



Ontario in the Creative Age

Kevin Stolarick

MARTIN
Prosperity Institute



Rotman School of Management
UNIVERSITY OF TORONTO



Brief Overview

1. Project Background
2. Report Highlights
3. Benchmarking Ontario
4. And Its Regions
5. Q&A

Ontario Government asked Roger Martin and Richard Florida to...

- Undertake a study of the changing composition of Ontario's economy and workforce
- Examine historical changes and projected future trends affecting Ontario
- Provide recommendations to the Province on how to ensure Ontario's economy and people remain globally competitive and prosperous

Ontario Budget, March 2008

This Work Was Completed by....

Andrea Baldwin, Creativity, Social Benefit and Job Creation: The Potential for Social Entrepreneurship in Ontario

Allison Bramwell, Ontario Community Colleges in the Creative Age: Bohemians, Bioinformatics, and the Built Environment

Rick DiFrancesco, Specification and Evaluation of Alternate Projections of the Magnitude and Structure of the Ontario Economy to 2020

Betsy Donald, From Kraft to Craft: Innovation and Creativity in Ontario's Food Economy

Betsy Donald, Heather Hall, Innovation and Creativity on the Periphery: Challenges and Opportunities in Northern Ontario

Richard Florida, Charlotta Mellander, Kevin Stolarick, Into the Black Box of Regional Development: Case Canada

Azmi Haq, Ontario's South Asian Transnationals: Unlocking the Potential of an Untapped Resource

Brian Hraes, Building Ontario's Music Economies

Chris Kennedy, Bryan Karney, Eric Miller, Marianne Hatzopoulou, Infrastructure and the Economy: Future Directions for Ontario

Karen King, Immigration and Education and Skills in Canada

Stewart Melanson, Learning from the Past, a Historical Perspective – Volume 1: The Automotive Industry and Economic Development in Ontario (1904 to the Present)

Stewart Melanson, Learning from the Past, a Historical Perspective – Volume 2: Learning from the Past: The Rise of Toronto as a Financial Centre

Carla Sedini, Evaluating Higher-Education Excellence Using the 3Ts – Creation and Attraction of Technology, Talent and Tolerance by Ontario Colleges and Universities

David Wolfe and Jen Nelles, Strategic Management of Urban Economies and the Scope for Intermunicipal Cooperation: Alternative Approaches to Local and Regional Development

Tara Vinodrai, The Place of Design: Exploring Ontario's Design Economy

Amy Cervenán, Sana Nisar, Yousuf Haque, Service Class Prosperity in Ontario

Richard Florida, Kevin Stolarick, Kathrine Richardson, Microsoft Canada – A Case Study of the New Development Centre in Richmond, BC

Karen King, Charlotta Mellander, Kevin Stolarick, What You Do, Not Who You Work For: A Comparison of the Occupational and Industry Structures of Canada, the United States, and Sweden

Scott Pennington, The Opportunity for Entrepreneurship in Ontario

Anil Verma, Low Wage Service Workers: A Profile

Authors

Roger Martin, Dean,
Joseph L. Rotman School of Management

Richard Florida, Director,
Martin Prosperity Institute

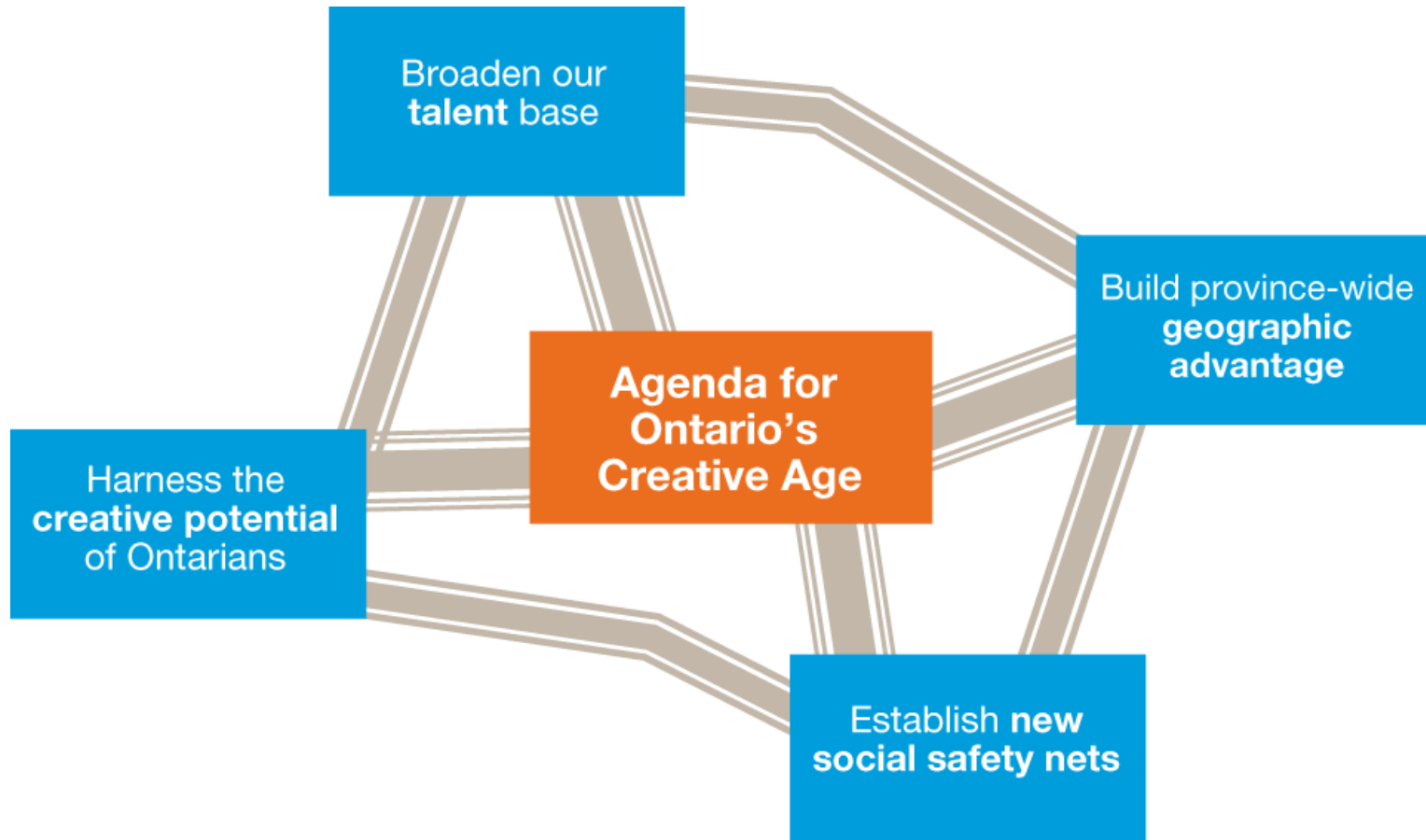
Project Direction

James Milway, Executive Director
David Smith, Project Leader
Kevin Stolarick, Research Director

Project Team

Patrick Adler
Tamer Azer
Fan Bai
Lance Bialas
Katherine Chan
Marisol D'Andrea
Yousuf Haque
Anam Kidwai
Aaron Meyer
Joshua Murphy
Sana Nisar
Scott Pennington
Paulo Raposo
Adrienne Ross
Kim Ryan
Ronnie Sanders
Daniela Scur
Kim Silk
Ying (Sunny) Sun
Ian Swain
Michael Wolfe

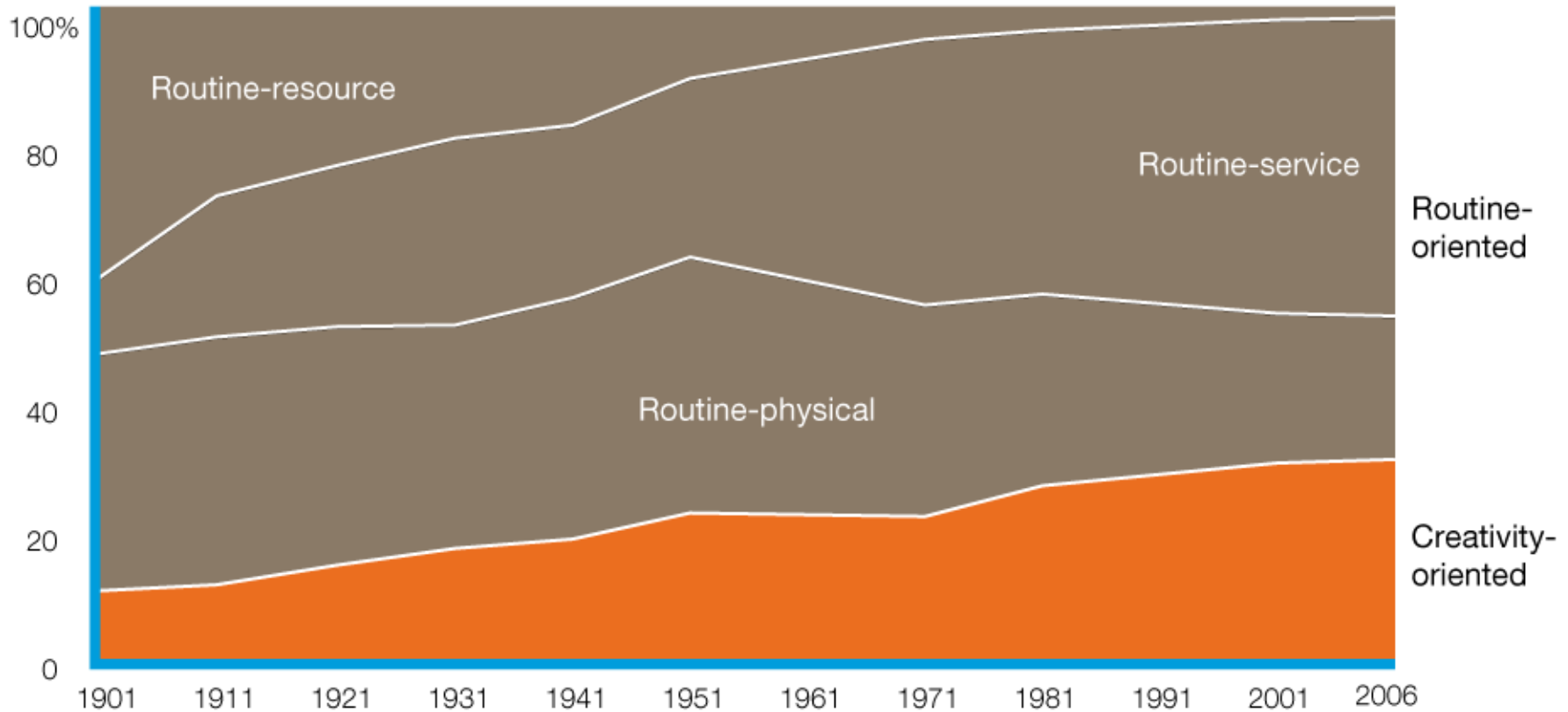
Ontario's distinctive advantage can be created through actions on four fronts



