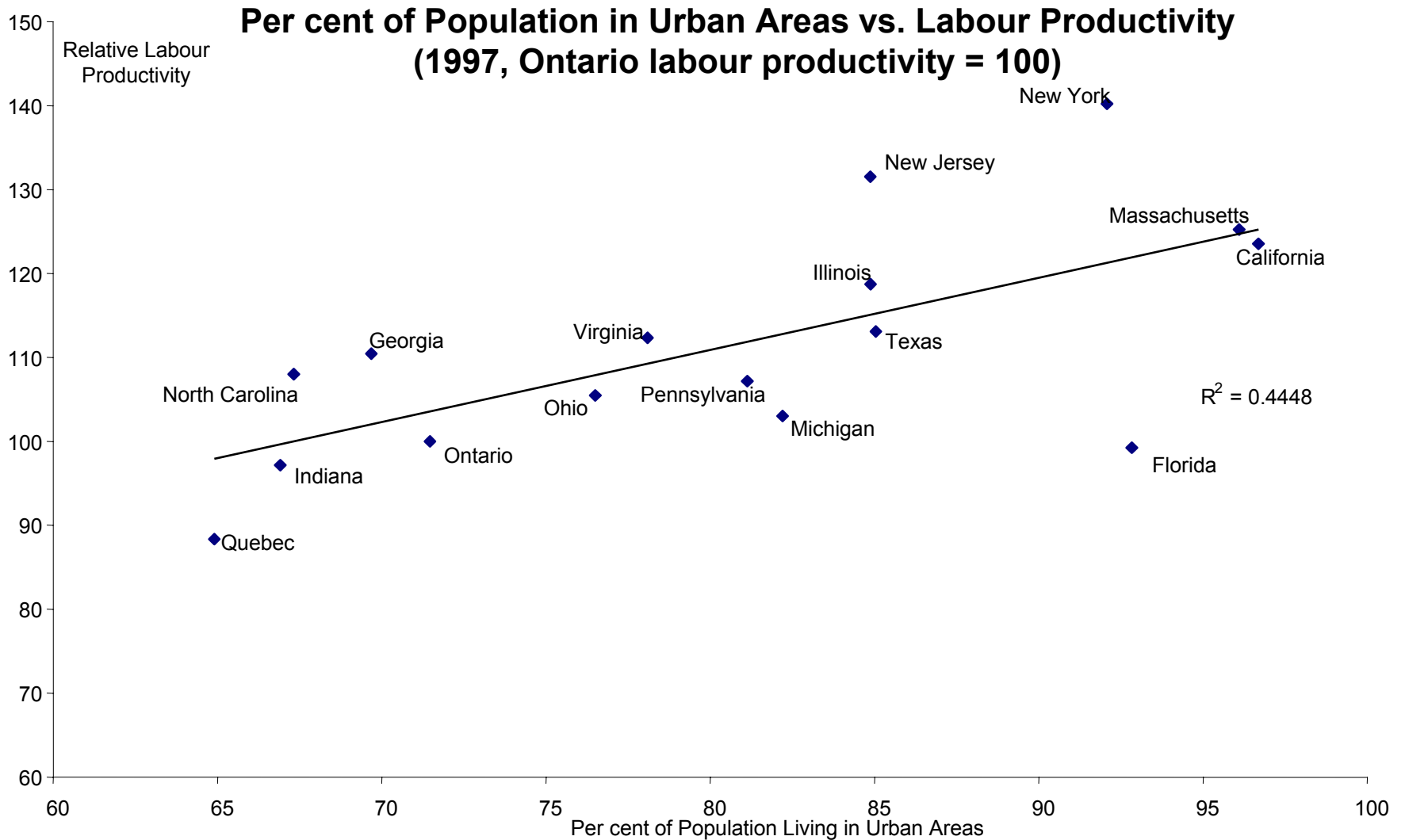
Wages vs. Productivity

Ontario and Selected North American Jurisdictions



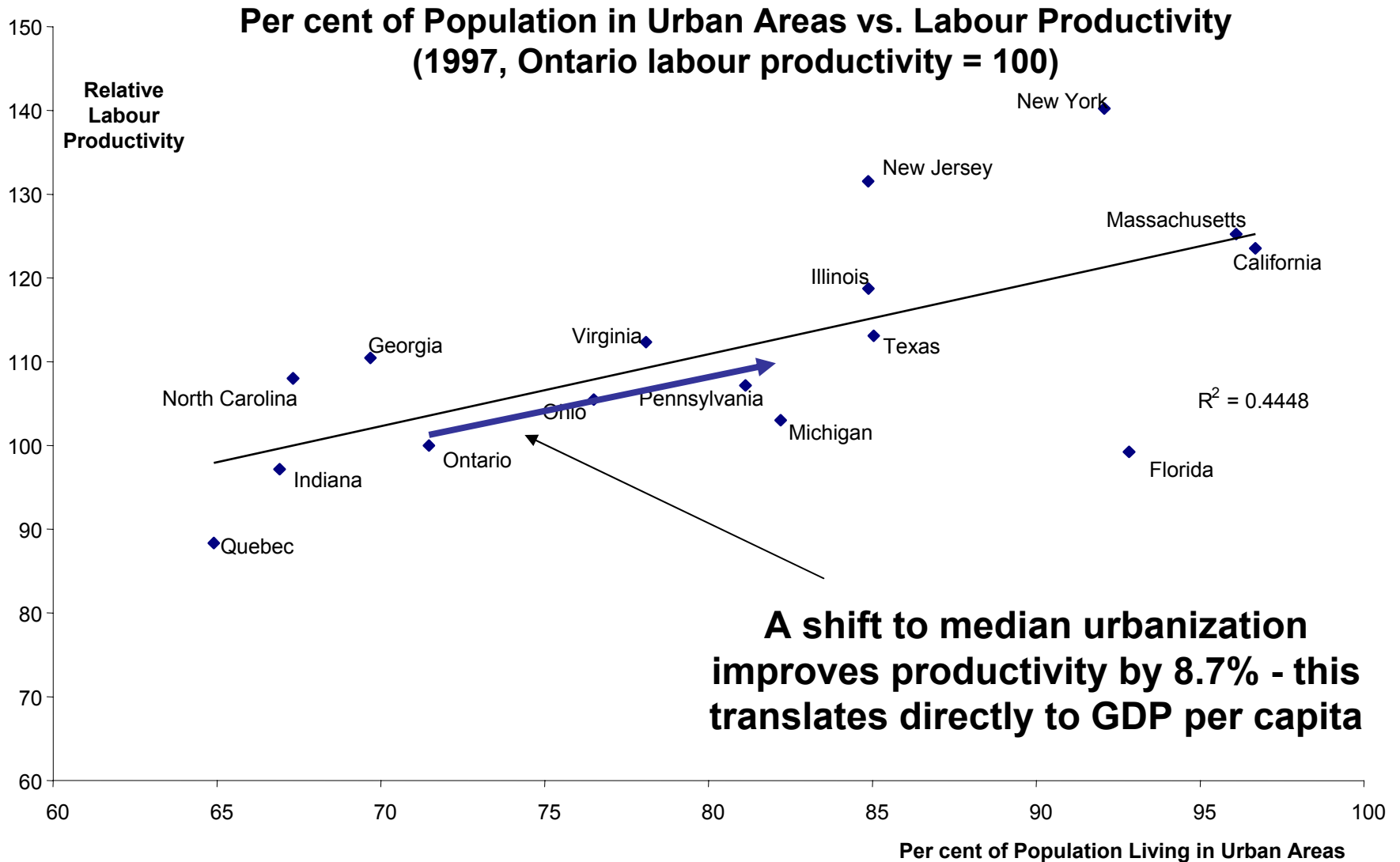
Source: Statistics Canada, Bureau of Economic Analysis, Institute for Competitiveness and Prosperity

Urbanization and Productivity



Source: Le Letourneau, R. (2000). "A Regional Perspective on the Canada-US Standard of Living Comparison." *Occasional Paper No. 22*. Ottawa: Industry Canada; Statistics Canada, Census 2001; U.S. Census Bureau; Census 2000; Institute for Competitiveness and Prosperity

