



Mining: Dynamic and Dependable for Ontario's Future

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**Peter Dungan, Director, Policy and Economic Analysis Program, University of Toronto
and**

Steve Murphy, Research Associate, Policy and Economic Analysis Program, University of Toronto

What We Set Out To Do:

Prepare a report that provides an up-to-date look at the mining industry in Ontario, highlighting the importance of the industry to the province.

Utilize published data on the industry, conduct input-output analysis to capture the scope of the industry and a mining company survey to capture the regional nature of the industry and information not available elsewhere.

The international environment for Ontario will remain challenging over the coming years, with a strong Canadian \$ and its major international trading partner's growth relatively muted.

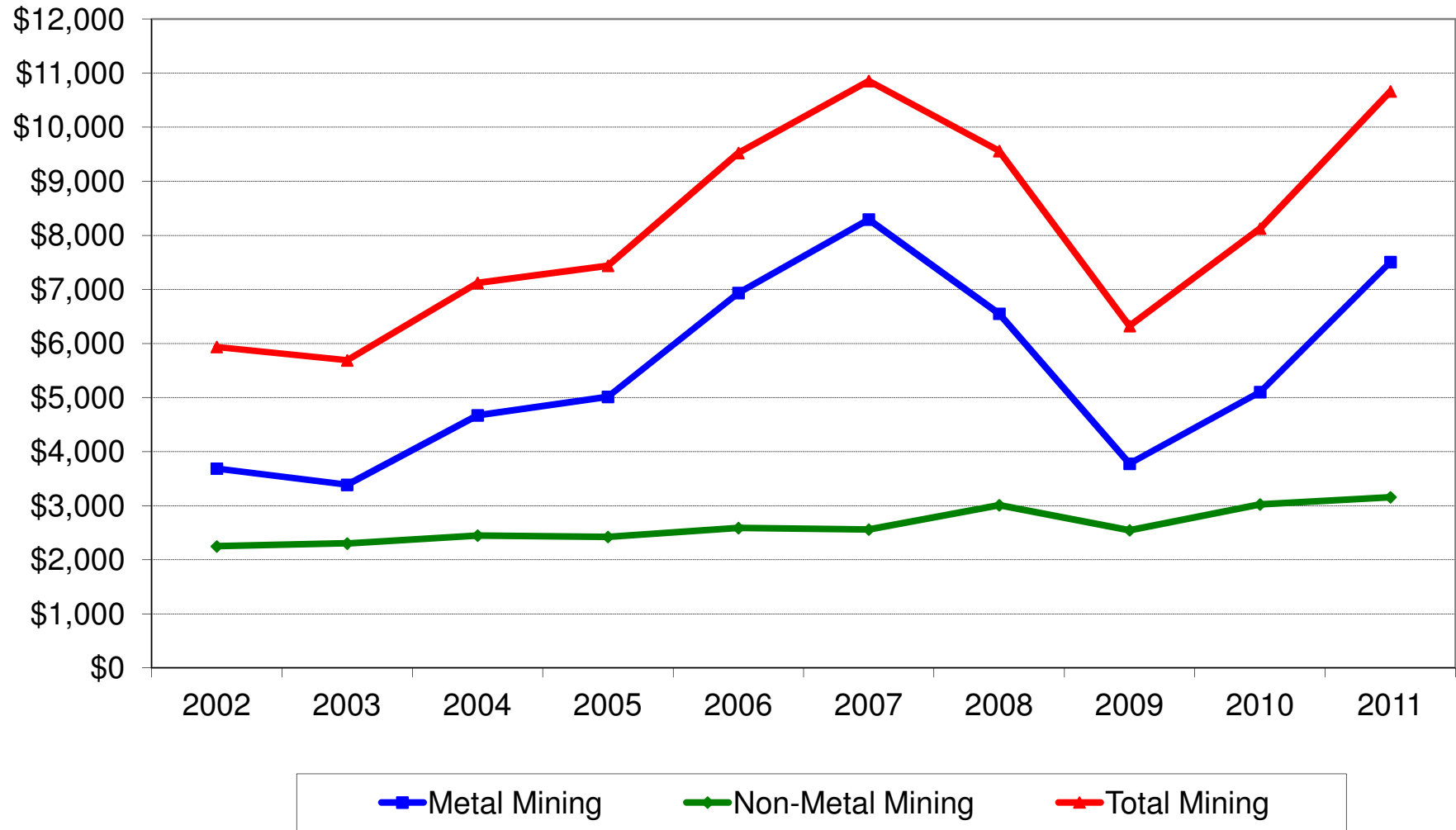
Resource exports to rapidly growing emerging economies (China, India) are a bright spot in this picture. Ontario has the commodities that these countries need.

While other resource based industries in the province are faltering, mining is growing, and is expected to continue to do so as exploration and capital investment expenditures hit record levels and interest in the development of the Ring of Fire continues.

Employment in the industry is growing, with both wages and output per worker dramatically higher than the provincial average.

Mining is important to all parts of the province, not only where the mines are located. Suppliers are located throughout the province and mining companies are vitally important to the Toronto Stock Exchange.

Value of Output in the Metal Mining, Non-Metal Mining and Total Ontario Mining Industry, \$Million

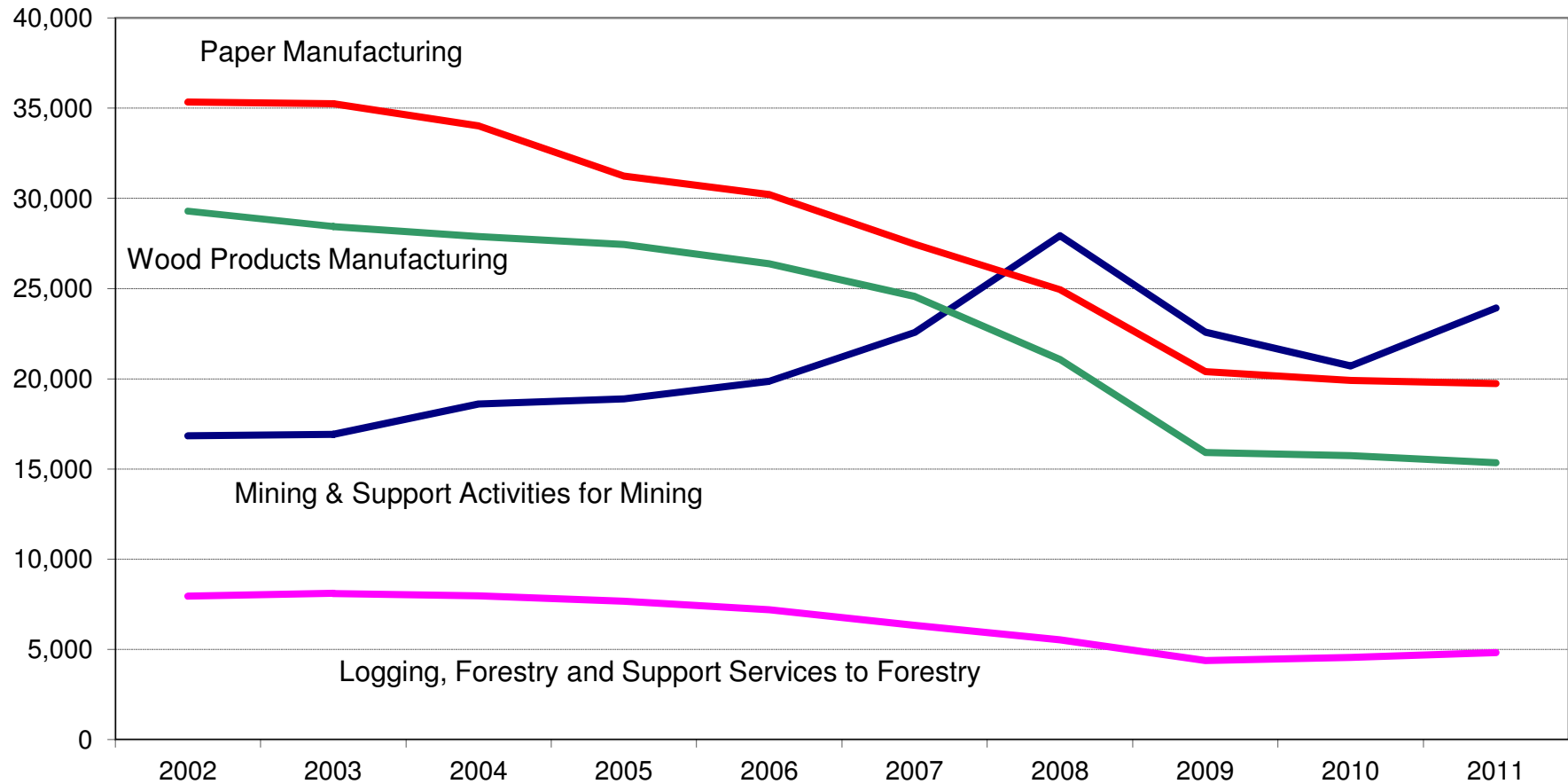


Source: Natural Resources Canada

% Share of the Value of Ontario Mineral Production, by Commodity

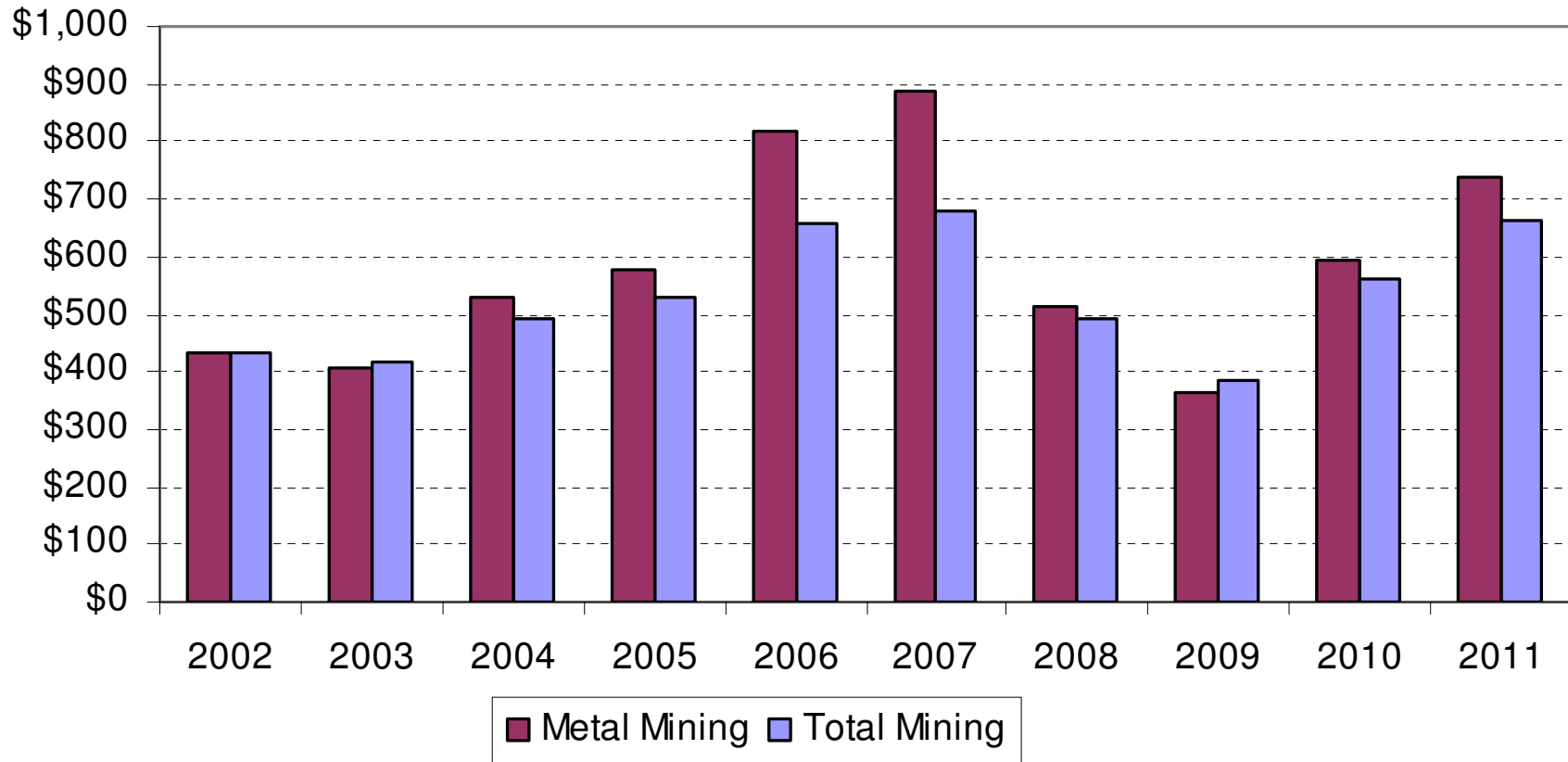
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Mineral Production (\$Billion)	\$5.9	\$5.7	\$7.1	\$7.4	\$9.5	\$10.9	\$9.6	\$6.3	\$8.1	\$10.7
Metals										
Copper	7.9	7.0	9.1	11.3	15.0	12.8	14.5	10.8	14.7	17.7
Gold	20.9	21.9	17.3	16.7	13.3	12.3	15.6	29.8	27.3	22.9
Nickel	21.2	22.3	29.0	30.3	34.4	42.0	27.6	11.1	14.6	20.4
Platinum Group Metals	na	na	na	4.5	4.5	4.3	5.4	2.9	2.3	5.9
Other Metals	12.1	8.4	10.1	4.6	5.7	5.1	5.4	5.1	3.9	3.5
Total Metals	62.1	59.5	65.6	67.4	72.8	76.4	68.5	59.7	62.8	70.4
Non-Metals										
Salt	4.4	4.5	3.6	3.5	2.8	2.4	3.4	5.4	5.1	4.7
Diamonds	0.0	0.0	0.0	0.0	0.0	0.0	3.1	3.7	4.3	4.3
Other Non-Metals	2.9	3.1	2.6	2.6	2.1	1.8	2.7	3.0	2.7	2.5
Total Non-Metals	7.3	7.6	6.2	6.0	4.9	4.2	9.2	12.1	12.1	11.4
Structural Materials										
Cement	10.3	10.9	9.3	8.8	7.0	6.0	6.4	8.3	6.8	5.3
Sand and gravel	6.8	7.7	6.3	5.9	5.2	4.9	5.7	7.0	6.4	4.5
Stone	8.5	9.0	8.2	7.8	7.0	6.0	7.4	10.1	9.1	6.2
Lime & Clay Products	5.0	5.2	4.3	4.1	3.2	2.6	2.8	2.9	2.8	2.2
Total Structural Materials	30.6	32.9	28.2	26.5	22.3	19.4	22.2	28.2	25.1	18.2