Share of creativity-oriented jobs is increasing

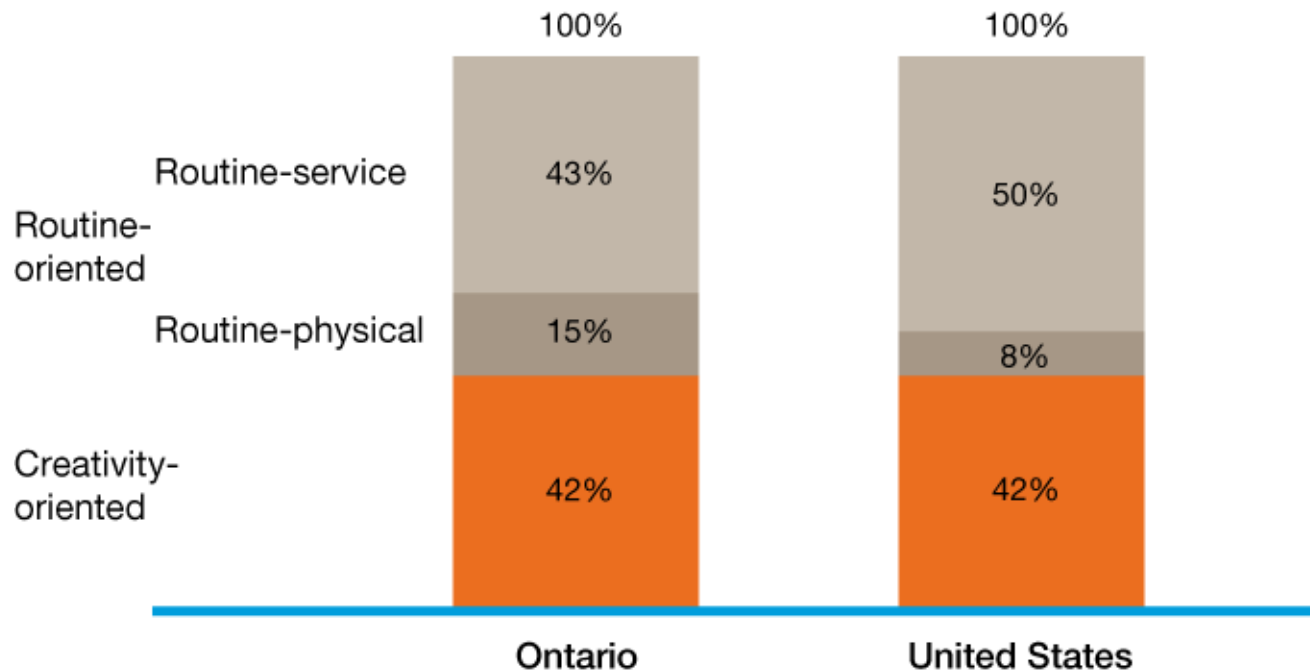
Share of
workforce

Routine-oriented and creativity-oriented jobs
Ontario (1901-2006)



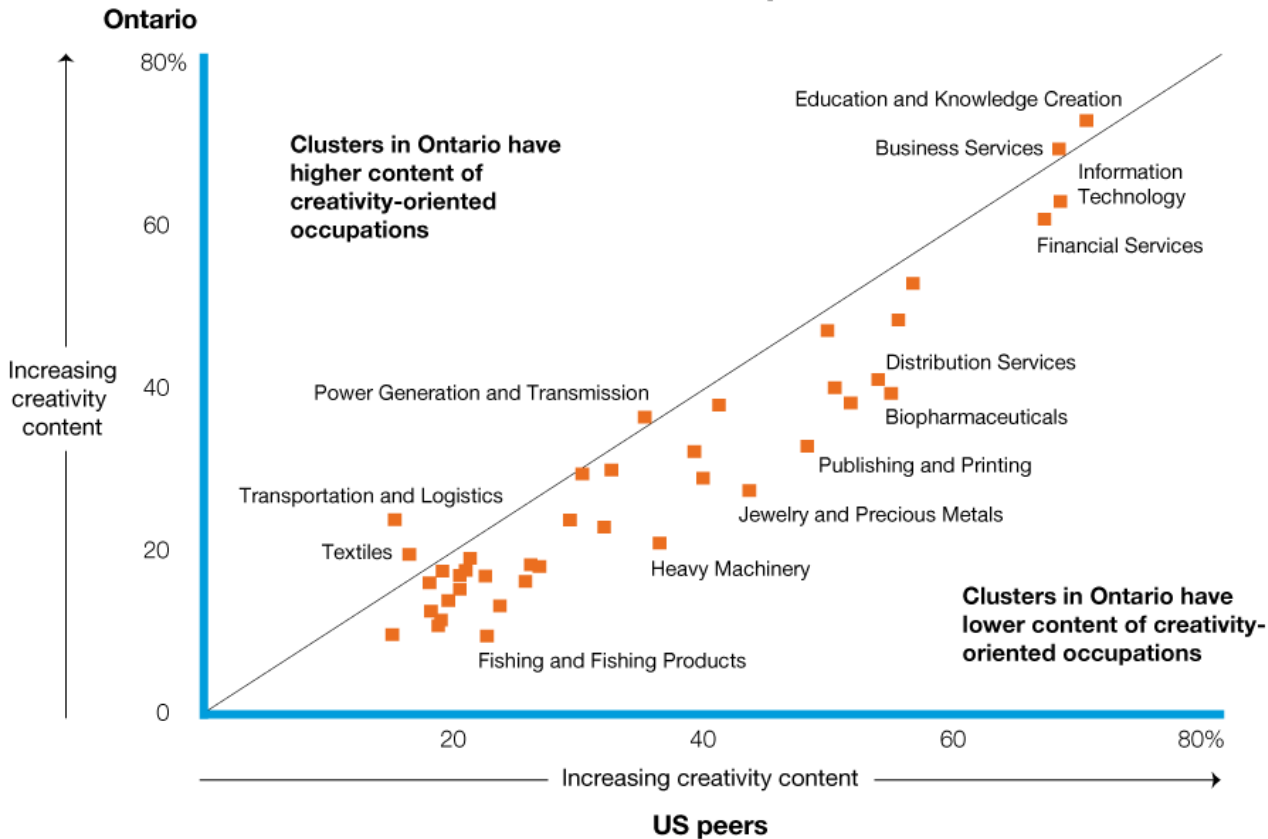
New jobs will be in creativity-oriented and routine-oriented service occupations

Proportion of net new job creation by occupation group
2006-2016



Ontario has less creative content than US peers in 36 of 41 clustered industries

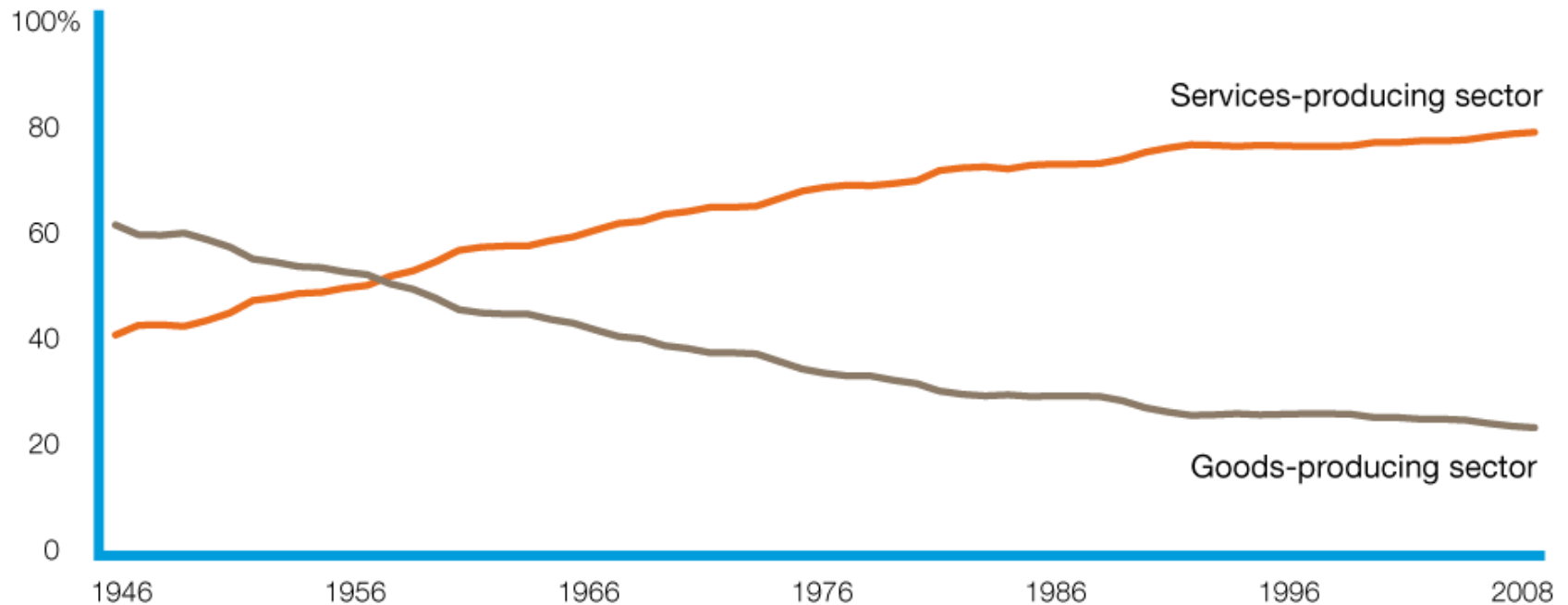
Creativity content in clustered industries, 2005
 % of workers in creativity-oriented occupations in each of 41 clustered industries
 Ontario vs 14 US peer states



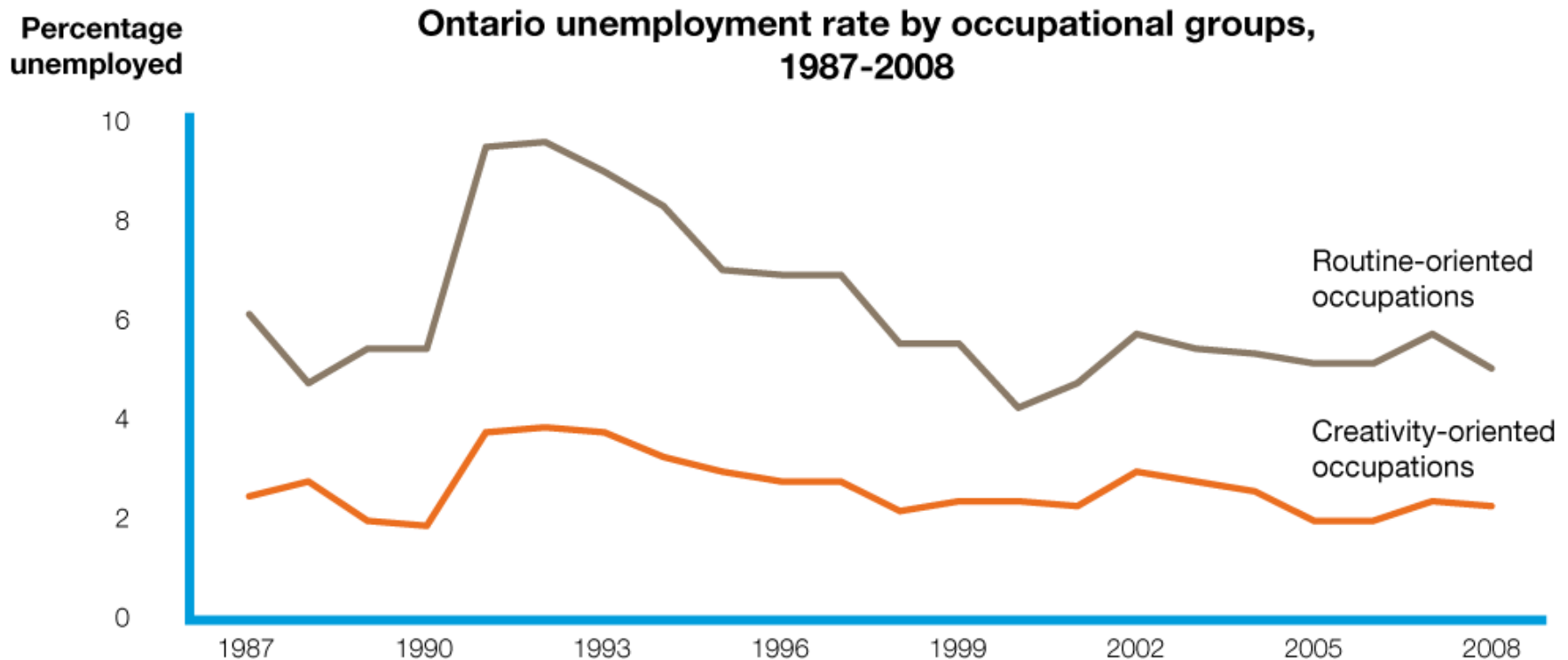
Nearly 80 percent of jobs in Canada are in services industries

Percentage of employment

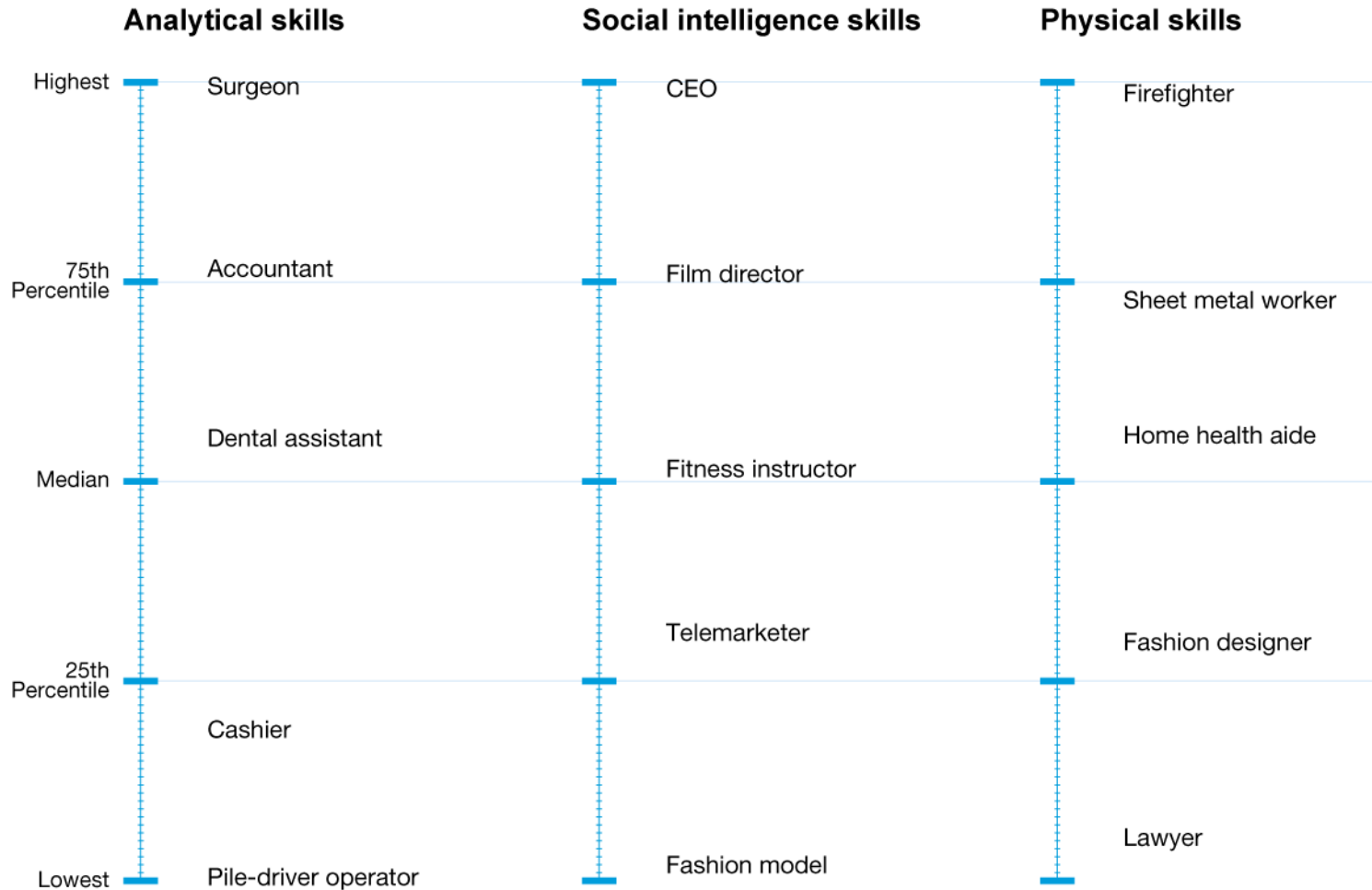
Employment in goods- versus services-producing sector, Canada, 1946-2008



Unemployment is higher in routine-oriented occupations especially in early 90s recession



Workers draw on three sets of skills

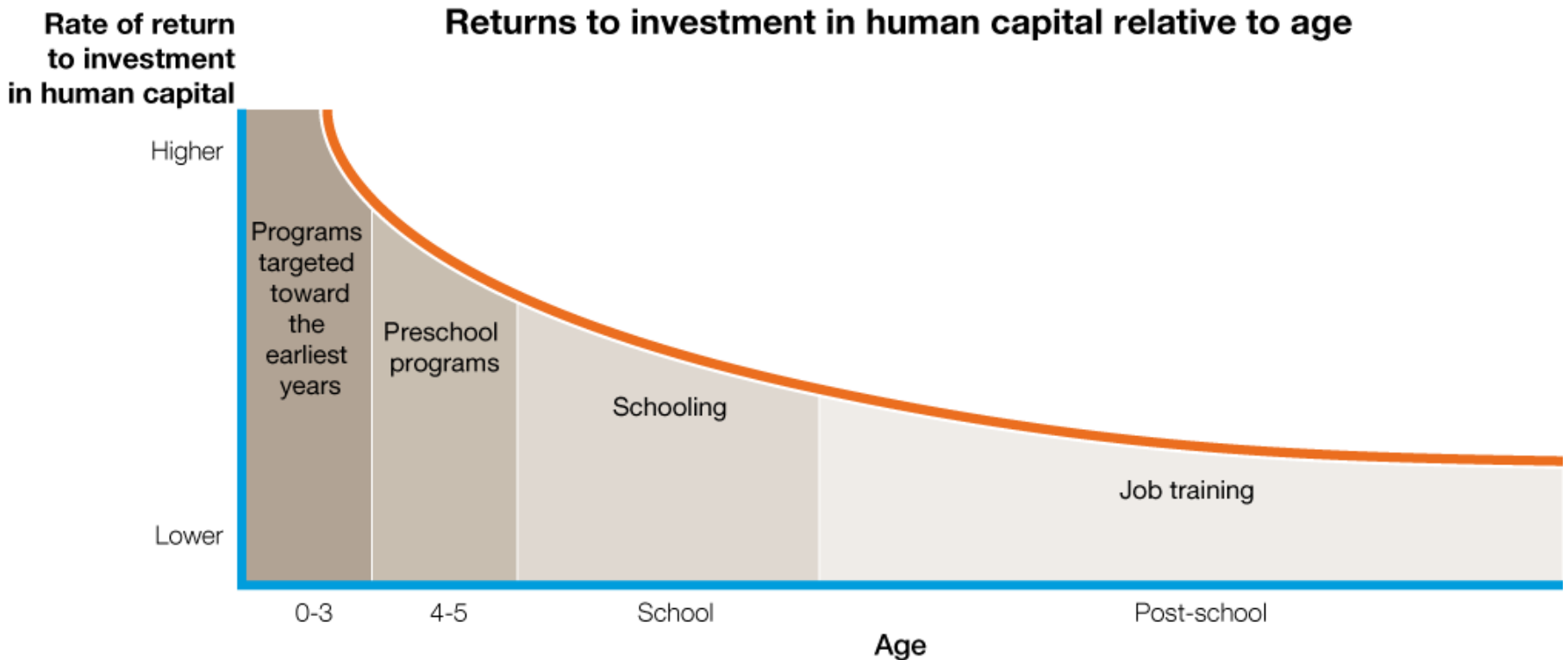


Ontario under values increases in analytical and social intelligence skills

Impact on earnings as occupations move from 25th to 75th percentile in skill content
Ontario and 14 US peer states, 2005

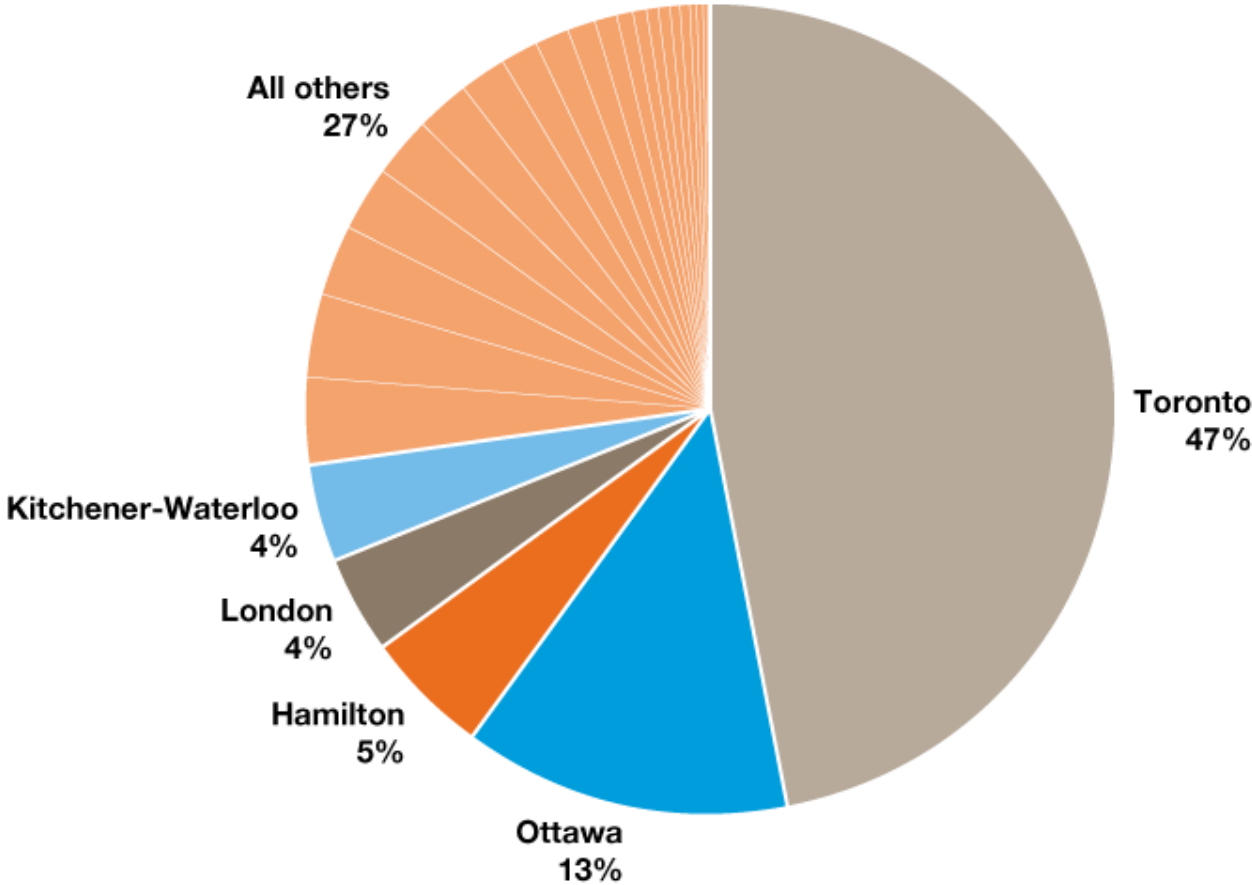


Returns to investment are highest for early childhood development

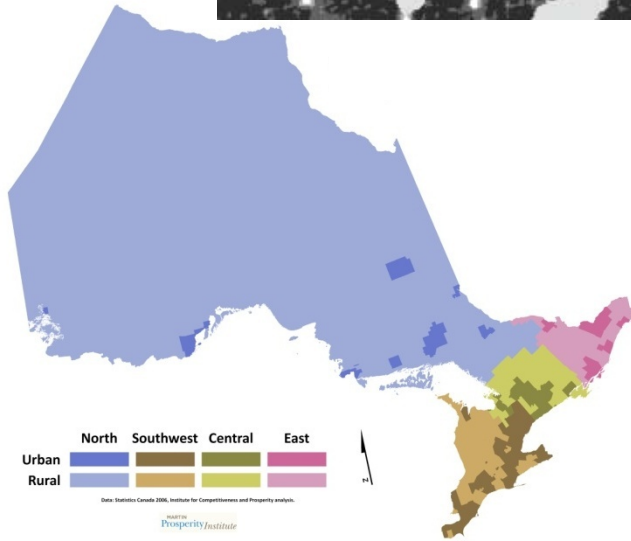
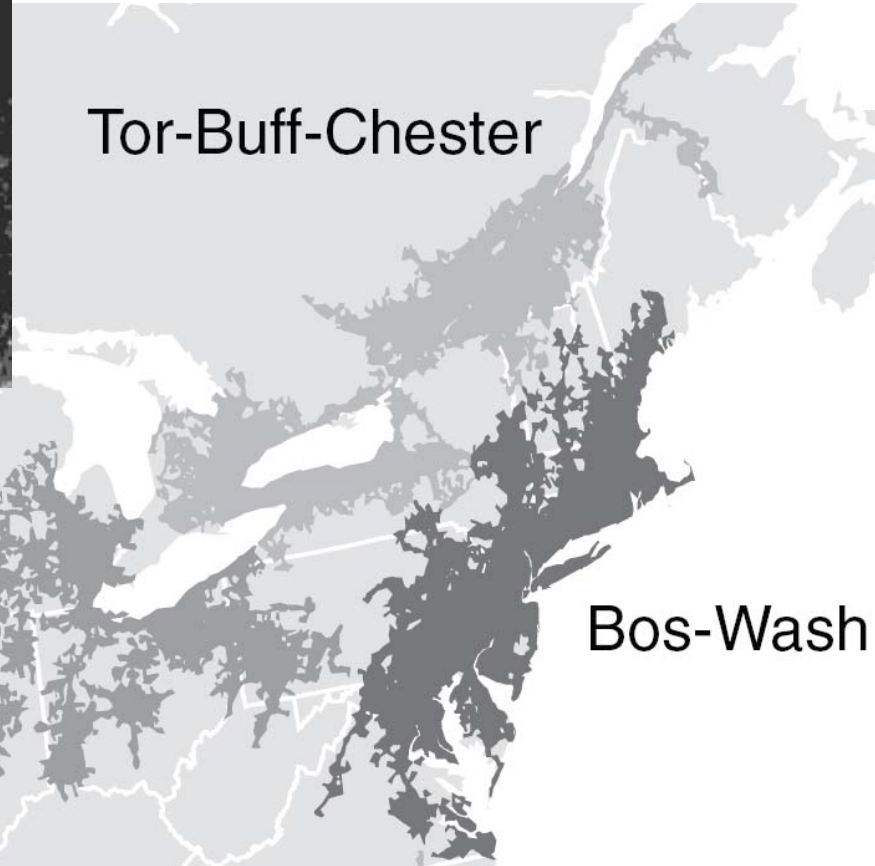


Workers in creativity-oriented occupations are concentrated in small number of city regions

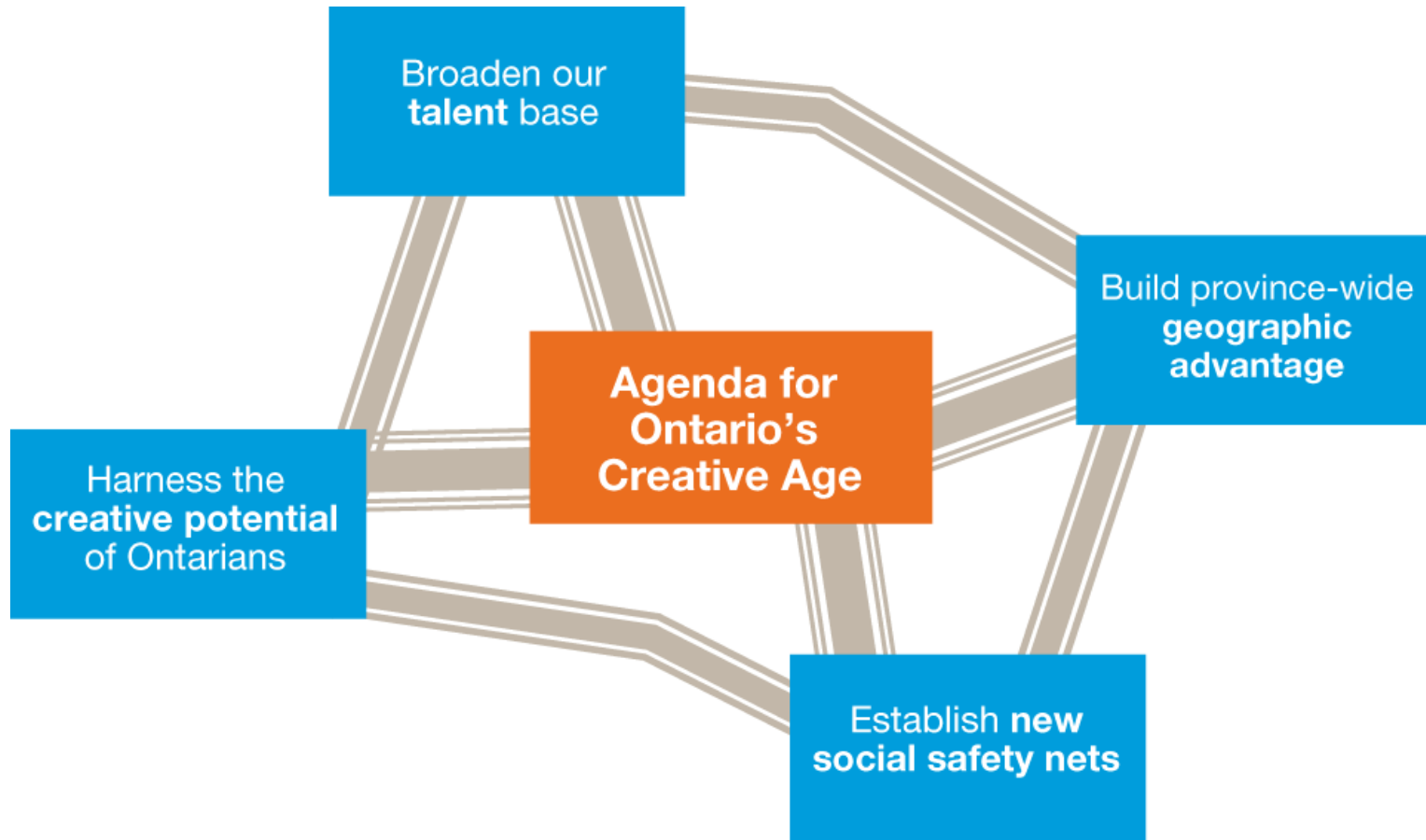
Proportion of Ontario's creativity-oriented occupations in city regions