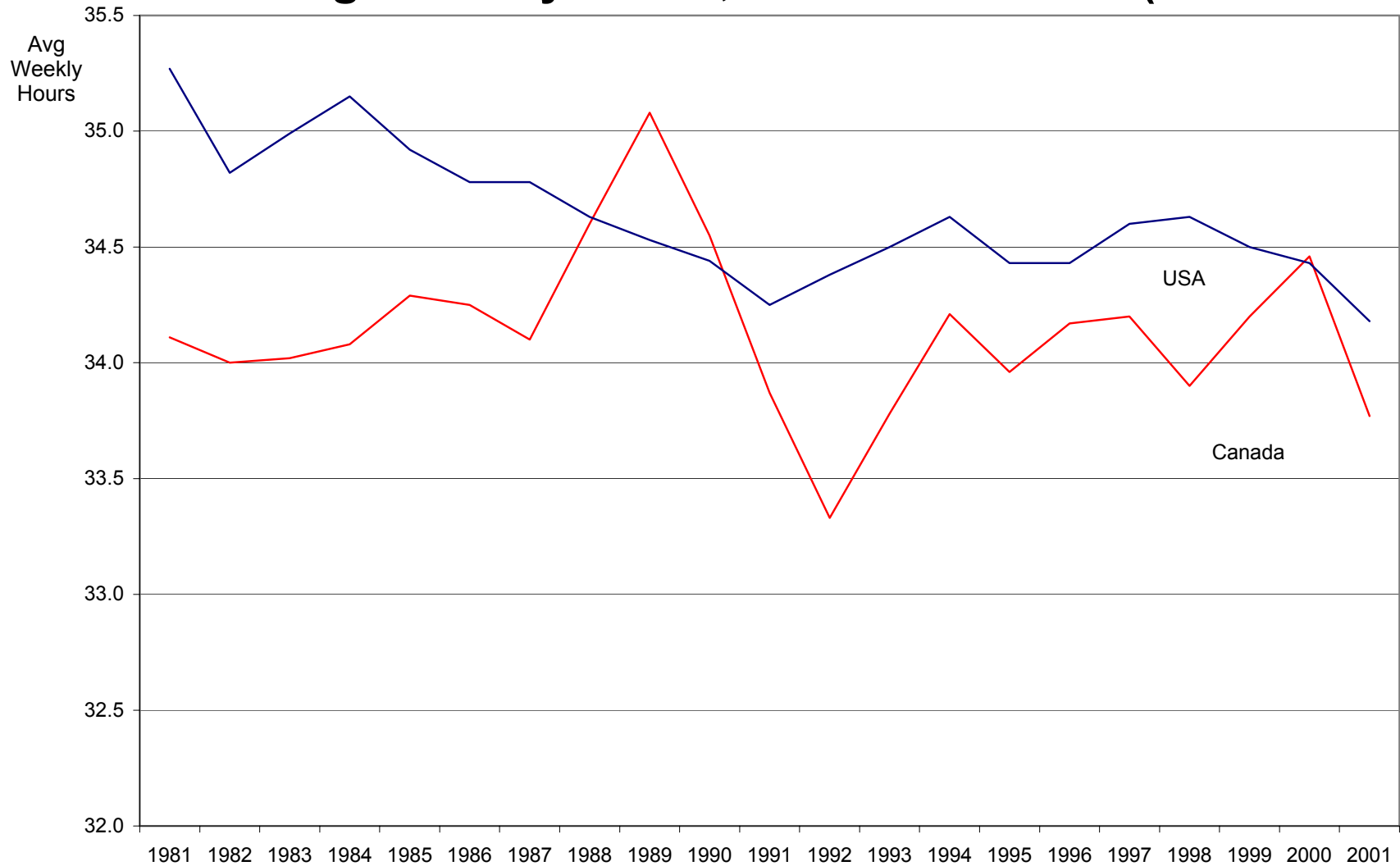
Impact of Ontario's Low Urbanization



Source: Le Letourneau, R. (2000). "A Regional Perspective on the Canada-US Standard of Living Comparison." *Occasional Paper No. 22*. Ottawa: Industry