Transportation

Connecting one of the largest countries on earth, Canada's transportation system comprises more than 1.4 million kilometres of roads, 10 major international airports, 300 smaller airports, more than 72,000 kilometres of functioning railroad, and more than 300 commercial ports and harbours offering access to three oceans, as well as the Great Lakes and the St. Lawrence Seaway.

With the distances Canadians and their goods need to travel and with the importance of international trade to the economy, transportation accounts for a considerable share of Canada's gross domestic product (GDP)—4.6%, or \$56.8 billion in 2008.

The sector's production grew a total 8.8% from 2004 to 2008, but just 0.3% in the last year of that period.

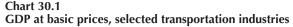
Transportation accounted for 691,900 jobs in 2008, or 4.7% of all jobs. Within the sector, truck transportation employed 26% of workers; transit and ground passenger transportation accounted for 17%; air transportation, nearly 10%; warehousing and storage, 6%; and rail transportation, nearly 6%.

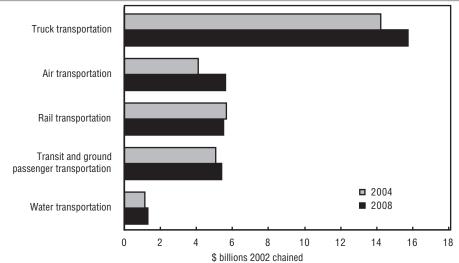
Trucking still tops

The largest employer, trucking, also accounted for the largest share of transportation's contribution to GDP—28% in 2008. Transportation by air, water and rail combined contributed 22%.

Only trucking and air transportation saw much growth over the period 2004 to 2008: air transportation's output rose 37%; trucking's rose 11%.

Canadian trucking companies that posted annual revenue of \$1 million or more hauled 607 million tonnes of goods in 2006, 3.4% more than in 2005. Domestic shipments accounted for 86% of the tonnage carried; transborder shipments made up 14%. However, transborder shipments accounted for 35% of total trucking revenue.





Source: Statistics Canada, CANSIM table 379-0027.

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The average transborder shipment travelled 1,345 kilometres; the average domestic haul, 481 kilometres. In 2006, nearly one-quarter of the tonnage hauled originated in the Toronto, Montréal and Edmonton census metropolitan areas. Hamilton posted the fourth highest tonnage, and Vancouver the fifth highest.

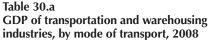
Some products, such as automobiles, are carried by truck or rail, but rail transport also handles larger quantities of non-containerized commodities.

In 2008, Canada's rail carriers hauled 37 million tonnes of wheat, other grains and cereals and other food and alcoholic and non-alcoholic products; 34 million tonnes of iron ores and concentrates; 34 million tonnes of coal; and 26 million tonnes of wood and wood products.

Containerized shipping accounted for 10% of the international tonnage handled in 2006—about 33 million tonnes, or 3.9 million twenty-foot equivalent units of containers, a 40% increase since 2001.

The Port of Vancouver handled nearly 57% of the country's container traffic in

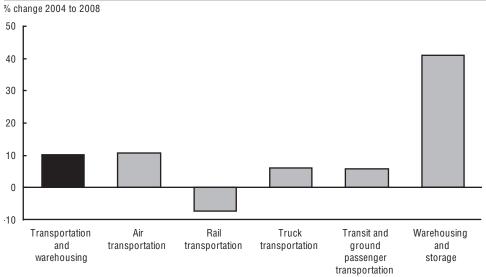
Chart 30.2 Employment growth, selected transportation industries



	Share of transportation and warehousing GDP	Growth rate from 2007
	%	
Air transportation	9.9	2.9
Rail transportation	9.7	-4.5
Water transportation	2.3	7.3
Truck transportation	27.7	0.3

Source: Statistics Canada, CANSIM table 379-0027.

2006, making it Canada's busiest container port. It was also the busiest port overall, handling 80 million tonnes of cargo, including containers, in 2006.



Source: Statistics Canada, CANSIM table 281-0024.

Getting around in the Arctic

The harsh climate and dispersed population north of 60 make it tough to move people and goods. Building and maintaining road or rail infrastructure is difficult in many areas. Marine transport is possible in coastal areas, but only in the warmest months. Often, air transport is the only option.

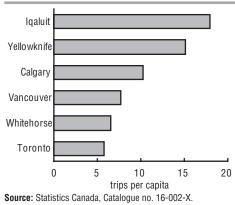
The three northern territories had about 10,500 km of roads in 2003, of which 3,100 km were paved. The Northwest Territories reported 121 km of railroad in 2007; the other territories had none.

Nunavut and the Northwest Territories send and receive cargo by sea; most of the activity is in Nunavut.

For passengers, however, aviation is key: people in the territories have a high propensity to travel by air. Citizens of Iqaluit and Yellowknife report more

Chart 30.3

Air passenger trips, selected cities, 2006



trips per capita than citizens of any other Canadian city. As well, the number of aircraft takeoffs and landings in Iqaluit, Yellowknife and Whitehorse generally rose from 2003 to 2007.

Getting around in Canada's suburbs

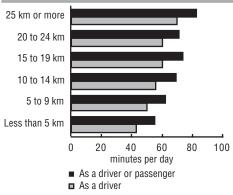
Inhabitants of the sparsely populated suburbs outside of Canada's big cities consider access to a private automobile not just convenient but, sometimes, essential.

Dependence on the automobile increased from 1992 to 2005. According to data from the General Social Survey on time use, the proportion of people aged 18 and older who went everywhere by car on the reference day—as drivers or passengers—rose from 68% in 1992 to 74% in 2005.

Conversely, the proportion of Canadians 18 and older who made at least one trip by bicycle or on foot declined from 25% in 1998 to 19% in 2005.

Suburban men, people aged 45 to 54, and people with children aged 5 to 12

Chart 30.4 Time spent in the car, daily, 2005



Note: Distance from city centre of census metropolitan areas only. Source: Statistics Canada, Catalogue no. 11-008-X.

were particularly likely to use their cars daily in 2005.

	2003	2004	2005	2006	2007	2008			
	\$ millions 2002 chained								
Transportation and warehousing	50,270	52,169	54,148	55,690	56,624	56,756			
Air transportation	3,668	4,119	4,710	5,116	5,467	5,623			
Rail transportation	5,151	5,648	5,780	5,750	5,769	5,508			
Water transportation	1,123	1,135	1,205	1,191	1,226	1,316			
Truck transportation	13,531	14,235	15,085	15,530	15,692	15,741			
Transit and ground passenge transportation	r 4,885	5,071	5,088	5,154	5,278	5,402			
Pipeline transportation	5,380	5,066	4,952	5,007	4,846	4,523			
Scenic and sightseeing transportation and support activities for transportation	9,033	9,152	9,460	9,872	10,247	10,438			
Postal service and couriers and messengers	5,834	5,883	6,110	6,218	6,248	6,391			
Warehousing and storage	1,648	1,915	1,903	2,040	2,083	2,064			

Table 30.1 GDP at basic prices for transportation and
warehousing, selected industries, 2003 to 2008

Note: North American Industry Classification System (NAICS), 2007.

Source: Statistics Canada, CANSIM table 379-0027.

Table 30.2 Canadian railway carriers' operating statistics, 2002 to 2007

	•	-	-			
	2002	2003	2004	2005	2006	2007
-			\$ thous	ands		
Operating revenue	8,213,346	8,307,268	8,861,767	9,821,994	10,397,871	10,481,566
Freight revenue	7,256,434	7,354,925	7,879,379	8,759,069	9,344,811	9,435,757
Passenger revenue	287,394	255,776	265,192	282,881	294,529	291,784
All other operating revenue	669,518	696,567	717,194	780,044	758,530	754,026
Operating expenses	6,621,037	6,713,296	6,951,895	7,506,354	7,787,544	7,989,137
Ways and structures expenses	1,229,852	1,221,768	1,283,774	1,311,510	1,340,936	1,459,704
Equipment expenses	1,396,081	1,430,549	1,371,147	1,440,876	1,466,059	1,507,953
Rail operating expenses	2,718,701	2,776,794	2,929,148	3,216,111	3,385,043	3,621,517
General expenses	1,276,401	1,284,185	1,367,826	1,537,857	1,595,506	1,399,963
-			thousa	inds		
Transportation and other cost-generating sources						
Tonnes of freight transported	335,830	343,304	361,606	369,943	353,346	350,487
Tonne–kilometres of freight transported	317,806,584	318,263,125	338,897,938	352,139,700	352,342,829	357,444,398
Passengers transported	4,251	3,958	4,048	4,269	4,243	4,336
Passenger–kilometres of passengers transported	1,596,947	1,433,643	1,420,804	1,478,454	1,450,481	1,444,656
Litres of diesel oil consumed for all trains	1,969,741	2,007,813	2,097,070	2,130,224	2,119,082	2,193,684
_			numl	ber		
Employees	37,282	36,312	35,591	34,995	34,062	34,281

Source: Statistics Canada, CANSIM tables 404-0004, 404-0005, 404-0013, 404-0016 and 404-0019.