Employment in the Mining Industry Compared to Other Natural Resource Based Sectors in Ontario



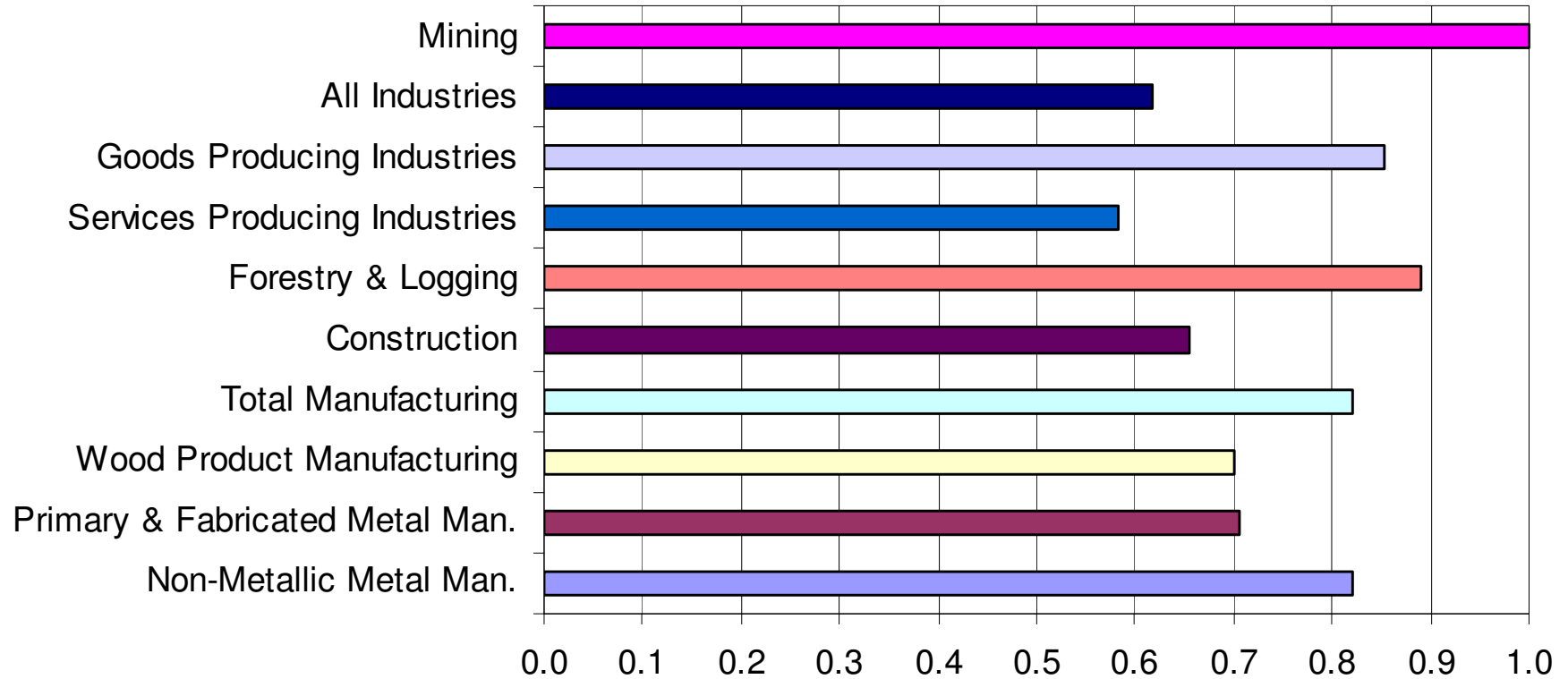
Source: Statistics Canada and authors' calculations

Output per Worker in the Metal Mining and Total Ontario Mining Industry, \$000

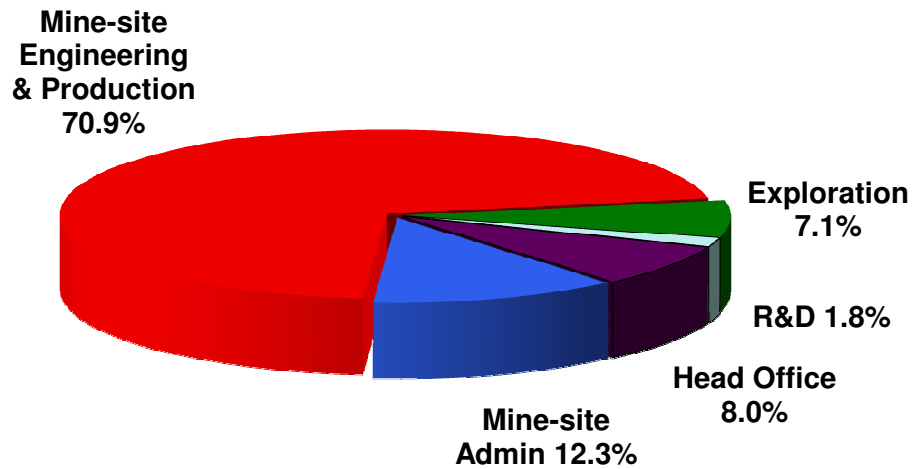


Source: Statistics Canada and authors' calculations

Real Value Added per Employee by Industry, Mining=1 in 2011

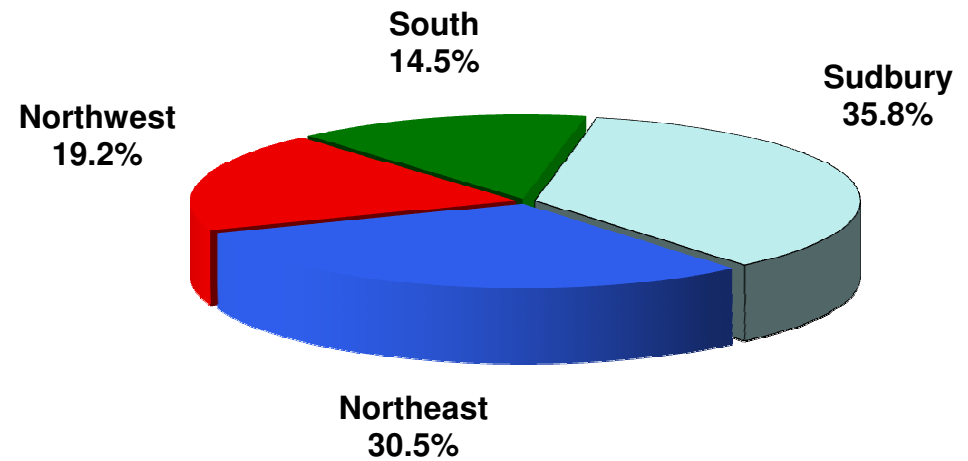


Mining Employment in Ontario, by Job Category, 2011



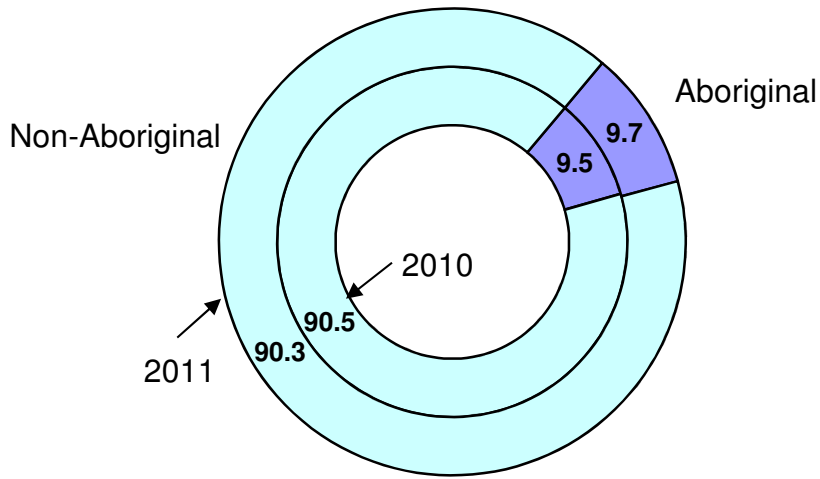
Source: OMA Industry Survey

Mining Employment in Ontario, by Region, 2011



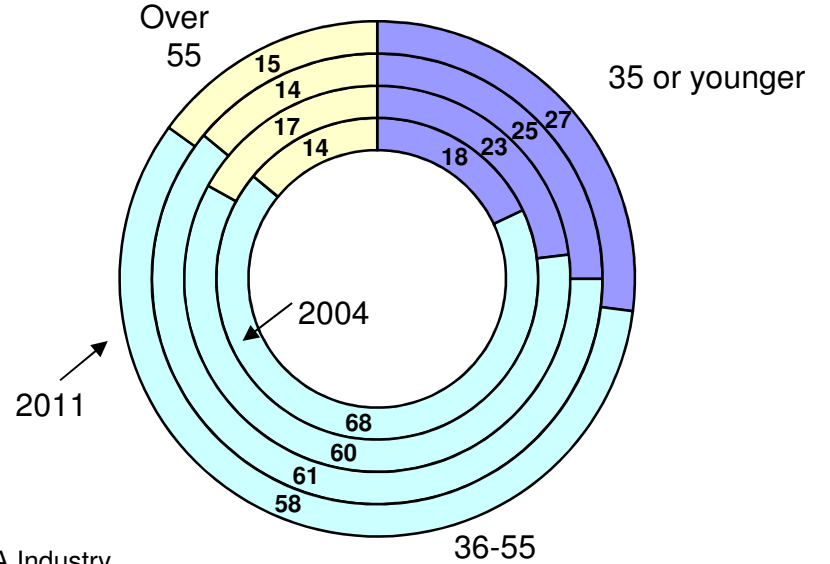
Source: OMA Industry Survey

% Share of Ontario Mining Industry Aboriginal Employment, 2010 and 2011



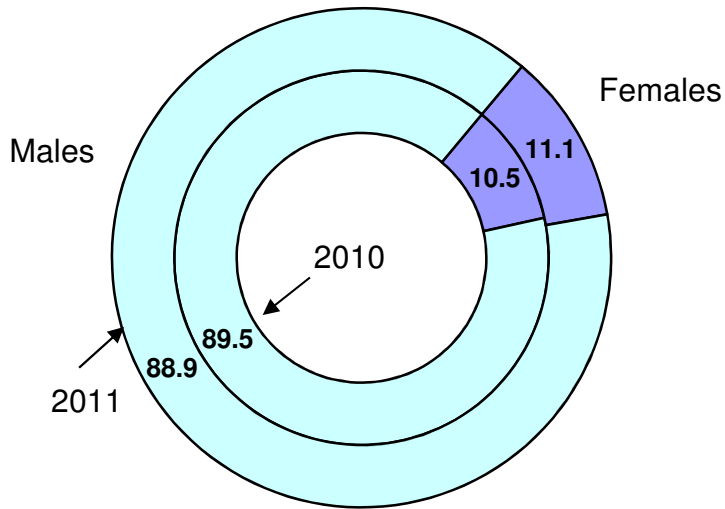
Source: OMA Industry Survey

% Share of Ontario Mining Industry Employment, By Age Category, 2004, 2007, 2010, 2011



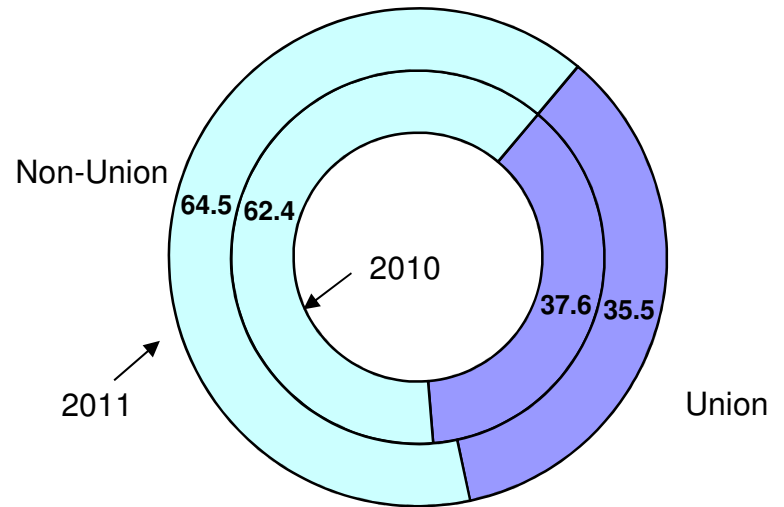
Source: OMA Industry

% Share of Ontario Mining Industry Employment, By Gender, 2010 and 2011



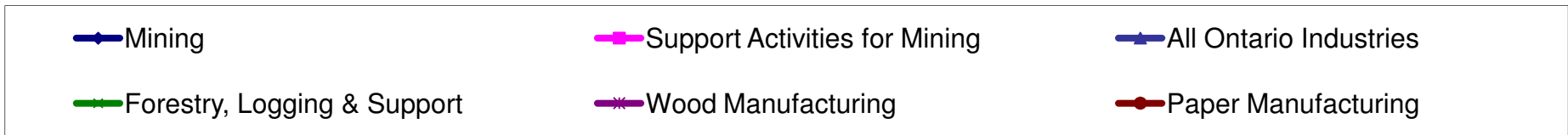
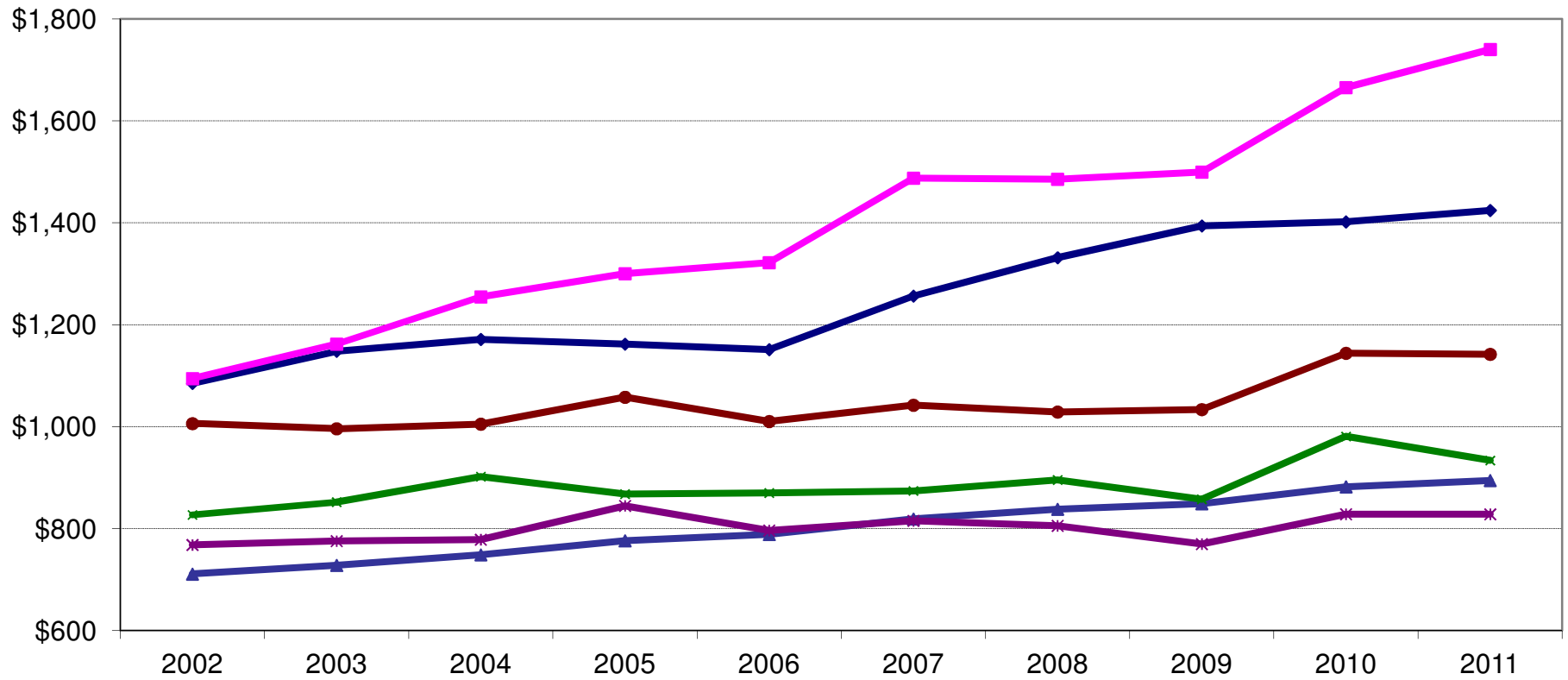
Source: OMA Industry Survey

% Share of Ontario Mining Industry Employment, By Union Affiliation, 2010 and 2011



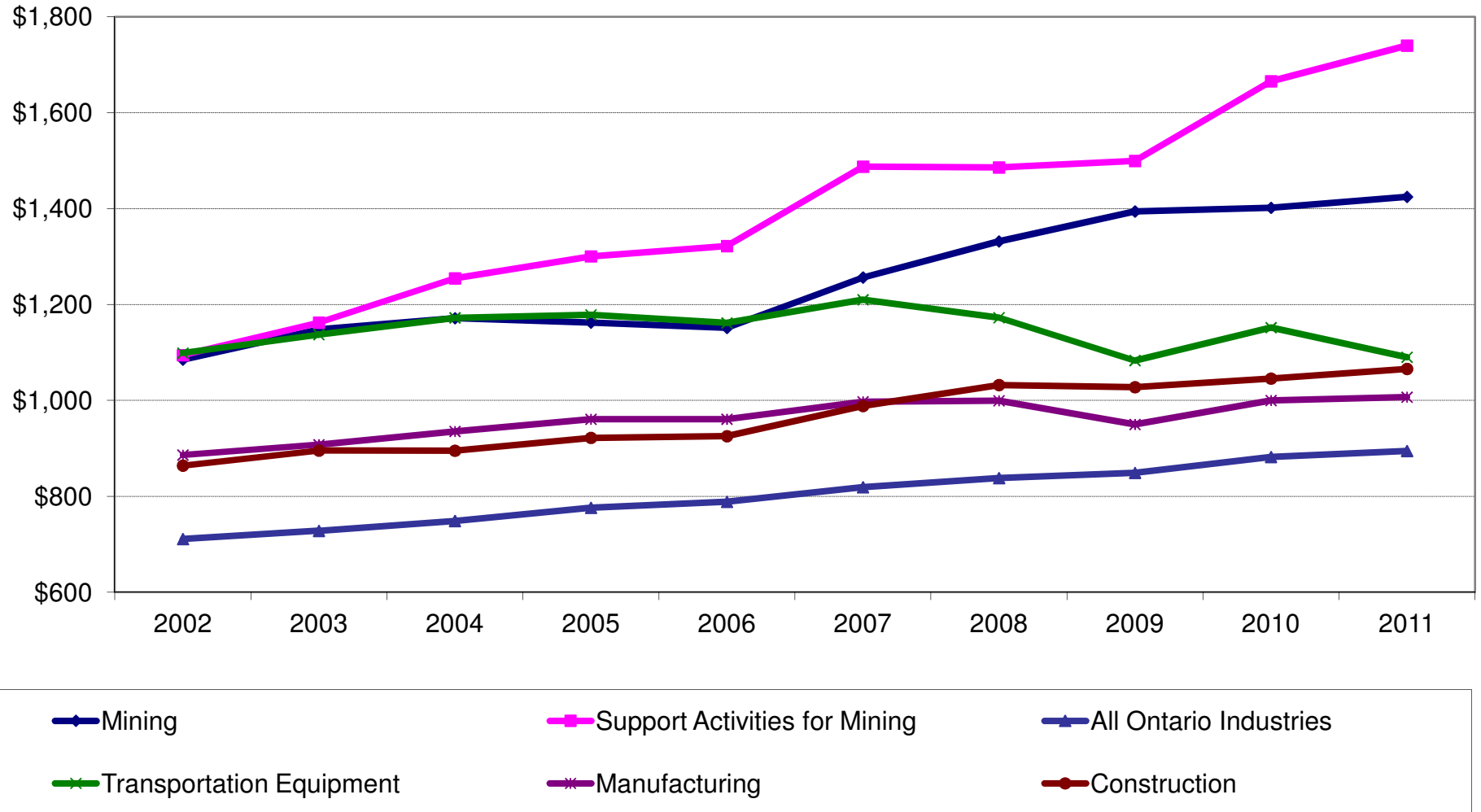
Source: OMA Industry Survey

Average Weekly Wages, by Ontario Resource-Related Industry



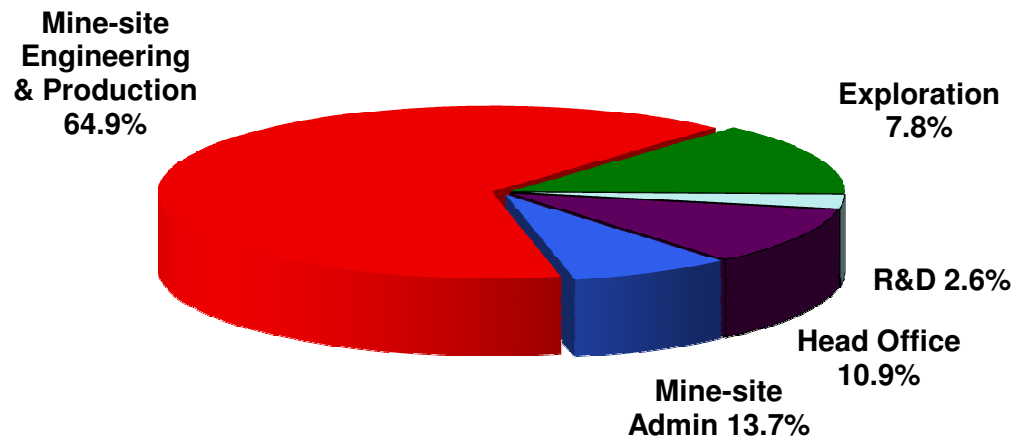
Source: Statistics Canada

Average Weekly Wages, by Ontario Industry



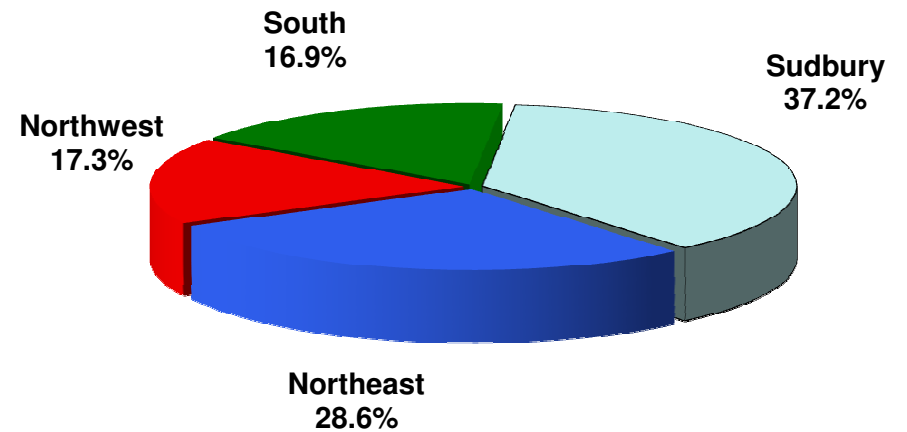
Source: Statistics Canada

Mining Wages & Salaries Paid in Ontario, by Job Category, 2011



Source: OMA Industry Survey

Mining Wages & Salaries Paid in Ontario, by Region, 2011



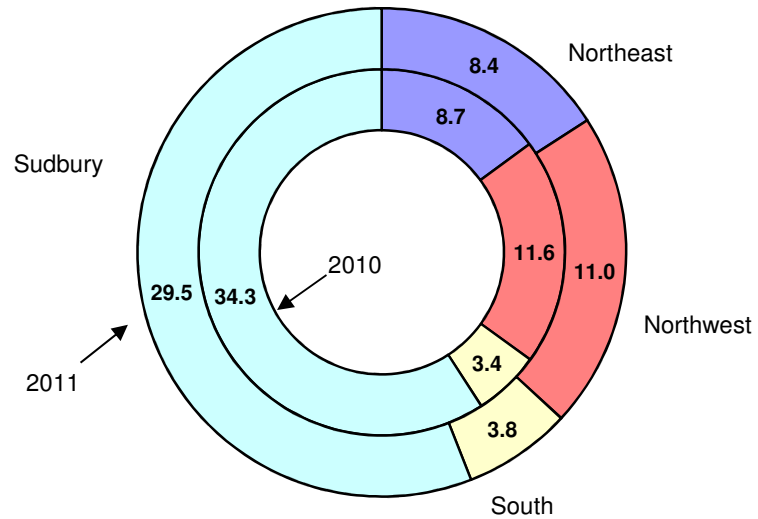
Source: OMA Industry Survey

Taxable Benefits as a % Share of Mining Wages & Salaries Paid, By Ontario Region, 2010 and 2011



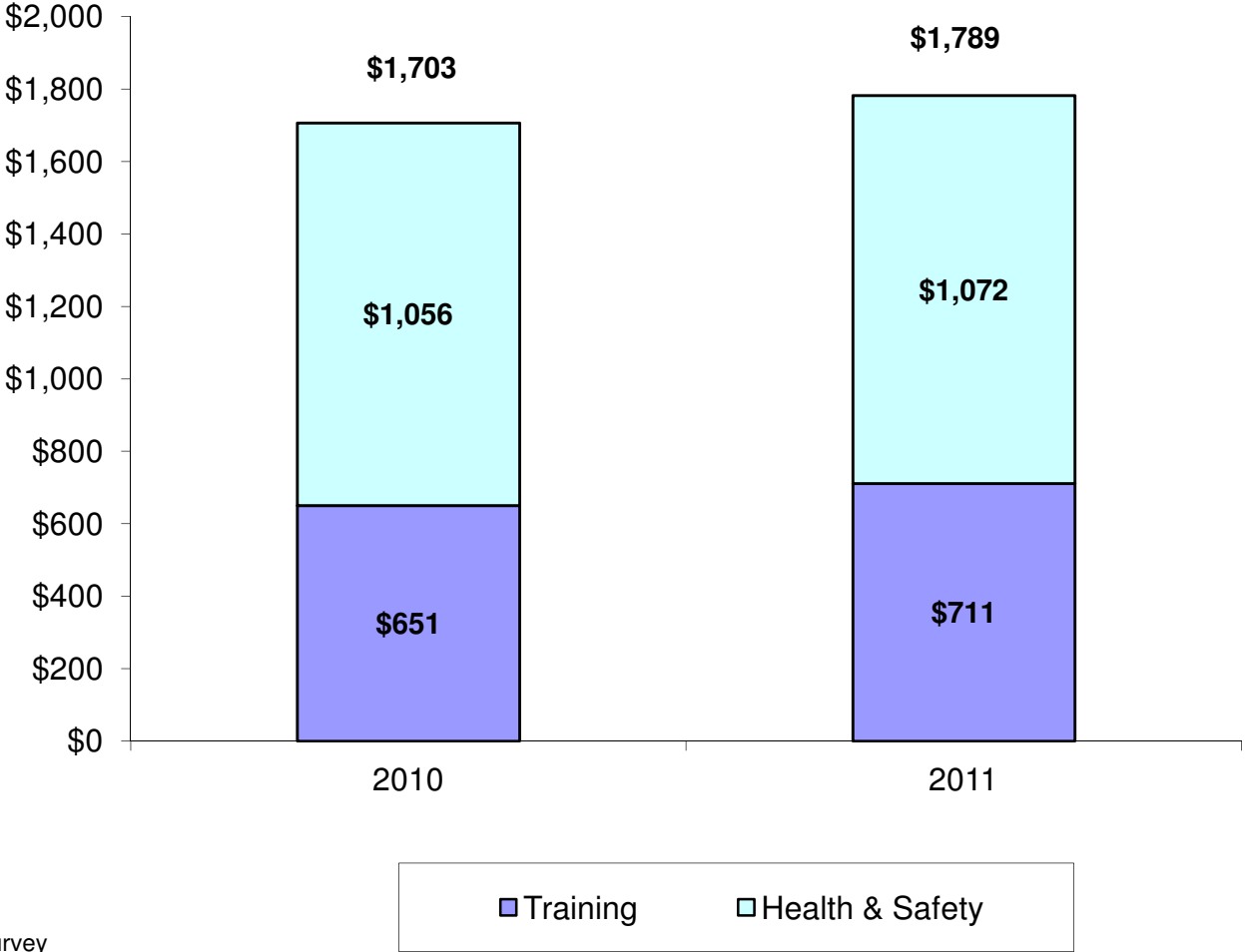
Source: OMA Industry Survey

Non-Taxable Benefits as a % Share of Mining Wages & Salaries Paid, By Ontario Region, 2010 and 2011



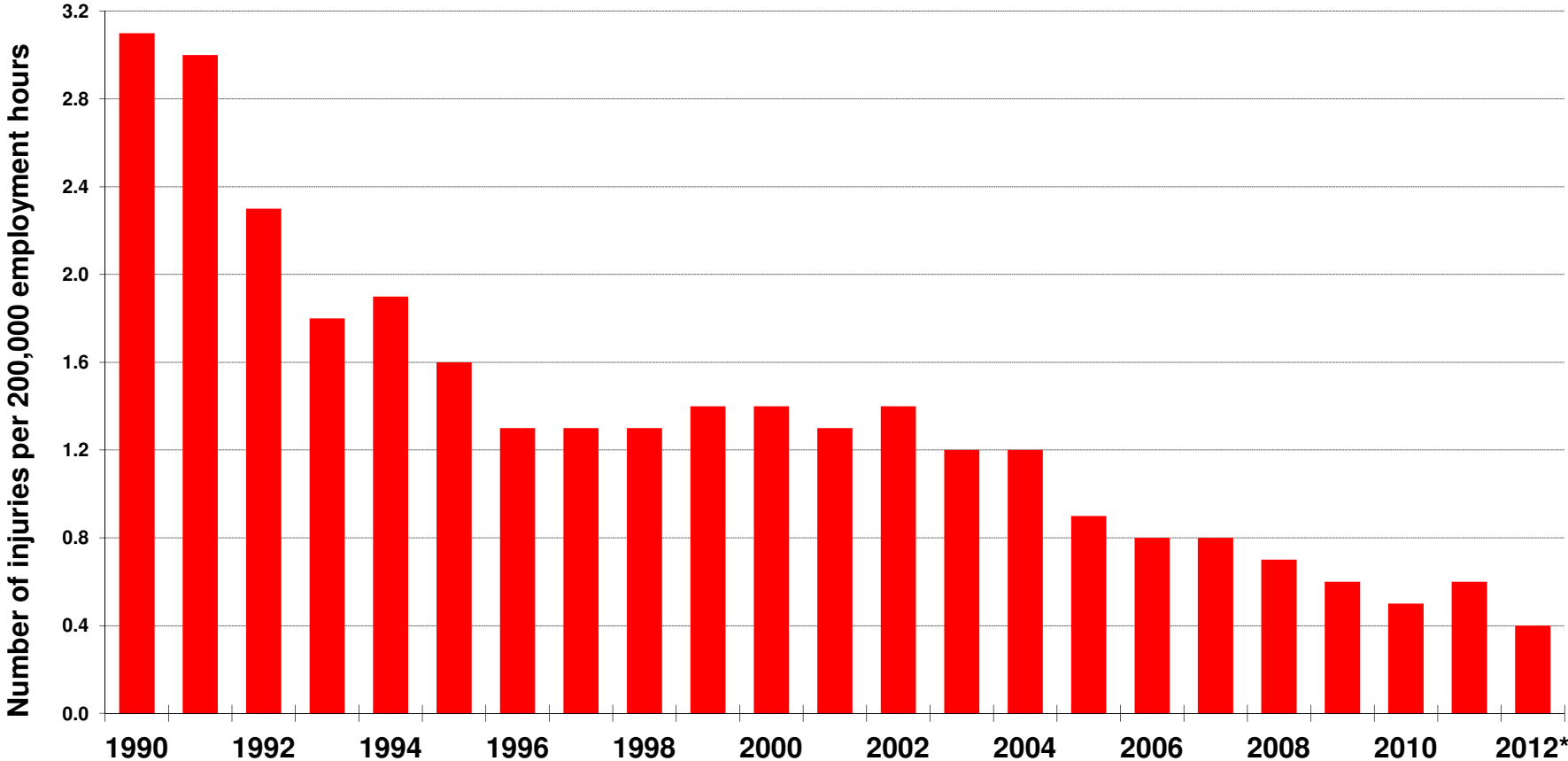
Source: OMA Industry Survey

Ontario Mining Industry, Training and Health & Safety Spending per Employee



Source: OMA Industry Survey

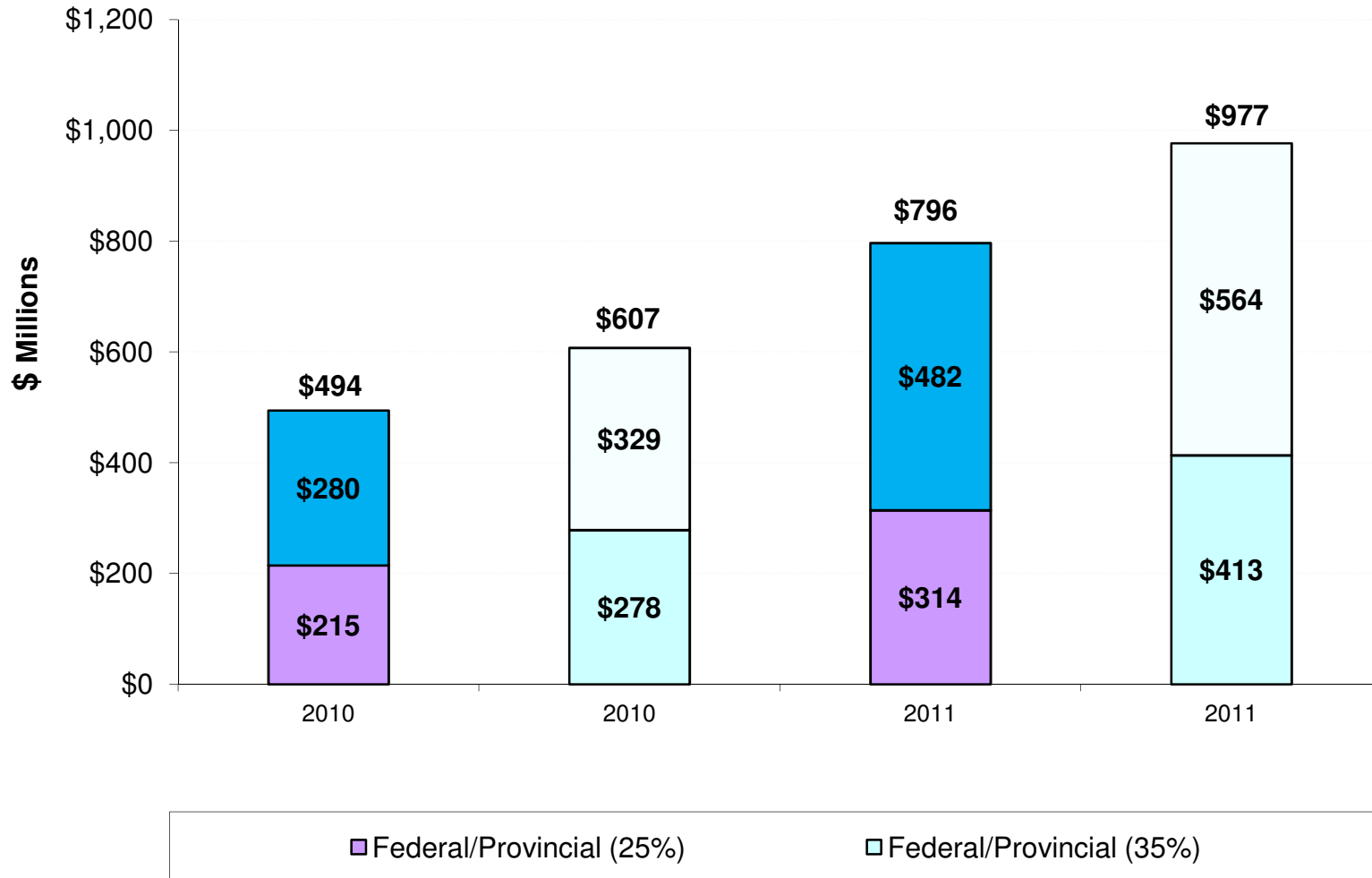
Lost-Time Injury Frequency in the Ontario Mining Industry



Source: Workplace Safety North

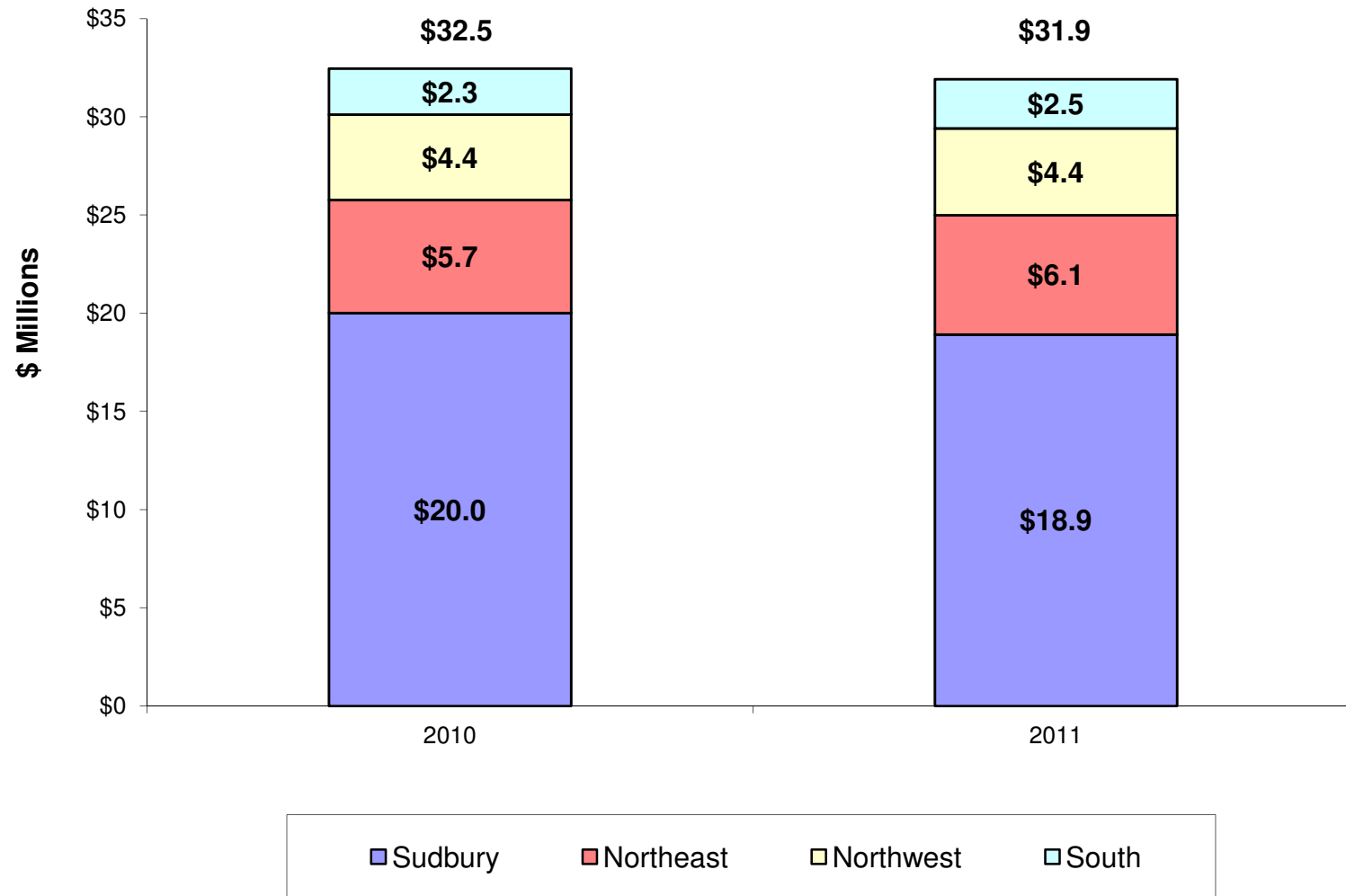
*9 months

Estimates of Federal and Provincial Taxes paid by the Ontario Mining Industry



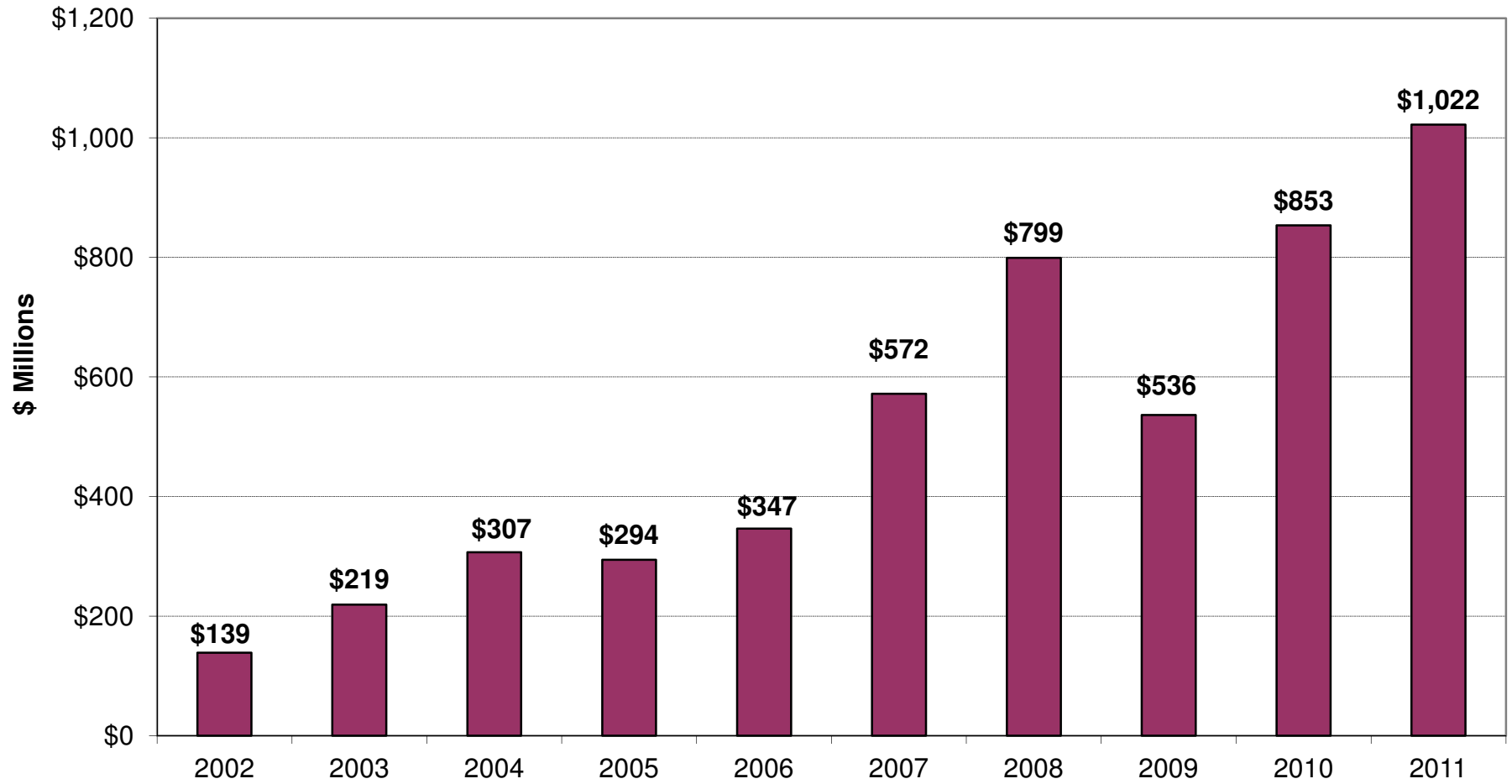
Source: Corporate Taxes Calculated as 25% and 35% of Canadian Mining Industry Corporate Taxes as reported by ENTRANS

Property Taxes paid by the Ontario Mining Industry, By Region



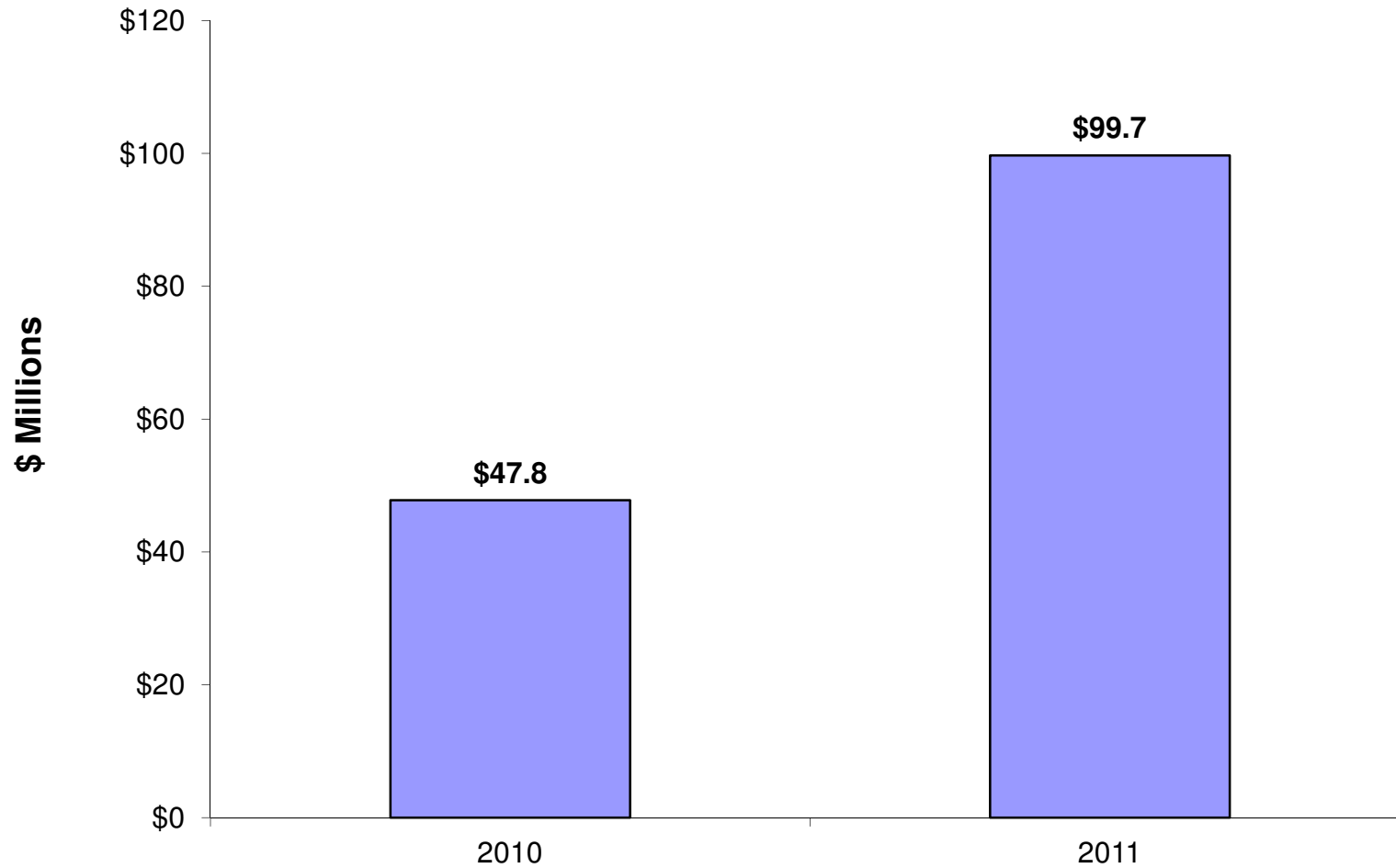
Source: OMA Industry Survey

Ontario Mineral Exploration Spending



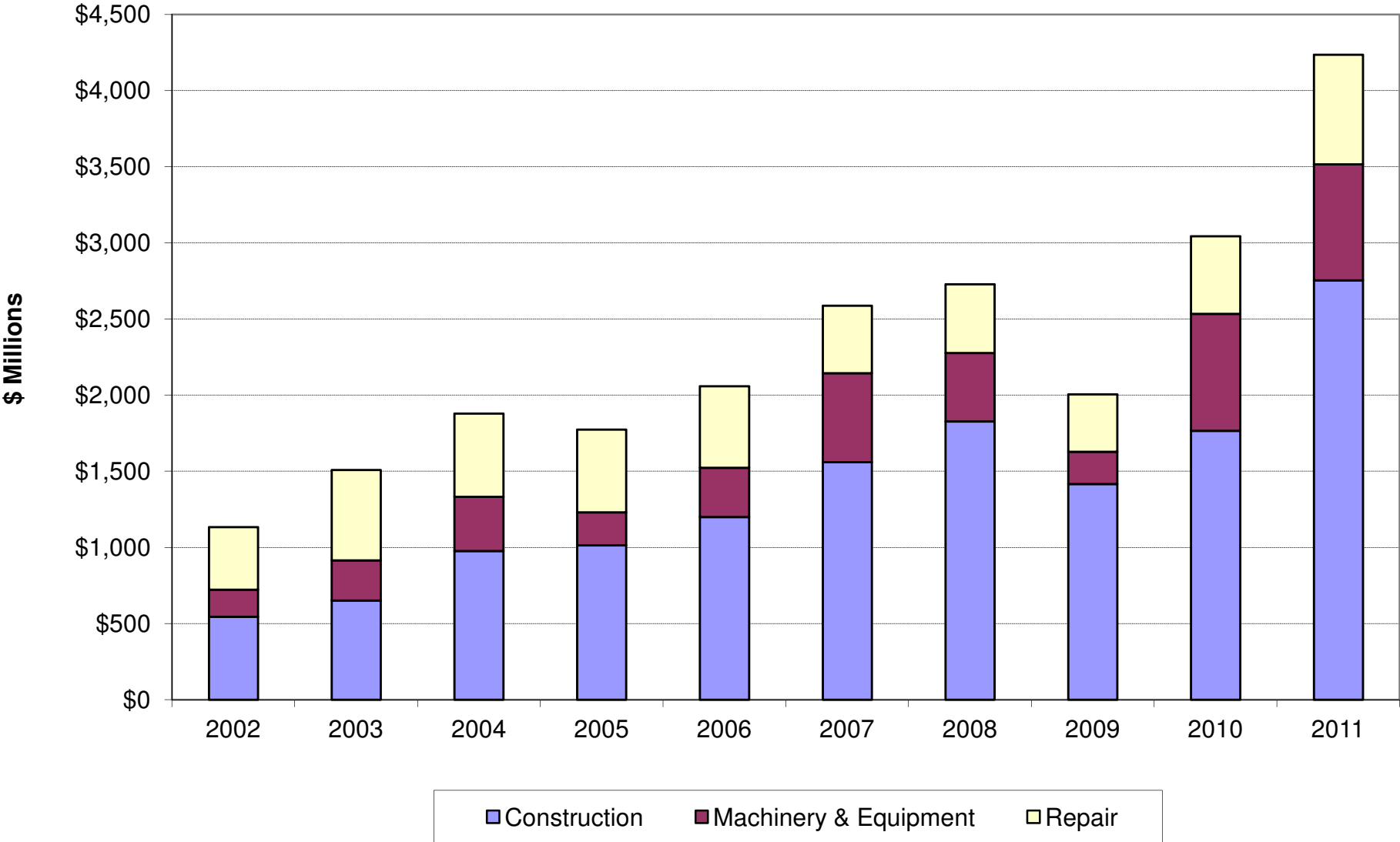
Source: Natural Resources Canada

Ontario Mining Industry Research & Development Spending



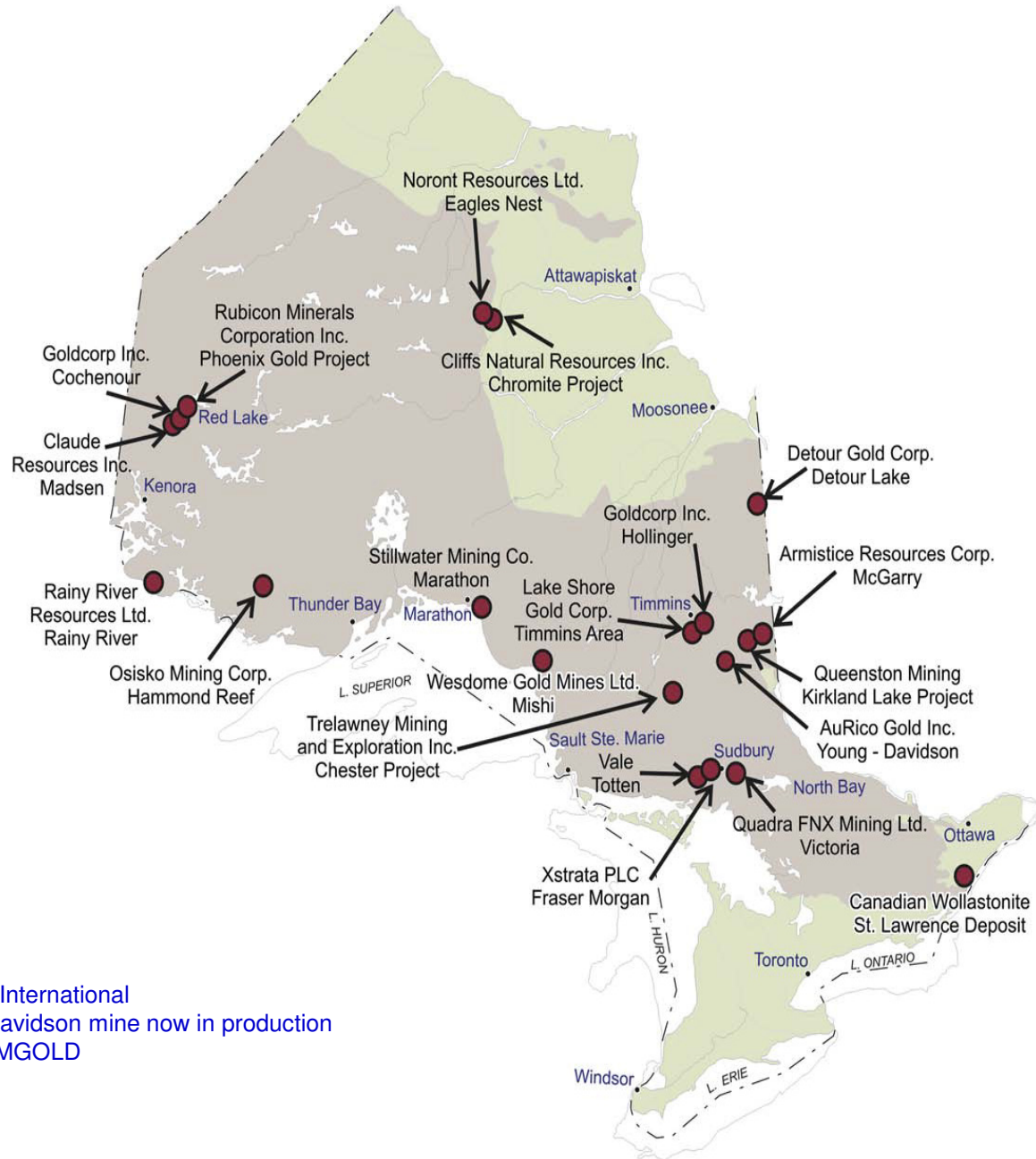
Source: OMA Industry Survey

Capital Expenditures in the Ontario Mining Industry



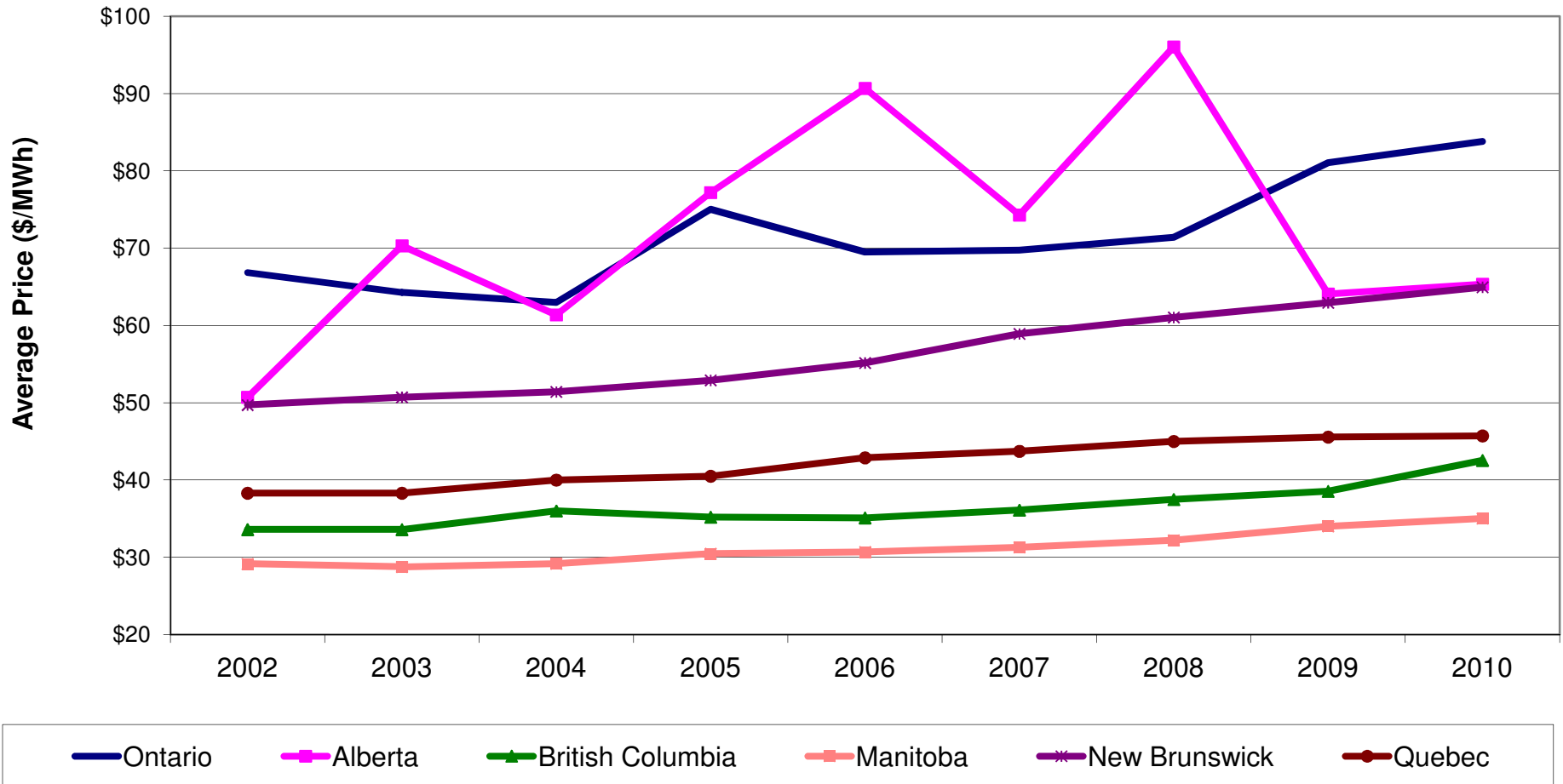
Source: Statistics Canada and authors' calculations

Ontario Mine Development Projects



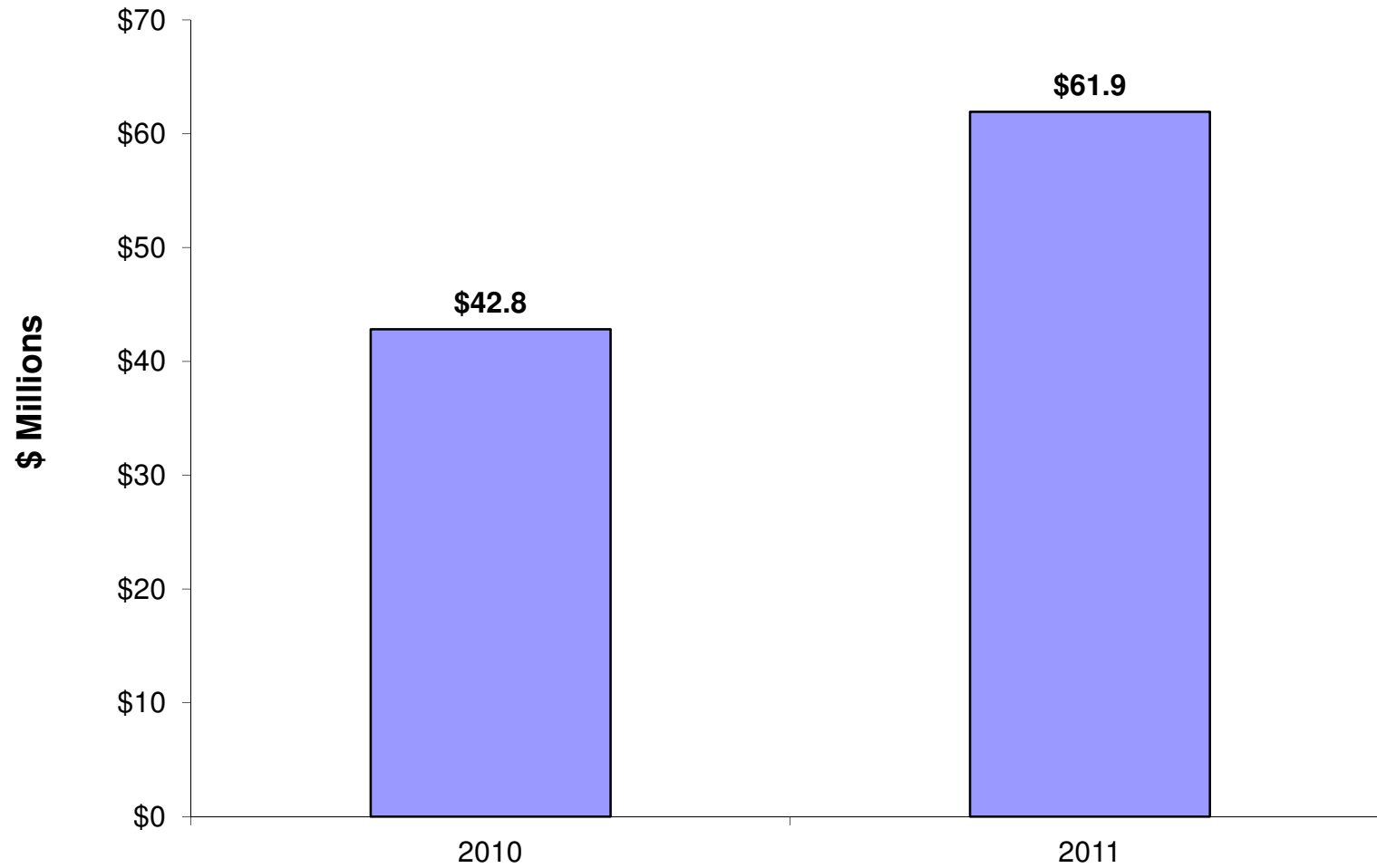
Quadra FNX now KGHM International
 AuRico Gold's Young – Davidson mine now in production
 Trelawney now part of IAMGOLD

Industrial Electricity Rates in Canada, 2002-2010



Source: Association of Major Power Consumers in Ontario (AMPCO)

Ontario Mining Industry Environmental Protection Spending

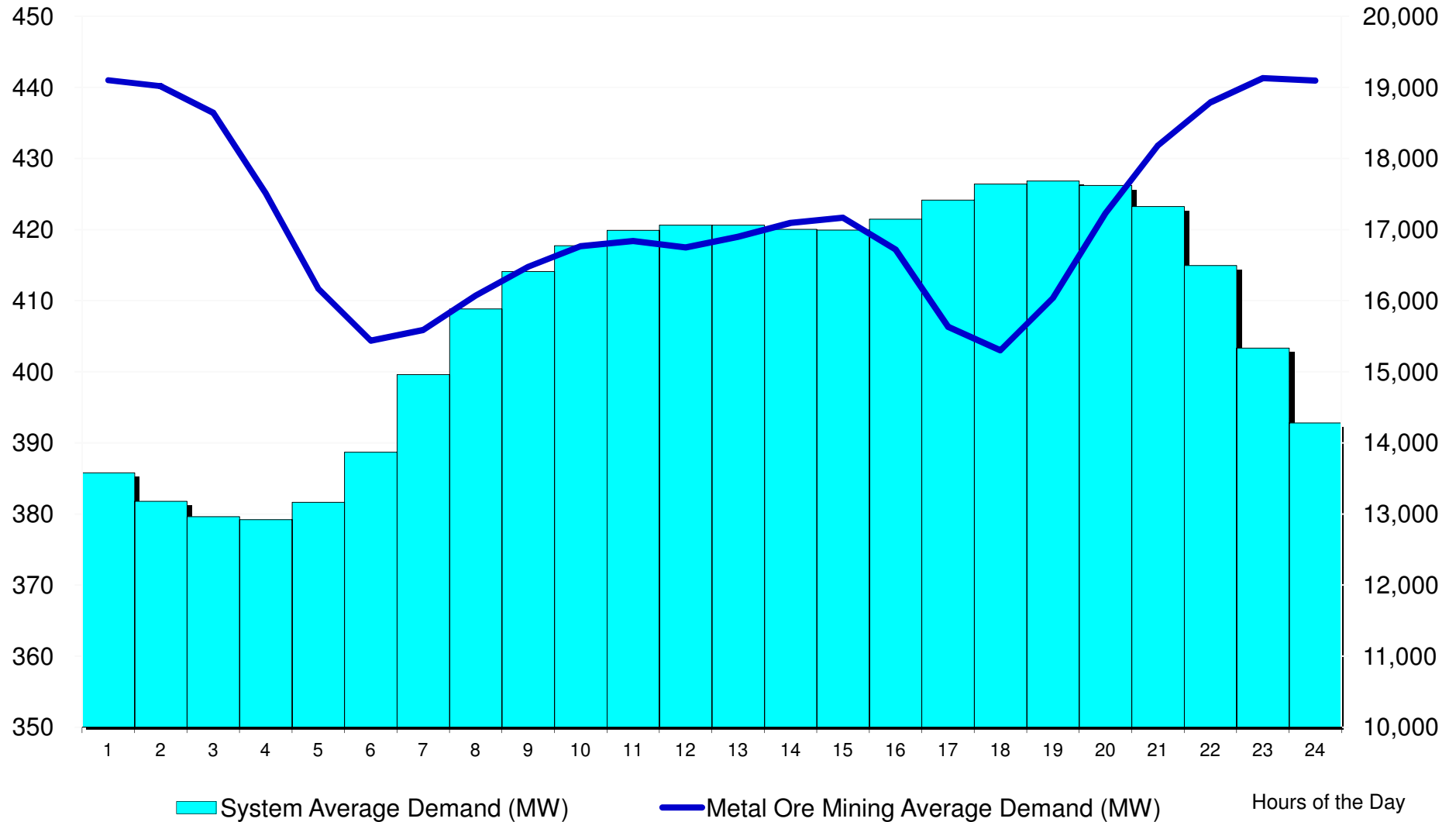


Source: OMA Industry Survey

2011 Daily Load Profile for the Ontario Metal Ore Mining Industry and Total Provincial Demand

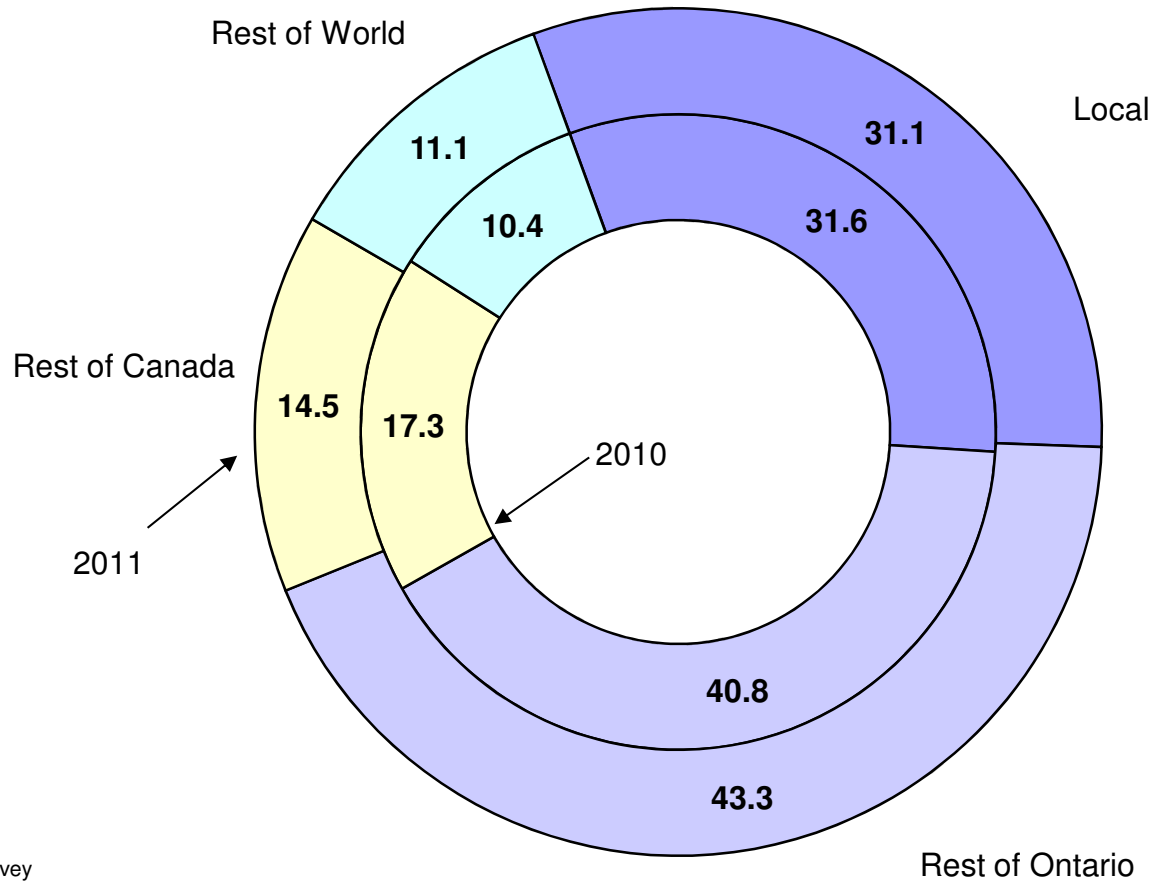
Metal Ore Mining (MW)

System (MW)



Source: Association of Major Power Consumers in Ontario (AMPCO)

Location of Mine Suppliers by % Share, 2010 and 2011



Source: OMA Industry Survey

The Input-Output Approach:

Studies ‘backward’ or ‘upstream’ linkages – inputs into mining production, and inputs into these inputs, and so on back up the production chain.

Company response is mandatory – where survey response may be partial.

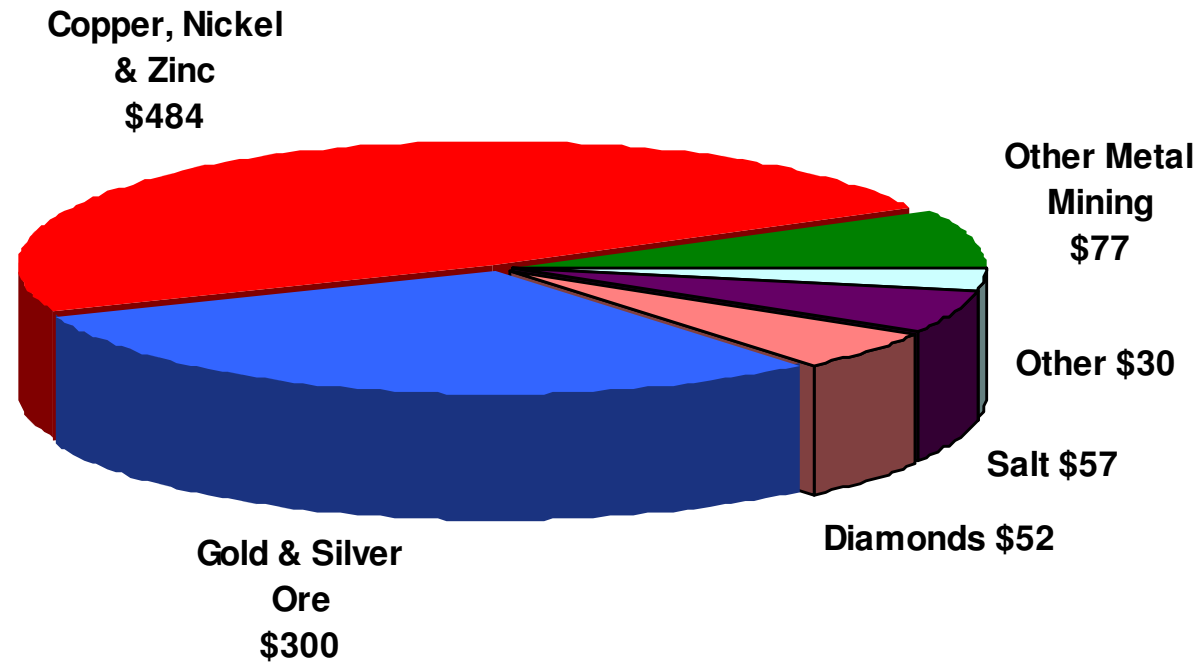
Statistics Canada will check results for consistency with other data sources (e.g., shipments surveys or tax data).

Full backward linkages can be examined – not simply first stage input purchases. For example, fuels may be sourced in Ontario, but the petroleum comes from Alberta; machinery may be supplied by a local dealer, but the local dealer imports it from abroad.

No results available within provinces – provincial totals only.

Statistics Canada also estimates the ‘induced’ effects – the impact of the spending of the all of the wages and salaries earned

Share of \$1 Billion of OMA Member Mineral Production in Ontario, 2011 (\$Million)



Source: Natural Resources Canada

Aggregate Direct and Upstream Impacts on GDP (\$ Million) and Employment of \$1 Billion of OMA Member Mineral Production in Ontario

	Ontario	Canada
Mineral Production	\$1,000	\$1,000
International Imports	-\$86	-\$97
Interprovincial Imports	-\$59	-\$68
Interprovincial Exports	\$4	\$68
GDP at Market Prices	\$858	\$900
Employment	4,418	4,775

Impacts on GDP by Industry of \$1 Billion of OMA Mineral Production in Ontario (\$ Million)

	Ontario	Quebec	Alberta	Canada
Total	\$858	\$13	\$15	\$900
Mining – Direct	\$691			\$691
Total Indirect	\$167	\$13	\$15	\$209
Mining – Indirect	\$13	\$1	<\$1	\$15
Finance, Insurance & Leasing	\$36	\$2	\$1	\$40
Professional, Scientific & Tech Services	\$26	\$1	\$1	\$29
Manufacturing	\$16	\$3	\$1	\$23
Utilities	\$16	\$1	<\$1	\$17
Wholesale Trade	\$15	\$1	\$1	\$18
Transportation & Warehousing	\$8	\$1	\$1	\$11
Admin & Support, Waste & Remediation	\$8	\$1	<\$1	\$10
Construction	\$8	<\$1	<\$1	\$8
Oil & Gas	<\$1	<\$1	\$9	\$13
Other Industries (including Government)	\$22	\$2	\$1	\$27

Direct and Indirect Impacts on Employment by Industry of \$1 Billion of OMA Mineral Production in Ontario

	Ontario	Quebec	Alberta	Canada
Total	4,418	176	68	4,775
Mining – Direct	2,421			2,421
Total Indirect	1,997	176	68	2,354
Mining – Indirect	139	11	<1	152
Professional, Scientific & Tech Services	367	22	8	409
Finance, Insurance & Leasing	299	16	7	332
Admin & Support, Waste & Remediation	215	22	6	251
Wholesale Trade	165	19	5	200
Manufacturing	158	35	8	220
Construction	119	1	1	123
Transportation & Warehousing	101	15	7	141
Utilities	58	3	<1	62
Oil & Gas	1	<1	9	11
Other Industries (including Government)	376	33	18	453

Impacts on International Imports into Ontario of \$1 Billion of OMA Mineral Production in Ontario (\$ Million)

	Imports
Total	\$86
Machinery & Equipment	\$15
Chemicals & Chemical Products	\$12
Business & Computer Services	\$7
Mineral Fuels	\$7
Electrical, Electronic & Communication Products	\$5
Motor Vehicle & Transportation Equipment	\$5
Other Finance, Insurance & Leasing	\$5
Primary Metal Products	\$4
Leather, Rubber & Plastic Products	\$3
Transport & Storage	\$3
Accommodation Services & Meals	\$3
Petroleum & Coal Products	\$2
Services Incidental to Mining	\$2
Other	\$13

Aggregate Direct, Upstream and Induced Impacts on GDP (\$ Million) and Employment of \$1 Billion of OMA Member Mineral Production in Ontario

	Ontario	Canada
Total Impact on Demand	\$1,263	\$1,284
International Imports	-\$141	-\$162
Interprovincial Imports	-\$86	-\$103
Interprovincial Exports	\$8	\$103
GDP at Market Prices	\$1,040	\$1,118
Employment	6,360	7,104

Total Impacts on GDP by Industry of \$1 Billion of OMA Mineral Production in Ontario (\$ Million)

	Ontario	Quebec	Alberta	Canada
Total	\$1,040	\$27	\$24	\$1,118
Mining – Direct	\$691			\$691
Total Indirect	\$167	\$13	\$15	\$209
Total Induced	\$183	\$13	\$9	\$218
Finance, Insurance & Leasing	\$76	\$3	\$2	\$83
Retail Trade	\$22	\$1	\$1	\$24
Manufacturing	\$8	\$2	\$1	\$13
Wholesale Trade	\$8	\$1	<\$1	\$10
Information and Cultural Industries	\$8	\$1	<\$1	\$10
Non-Profit Institutions serving Households	\$8	<\$1	<\$1	\$8
Professional, Scientific & Tech Services	\$6	\$1	<\$1	\$8
Accommodation and Food Services	\$6	<\$1	<\$1	\$7
Health Care and Social Assistance	\$6	<\$1	<\$1	\$6
Government Sector	\$6	<\$1	<\$1	\$7
Transportation & Warehousing	\$5	\$1	\$1	\$8
Utilities	\$5	\$1	<\$1	\$6
Other Industries	\$19	\$1	\$3	\$28

Total Impacts on Employment by Industry of \$1 Billion of OMA Mineral Production in Ontario

	Ontario	Quebec	Alberta	Canada
Total	6,360	354	135	7,104
Total Direct	2,421			2,421
Total Indirect	1,997	176	68	2,354
Total Induced	1,942	178	67	2,329
Retail Trade	453	27	11	517
Accommodation and Food Services	210	17	7	253
Finance, Insurance & Leasing	193	16	6	228
Other Services (excluding Public Admin)	170	11	5	192
Non-Profit Institutions serving Households	151	6	2	164
Health Care and Social Assistance	99	4	1	107
Admin & Support, Waste & Remediation	88	14	4	113
Professional, Scientific & Tech Services	82	10	3	102
Wholesale Trade	78	12	3	101
Manufacturing	71	24	5	112
Government Sector	69	4	2	78
Transportation & Warehousing	65	10	5	90
Arts, Entertainment & Recreation	54	6	2	66
Information & Cultural Industries	54	7	2	68
Construction	52	2	1	56
Other Industries	53	8	8	82

Total Impacts on GDP (\$Million) and Employment of \$1 Billion of OMA Member Mineral Production in Ontario

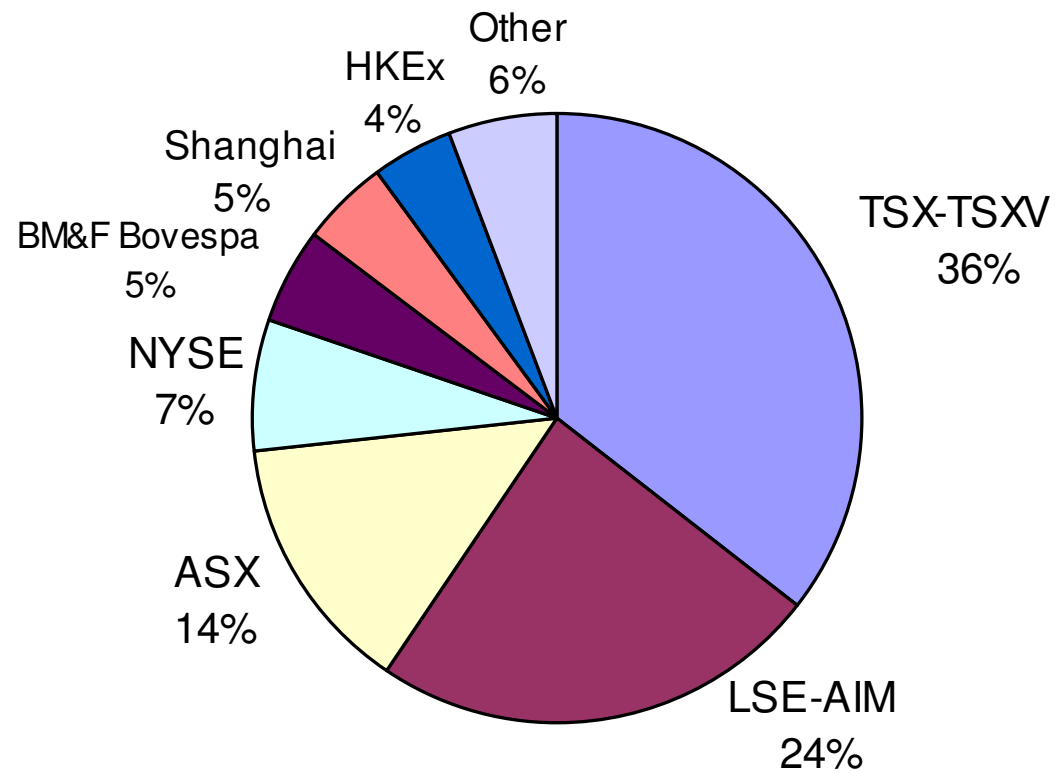
	Ontario	Quebec	Alberta	Canada
GDP				
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Employment				
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Mining - Direct	2,421			2,421
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Induced	1,942	178	67	2,329

Location in Ontario of CAMESE Member Firms, By City and Region

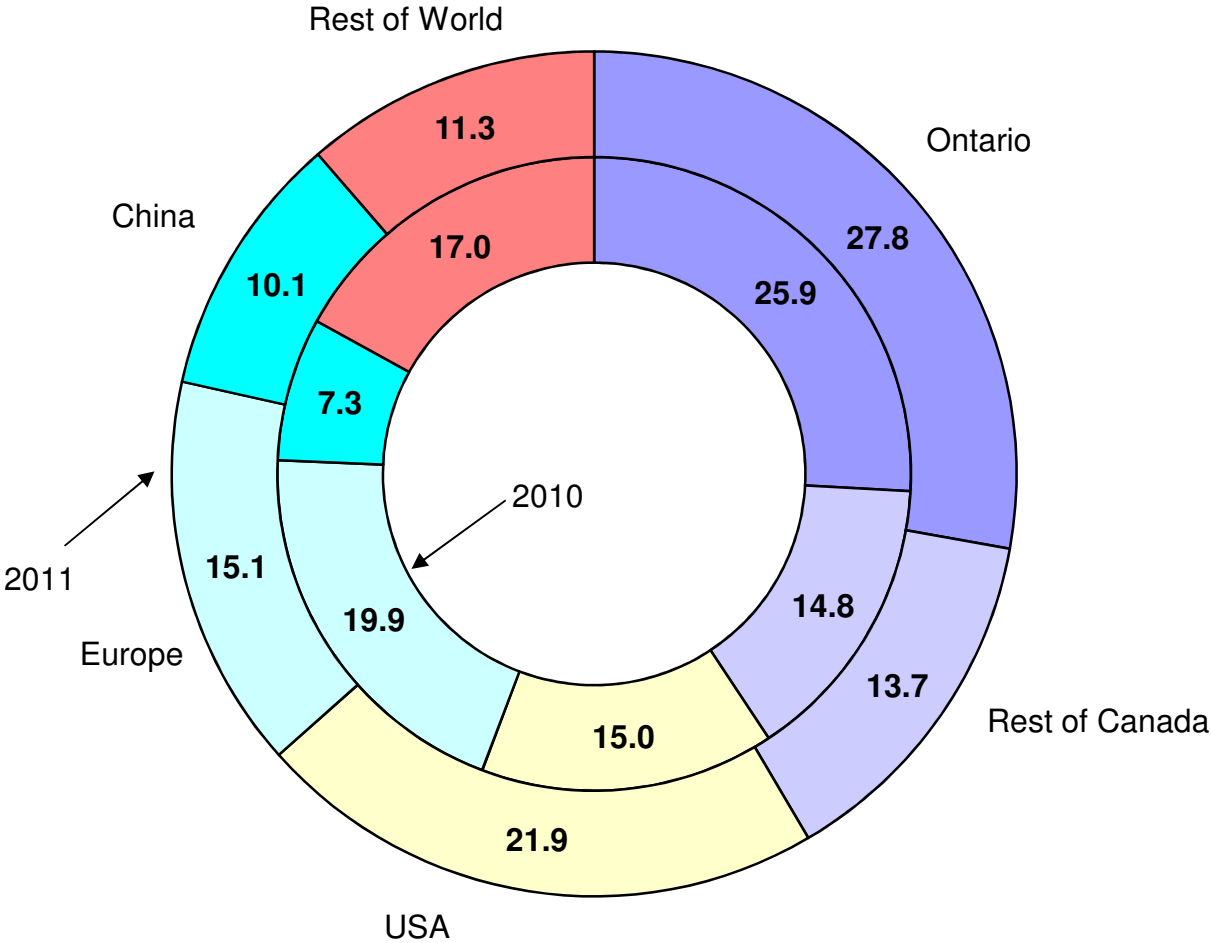
City	Number of Companies		City	Number of Companies	
	2011/2012	2012/2013		2011/2012	2012/2013
Mississauga	29	30	Elliot Lake	1	1
Toronto	28	30	Elora	1	1
Greater Sudbury	24	26	Georgetown	1	1
Ottawa	8	9	Goodwood	1	1
Burlington	7	7	Guelph	1	1
Markham	7	7	Halton Hills	1	1
North Bay	6	7	Hawkestone	1	1
Oakville	4	5	Hensall	1	1
Concord	4	4	Kingston	1	1
Brampton	3	4	Kirkland Lake	1	1
Barrie	3	3	Larder Lake	1	1
Milton	3	3	Lindsay	1	1
Sault Ste. Marie	3	3	Lucknow	1	1
Cambridge	2	3	Orangeville	1	1
Collingwood	2	2	Orillia	1	1
Greater Hamilton	2	2	Parry Sound	1	1
Kitchener-Waterloo	2	2	Peterborough	1	1
New Liskeard	2	2	Rockwood	1	1
Richmond Hill	2	2	St. Catharines	1	1
Timmins	2	2	St. George/Brant	1	1
Whitby	2	2	St. Thomas	1	1
London	1	2	Thunder Bay	1	1
Oshawa	1	2	Tilbury	0	1
Alliston	1	1	Trenton	1	1
Cobourg	1	1	Vaughan	1	1
Coldwater	1	1	Woodbridge	1	1
Earlton	1	1			
			Total	176	189

Region	Number of Companies	
	2011/12	2012/13
South	134	144
Northeast	17	18
Sudbury	24	26
Northwest	1	1
Total	176	189

Share of Value of Global Mine Equity Financings 2007-2011

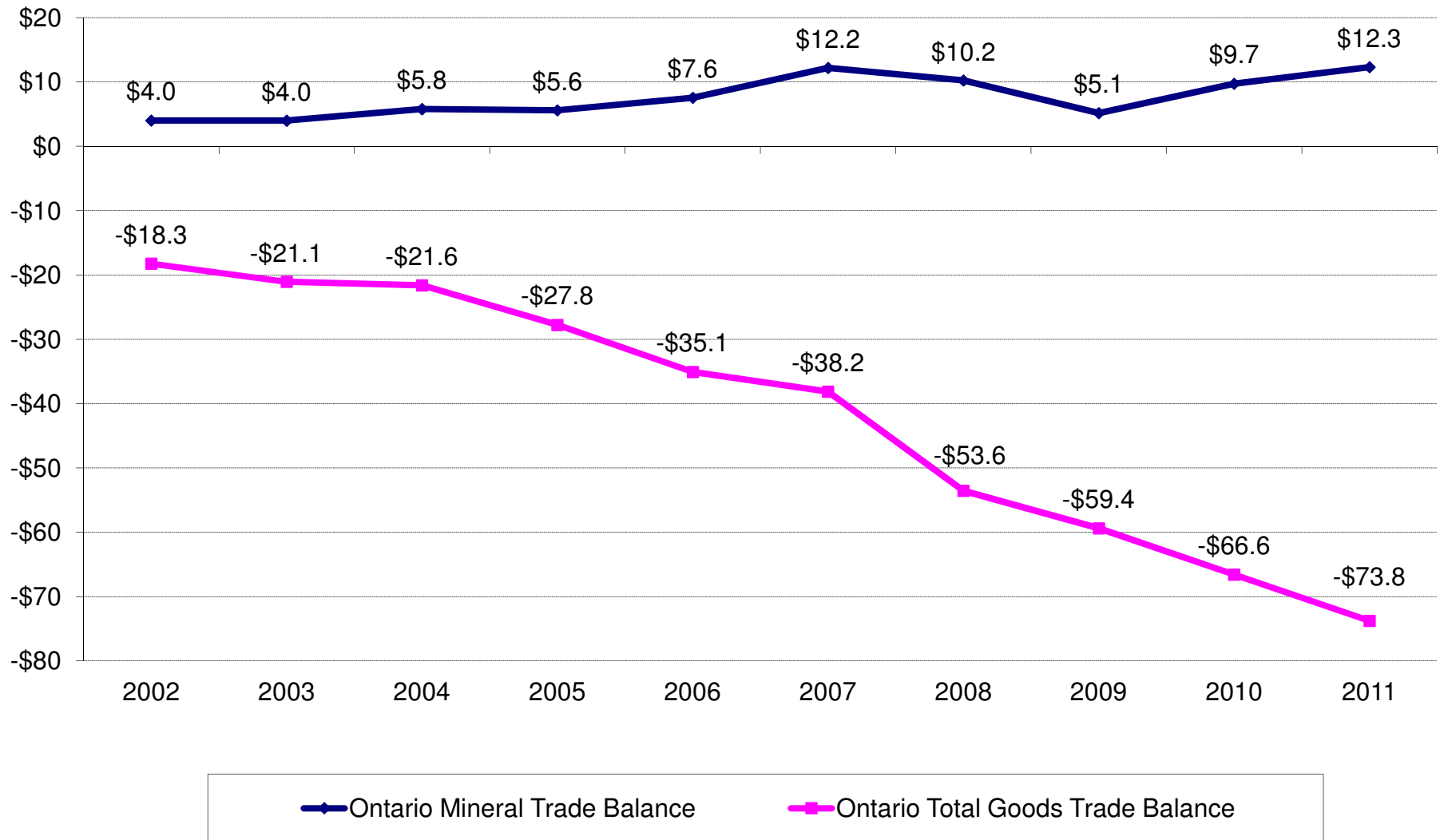


Location of Mine Customers by % Share, 2010 and 2011



Source: OMA Industry Survey

Ontario International Trade Balances (\$Billion)



Source: Trade Statistics Online, Industry Canada, Statistics Canada