Canada; Statistics Canada, Census 2001; U.S. Census Bureau; Census 2000; Institute for Competitiveness and Prosperity

Intensity: National Data

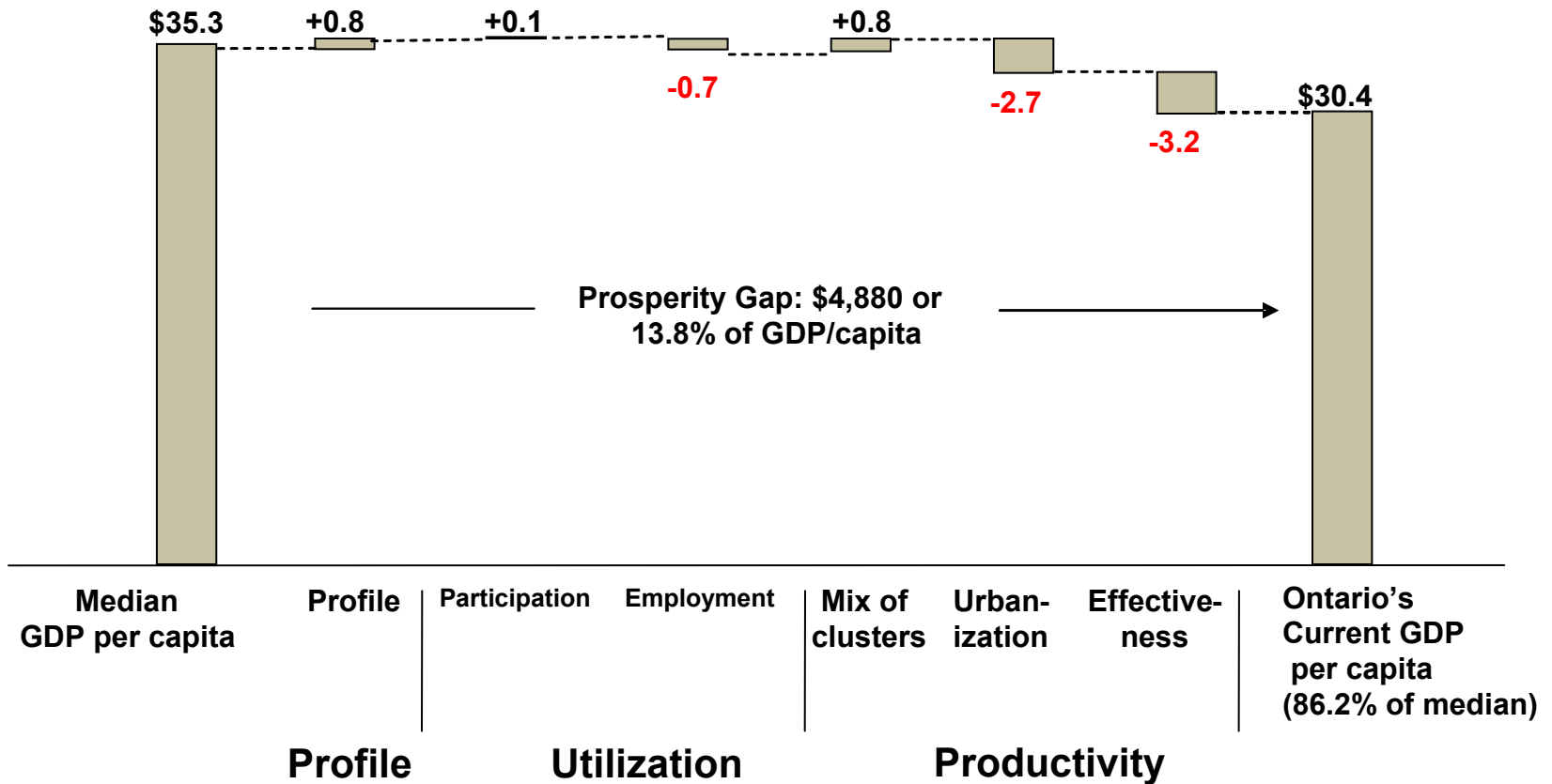
Average Weekly Hours, Canada and U.S. (1981 – 2001)



Source: Sharpe, A. (2001). "Determinants of Trends in Living Standards in Canada and the United States, 1989 - 2000."
International Productivity Monitor No. 2 Spring 2001

Mapping the prosperity gap

(US\$000)



Source: Statistics Canada, Bureau of Economic Analysis, Institute for Competitiveness and Prosperity
 Note: Median comprises 16 North American jurisdictions with populations that exceed 6 million

Performance leads and gaps within the peer group

		PROFILE	UTILIZATION		PRODUCTIVITY			
	GDP per capita	Profile	Participation	Employment	Cluster Mix	Urbanization	Effectiveness	Performance Lead or Gap
Massachusetts	\$44,878	\$135	\$750	\$656	\$998	\$4,448	\$2,590	\$9,578
New Jersey	\$43,151	\$0	\$73	\$48	\$448	\$916	\$6,463	\$7,851
New York	\$42,115	\$128	\$2,952	\$385	\$288	\$2,697	\$7,295	\$6,816
California	\$39,698	\$0	\$98	\$605	\$316	\$4,155	\$630	\$4,398
Illinois	\$37,626	\$171	\$651	\$42	\$957	\$885	\$38	\$2,326
Virginia	\$36,922	\$924	\$51	\$629	\$173	\$1,002	\$1,194	\$1,623
Georgia	\$36,175	\$958	\$734	\$172	\$400	\$3,362	\$2,775	\$875
Texas	\$35,598	\$54	\$1,374	\$159	\$37	\$906	\$1,914	\$298
N. Carolina	\$35,002	\$521	\$49	\$461	\$908	\$3,995	\$3,673	\$298
Pennsylvania	\$32,895	\$919	\$1,926	\$40	\$146	\$145	\$771	\$2,405
Ohio	\$32,823	\$452	\$478	\$120	\$36	\$1,377	\$253	\$2,477
Michigan	\$32,740	\$149	\$250	\$176	\$55	\$150	\$2,432	\$2,560
Indiana	\$31,608	\$96	\$1,125	\$512	\$117	\$4,122	\$30	\$3,691
Ontario	\$30,420	\$805	\$103	\$713	\$825	\$2,653	\$3,247	\$4,880
Florida	\$29,539	\$1,402	\$2,086	\$131	\$1,000	\$2,851	\$4,255	\$5,761
Quebec	\$25,052	\$1,121	\$1,324	\$1,430	\$101	\$4,082	\$4,634	\$10,248
median	\$35,300	\$0	\$1	\$1	\$0	\$3	\$330	\$0

Source: Statistics Canada; Bureau of Economic Analysis, Institute for Competitiveness and Prosperity

Measuring Ontario's Prosperity

Drawing on our work to date

Mapping the performance gap

Hamilton and St. Catharines Cluster Data

The Metal Manufacturing Cluster

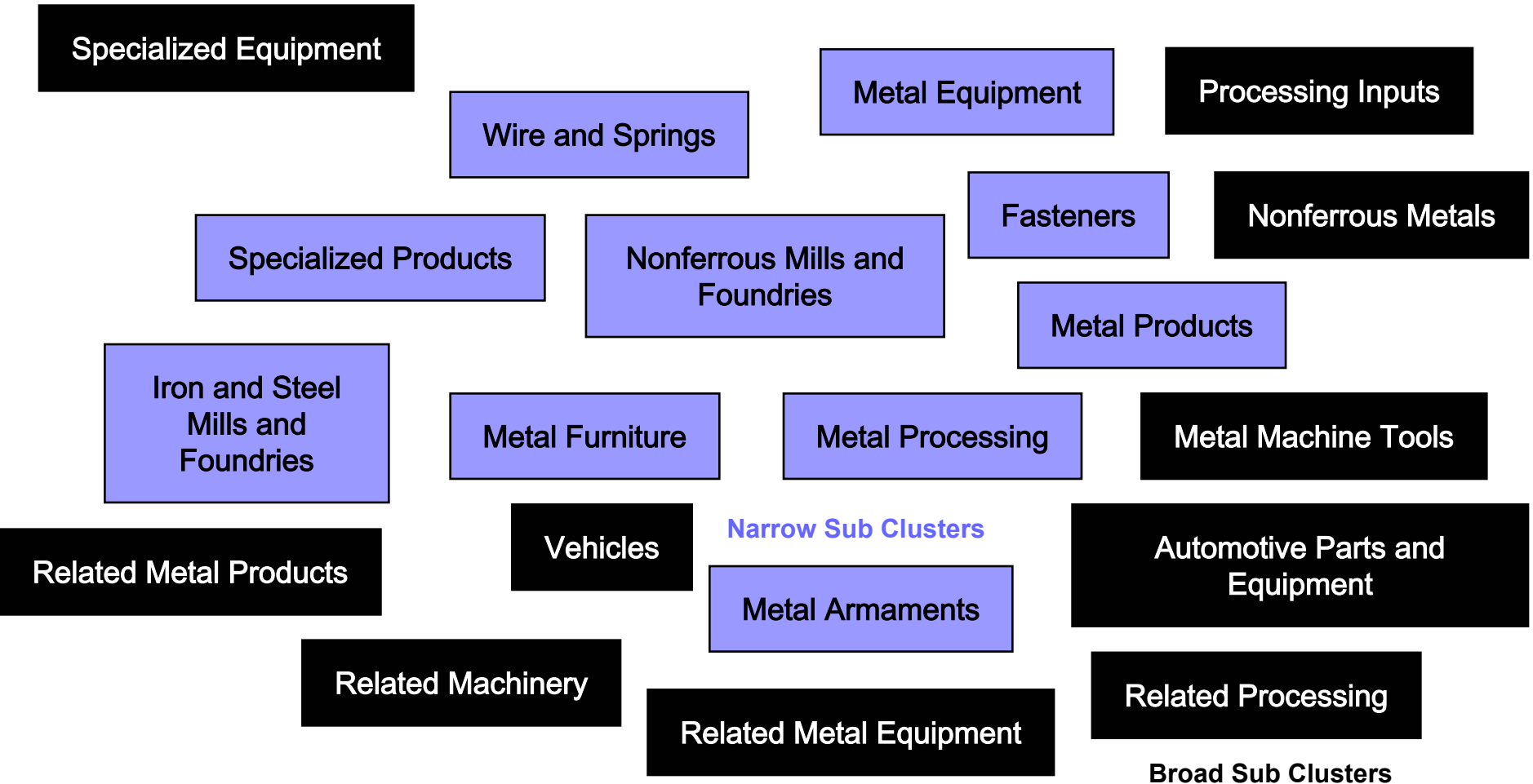
Leading CMA's by Traded Cluster Employment (2000)

	Ontario CMA	Employment	Location Quotient
1	Toronto	42,578	1.28
2	Hamilton	23,848	5.43
3	Kitchener	7,389	2.51
4	St. Catharines	7,004	2.91
5	Windsor	6,969	3.43
6	London	3,333	1.17
7	Oshawa	1,939	1.04
8	Ottawa	1,138	0.17
9	Thunder Bay	728	0.90
10	Sudbury	244	0.25

Note: Location quotients are North American

Source: Statistics Canada, Canadian Business Patterns (June 2000); Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Institute for Competitiveness & Prosperity

Components of the Metal Manufacturing Cluster



43 Narrow Sub Cluster Industries
 24 Broad Sub Cluster Industries

Source: Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Institute for Competitiveness & Prosperity analysis

The Education and Knowledge Creation Cluster

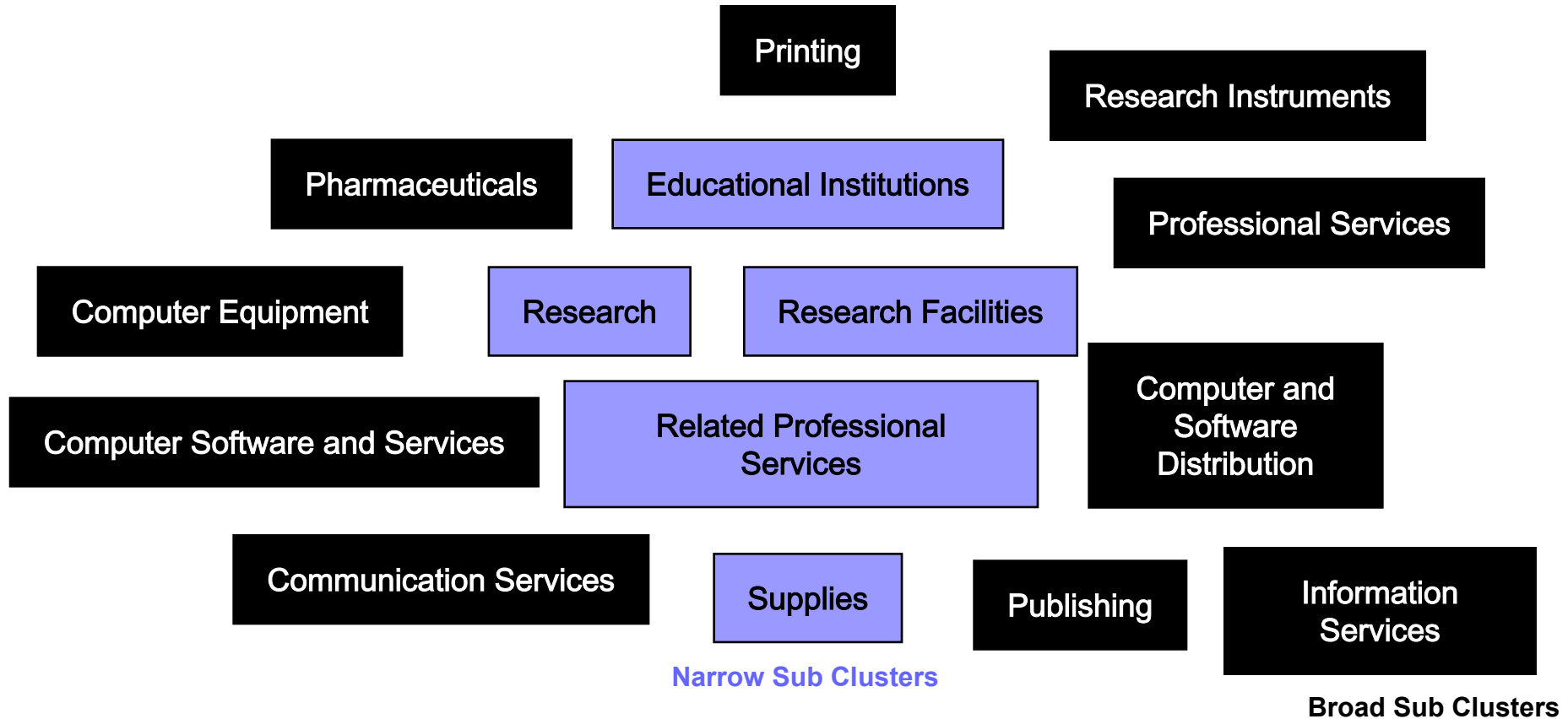
Leading CMA's by Traded Cluster Employment (2000)

	Ontario CMA	Employment	Location Quotient
1	Toronto	54,523	1.03
2	Ottawa	23,943	2.31
3	Hamilton	10,914	1.56
4	Kitchener	9,904	2.11
5	London	7,680	1.69
6	Windsor	3,985	1.23
7	St. Catharines	3,642	0.95
8	Sudbury	2,482	1.57
9	Thunder Bay	2,181	1.69
10	Oshawa	1,502	0.51

Note: Location quotients are North American

Source: Statistics Canada, Canadian Business Patterns (June 2000); Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Institute for Competitiveness & Prosperity

The Education and Knowledge Creation Cluster



10 Narrow Sub Cluster Industries
30 Broad Sub Cluster Industries

Source: Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Institute for Competitiveness & Prosperity analysis

The Hospitality and Tourism Cluster

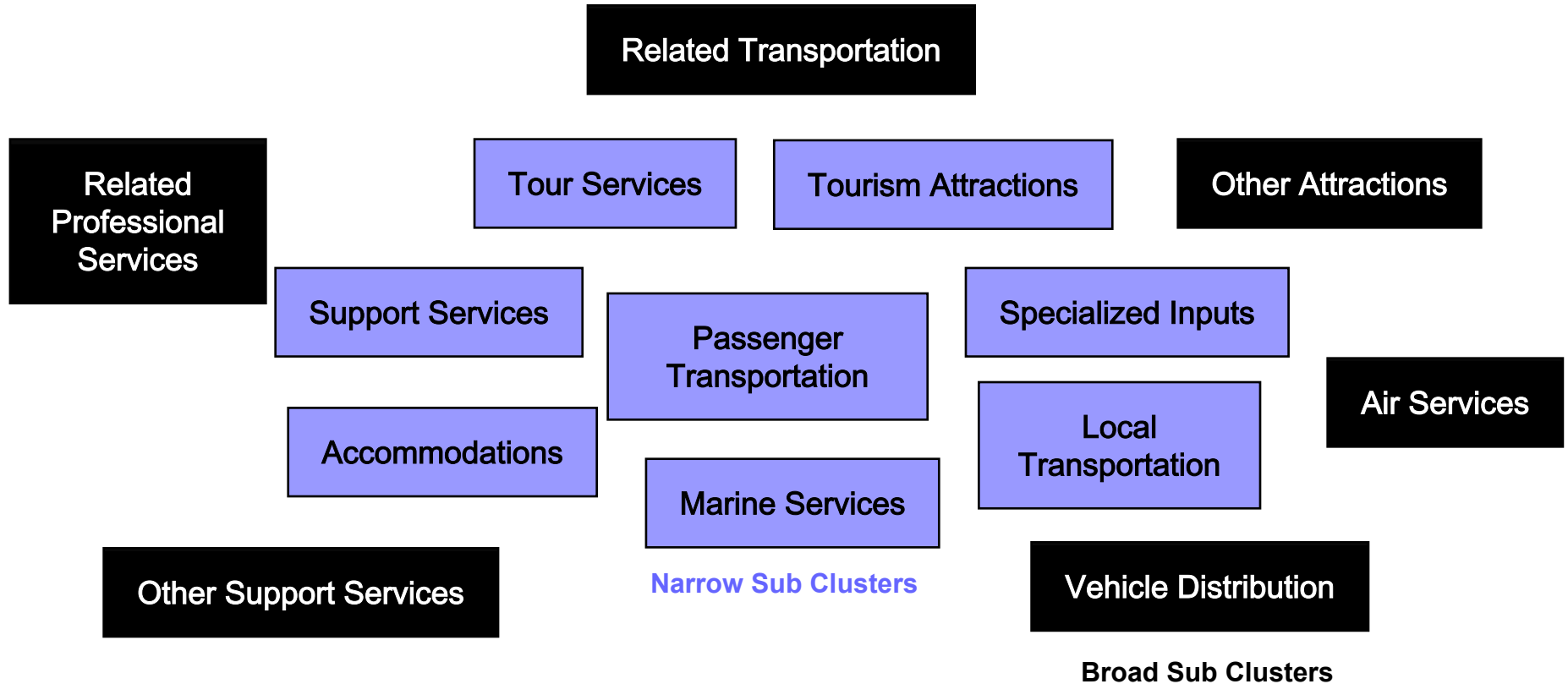
Leading CMA's by Traded Cluster Employment (2000)

	Ontario CMA	Employment	Location Quotient
1	Toronto	47,965	0.79
2	Ottawa	12,714	1.07
3	St. Catharines	10,930	2.50
4	Windsor	4,985	1.35
5	Hamilton	4,658	0.58
6	Kitchener	3,025	0.57
7	London	2,638	0.51
8	Sudbury	2,321	1.29
9	Thunder Bay	1,951	1.33
10	Oshawa	1,611	0.48

Note: Location quotients are North American

Source: Statistics Canada, Canadian Business Patterns (June 2000); Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Institute for Competitiveness & Prosperity

The Hospitality and Tourism Cluster



22 Narrow Sub Cluster Industries

12 Broad Sub Cluster Industries

Source: Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Institute for Competitiveness & Prosperity analysis

The Automotive Cluster

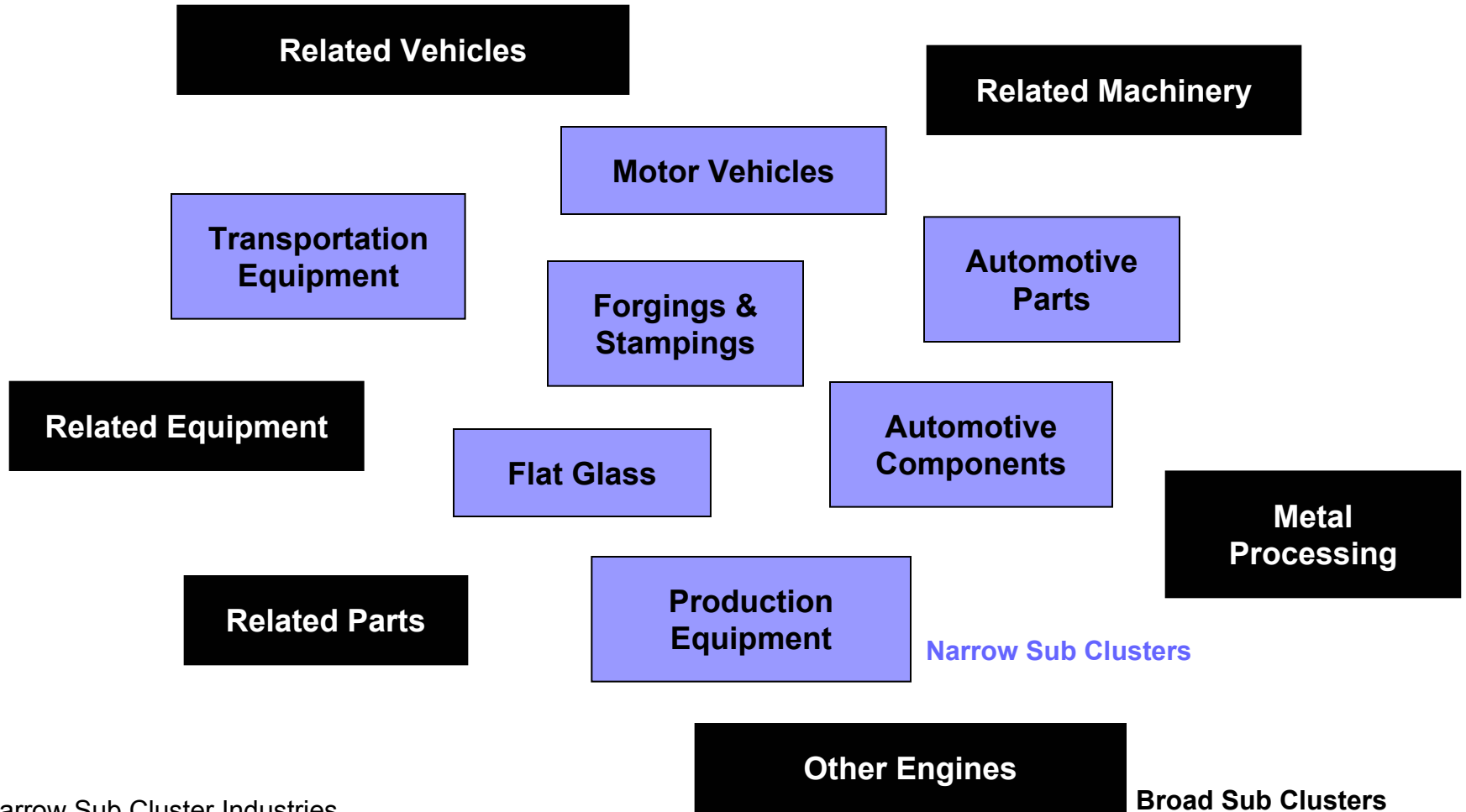
Leading CMA's by Traded Cluster Employment (2000)

	Ontario CMA	Employment	Location Quotient
1	Toronto	53,023	1.66
2	Oshawa	22,833	12.82
3	Windsor	21,447	11.04
4	Kitchener	9,969	3.53
5	London	8,897	3.26
6	St. Catharines	7,568	3.28
7	Hamilton	4,041	0.96
8	Ottawa	1,357	0.22
9	Sudbury	320	0.34
10	Thunder Bay	142	0.18

Note: Location quotients are North American

Source: Statistics Canada, Canadian Business Patterns (June 2000); Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Institute for Competitiveness & Prosperity

Components of the Automotive Cluster



14 Narrow Sub Cluster Industries

18 Broad Sub Cluster Industries

By share of traded cluster employment ranks 10th in the US, 3rd in Ontario and 17th in the rest of Canada

Source: Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Institute for Competitiveness & Prosperity analysis

The Processed Food Cluster

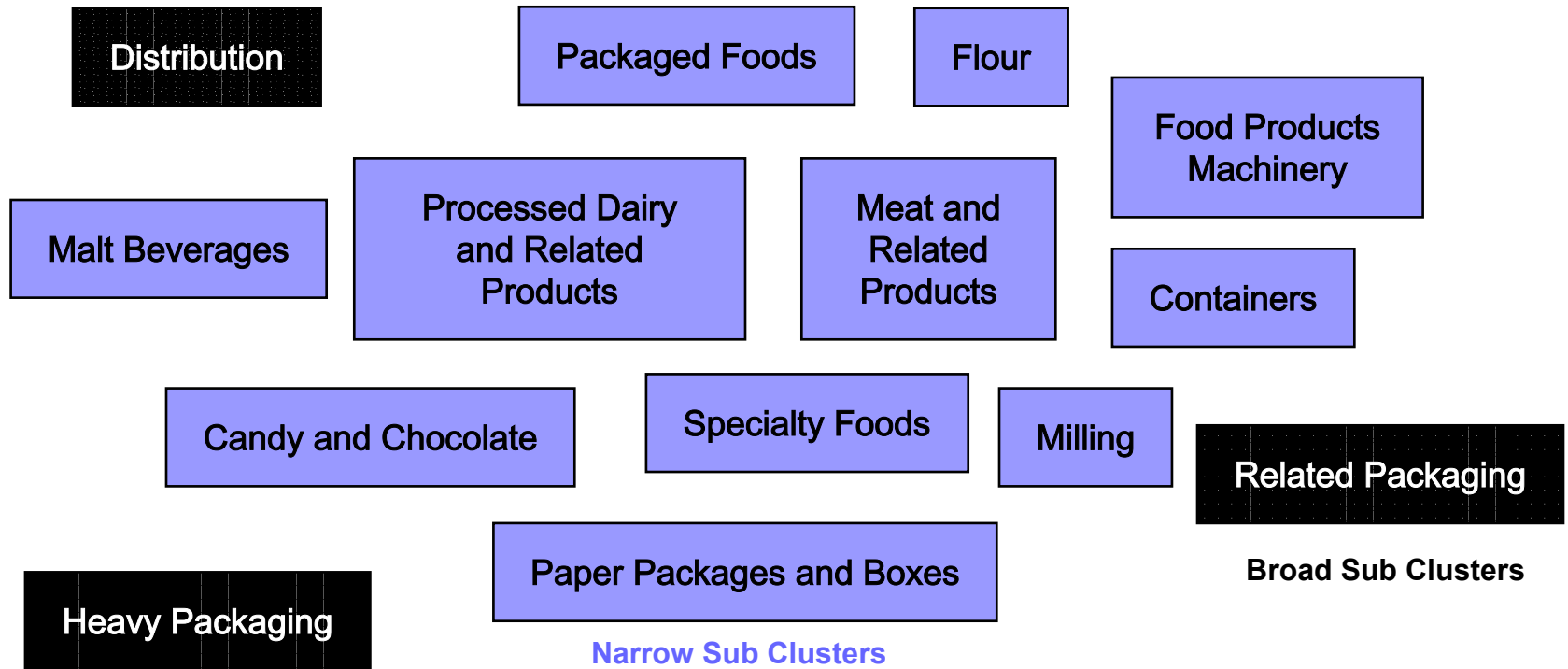
Leading CMA's by Traded Cluster Employment (2000)

	Ontario CMA	Employment	Location Quotient
1	Toronto	42,642	1.27
2	Kitchener	6,870	2.32
3	Hamilton	6,095	1.38
4	London	3,972	1.38
5	St. Catharines	1,958	0.81
6	Ottawa	1,736	0.26
7	Thunder Bay	764	0.94
8	Windsor	695	0.34
9	Oshawa	569	0.30
10	Sudbury	330	0.33

Note: Location quotients are North American

Source: Statistics Canada, Canadian Business Patterns (June 2000); Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Institute for Competitiveness & Prosperity

Components of the Processed Food Cluster



43 Narrow Sub Cluster Industries

6 Broad Sub Cluster Industries

Source: Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Institute for Competitiveness & Prosperity analysis

Some Questions to Consider Together

Based on your knowledge of St. Catharines, Hamilton and Halton, what industry clusters do you see as most critical to its competitiveness and prosperity?

What are the three or four most important factors for the growth and competitiveness of the region and its clusters?

What are the greatest strengths of the business environment for enhancing the competitiveness of businesses or industries in the region? What are the greatest challenges?

How should universities and colleges contribute to the economic development of St. Catharines, Hamilton and Halton?

What Can Canadian Universities Do?

- **Aspirations**

- **Focus on the global peak and set goals accordingly**
- **Compete globally for faculty and students**
- **Seek unique and differentiated positioning**

- **Connectedness**

- **Seek to collaborate with proximate businesses**
- **Be guided in part by their needs**
- **And seek to guide them with your research-based insights**