Other international Total Domestic United States thousands of tonnes Total handled 1994 351,316 104.368 78,801 168.147 1995 360,455 100,740 85,198 174,518 1996 357,513 97,649 88,484 171,379 1997 376,067 93,418 94,313 188,337 1998 376,032 96,607 100,060 179,364 1999 385,597 104.398 101,983 179,216 2000 402,783 109.020 108,794 184,969 2001 394.701 107.842 107.955 178.904 2002 408,141 125,407 114,310 168,424 2003 443,779 137,079 123,366 183.335 2004 453,280 123,329 191,746 138.206 2005 471,268 140,356 128,681 202,231 2006 466,277 136.210 126,717 203.350 Loaded 1994 222.222 52.184 49.520 120.518 1995 226,910 50,370 49,939 126,601 1996 223,096 48,825 52,399 121,873 1997 234,653 46,709 56.891 131.054 1998 227.346 48.304 58.872 120.171 1999 231,847 52,199 59,727 119,921 2000 242,351 54.507 64.744 123.099 2001 228,663 53,939 62,038 112,685 2002 237,051 62,780 72,867 101,404 2003 259,872 68,485 81,180 110,207 2004 265,126 83,720 112,310 69,096 2005 271,978 70,224 85,767 115,987 2006 274.088 68.080 84.378 121.629 Unloaded 1994 129,094 52,184 29,282 47,629 1995 133,546 50,370 35,259 47,917 1996 134,416 36.085 48,825 49,506 1997 141.414 46.709 37.423 57.283 1998 148,686 48,304 41,189 59,194 1999 153,750 52,199 42,256 59.295 2000 160.432 54,513 44.050 61.869 2001 166.038 53.903 45.917 66.219 2002 171,091 62,626 41,444 67,020 2003 183,908 68,594 42,186 73,128 2004 188,155 39,609 79,436 69,110 2005 199,290 70,132 42,914 86.245 2006 192,190 68,130 42,339 81,720

Table 30.3 Shipping activities at Canadian ports, tonnage loaded and
unloaded, 1994 to 2006

Source: Statistics Canada, Catalogue no. 54-205-X.

	1994	1995	1996	1997	1998	1999
			nun	nber		
Transportation and warehousing	549,518	553,249	555,148	566,196	582,593	588,436
Air transportation	45,461	48,399	49,823	55,414	60,367	62,400
Rail transportation	54,907	52,226	48,659	46,099	46,323	45,989
Water transportation	11,143	12,886	13,274	11,744	11,018	11,636
Truck transportation	137,754	141,304	145,125	155,044	156,256	156,362
Transit and ground passenger transportation	95,453	91,245	91,752	91,173	91,776	93,039
Pipeline transportation	5,310	5,086	4,842	4,943	4,694	4,653
Scenic and sightseeing transportation	1,791	1,931	1,872	1,786	1,780	1,903
Support activities for transportation	69,741	69,385	66,534	68,732	71,285	76,532
Couriers and messengers	36,070	36,815	37,047	38,160	39,215	38,501
Warehousing and storage	25,949	25,568	27,584	27,144	28,350	29,033

Table 30.4 Employment in transportation and warehousing, selected industries,1994 to 2008

Note: North American Industry Classification System (NAICS), 2002. Source: Statistics Canada, CANSIM table 281-0024.

Table 30.5 Major Canadian airlines, selected operating statistics, 1994 to 2008

	1994	1995	1996	1997	1998	1999
			thous	sands		
Passengers transported	19,126	21,428	23,164	24,363	24,571	24,047
Passenger-kilometres	45,281,336	51,798,045	57,015,549	62,479,410	64,426,065	65,711,146
Kilograms of goods transported	395,674	386,560	405,975	449,828	431,150	451,801
Tonne-kilometres of goods transported	1,537,977	1,728,762	1,882,803	2,058,953	2,340,594	2,016,503
Hours flown	638	723	785	826	843	904
Litres of turbo fuel consumed	3,055,616	3,417,802	3,349,814	3,631,436	3,855,178	3,571,445

Source: Statistics Canada, CANSIM table 401-0001.

Table 30.6 For-hire trucking operating statistics, 1993 to 2007

	1993	1994	1995	1996	1997	1998
			\$ m	illions		
Operating revenues	8,944.9	10,976.2	12,054.9	12,764.0	14,224.1	14,885.8
Operating expenses	8,561.0	10,145.6	11,256.9	12,019.4	13,223.8	13,877.8
				%		
Operating ratio	0.96	0.92	0.94	0.94	0.93	0.93

Source: Statistics Canada, CANSIM table 403-0002.

Transportation

2000	2001	2002	2003	2004	2005	2006	2007	2008
				number				
599,227	595,098	600,305	608,331	627,973	644,095	663,583	685,332	691,909
62,751	61,991	57,576	60,508	59,576	60,978	61,159	68,453	65,971
47,275	45,991	46,005	44,545	43,256	42,669	41,429	40,496	40,151
12,765	11,939	12,055	Х	Х	Х	Х	Х	Х
157,250	166,409	168,389	166,207	172,019	176,893	179,588	181,942	182,376
97,161	92,757	101,602	104,617	112,311	115,571	116,925	119,760	118,881
4,949	4,369	4,344	Х	Х	Х	Х	Х	Х
2,051	2,855	2,879	Х	Х	Х	Х	Х	Х
78,978	77,103	79,489	83,381	85,313	87,872	92,206	96,283	97,601
38,271	38,685	37,046	37,432	38,909	40,914	43,794	45,862	46,894
29,436	28,477	28,044	29,586	31,096	32,437	41,013	43,365	43,822

2000	2001	2002	2003	2004	2005	2006	2007	2008
				thousands				
24,480	23,414	23,430	20,042	28,159	32,091	33,439	35,568	37,494
68,516,738	67,018,521	69,254,337	59,508,960	76,122,855	83,909,440	88,323,198	93,363,940	96,677,633
407,876	361,834	355,493	298,990	297,246	268,947	265,470	242,511	218,944
1,934,683	1,725,325	1,800,415	1,419,988	1,478,716	1,378,548	1,425,103	1,301,260	1,260,823
921	856	806	703	926	981	1,010	1,078	1,119
3,871,274	3,678,966	3,453,486	2,999,282	3,660,671	3,855,953	3,980,077	4,137,528	4,178,965

1999	2000	2001	2002	2003	2004	2005	2006	2007
\$ millions								
16,943.4	19,469.1	21,002.8	20,617.8	22,744.7	25,162.0	27,028.6	28,771.3	28,094.1
15,759.6	18,130.9	19,466.0	19,215.0	21,297.7	23,345.6	24,918.5	26,905.7	26,544.8
				%				
0.93	0.93	0.93	0.94	0.94	0.93	0.92	0.94	0.94

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	2003	2004	2005	2006	2007	2008
			nun	nber		
All vehicle registrations	24,687,511	25,196,428	25,838,309	26,684,822	27,577,524	28,466,275
Road motor vehicle registrations	18,883,584	19,156,055	19,515,295	20,065,171	20,593,251	21,087,014
Vehicles weighing less than 4,500 kilograms	17,768,773	17,989,919	18,275,275	18,738,941	19,198,960	19,612,935
Vehicles weighing from 4,500 kilograms to 14,999 kilograms	379,079	393,528	415,764	442,607	461,144	490,147
Vehicles weighing 15,000 kilograms or more	282,420	285,942	301,574	318,272	328,128	332,873
Buses	79,948	77,842	78,962	80,447	82,583	84,163
Motorcyles and mopeds	373,362	408,822	443,718	484,903	522,433	566,894
Trailers	4,315,996	4,513,641	4,722,563	4,961,184	5,231,114	5,527,800
Off-road, construction and farm vehicles	1,487,930	1,526,731	1,600,450	1,658,466	1,753,158	1,851,460

Source: Statistics Canada, CANSIM table 405-0004.

Table 30.8 Road motor vehicle fuel sales, 2002 to 2007

	2002	2003	2004	2005	2006	2007
			thousand	s of litres		
Net sales of gasoline	37,949,600	38,421,608	38,911,752	38,484,324	38,653,955	39,640,225
Gross sales of gasoline	39,205,669	39,797,315	40,146,013	39,845,934	39,918,335	40,854,912
Net sales of diesel oil	13,737,648	14,720,634	15,671,144	16,216,420	16,611,819	17,196,304
Net sales of liquefied petroleum gas ¹	323,935	313,019	358,459	324,286	325,747	316,239

Note: Gross is the total volume sold and net is the volume on which taxes were paid.

1. Data for British Columbia are not included.

Source: Statistics Canada, CANSIM table 405-0002.