Harness the potential of the mega-region and connect the disconnected parts of Ontario



Ontario's distinctive advantage can be created through actions on four fronts



Benchmarking Ontario (and its Regions)

Summary Statistics

Total Population, 2006
 GDP (CAD millions) 2006
 Median Age, 2006
 Overall Cost of Living Index

Overall Performance

Population Growth (00-05)
 Job Growth (00-05)
 GDP per capita, 2006
 Change in Average Wage (00-05)
 Creativity Index

Technology

Total Patents, 2005
 Patents per 10,000, 2005
 Patent Growth, Short Term (00-05)
 North American High Tech LQ, 2006
 North American Tech Pole Index

Talent

Creative Class as % of Workforce, 2006
 Super Creative Core as % of Workforce, 2006
 Pop > 25, Above High School below BA, 2006
 Talent Index (Pop > 25, BA and above), 2006
 Pop > 25, Graduate and/or Professional Degree, 2006
 Brain Drain/Gain Index, 2006

Tolerance

Visible Minorities (% Pop), 2006
 Mosaic Index (% Pop), 2006
 Gay and Lesbian Index, 2006
 Bohemian Index, 2006
 Integration Index, 2006

Territorial Assets

Social and Cultural Assets

Arts and Cultural Establishments per 10,000, 2006
 Restaurants and Bars per 1,000, 2006
 Student/Teacher Ratio, 2006
 Doctor's per 1,000, 2006

Civic Assets

Federal Voter Turnout (%), 2004/2006
 Violent and Property Crime per Capita, 2006

Housing and Transportation Assets

Population Density (KM2), 2006
 Median Housing Value to Income Ratio, 2005
 Drivers per Other Modes, 2006



Ontario

Summary Statistics	Ontario	Peer Minimum	Peer Average	Peer Maximum	Provincial/State Average
Total Population, 2006	12,160,000	7,642,884	15,449,000	36,458,000	546,000
GDP (CAD millions) 2006	\$537,000	\$422,000	\$791,000	\$1,967,000	\$29,000
Median Age, 2006	39	33.1	36.8	39.8	37.5

Overall Performance	Ontario	Peer Ranking	Peer Minimum	Peer Average	Peer Maximum	Provincial/State Average
Population Growth (00-05)	6.6%	10	1%	5.8%	20.2%	5.7%
Job Growth (00-05)	8.2%	10	-1.2%	9.8%	25.9%	9.3%
GDP per capita, 2006	\$44,000	18	\$36,100	\$51,000	\$67,500	\$45,000
Change in Average Wage (00-05)	-0.2%	10	-4.8%	-0.4%	16.1%	0.1%
Creativity Index	0.80	6	0.33	0.70	0.92	N/A

21 Regions in Peer Group: California; Texas; New York; Florida; Illinois; Pennsylvania; Ohio; New Jersey; Michigan; Georgia; Virginia; North Carolina; Massachusetts; Washington; Indiana; Quebec; Tennessee; Arizona; Alberta; British Columbia; Ontario

Technology



“A high technology base is both a necessary condition for and a result of a region having a strong creative economy.”

Being known as a "high-tech" region helps to attract the creative workforce, which, in turn, generates new technologies making the region even more high-tech.”

Technology



- High Technology:

- Concentration of high-tech companies
- Growth of high-tech companies
- Tech-Pole (North American)

- Innovation:

- # of patented innovations per 1,000 people
- Growth in patented innovations

Ontario

Technology	Ontario	Peer Ranking	Peer Minimum	Peer Average	Peer Maximum	Provincial/State Average
Total Patents, 2005	1467	13	292	4,144	17,961	517
Patents per 10,000, 2005	1.21	18	1.24	2.33	4.93	2.46
Patent Growth, Short Term (00-05)	4.5%	4	-7.7%	-0.4%	45.6%	-0.5%
North American High Tech LQ, 2006	1.06	7	0.65	1.02	1.64	0.63
North American Tech Pole Index	5.048	4	0.773	5.429	22.915	0.189

Talent



“The concentration of people in the Creative and Super Creative Classes, has a stronger relationship with economic growth.

Creative people don't just cluster where the jobs are. They cluster in places that are centers of creativity and also where they like to live.

Places need a people climate -- or a creativity climate -- as well as a business climate.”

Talent



- Talent Index
(Bachelors Degree and above)
- % Super Creative
(scientists, engineers, artists, musicians, designers)
- % Knowledge Workers
(super creative + professionals)
- Brain Drain/Gain Index (BDGI)

Ontario

Talent	Ontario	Peer Ranking	Peer Minimum	Peer Average	Peer Maximum	Provincial/State Average
	Creative Class as % of Workforce, 2006	30.3%	10	25.7%	30.9%	37.1%
Super Creative Core as % of Workforce, 2006	16.5%	1	9.3%	12.7%	16.5%	11.0%
Pop > 25, Above High School below BA, 2006	20.1%	N/A	5.7%	7.2%	20.1%	59.0%
Talent Index (Pop > 25, BA and above), 2006	22.8%	16	18.1%	27.7%	37.0%	21.7%
Pop > 25, Graduate and/or Professional Degree, 2006	9.0%	12	6.3%	10.3%	15.6%	7.5%
Brain Drain/Gain Index, 2006	1.34	6	0.92	1.16	1.88	N/A

Inclusiveness



“Diversity has become a politically charged buzzword. To some it is an ideal and rallying cry, to others a Trojan-horse concept that has brought us affirmative action and other liberal abominations.”

Creative Class people use the word often, but not to press any political hot buttons. Diversity is simply something they value in all its manifestations.”

Inclusiveness



- **Mosaic Index**
(% foreign born)
- **Gay/Lesbian Index**
(% gay & lesbian population)
- **Boho Index**
(% culturally creative)
- **% Visible Minority**
- **% Interracial Marriage**

Ontario

Tolerance	Ontario	Peer Ranking	Peer Minimum	Peer Average	Peer Maximum	Provincial/State Average
	Visible Minorities (% Pop), 2006	22.6%	8	8.7%	27.9%	40.2%
Mosaic Index (% Pop), 2006	27.9%	1	3.6%	13.8%	27.9%	7.9%
Gay and Lesbian Index, 2006	1.06	14	0.69	0.99	1.42	0.81
Bohemian Index, 2006	1.27	8	0.68	1.00	1.60	0.69

Territory Assets



“What Creative people look for in communities are abundant high-quality amenities and experiences, an openness to diversity of all kinds, and above all else the opportunity to validate their identities as creative people.”

Places are valued for authenticity and uniqueness ... Authenticity comes from several aspects of a community ... It comes from the mix ... Authenticity is the opposite of generic.”

Territory Assets (Quality of Place)



- Economy/Growth
- Housing
- Culture
- Climate
- Education
- Healthcare
- Recreation
- Dis-amenities
 - Crime, Weather
- Transportation
 - Connectedness

Benchmarking Ontario's 15 Metro Areas (CMAs)



Benchmarking – St. Catharines - Niagara

Summary Statistics						St. Catharines – Niagara, ON	Peer Minimum	Peer Average	Peer Maximum	Provincial/State Average
	Total Population, 2006						390,000	330,088	390,000	454,000
GDP (CAD millions) 2006						\$16,000	\$14,000	\$17,000	\$21,000	\$29,000
Median Age, 2006						42.1	33.4	37.1	43.1	37.5
Overall Cost of Living Index						100.5	89.0	98.6	107.4	101.5

Overall Performance						St. Catharines – Niagara, ON	Peer Ranking	Peer Minimum	Peer Average	Peer Maximum	Provincial/State Average
	Worst				Best						
Population Growth (00-05)						3.5%	7	0%	4.0%	7.4%	5.7%
Job Growth (00-05)						1.9%	8	-3.3%	3.9%	11.6%	9.3%
GDP per capita, 2006						\$42,000	9	\$37,500	\$47,000	\$65,200	\$45,000
Change in Average Wage (00-05)						-4.0%	10	-8.8%	-0.5%	9.0%	0.1%
Creativity Index						0.48	8	0.36	0.59	0.83	N/A

11 Regions in Peer Group: Canton, OH; Fort Wayne, IN; Lansing, MI; Peoria, IL; Reading, PA; Spokane, WA; Tallahassee, FL; Victoria, BC; Ann Arbor, MI; Santa Barbara, CA; St. Catharines – Niagara, ON

St. Catharines - Niagara

Technology					St. Catharines –	Peer	Peer	Peer	Peer	Provincial/State
	Worst			Best	Niagara, ON	Ranking	Minimum	Average	Maximum	Average
Total Patents, 2005	■	■	■	■	21	11	21	107	394	517
Patents per 10,000, 2005	■	■	■	■	0.54	11	0.54	2.82	11.45	2.46
Patent Growth, Short Term (00-05)	■	■	■	■	20.1%	1	-12.7%	3.2%	20.1%	-0.5%
North American High Tech IQ, 2006	■	■	■	■	0.50	8	0.26	0.77	1.87	0.63
North American Tech Pole Index	■	■	■	■	0.040	7	0.008	0.099	0.385	0.189

St. Catharines - Niagara

Talent					St. Catharines –	Peer	Peer	Peer	Peer	Provincial/State
	Worst			Best	Niagara, ON	Ranking	Minimum	Average	Maximum	Average
Creative Class as % of Workforce, 2006					22.9%	11	22.9%	29.7%	38.2%	26.1%
Super Creative Core as % of Workforce, 2006					12.0%	6	9.4%	12.8%	18.6%	11.0%
Pop > 25, Above High School below BA, 2006					61.3%	N/A	41.2%	58.1%	67.5%	59.0%
Talent Index (Pop > 25, BA and above), 2006					14.2%	11	14.2%	27.5%	51.7%	21.7%
Pop > 25, Graduate and/or Professional Degree, 2006					5.9%	11	5.9%	10.8%	26.2%	7.5%
Brain Drain/Gain Index, 2006					0.64	11	0.64	0.89	1.27	N/A

St. Catharines - Niagara

Tolerance	St. Catharines –					Peer	Peer	Peer	Peer	Provincial/State
	Worst			Best	Niagara, ON	Ranking	Minimum	Average	Maximum	Average
Visible Minorities (% Pop), 2006	■		■		6.5%	11	6.5%	16.3%	37.7%	11.1%
Mosaic Index (% Pop), 2006			■		18.0%	3	2.2%	9.4%	23.6%	7.9%
Gay and Lesbian Index, 2006		■	■		0.63	9	0.59	0.92	1.62	0.81
Bohemian Index, 2006			■		0.88	3	0.35	0.71	1.60	0.69
Integration Index, 2006			■	■	0.84	2	0.54	0.72	0.90	N/A

St. Catharines - Niagara

Territorial Assets						St. Catharines –	Peer	Peer	Peer	Peer
	Worst		Best			Niagara, ON	Ranking	Minimum	Average	Maximum
Social and Cultural Assets										
Arts and Cultural Establishments per 10,000, 2006						5.94	2	0.77	2.21	6.85
Restaurants and Bars per 1,000, 2006						3.01	1	1.67	2.07	3.01
Student/Teacher Ratio, 2006						15.34	3	11.37	16.37	21.63
Doctor's per 1,000, 2006						0.58	9	0.20	0.95	1.86
Civic Assets										
Federal Voter Turnout (%), 2004/2006						68%	5	54%	64%	71%
Violent and Property Crime per Capita, 2006						0.06	9	0.03	0.05	0.09
Housing and Transportation Assets										
Population Density (KM2), 2006						279	2	52.78	159.87	474.71
Median Housing Value to Income Ratio, 2005						3.49	6	2.44	4.59	12.82
Drivers per Other Modes, 2006						11.96	4	3.47	19.02	37.98

Questions?



Thank You

Kevin Stolarick

kms@rotman.utoronto.ca

www.martinprosperity.org/ontario

www.martinprosperity.org



**Ontario
in the
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Ontario in the creative age

- **The promise and the challenge of the creative age**
- Realizing the promise of the creative age
- Agenda for Ontario's creative age

Ontario in the creative age

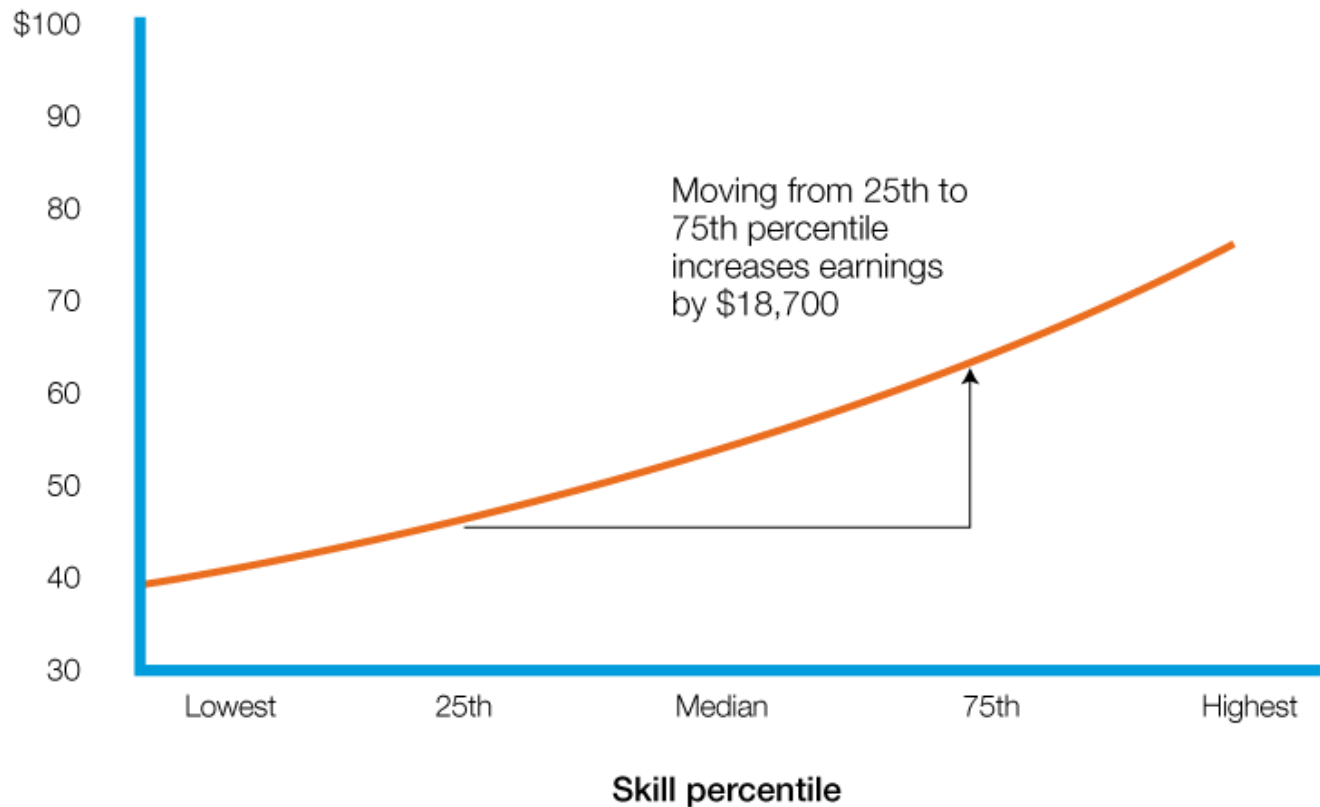
- The promise and the challenge of the creative age
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Earnings rise with increases in occupations' analytical skills

Skills' impact on earnings, Ontario

Average employment
income (C\$ 000), 2005

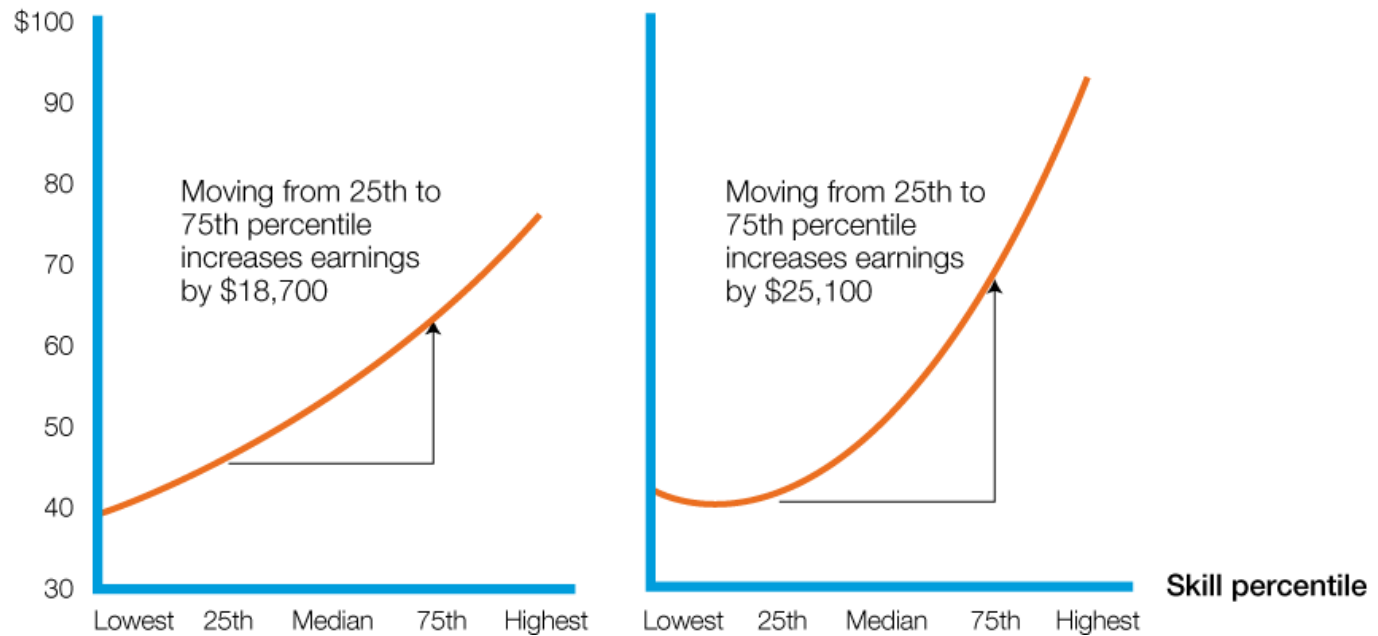
Analytical skills



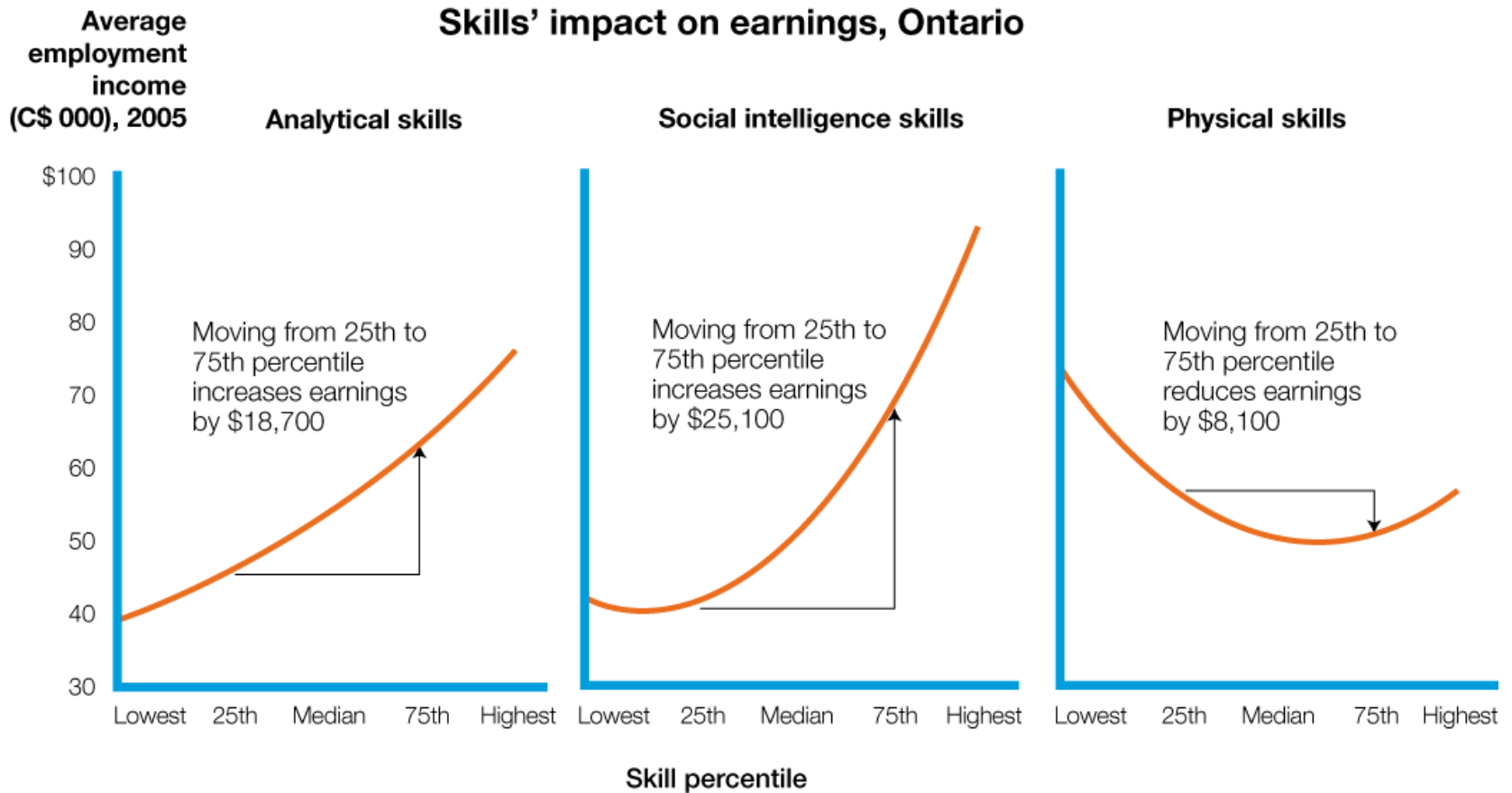
Earnings rise more with increases in occupations' social intelligence skills

Skills' impact on earnings, Ontario

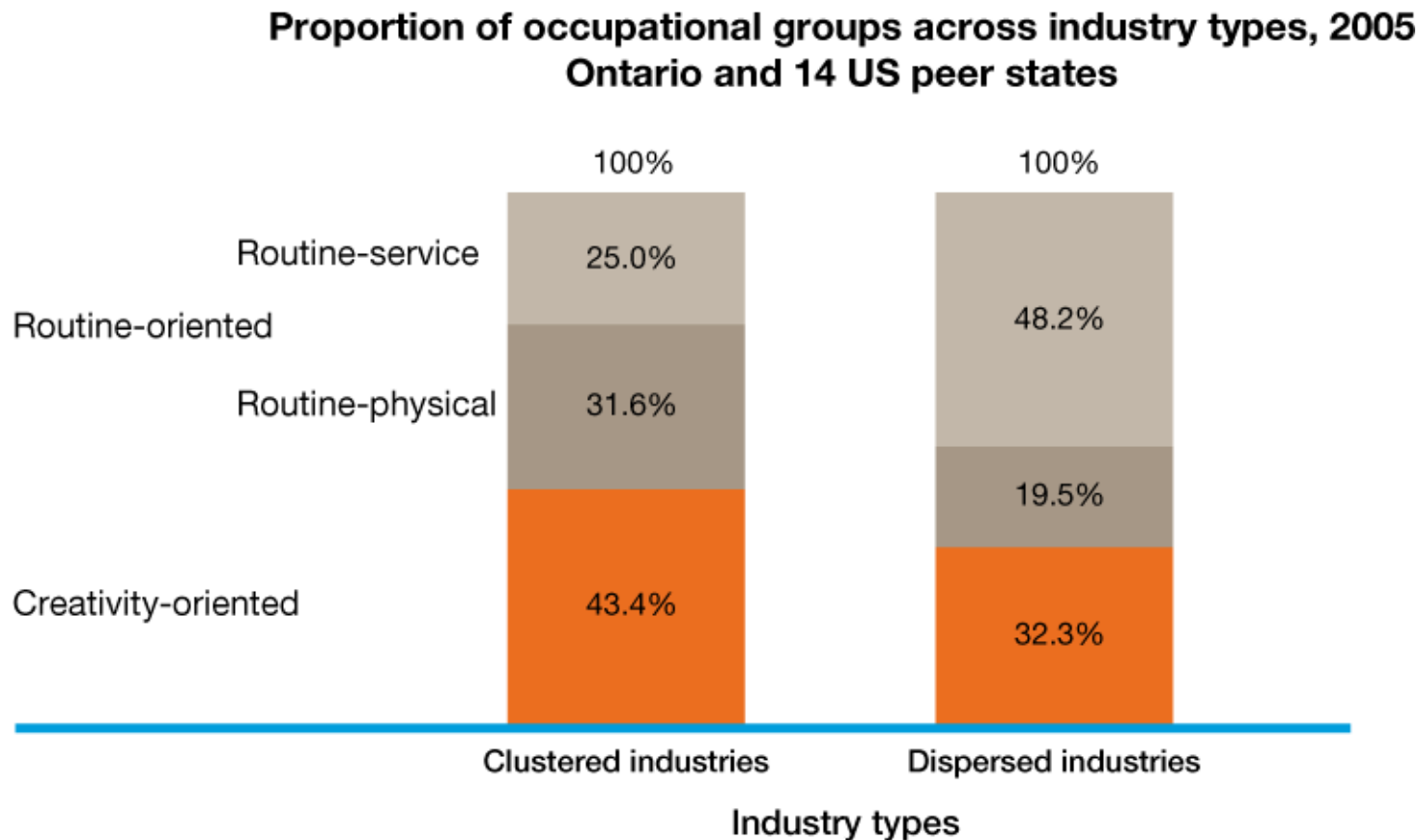
Average employment income (C\$ 000), 2005



Earnings do not rise with increases in physical skills

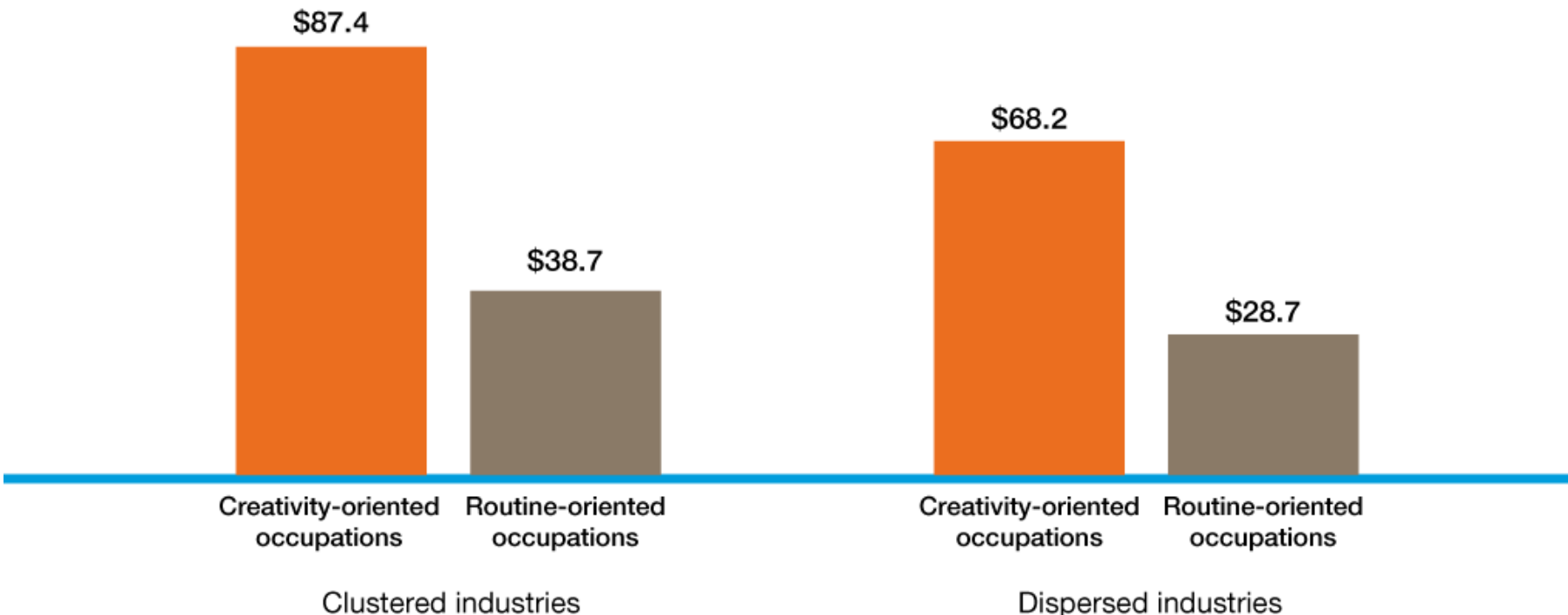


Clustered industries draw more on creativity-oriented occupations than *dispersed* industries



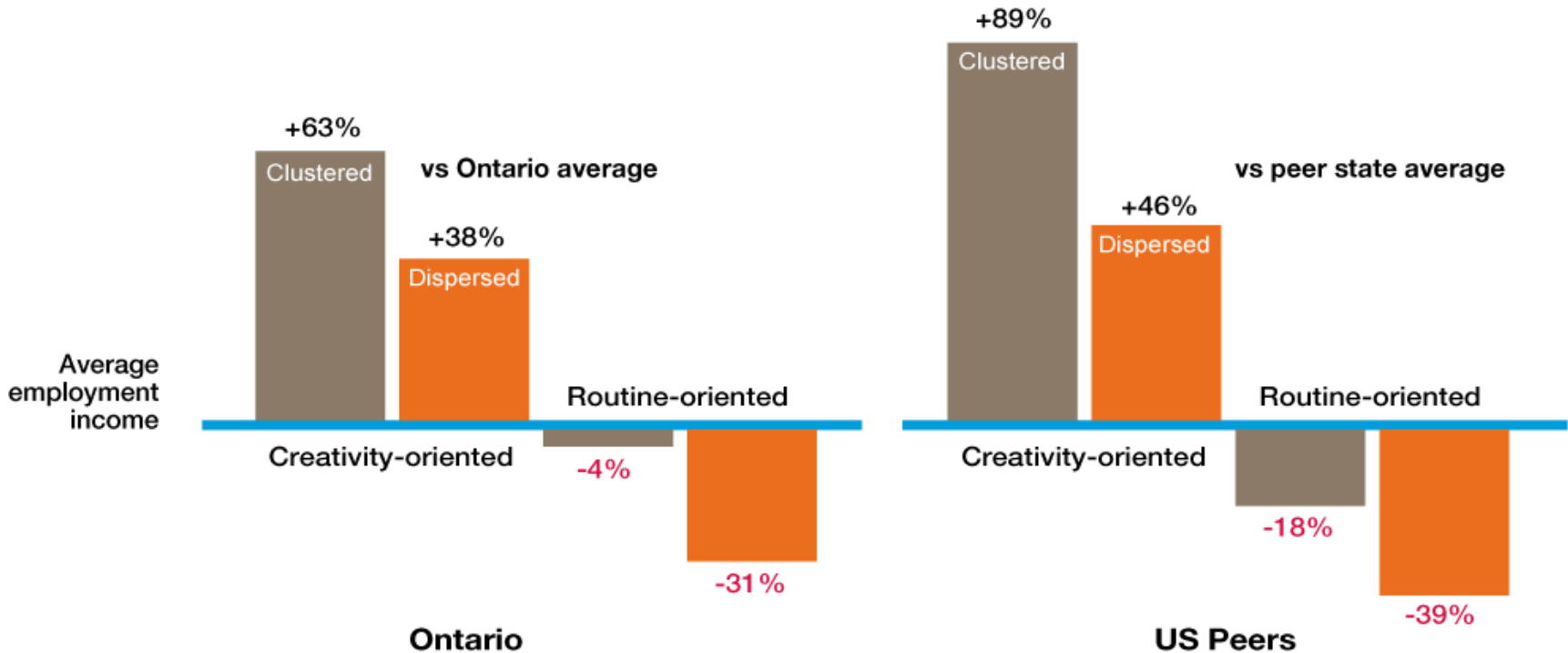
Creativity-oriented occupations in clustered industries generate highest earnings

Average employment income (000 C\$ 2005)
Ontario and 14 US peer states

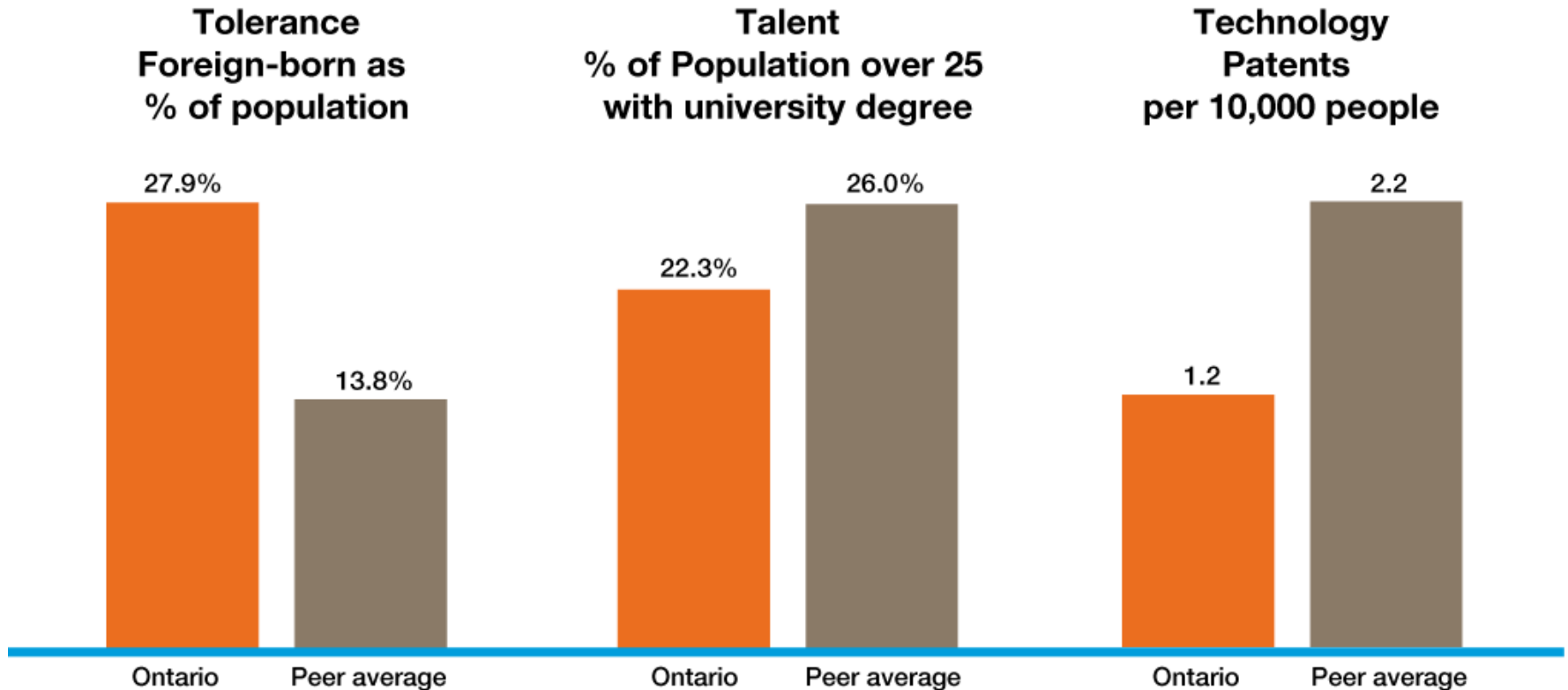


Wage differences are much less prevalent in Ontario than in peer states

Employment income comparison by occupational groups and industry types, 2005
Ontario and 14 US peer states



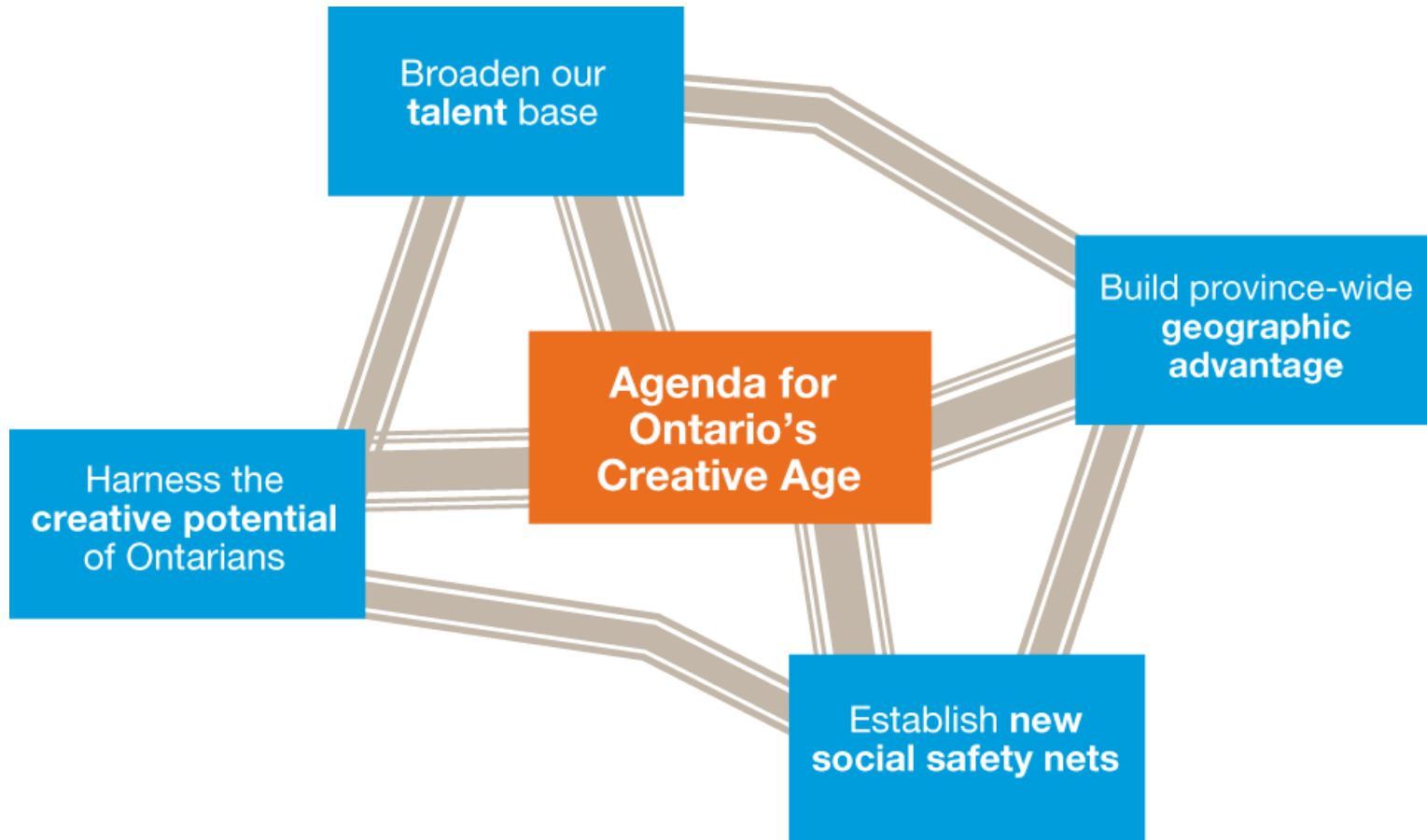
Ontario out performs US peers on Tolerance but under performs on Talent and Technology



Ontario in the creative age

- The promise and the challenge of the creative age
- Realizing the promise of the creative age
- **Agenda for Ontario's creative age**

Ontario's distinctive advantage can be created through actions on four fronts



Harness the *creative potential* of Ontarians

- Increased creativity in all jobs
- Be the world's first jurisdiction where creativity-oriented occupations account for half of all jobs
- Strengthen creativity skills through our education system
- Market Ontario as a creative province
- Make diversity a cornerstone of economic prosperity

Broaden our *talent* base

- Make Ontario the talent province
- Strengthen our managerial capacity

Establish *new social safety nets*

- Make early childhood development a high priority
- Invest in skills development for recent immigrants
- Consider wage insurance for longer tenure workers

Build province-wide *geographic advantage*

- Make the mega-region as strong as it can be
- Invest in connectivity