

## Modal Trends: 1987–91

**T**his section presents limited time series data for each transportation mode for 1987 through 1991.

### Highway

(Statistics supporting the trends described below appear in tables 52a and b for Canada, tables 53a and b for Mexico, and tables 54a and b for the United States.)

Between 1987 and 1991, Canada's road system improved. Specifically, while the amount of its public roads remained fairly constant, the extent of its paved public roads increased at a faster rate than did its population. In 1990, the number of highway deaths per capita in Canada dipped, dropping from about 100—the level reached in 1987 through 1989—to a low of 92.

Over the 1987–91 period, many improvements were made to Mexico's highway profile. For example, its motorway distance tripled between 1987 and 1991. It has had about one-twentieth the paved highway miles per capita of Canada and one-fifteenth that of the United States. Additionally, the number of highway vehicles per capita in Mexico increased each year at a much faster rate than in either Canada or the United States: 15 percent, compared to 3 percent for Canada and under 1 percent for the United States. Despite this growth, however, Mexico had fewer than one-fifth the per capita number of cars of either Canada or the United States by 1991.

The United States has had about a third less paved highway distance per capita than Canada; it has had less motorway (freeways and other expressways) distance per capita as well. As in Canada, the U.S. rate of growth in paved highways was greater than its population growth over the 1987-91 period. U.S. highway vehicles and vehicle travel per capita increased in each of these years. Average freight haulage per capita by large for-hire firms varied during the period, but tended upward at a rate many times greater than that for the population. In spite of these increases, highway fuel consumption and fatalities were less in 1991 than in 1987.

Per capita for-hire freight carrier haulage varied within a narrow range in all three nations. Canada appears to have had a higher ratio than either Mexico or the United States; these two countries had similar ratios.

Automotive fuel consumption trends differed among the three nations.

- In 1990, Canada's total per capita fuel consumption was 78 percent of that for the United States, while Mexico's was roughly 31 percent of U.S. consumption. In the 1987-90 period, Canada's gasoline consumption increased 11 percent, while its diesel consumption increased 23 percent. This difference in growth may be partially explained by differences in the ways the two fuels are taxed by the Canadian government.
- Mexican fuel statistics represent total production rather than highway consumption; assuming that Mexico does not export gasoline or diesel fuels (although it does export crude oil), it is reasonable to use these production statistics as an indicator of consumption. On this basis, Mexican gasoline consumption seems to have increased about 14 percent, and diesel consumption by almost 20 percent. Judging by the numbers of highway vehicles in Mexico, it appears that most of the country's gasoline and diesel fuel continues to be consumed by highway travel.
- U.S. gasoline consumption increased 2 percent; its diesel fuel consumption rose 12 percent.

Table 52a

## Highway Trends: Canada (Metric)

	1987	1988	1989	1990	1991
<b>Highways, km</b>	1,717,873◄	1,620,238	1,611,542	1,637,262	n/a
Motorways	n/a	14,796	14,660	14,985	n/a
National main roads	124,459	130,844	131,064	132,246	n/a
Secondary roads	250,812	131,564	134,054	134,297	n/a
Other roads	1,342,602	1,343,034	1,331,764	1,355,734	n/a
Paved roads, km	498,183	513,615	512,470	573,042	n/a
Paved roads per 1,000 capita	19.4	19.8	19.5	21.5	n/a
<b>Vehicles<sup>1</sup></b>	15,864,388	17,152,184	16,719,529	16,981,130	17,223,039
Cars	11,772,506	12,986,001	12,811,318	12,622,038	13,061,084
Motorcycles	448,094	400,317	377,997	359,015	351,231
Buses <sup>2</sup>	59,266	59,834	62,494	63,962	64,208
Trucks	3,584,522	3,706,032	3,467,720	3,936,115	3,746,516
Vehicles per 1,000 capita	619	662	637	638	631
<b>Vehicle-km, million</b>	n/a	n/a	n/a	303,401	n/a
Cars	202,958◄	225,697◄	224,172◄	222,353◄	n/a
Motorcycles	n/a	n/a	n/a	1,195	n/a
Buses	n/a	n/a	n/a	2,057◄	n/a
Trucks	n/a	n/a	n/a	77,796◄	n/a
Vehicle km per capita	n/a	n/a	n/a	11,402◄	n/a
Vehicle-km per car	17,240	17,380◄	17,498	17,661◄	n/a
Vehicle-km per truck	n/a	n/a	n/a	19,789◄	n/a
<b>Truck tonnes, million<sup>4</sup></b>	169	177	162	149	n/a
<b>Truck tonne-km, million<sup>4</sup></b>	57,320	57,888	54,405	54,700	n/a
Average load tonnes <sup>4</sup>	6.0	5.9	5.2	5.6	n/a
Tonne trip length, km <sup>4</sup>	339	327	336	367	n/a
Tonne-km per capita <sup>4</sup>	2,238	2,234	2,073	2,056	n/a
<b>Fuel liters, million</b>	35,646	40,331	40,747	41,103	40,470
Gasoline	28,576	31,718	32,038	31,766	31,212
Diesel	7,029	8,528	8,640	8,646	8,328
Other	41	84	69	690	931
Fuel liters per capita	1,391	1,557	1,553	1,545	1,483
<b>Road fatalities<sup>4</sup></b>	4,285	4,153	4,260	3,957	3,626
Fatalities per million capita	167	160	162	149	133

## Notes

◄ Denotes estimate

n/a Not available for this report

1. Includes "Other Road Motor Vehicles" (ambulances, fire trucks, etc.) as trucks. There were 66,712 of these reported for 1991. Mopeds were included with motorcycles.

2. All registered buses, including school, intercity, transit, and other.

3. Only for-hire truck freight carriers with revenues exceeding one million Canadian dollars.

4. Unsure if the figure includes highway-rail grade crossing fatalities.

Table 52b

## Highway Trends: Canada (U.S. Measures)

	1987	1988	1989	1990	1991
<b>Highways, miles</b>	1,377,069◄	1,325,989	1,319,873	1,373,496	n/a
Motorways	n/a	9,194	9,110	9,312	n/a
National main roads	77,339	81,306	81,443	82,178	n/a
Secondary roads	155,855	81,754	83,301	83,452	n/a
Other roads	834,293	834,561	827,558	842,453	n/a
Paved roads, miles	309,571	319,161	318,449	356,088	n/a
Paved roads per 1,000 capita	12.1	12.3	12.1	13.4	n/a
<b>Vehicles<sup>1</sup></b>	15,864,388	17,152,184	16,719,529	16,981,130	17,223,039
Cars	11,772,506	12,986,001	12,811,318	12,622,038	13,061,084
Motorcycles	448,094	400,317	377,997	359,015	351,231
Buses <sup>2</sup>	59,266	59,834	62,494	63,962	64,208
Trucks	3,584,522	3,706,032	3,467,720	3,936,115	3,746,516
Vehicles per 1,000 capita	619	662	637	638	631
<b>Vehicle-mi, million</b>	n/a	n/a	n/a	188,533◄	n/a
Cars	126,118	140,248	139,301◄	138,170◄	n/a
Motorcycles	n/a	n/a	n/a	743◄	n/a
Buses	n/a	n/a	n/a	1,278◄	n/a
Trucks	n/a	n/a	n/a	48,342◄	n/a
Vehicle-mi.per capita	n/a	n/a	n/a	7,085◄	n/a
Vehicle-mi.per car	7,898,468	10,800	10,873◄	10,975◄	n/a
Vehicle-mi.per truck	n/a	n/a	n/a	12,297◄	n/a
<b>Truck tons, million<sup>3</sup></b>	153	161	147	135	n/a
<b>Truck ton-mi., million<sup>3</sup></b>	39,257	39,646	37,261	37,463	n/a
Average load tons <sup>3</sup>	6.6	6.5	5.7	6.2	n/a
Ton trip length, mi. <sup>3</sup>	211	203	209	228	n/a
Ton-km per capita <sup>3</sup>	1,532	1,530	1,420	1,408	n/a
<b>Fuel gallons, million</b>	9,418	10,655	10,765	10,859	10,692
Gasoline	7,550	8,380	8,465	8,393	8,246
Diesel	1,857	2,253	2,283	2,284	2,200
Other	11	22	18	182	246
Fuel gallons per capita	368	411	410	408	392
<b>Road fatalities<sup>3</sup></b>	4,285	4,153	4,260	3,957	n/a
Fatalities per million capita	104	100	101	92	n/a

## Notes

◄ Denotes estimate

n/a Not available for this report

1. Includes "Other Road Motor Vehicles" (ambulances, fire trucks, etc.) as trucks. There were 66,712 of these reported for 1991. Mopeds were included with motorcycles.

2. All registered buses, including school, intercity, transit, and other.

3. Only for-hire truck freight carriers with revenues exceeding one million Canadian dollars.

**Table 53a Highway Trends: Mexico (Metric)**

	1987	1988	1989	1990	1991
<b>Highways, km</b>	233,339	235,033	237,057	239,235	242,294
Motorway	939	1,106	1,231	1,761	3,166
National main roads	45,204	45,338	45,379	45,743	45,805
Secondary roads	59,622	57,426	57,894	61,108	61,230
Other roads	127,574	131,163	132,553	130,623	132,093
Paved roads, km	79,335	81,321	82,022	82,775	n/a
Paved roads per 1,000 capita	1.04	1.04	1.03	1.02	n/a
<b>Vehicles</b>	8,006,958	8,346,025	8,792,379	9,342,685	9,977,410
Cars	5,372,270	5,582,336	5,856,841	6,209,449	6,601,559
Motorcycles	221,059	218,207	218,698	218,698◀	218,698◀
Buses	77,859	78,467	79,147	80,658	83,014
Trucks	2,335,770	2,467,015	2,637,693	2,833,880	3,074,139
Vehicles per 1,000 capita	105	107	110	115	121
<b>Vehicle-km, million</b>	50,719◀	51,283◀	52,146◀	n/a	n/a
Cars	34,114◀	34,840◀	35,224◀	n/a	n/a
Motorcycles	1,413◀	1,309◀	1,270◀	n/a	n/a
Buses	539◀	519◀	523◀	n/a	n/a
Trucks	14,653◀	14,615◀	15,129◀	n/a	n/a
Vehicle-km per capita	662◀	656◀	654◀	n/a	n/a
Vehicle-km per car	6,350◀	6,241◀	6,014◀	n/a	n/a
Vehicle-km per truck	6,273◀	5,924◀	5,736◀	n/a	n/a
<b>Truck tonnes, million<sup>1</sup></b>	296	290	310	315	n/a
<b>Truck tonne-km, million<sup>1</sup></b>	101,483	102,921	107,243◀	107,243◀	108,884
Average load tonnes					
Tonne trip length, km	343	355	346	341	n/a
Truck tonne-km per capita	1,325	1,317	1,346	1,320	n/a
<b>Fuel liters million<sup>2</sup></b>	31,682	32,125	35,259	40,108	41,306
Gasoline	19,602	20,371	22,892	25,101	25,149
Diesel	12,080	11,754	12,367	15,007	16,157
Other	n/a	n/a	n/a	n/a	n/a
Fuel liters per capita	414	411	442	494	n/a
<b>Road fatalities<sup>2</sup></b>	4,695	4,863	5,133	5,500	5,700
Fatalities per million capita	61	62	64	68	69

Notes

◀ Denotes estimate

n/a Not available for this report.

1. For-hire freight carriers, but survey parameters unknown.

2. Fatalities on roads of federal interest (red roads).

Table 53b Highway Trends: Mexico (U.S. Measures)

	1987	1988	1989	1990	1991
<b>Highways, miles</b>	144,997	146,050	147,307	148,661	150,561
Motorways	583	687	765	1,094	1,967
National main roads	28,090	28,173	28,199	28,425	28,463
Secondary roads	37,049	35,685	35,975	37,973	38,048
Other roads	79,274	81,505	82,368	81,169	82,083
Paved roads, miles	49,299	50,533	50,968	51,437	n/a
Paved roads per 1,000 capita	0.6	0.6	0.6	0.6	n/a
<b>Vehicles</b>	8,006,958	8,346,025	8,792,379	9,342,685	9,977,410
Cars	5,372,270	5,582,336	5,856,841	6,209,449	6,601,559
Motorcycles	221,059	218,207	218,698	218,698◄	218,698◄
Buses	77,859	78,467	79,147	80,658	83,014
Trucks	2,335,770	2,467,015	2,637,693	2,833,880	3,074,139
Vehicles per 1,000 capita	105	107	110	115	121
<b>Vehicle-miles, million</b>	31,517◄	31,867◄	32,404◄	n/a	n/a
Cars	21,198◄	21,650◄	21,888◄	n/a	n/a
Motorcycles	878◄	813◄	789◄	n/a	n/a
Buses	335◄	323◄	325◄	n/a	n/a
Trucks	9,105◄	9,082◄	9,401◄	n/a	n/a
Vehicle-miles per capita	411◄	408◄	407◄	n/a	n/a
Vehicle -miles per car	3,946◄	3,878◄	3,737◄	n/a	n/a
Vehicle-miles per truck	3,898◄	3,681◄	3,564◄	n/a	n/a
<b>Truck tons, millions<sup>1</sup></b>	326	319	341	347	n/a
<b>Truck ton-miles, millions<sup>1</sup></b>	69,503	70,488	73,448◄	73,448◄	74,572
Average load tons <sup>1</sup>					
Ton trip length, miles <sup>1</sup>	213	221	215	212	n/a
Truck ton-miles per capita	907	902	922	904	901
<b>Fuel gallons, millions</b>	10,783	10,934	12,000	9,994	17,557
Gasoline	6,672◄	6,933◄	7,791◄	6,441	10,913◄
Diesel	4,111◄	4,001◄	4,209◄	3,553	6,644◄
Other	n/a	n/a	n/a	n/a	n/a
Fuel gallons per capita	141	140	151	123	n/a
<b>Road fatalities<sup>2</sup></b>	4,695	4,863	5,133	5,500	5,700
Fatalities per million capita	61	62	64	68	n/a

## Notes

◄ Denotes estimate

n/a Not available for this report.

1. For-hire freight carriers, but survey parameters unknown.

2. Fatalities on roads of federal interest (red roads) only.

Table 54a

## Highway Trends: United States (Metric)

	1987	1988	1989	1990	1991
<b>Highways, km</b>	6,233,299	6,228,669	6,237,290	6,243,163	6,257,882
Motorways	83,214	83,964	84,361	84,865	85,187
National main roads	568,685	569,774	570,412	571,485	583,742
Secondary roads	700,580	701,954	701,820	702,111	704,877
Other roads	4,880,820	4,872,977	4,880,697	4,884,702	4,884,076
Paved roads, km	3,496,881	3,525,427	3,630,103	3,633,521	3,660,861
Paved roads per 1,000 pop.	14.4	14.4	14.7	14.5	14.5
<b>Vehicles</b>	183,871,730	188,981,016	191,693,742	193,057,376	192,548,972
Cars	137,208,090	141,251,695	143,025,658	143,453,040	142,955,623
Motorcycles	4,917,131	4,584,284	4,433,195	4,259,462	4,177,037
Buses	602,055	615,669	625,040	626,987	631,279
Trucks	41,144,454	42,529,368	43,609,849	44,717,887	44,785,033
Vehicles per 1,000 capita	757	771	775	772	762
<b>Vehicles-km, million</b>	3,093,217	3,259,876	3,373,197	3,455,304	3,495,092
Cars	2,180,726	2,300,139	2,377,730	2,438,230	2,467,672
Motorcycles	15,295	16,285	16,687	15,377	14,767
Buses	8,557	8,795	9,105	9,216	9,240
Trucks	888,639	934,657	969,675	992,481	1,003,413
Vehicle km per capita	12,738	13,303	13,638	13,825	13,832
Vehicle-km per car	15,894	16,284	16,624	16,997	17,262
Vehicle-km per truck	17,212	17,423	17,209	15,494	14,717
<b>Person-km, million</b>	4,401,554◄	4,700,672◄	4,884,506◄	4,925,741◄	4,950,957◄
Cars & personal trucks	4,364,547◄	4,663,504◄	4,845,890◄	4,888,734◄	4,913,146◄
Person-km per car-km	1.60◄	1.59◄	1.51◄	1.52◄	1.52◄
Bus <sup>1</sup>	37,007	37,168	38,616	37,007	37,812
Total Person-km per capita	18,126◄	19,182◄	19,748◄	19,709◄	19,593◄
<b>Truck tonnes, million<sup>2</sup></b>	528	533	535	701	635
<b>Truck tonne-km, million<sup>2</sup></b>	276,066	263,109	294,231	327,531	391,757
Average load tonnes <sup>2</sup>	12.07	12.34	14.07	13.25	13.16
Tonne trip length, km	523	494	550	467	617
Truck tonne-km per capita	1,137	1,074	1,190	1,311	1,550
<b>Fuel liters million</b>	483,527	491,618	499,108	498,042	486,843
Gasoline	411,438	415,655	418,744	417,047	408,585
Diesel	72,089	75,963	80,365	80,995	78,258
Other	n/a	n/a	n/a	n/a	n/a
Fuel liters per capita	1,991	2,006	2,018	1,993	1,927
<b>Road fatalities<sup>3</sup></b>	46,385	47,093	45,555	44,528	41,462
Fatalities per million capita	191	192	184	178	164

## