

Measuring Ontario's Prosperity: Developing an Economic Indicator System

**Presentation by
James Milway
to**

**GTA Economic Development Partnership Meeting
September 20, 2002**

This is a copy of the presentation given by James Milway in Toronto on September 20th 2002 to the GTA Economic Development Partnership Meeting.

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 Working Paper, *A View of Ontario: Ontario's Clusters of Innovation* 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.

The Task Force – mandate and aspiration

Task Force Mandate

To measure and monitor Ontario's competitiveness, productivity and economic progress compared to other provinces and the US states and to report to the public on a regular basis.

Long Term Aspiration

We aspire to have a significant influence in increasing Ontario's competitiveness, productivity and capacity for innovation. This will help ensure continued success in the creation of good jobs, increased prosperity and a high quality of life for all Ontarians.

We will accomplish this by undertaking research, publishing breakthrough reports and proposing significant innovations in public policy which stimulate businesses, governments and educational institutions to take action.

Task Force members

Roger L. Martin, Chairman

James L. Balsillie, Research in Motion

Timothy D. Dattels, Goldman Sachs

Lisa de Wilde, Canadian Feature Film Policy Advisory Group

David Folk, Jefferson Partners

Suzanne Fortier, Queen's University

Gordon Homer, Scotia Capital

David Johnston, University of Waterloo

David Keddie, National Compressed Air and National Drilling Systems

Mark Mullins, MSG Hedge Corporation

William Orovan, McMaster Medical School

Timothy H. Penner, Procter & Gamble

Belinda Stronach, Magna International

Daniel Trefler, University of Toronto

Measuring Ontario's Prosperity: Developing an Economic Indicator System

- **Laying the Groundwork**
- **Our Approach to an Indicator System**
- **Mapping the Performance Gap**
- **The Capacity for Innovation and Upgrading (AIM)**
- **Social and Environmental Measures**
- **Conclusion**

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

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**

Ontario Lags Alberta in GDP per Capita (2000)

Rank	Province	Nominal GDP Per Capita in \$CDN	GDP per Capita at PPP in \$US
1	Alberta	\$47,659	\$40,016
2	Ontario	\$36,837	\$30,420
3	Saskatchewan	\$32,775	\$27,519
4	British Columbia	\$31,452	\$26,408
5	Québec	\$30,307	\$25,052
6	Manitoba	\$29,493	\$24,763
7	Newfoundland	\$26,166	\$21,970
8	New Brunswick	\$26,092	\$21,908
9	Nova Scotia	\$25,552	\$21,455
10	PEI	\$24,236	\$20,349

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

Ontario Fares Well Among Leading Nations

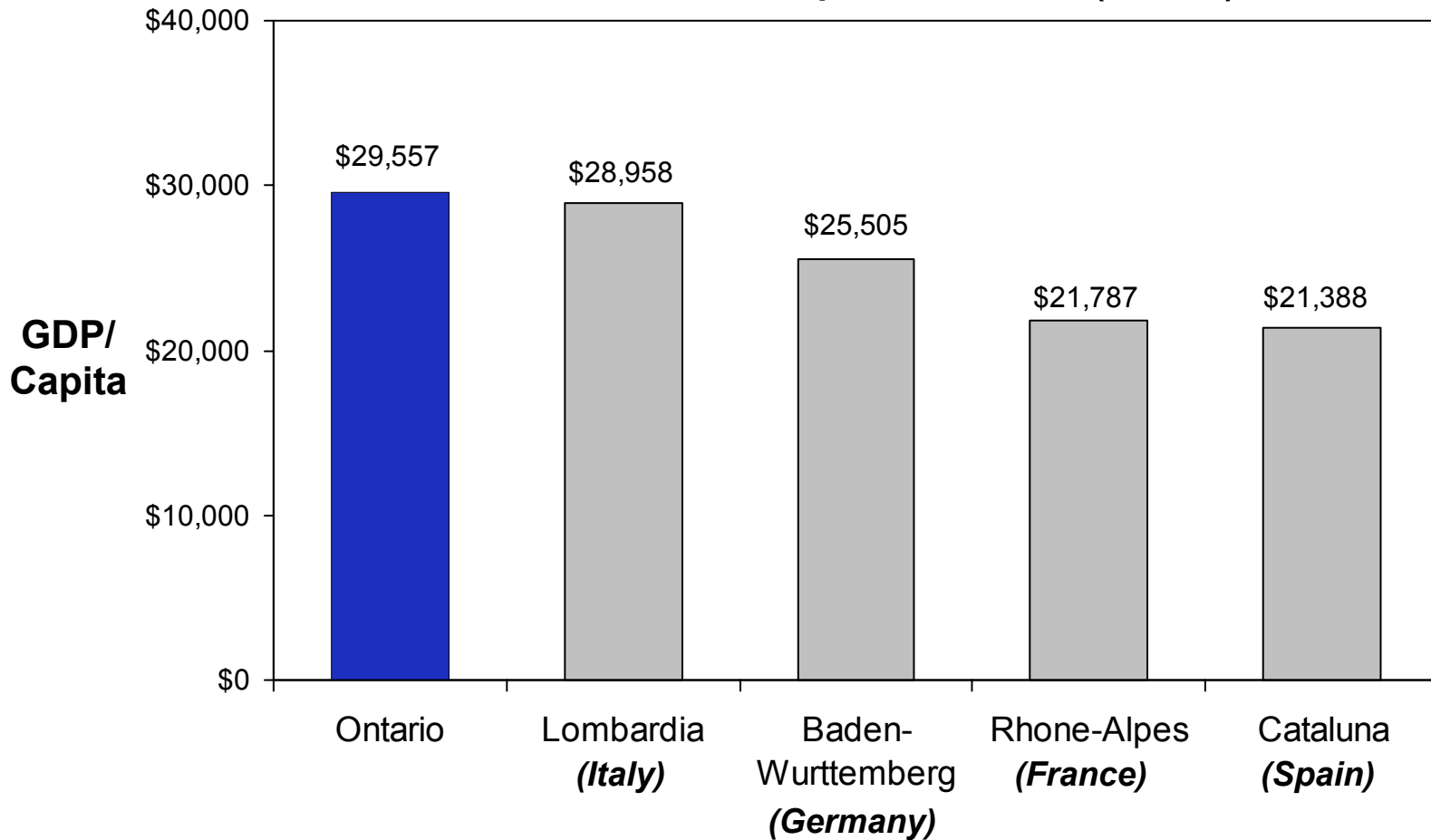
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Source: OECD Main Accounts, National Data; CANSIM; Institute for Competitiveness & Prosperity analysis

Ontario versus “The Four Motors”

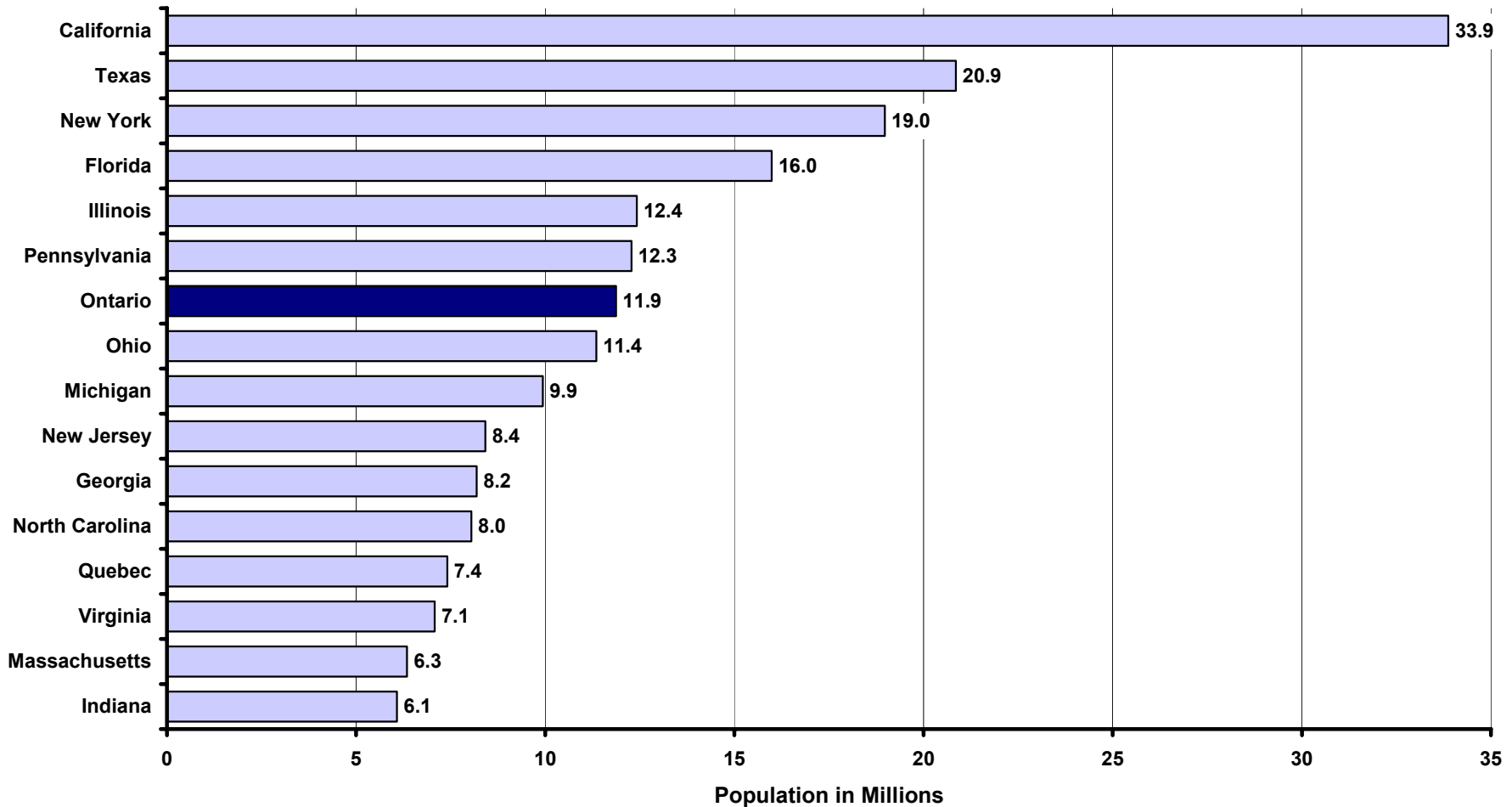
GDP Per Capita, 1999 (PPP)



Source: Statistics Canada; Eurostat

Select States and Provinces for Comparison

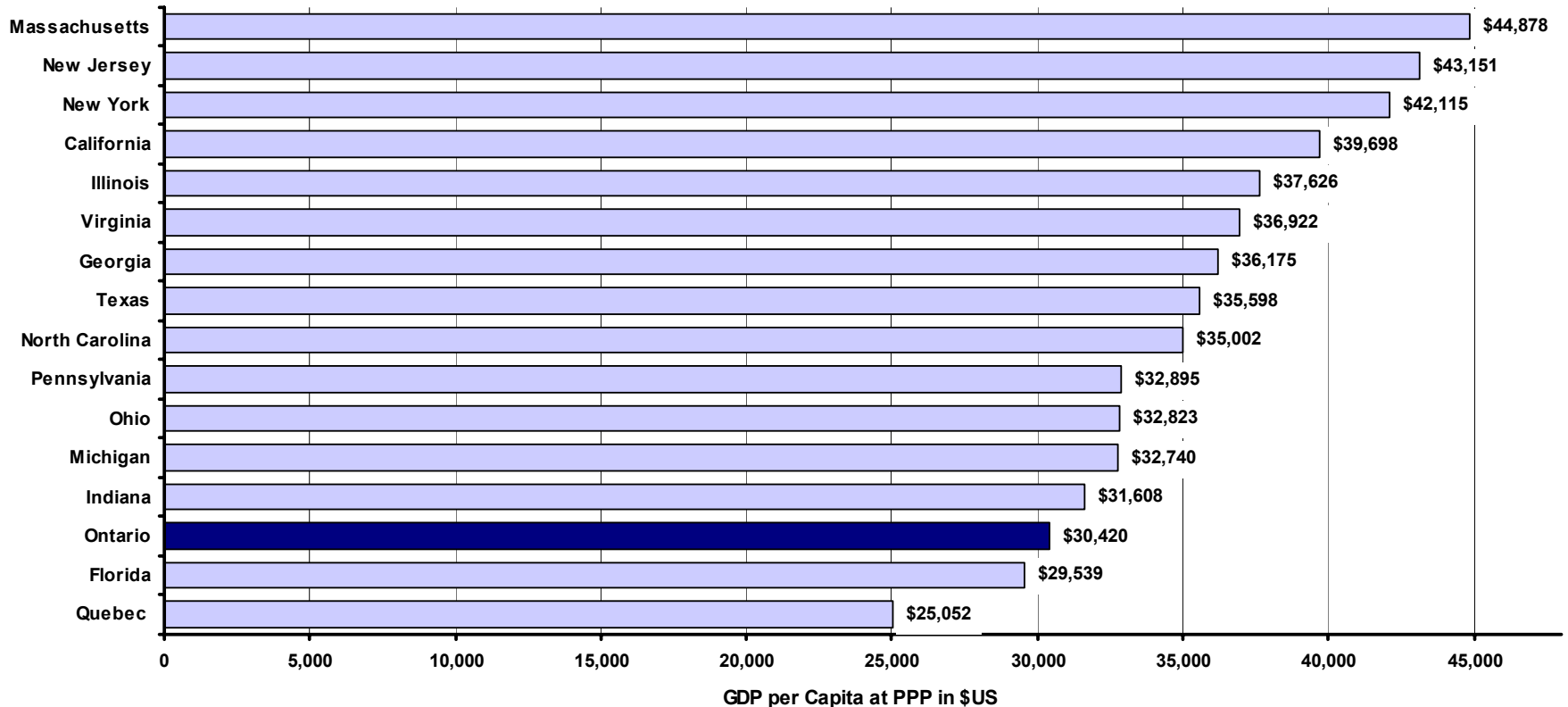
States and Provinces with Population over 6 Million



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

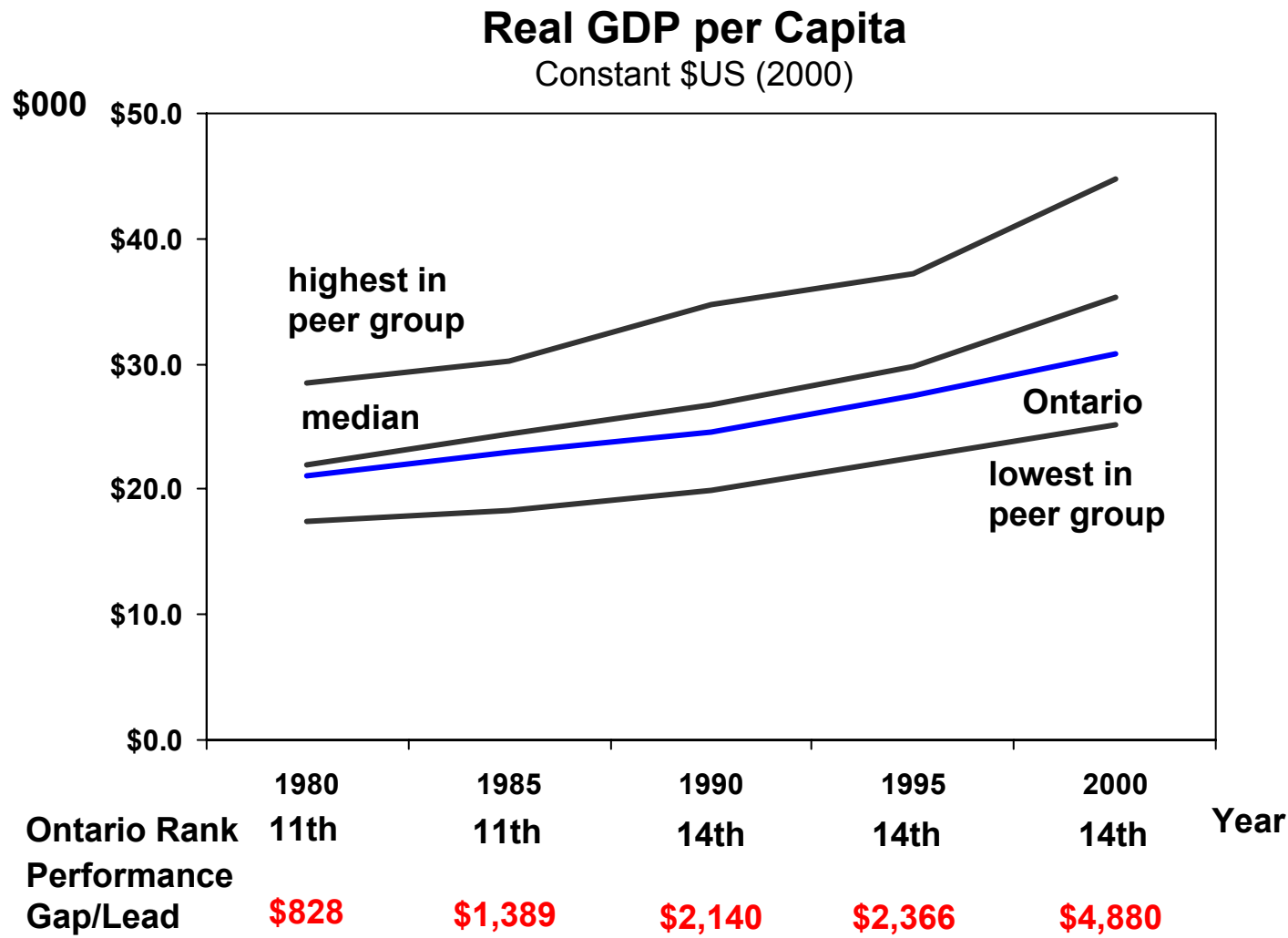
Ontario in a North American Context

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 since 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

Component Parts of GDP per Capita

GDP Per Capita:

GDP		Hours worked		Jobs		Potential labour force
<hr/>		<hr/>		<hr/>		<hr/>
Hours Worked	X	Jobs	X	Potential labour force	X	Population
Effectiveness		Intensity		Utilization		Profile

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.

Expanding the four elements into drivers

Four Components of GDP per capita

- Profile
- Utilization
- Intensity

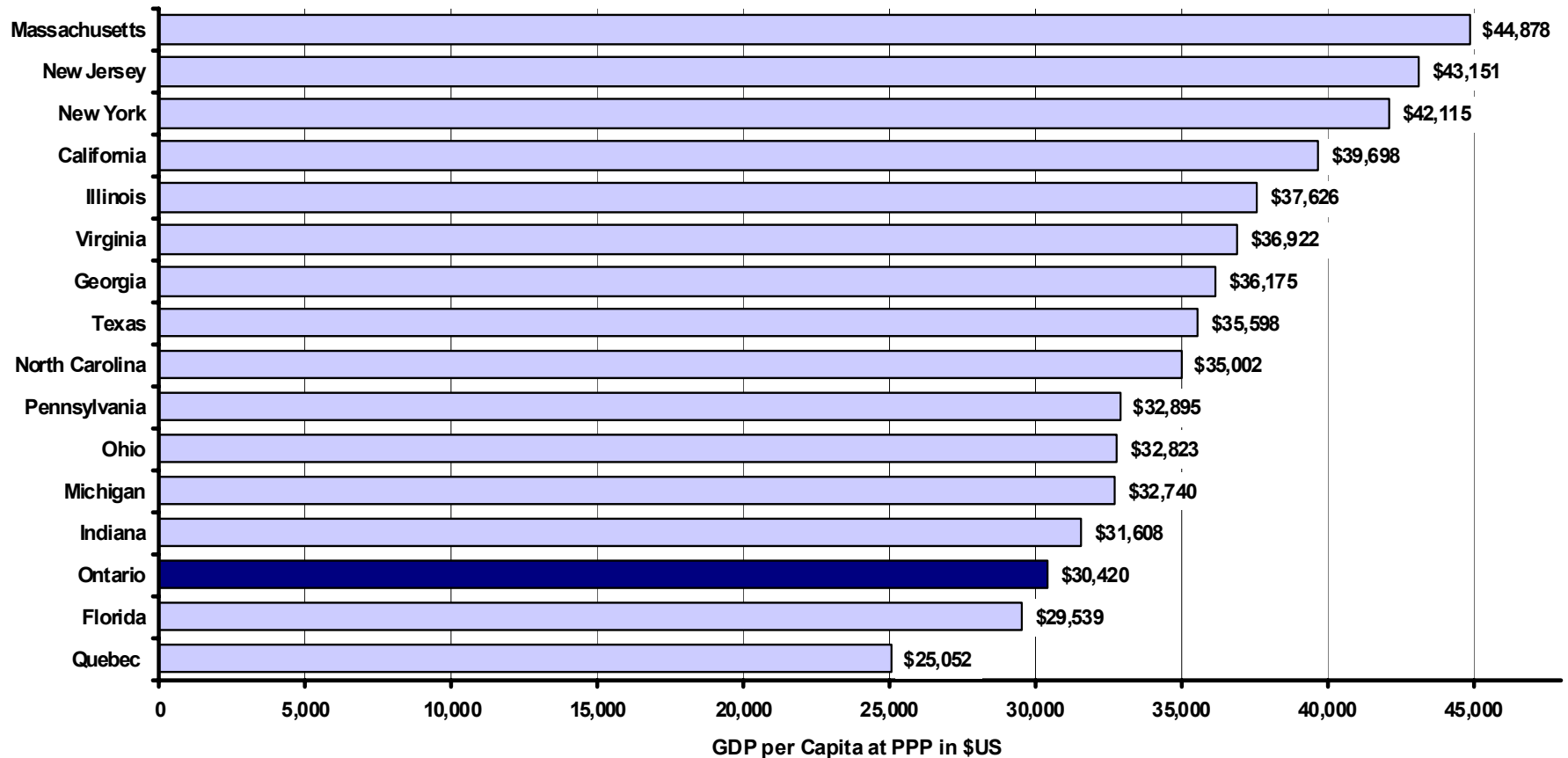
▪ Effectiveness

Eight Drivers of GDP per capita

- Profile
- Participation rate
- Employment rate
- Intensity
- Mix of Ontario's Clusters
- Content of Ontario's Clusters
- Urbanization
- Other effectiveness

Ontario and its peer group

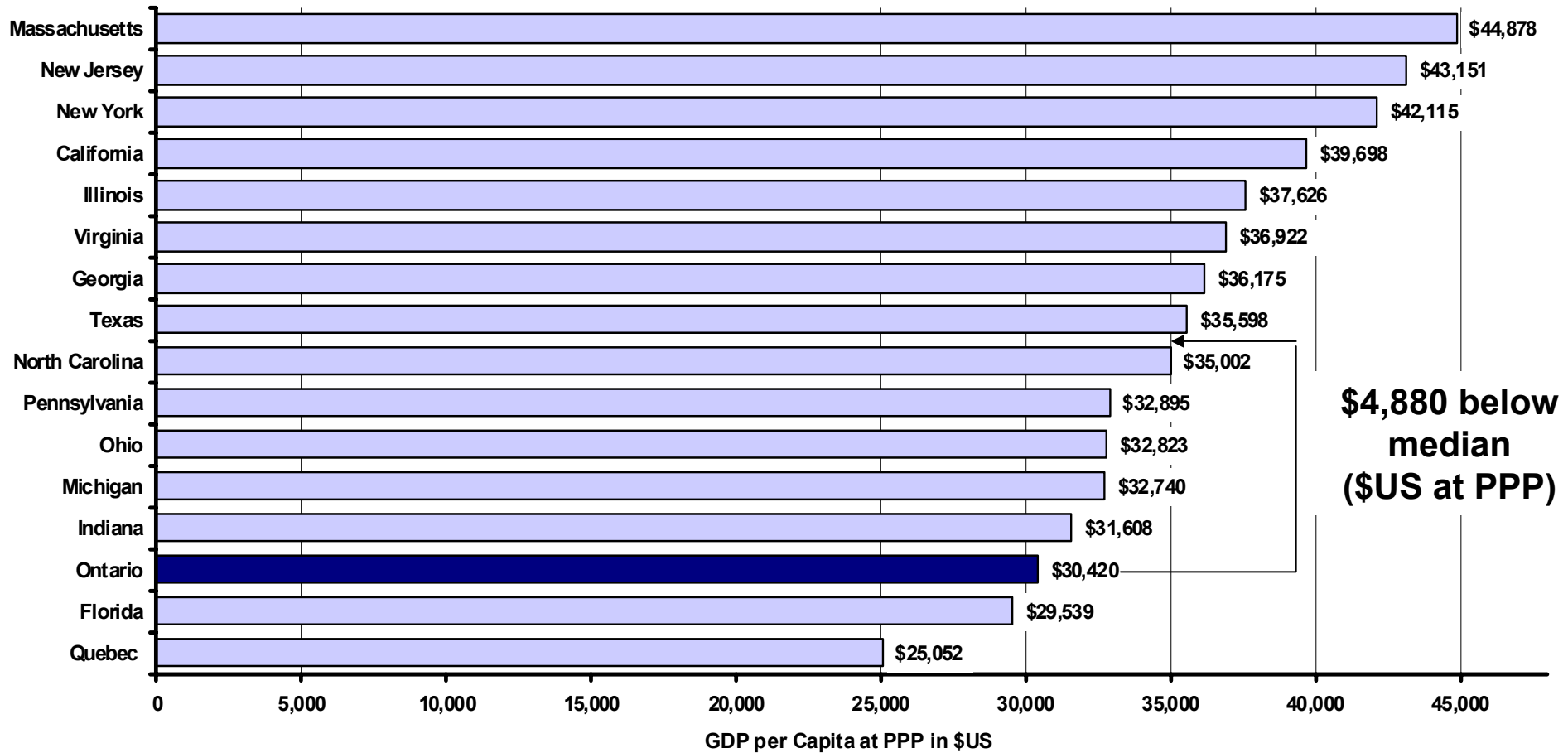
GDP per Capita for Select States and Provinces (2000) (Provinces at Purchasing Power Parity in \$US)



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

Ontario and its peer group

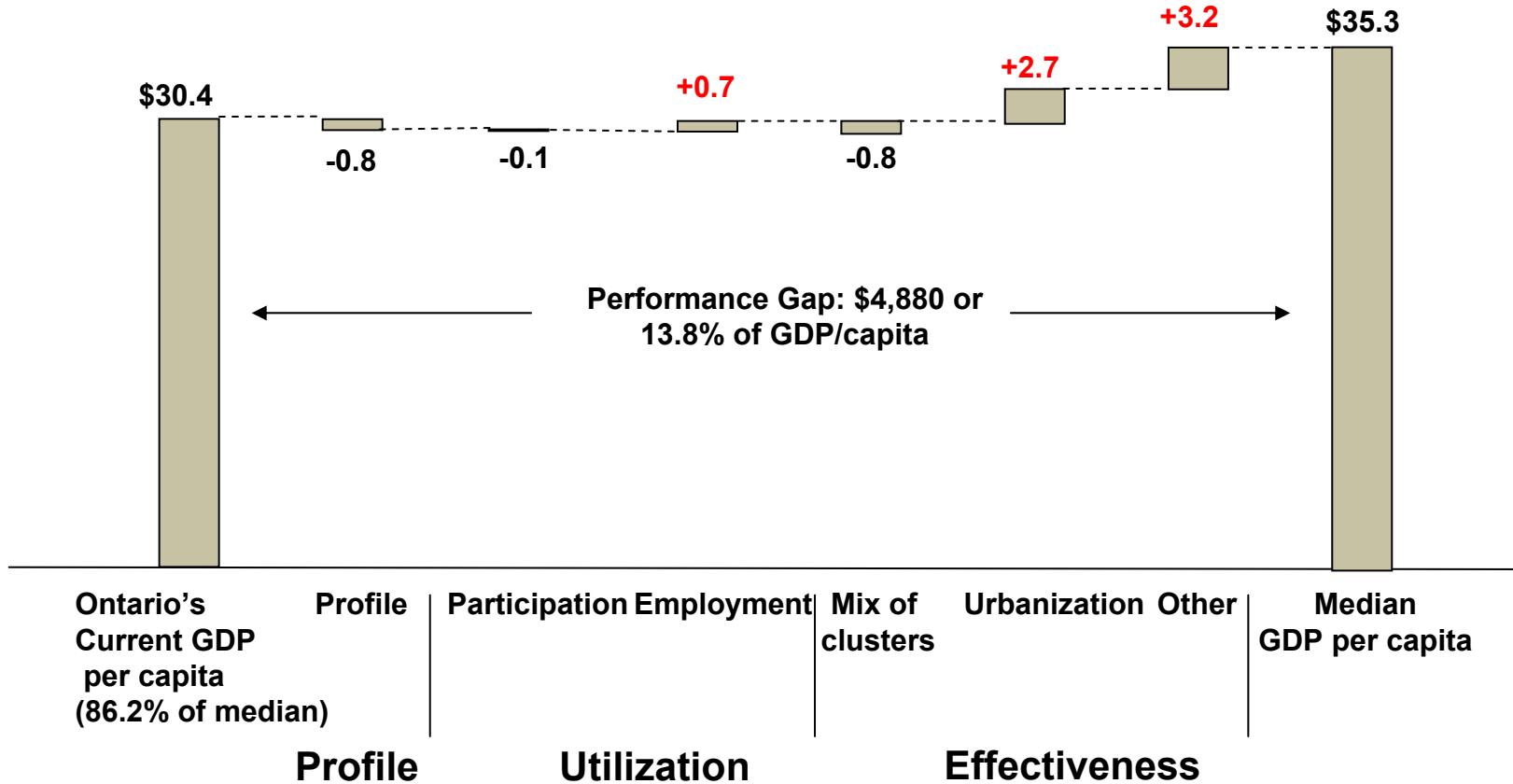
GDP per Capita for Select States and Provinces (2000) (Provinces at Purchasing Power Parity in \$US)



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Mapping the Performance Gap

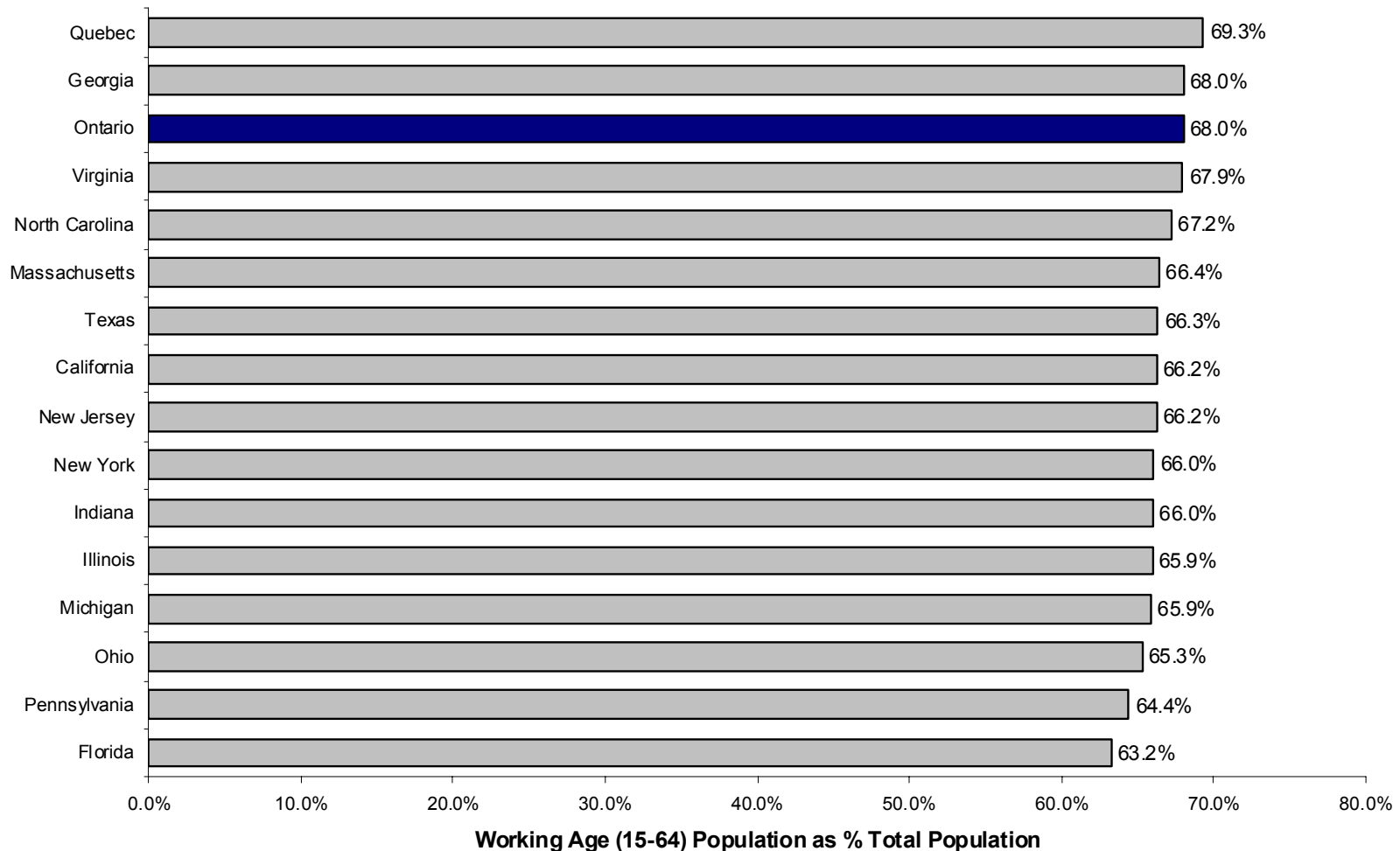
(US\$000)



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

Ontario's demographic *profile*

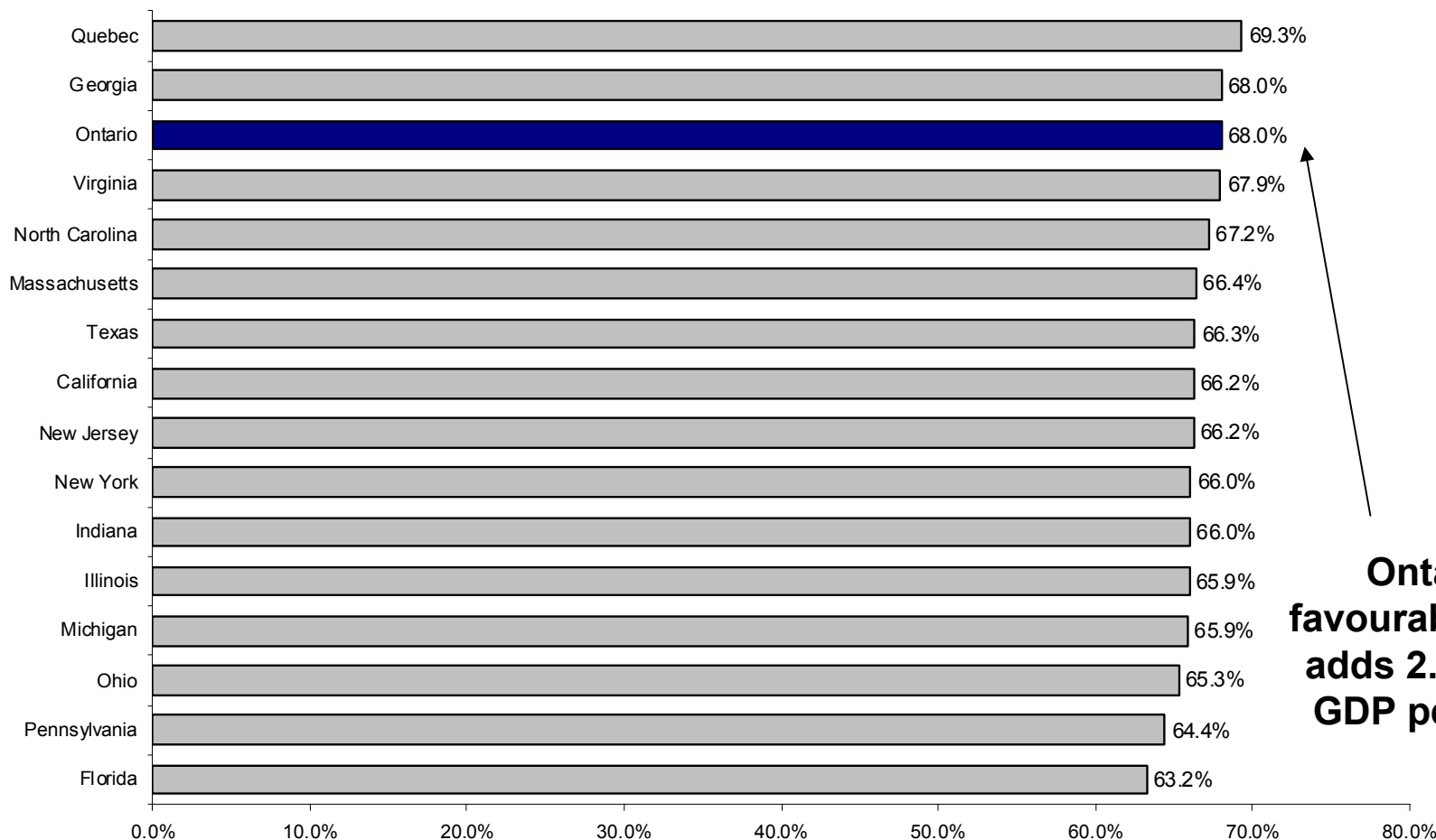
Working Age Population as % of Total Ontario and Selected North American Jurisdictions



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

Ontario's demographic *profile*

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



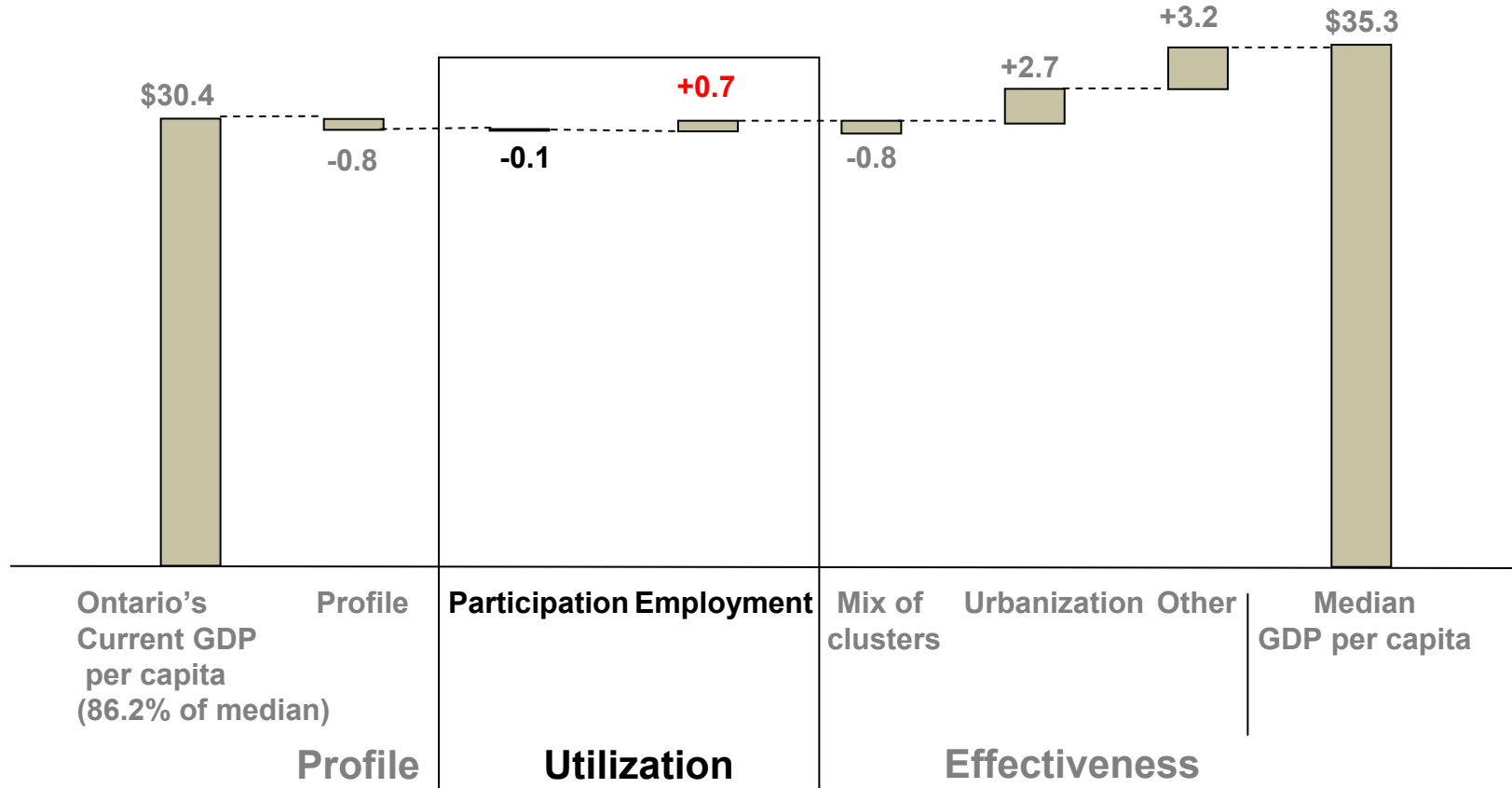
Ontario's favourable *profile* adds 2.6% to its GDP per capita

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

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

Mapping the Performance 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

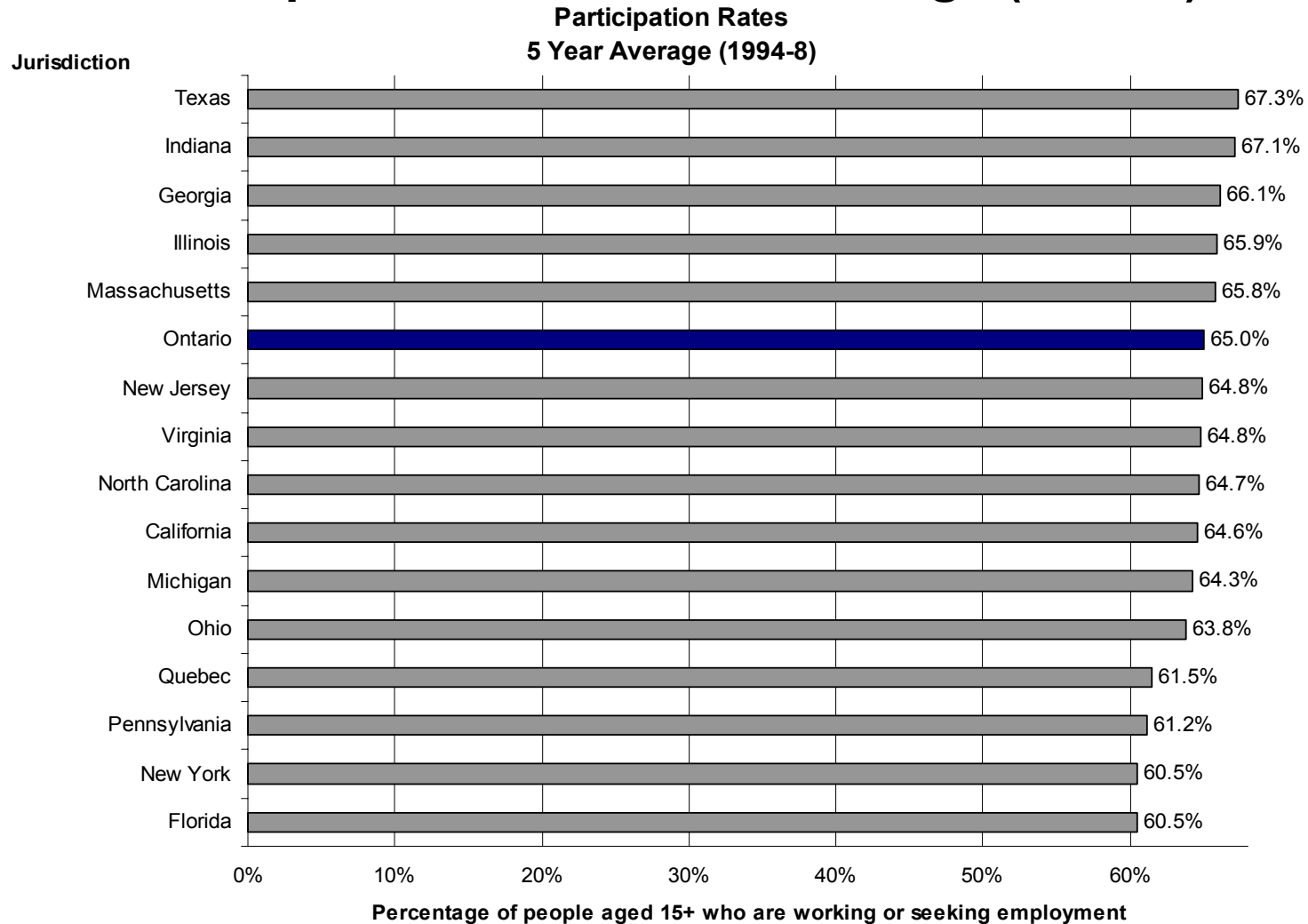
Utilization: Participation & Employment Rates

$$\text{Participation rate} \times \text{Employment rate} = \textit{Utilization}$$

$$\frac{\text{Workers + Job seekers}}{\text{Working Age Population}} \times \frac{\text{Employed people}}{\text{Workers + Job Seekers}} = \frac{\text{Employed people}}{\text{Working Aged Population}}$$

Ontario's Participation Rate is a strength

Participation Rates 5 Year Average (1994-8)

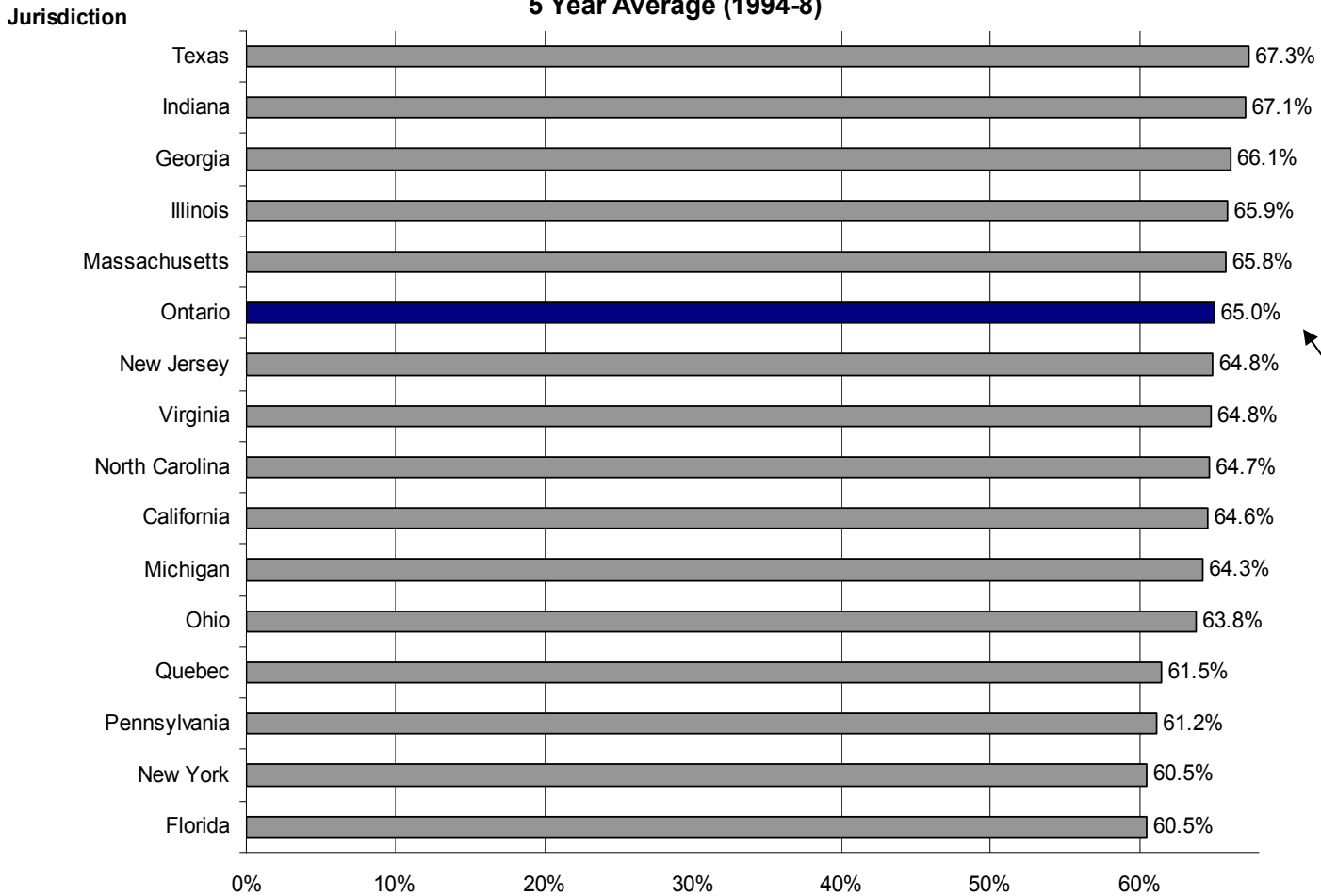


Source: Statistics Canada, Labour Force Historical Review; Bureau of Labor Statistics, Current Employment Statistics; U.S. Census Bureau, Census 2000.

Ontario's Participation Rate is a strength

Participation Rates 5 Year Average (1994-8)

Participation Rates
5 Year Average (1994-8)



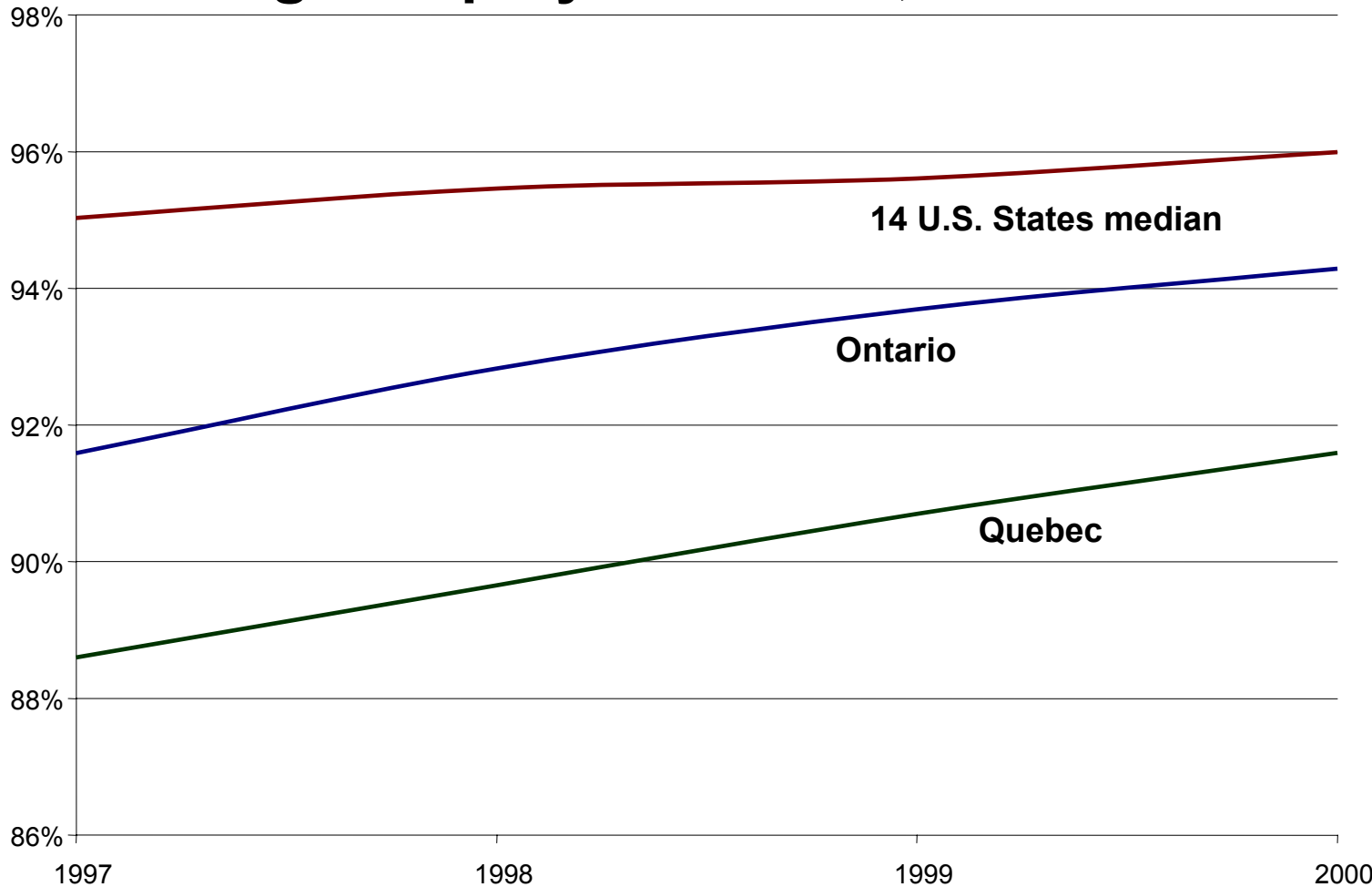
Ontario's over-performance adds 0.3% to GDP per capita

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

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

Ontario's Employment Rate is an improvement opportunity

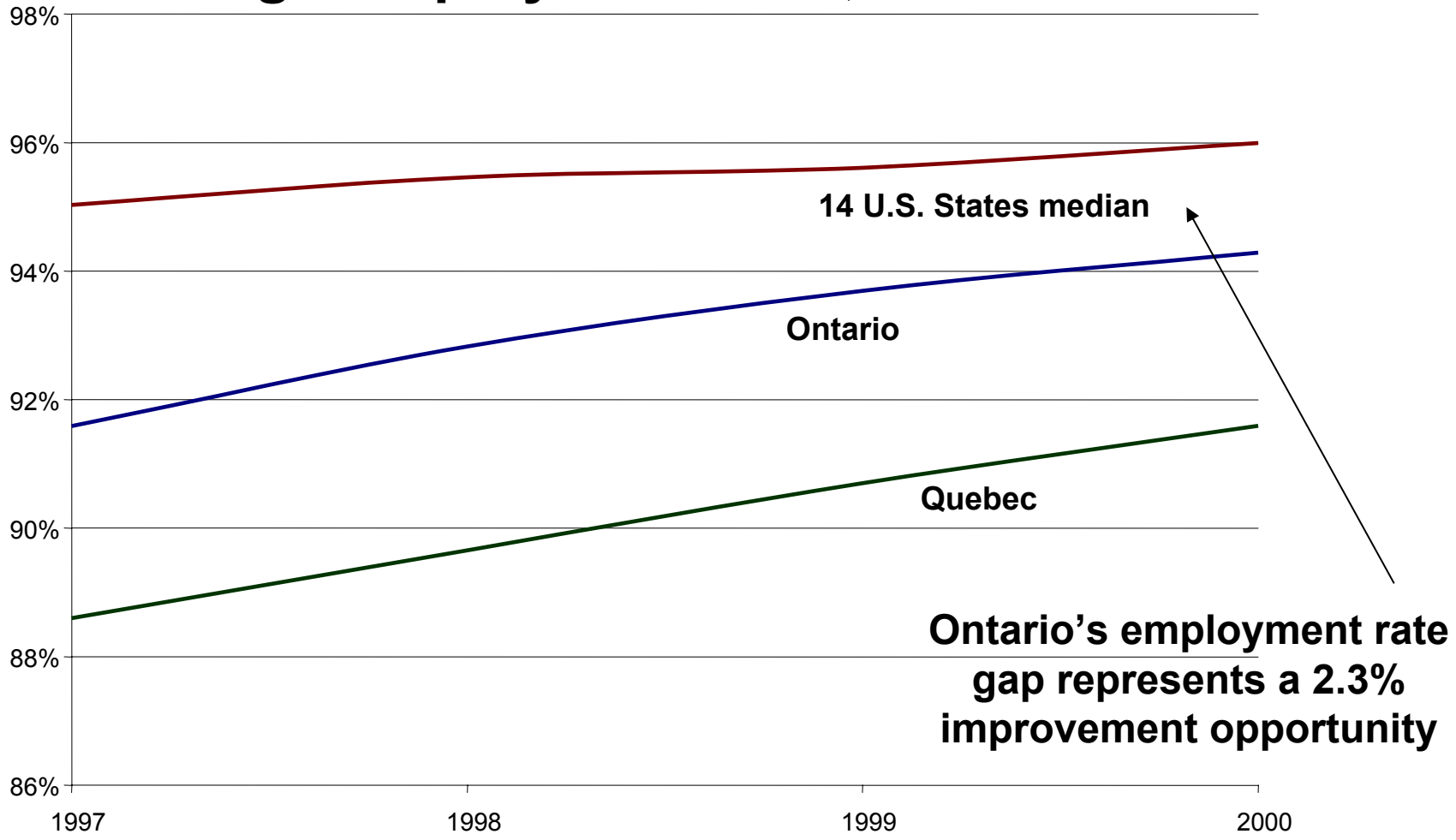
Average Employment Rate, 1997 - 2000



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.

Ontario's Employment Rate is an improvement opportunity

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 Performance 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

Mix of Clusters: Results from US Cluster Mapping

Identifying 41 Clusters of Traded Industries

Upstream Materials and Products

- Metals and Materials**
 - Construction Materials
 - Metal Manufacturing
- Forest Products**
 - Forest Products
- Petroleum/Chemicals**
 - Oil and Gas
 - Chemical Products
 - Plastics
- Semiconductors/Computer**
 - Information Technology

Industrial and Supporting Functions

- Multiple Business**
 - Education and Knowledge Creation
 - Business Services
 - Heavy Machinery
 - Financial Services
 - Motor Driven Products
 - Prefabricated Enclosures
 - Production Technology
 - Analytical Instruments
 - Heavy Construction Services
- Transportation and Logistics**
 - Automotive
 - Distribution Services
 - Transportation and Logistics
- Power**
 - Power Generation
 - Power Transmission and Distribution
- Office**
 - Publishing and Printing
- Telecommunications**
 - Communications Equipment
- Defense**
 - Aerospace Engines
 - Aerospace Vehicles and Defense

Final Consumption Goods and Services

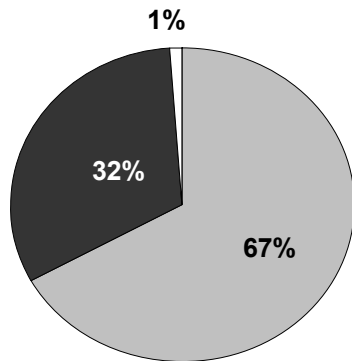
- Food/Beverages**
 - Agricultural Products
 - Processed Foods
 - Fishing and Fishing Products
- Housing/Household**
 - Building Fixtures, Equipment & Services
 - Lighting and Electrical Equipment
 - Furniture
- Textiles/Apparel**
 - Textiles
 - Apparel
 - Footwear
- Health Care**
 - Medical Devices
 - Pharmaceuticals and Biotechnology
- Personal**
 - Leather and Sporting Goods
 - Jewelry and Precious Metals
 - Tobacco
- Entertainment/Leisure**
 - Entertainment
 - Hospitality and Tourism

Source: Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

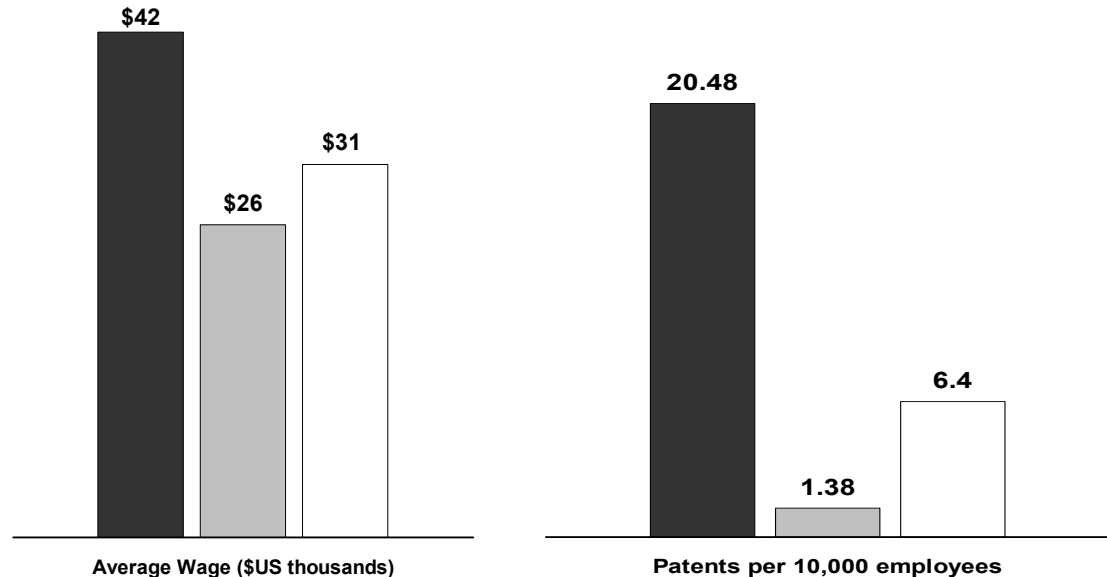
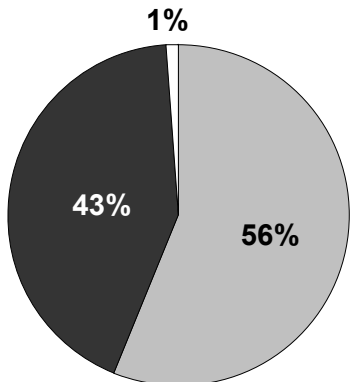
Results from the US Cluster Mapping Project

The Economics of Traded Clusters and Local Industries

Share of Employment



Share of Income



■ Traded Clusters ■ Local Industries □ Natural Resources

Source: Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Ontario's Mix of Clusters improves performance

	<u>Ontario</u>		<u>U.S. peer group</u>	
	<u>% of employment</u>	<u>average U.S. wage*</u>	<u>% of employment</u>	<u>average U.S. wage</u>
▪ Traded Clusters	40.2%	\$41,722	32.7%	\$41,396
▪ Local Industries	58.5	\$27,540	66.8	\$27,540
▪ Natural Resources	1.3	\$28,931	0.5	\$28,931
▪ Total	100.00%	\$33,257	100.00%	\$32,078

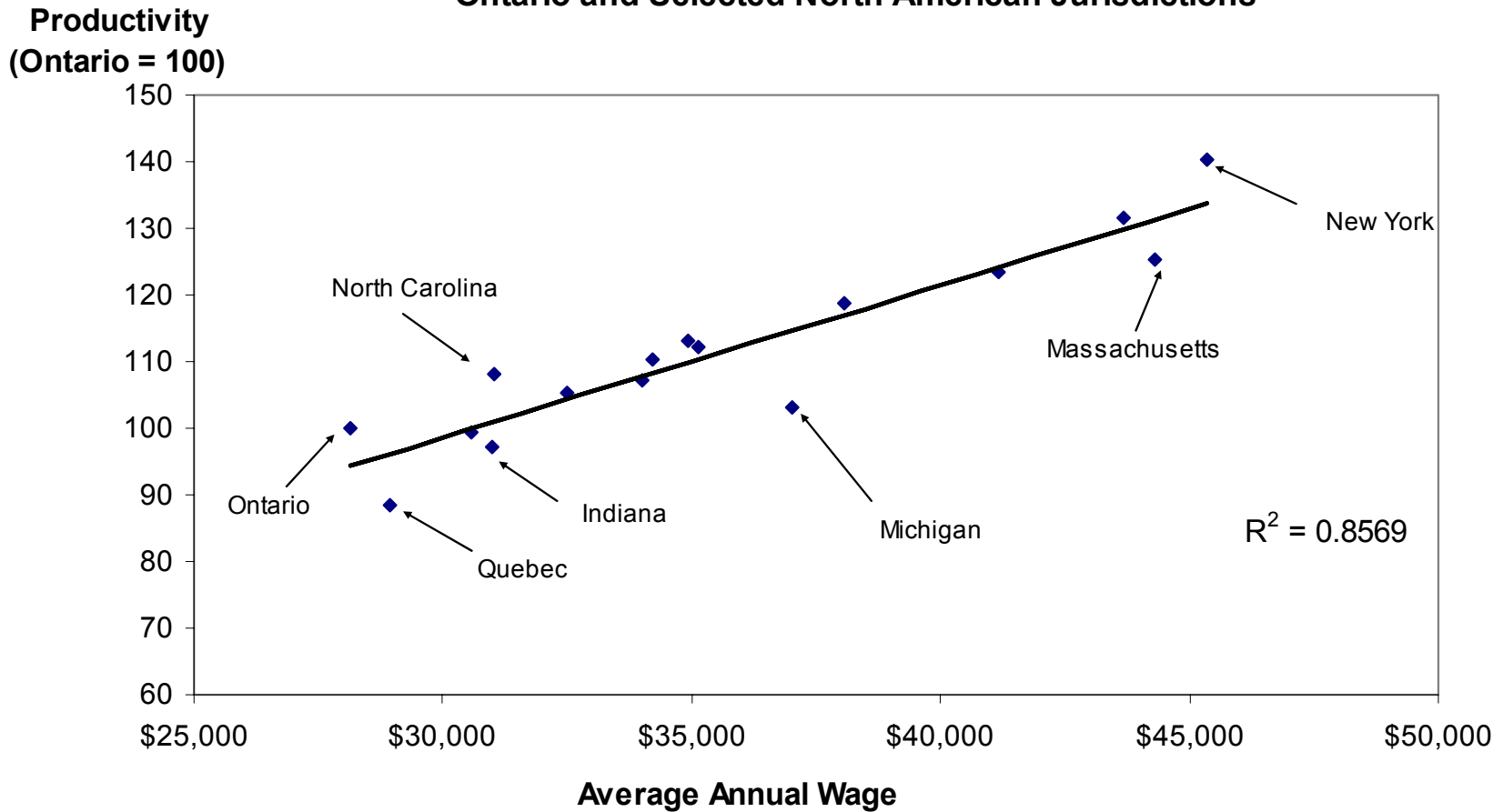
- More employment in traded clusters (40.18 % vs 32.70%)
- Slightly higher-wage mix of traded clusters (\$41,722 vs \$41,396)
- Ontario's over-performance given its mix of clusters : 3.7% (\$33,257 vs \$32,078)

*US wages used: focuses on mix and comparable Ontario wages are unavailable

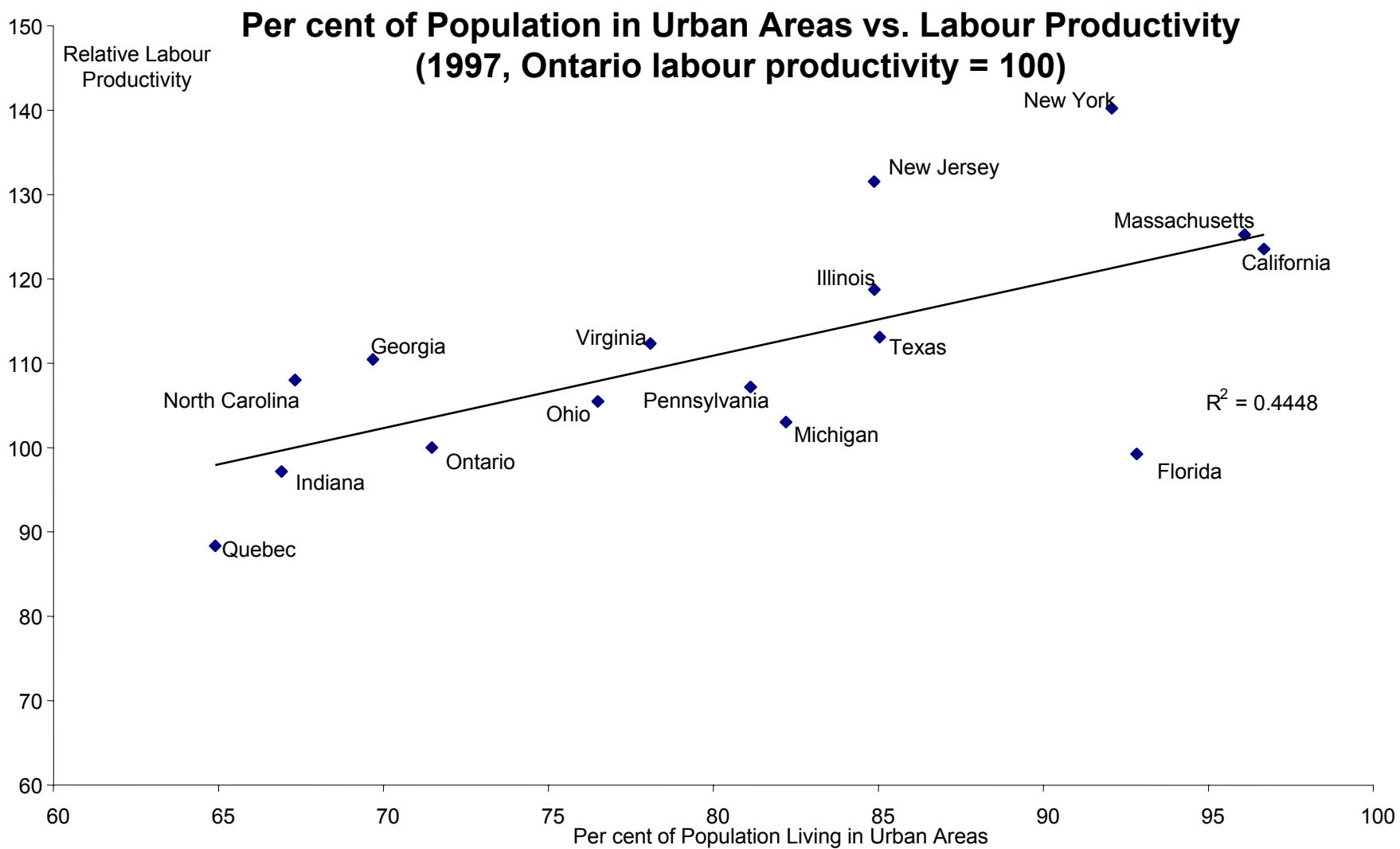
Annual Wage Correlates Closely with Productivity

Wages vs. Productivity

Ontario and Selected North American Jurisdictions

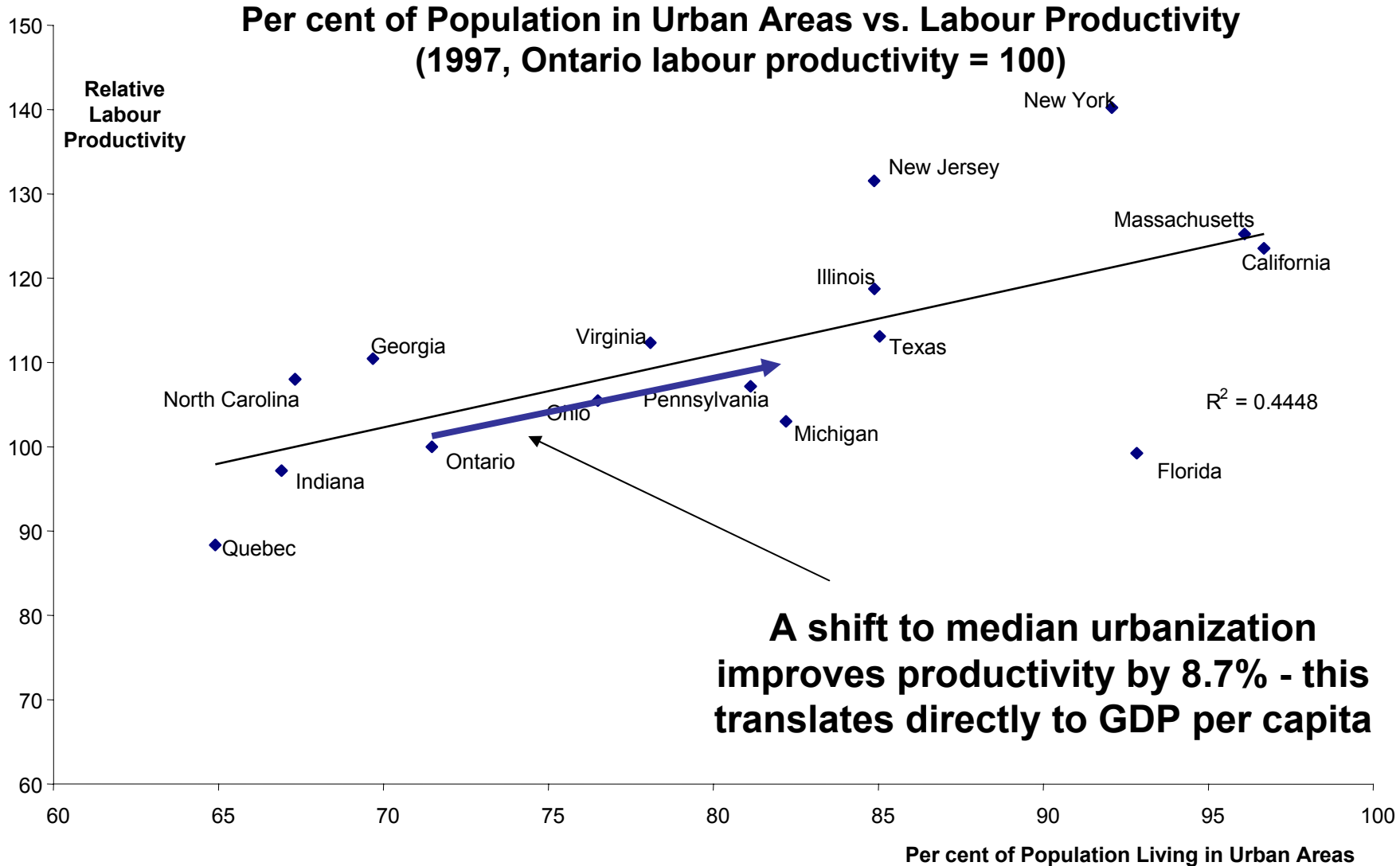


Urbanization and Productivity



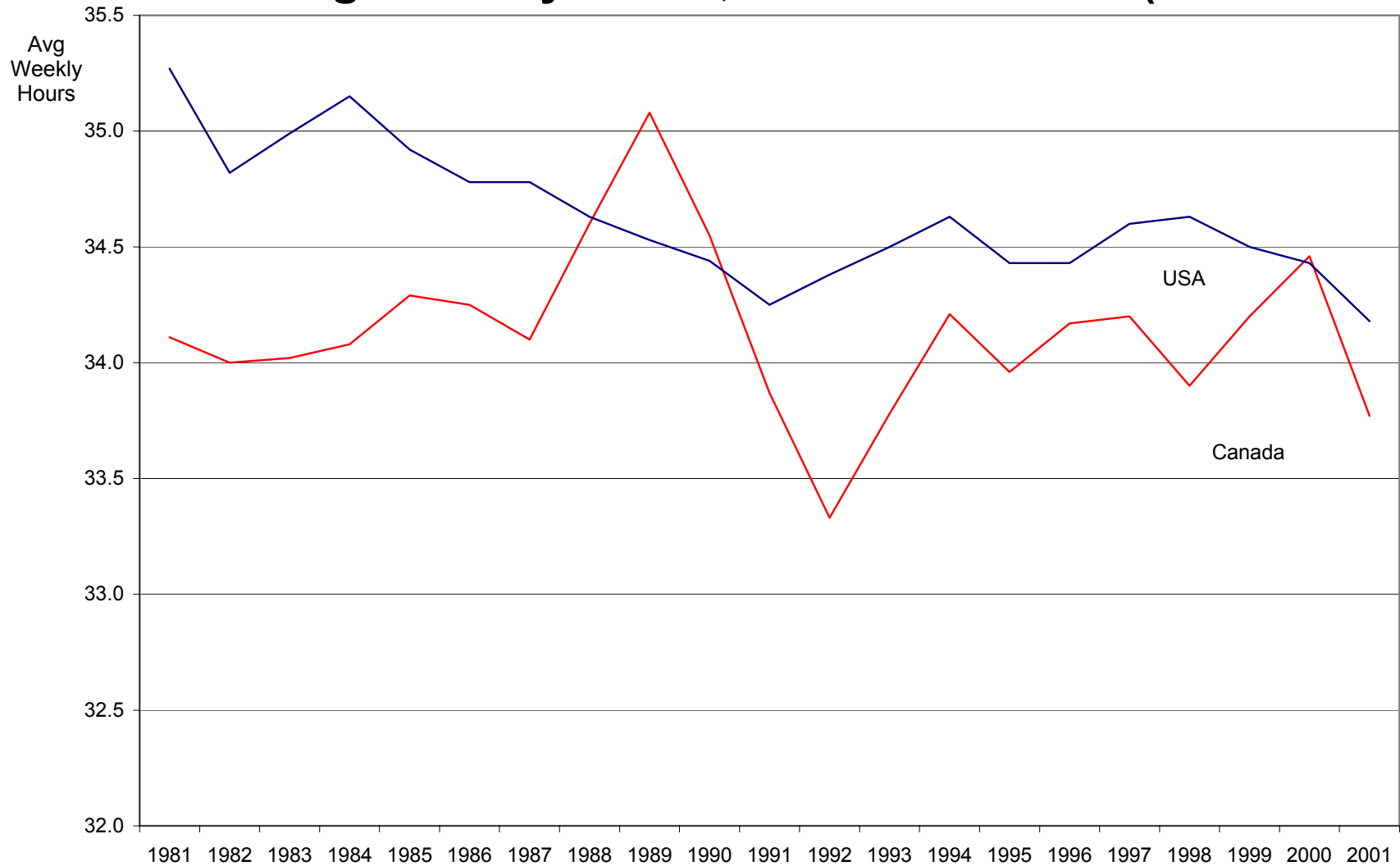
Source: Le Letourneau, R. (2000). "A Regional Perspective on the Canada-US Standard of Living Comparison." *Occasional Paper No. 22*. Ottawa: Industry Canada; Statistics Canada, Census 2001; U.S. Census Bureau; Census 2000; Institute for Competitiveness and Prosperity

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

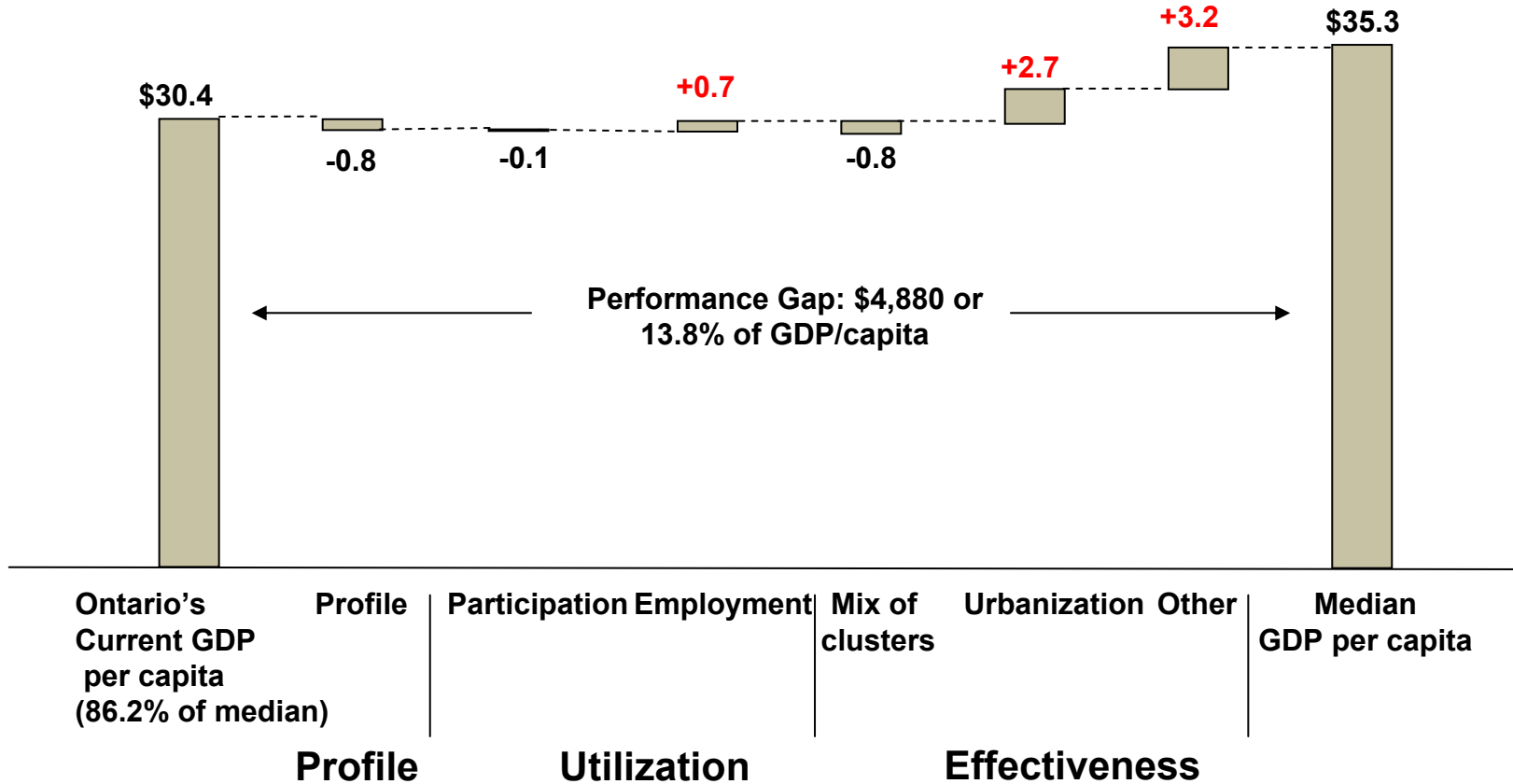
Average Weekly Hours, Canada and U.S. (1981 – 2001)



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 Performance Gap

(US\$000)



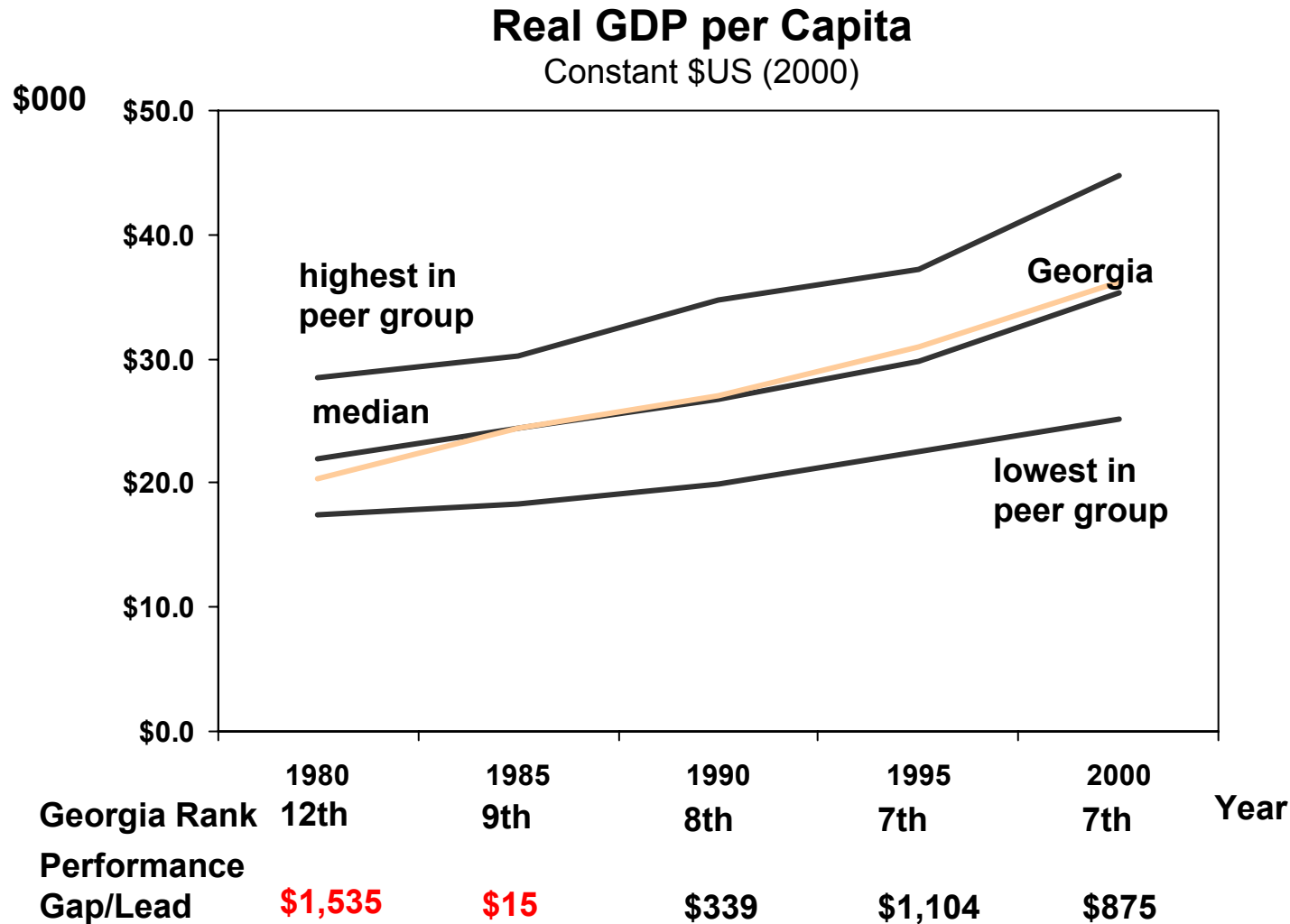
Source: Statistics Canada, Bureau of Economic Analysis, Institute for Competitiveness and Prosperity
 Note: Median comprises 16 North American jurisdictions with populations that exceed 6 million

Performance leads and gaps within the peer group

		PROFILE	UTILIZATION		EFFECTIVENESS			
	GDP per capita	Profile	Participation	Employment	Cluster Mix	Urbanization	Other Effectiveness Drivers	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

Georgia's performance since 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

Leading Clusters in Ontario's CMAs

Leading Clusters by Share of Traded Cluster Employment (2000)

Toronto

Cluster	Employment	Share in Region	Share in Canada	Location Quotient
1 Business Services	189,766	16.9%	33.3%	1.58
2 Financial Services	143,500	12.8%	31.6%	1.50
3 Distribution Services	66,129	5.9%	35.7%	1.70
4 Transportation and Logistics	57,534	5.1%	23.1%	1.10
5 Publishing and Printing	55,637	5.0%	36.7%	1.75

Ottawa - Hull

Cluster Name	Employment	Share in Region	Share in Canada	Location Quotient
1 Business Services	44,839	26.3%	7.9%	1.91
2 Education and Knowledge Creation	23,943	14.0%	7.7%	1.87
3 Financial Services	14,402	8.4%	3.2%	0.77
4 Hospitality and Tourism	12,714	7.5%	3.9%	0.96
5 Communications Equipment	12,490	7.3%	28.0%	6.80

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

Leading Clusters in Ontario's CMAs

Leading Clusters by Share of Traded Cluster Employment (2000)

Hamilton

Cluster	Employment	Share in Region	Share in Canada	Location Quotient
1 Metal Manufacturing	23,848	20.3%	15.2%	5.50
2 Education and Knowledge Creation	10,914	9.3%	3.5%	1.27
3 Business Services	10,804	9.2%	1.9%	0.68
4 Financial Services	9,865	8.4%	2.2%	0.78
5 Processed Food	6,095	5.2%	3.3%	1.19

Kitchener

Cluster	Employment	Share in Region	Share in Canada	Location Quotient
1 Automotive	9,969	9.9%	5.4%	2.92
2 Education and Knowledge Creation	9,904	9.8%	3.2%	1.71
3 Business Services	8,832	8.8%	1.6%	0.83
4 Metal Manufacturing	7,389	7.3%	4.7%	2.54
5 Processed Food	6,870	6.8%	3.7%	2.00

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

Leading Clusters in Ontario's CMAs

Leading Clusters by Share of Traded Cluster Employment (2000)

St. Catharines

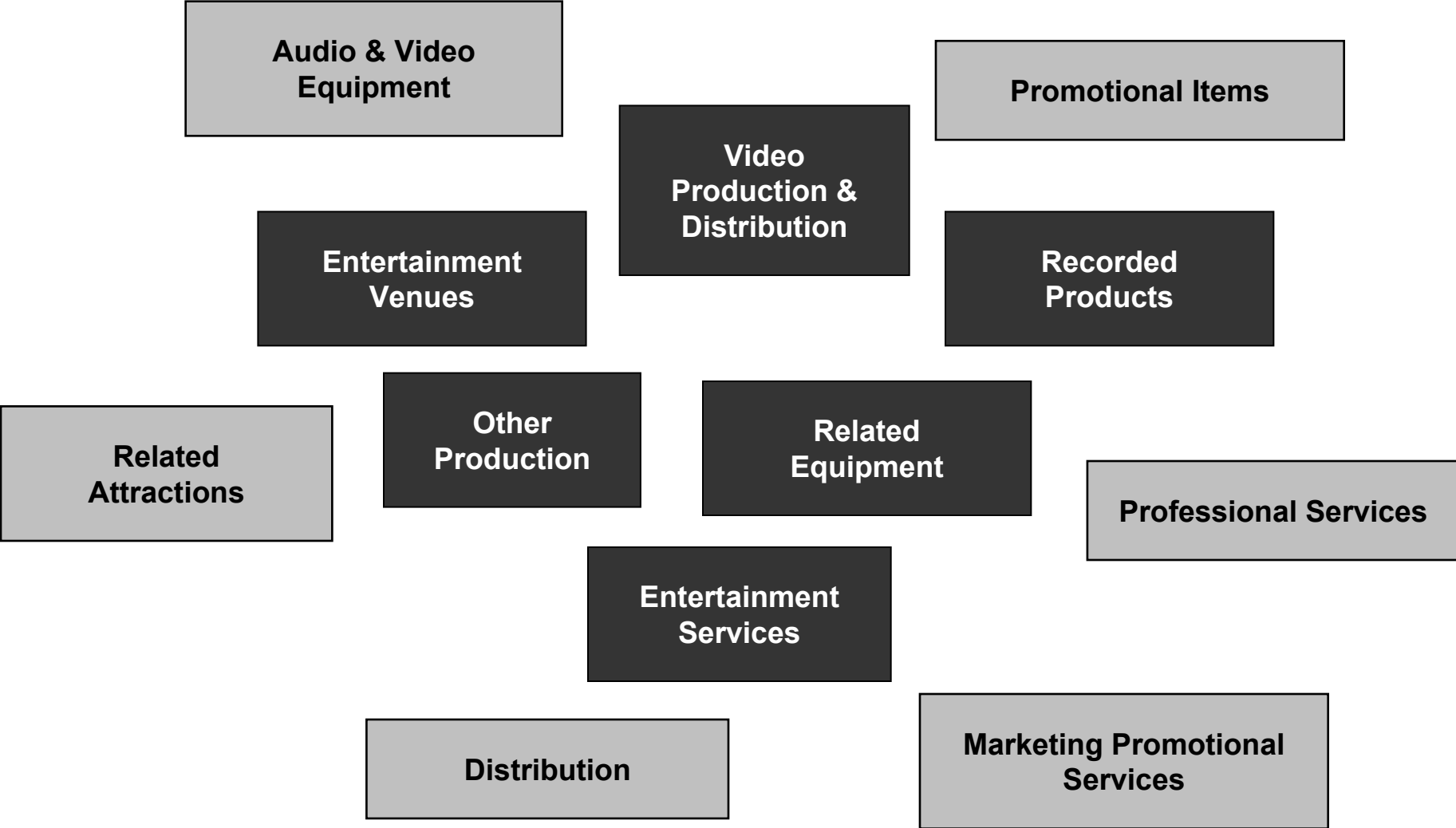
Cluster	Employment	Share in Region	Share in Canada	Location Quotient
1 Hospitality and Tourism	10,930	16.2%	3.4%	2.23
2 Automotive	7,568	11.2%	4.1%	2.71
3 Metal Manufacturing	7,004	10.4%	4.5%	2.94
4 Education and Knowledge Creation	3,642	5.4%	1.2%	0.77
5 Business Services	3,528	5.2%	0.6%	0.41

Oshawa

Cluster	Employment	Share in Region	Share in Canada	Location Quotient
1 Automotive	22,833	46.1%	12.4%	10.58
2 Business Services	3,405	6.9%	0.6%	0.51
3 Financial Services	2,612	5.3%	0.6%	0.49
4 Metal Manufacturing	1,939	3.9%	1.2%	1.05
5 Transportation and Logistics	1,731	3.5%	0.7%	0.59

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

Components of the Entertainment Cluster



Source: Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Entertainment Clusters in North America

Leading Provincial and State Jurisdictions

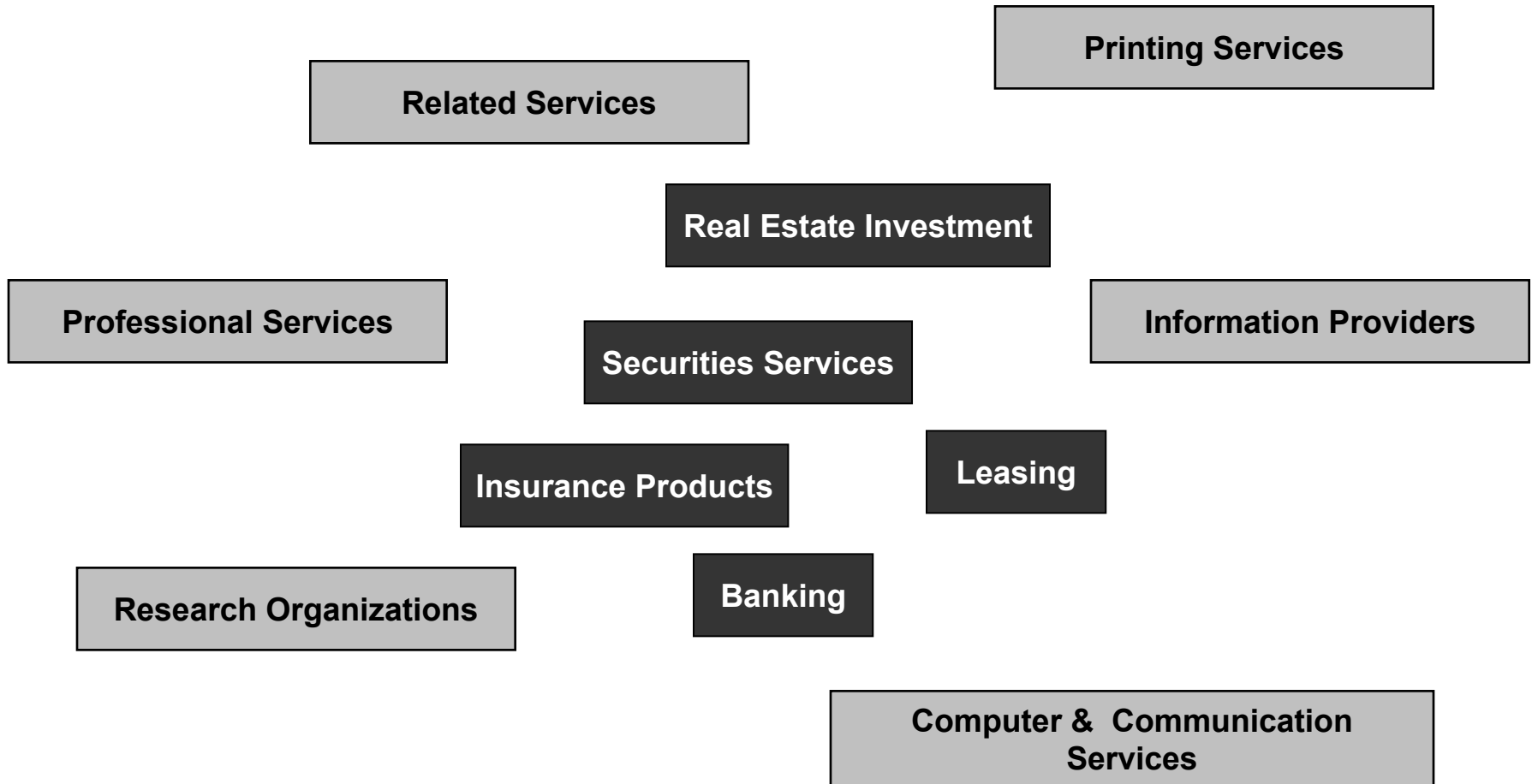
Provinces and States	Employment*
1 California	260,405
2 New York	80,505
3 Ontario	66,943
4 Quebec	39,954
5 Florida	39,537
6 Illinois	36,936
7 Texas	35,927
8 Indiana	32,346
9 Pennsylvania	31,559
10 Colorado	28,871

Leading Metropolitan Jurisdictions

Metropolitan Area CMA and MSA	Employment*
1 Los Angeles- Long Beach CA	167,726
2 New York, NY	61,882
3 Toronto, ON	46,579
4 Chicago, IL	32,441
5 Greater Boston Area, MA-NH	18,196
6 New London-Norwich, CT	17,808
7 Washington, DC-MD-VA-WV	16,894
8 Atlanta, GA	15,828
9 Phoenix-Mesa, AZ	15,204
10 Seattle-Bellevue-Everett, WA	14,615

Note: US Statistics are for 1999; Canadian Statistics are for 2000
 Source: Statistics Canada, Canadian Business Pattern (June 2000); Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Institute for Competitiveness & Prosperity analysis

Components of the Financial Services Cluster



Financial Services Clusters

Leading Provincial and State Jurisdictions

Provinces and States	Employment*
1 New York	362,140
2 California	285,525
3 Ontario	199,761
4 Illinois	188,231
5 Texas	185,367
6 Florida	152,290
7 Massachusetts	145,939
8 Pennsylvania	144,599
9 New Jersey	132,881
10 Ohio	125,529

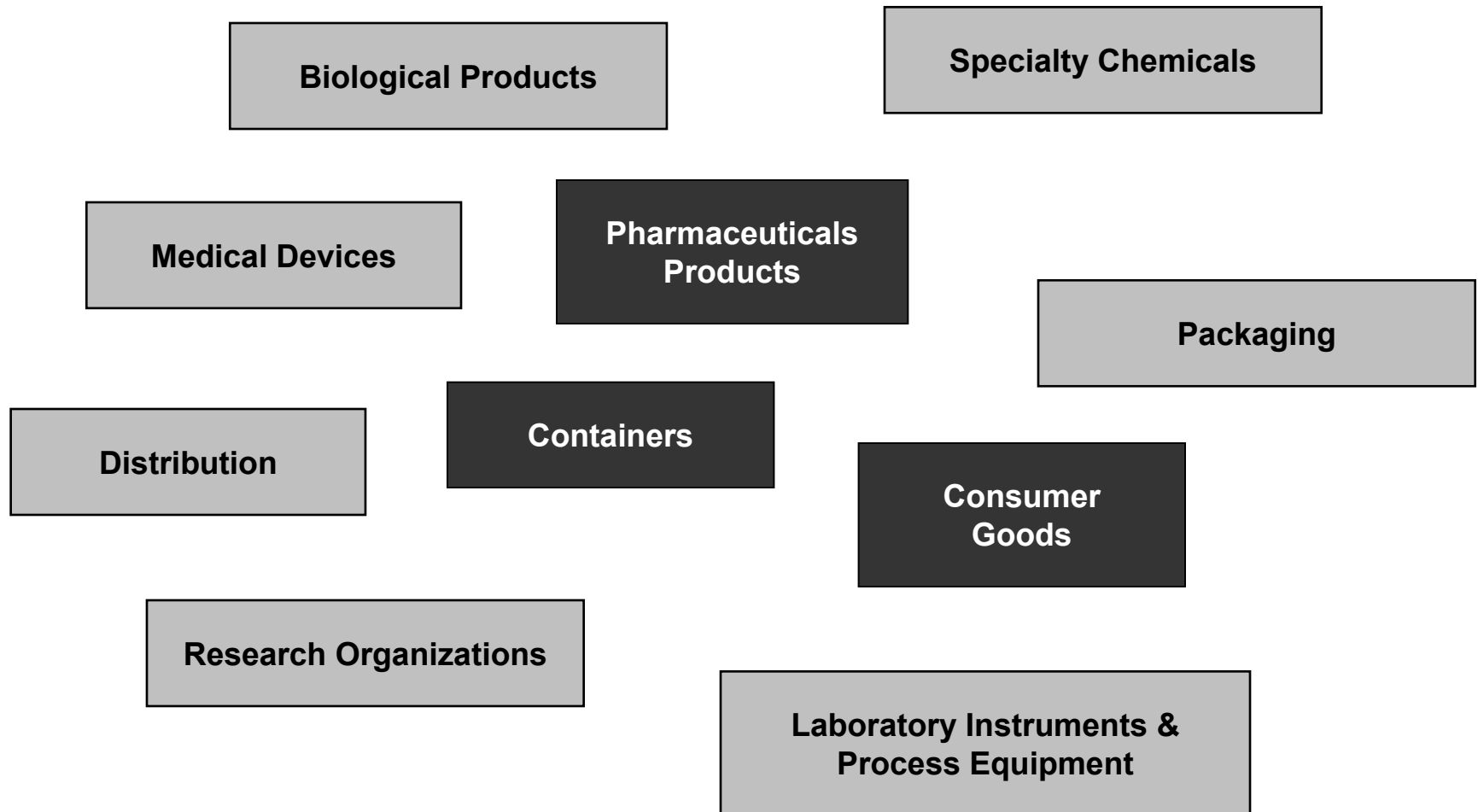
Leading Metropolitan Jurisdictions

Metropolitan Area CMA and MSA	Employment*
1 New York, NY	278,801
2 Chicago, IL	152,601
3 Toronto	143,500
4 Boston-Worcester-Lawrence- Lowell-Brocktn, MA-NH	139,165
5 Philadelphia, PA-NJ	91,370
6 Los Angeles- Long Beach, CA	90,127
7 Minneapolis-St.Paul, MN-WI	64,788
8 Atlanta, GA	59,264
9 Hartford, CT	57,478
10 Dallas, TX	57,458

Note: US Statistics are for 1999; Canadian Statistics are for 2000

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

Components of the Pharma / Biotech Cluster



Source: Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Pharmaceuticals and Biotechnology Clusters

Leading Provincial and State Jurisdictions

Provinces and States	Employment*
1 New Jersey	41,744
2 California	28,977
3 New York	25,211
4 North Carolina	15,150
5 Connecticut	13,521
6 Pennsylvania	13,425
7 Ontario	12,163
8 Illinois	10,613
9 Texas	10,570
10 Ohio	9,827

Leading Metropolitan Jurisdictions

Metropolitan Area CMA and MSA	Employment*
1 Newark, NJ	21,011
2 Middlesex-Somerset-Hunterdon, NJ	13,153
3 Los Angeles-Long Beach, CA	11,420
4 Toronto	10,247
5 Nassau-Suffolk, NY	9,900
6 New York, NY	9,215
7 Philadelphia, PA-NJ	7,575
8 Greater Boston Area, MA-NH	7,525
9 New Haven-Bridgeport-Stamford-Danbury-Wtrbry	7,399
10 Chicago, Il	7,069

Note: US Statistics are for 1999; Canadian Statistics are for 2000

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

Components of the Automotive Cluster

Related Vehicles

Related Machinery

Motor Vehicles

Transportation
Equipment

Automotive Parts

Related Equipment

Flat Glass

Automotive
Components

Metal Processing

Production
Equipment

Forgings and
Stampings

Related Parts

Other Engines

Automotive Clusters in North America

Leading Provincial and State Jurisdictions

Provinces and States	Employment*
1 Michigan	288,978
2 Ohio	180,643
3 Ontario	138,555
4 Indiana	124,572
5 California	71,060
6 Tennessee	62,970
7 Kentucky	54,110
8 Illinois	50,053
9 Missouri	42,371
10 Wisconsin	42,138

Leading Metropolitan Jurisdictions

Metropolitan Area CMA and MSA	Employment*
1 Detroit, MI	154,056
2 Toronto	53,023
3 Dayton-Springfield, OH	32,414
4 Grand Rapids-Muskegon-Holland, MI	32,284
5 Chicago, IL	28,956
6 Cleveland-Lorain- Elyria, OH	27,464
7 Los Angeles-Long Beach, CA	27,085
8 Flint, MI	26,717
9 Indianapolis, IN	23,308
10 Ann Arbor, MI	23,191

Note: US Statistics are for 1999; Canadian Statistics are for 2000

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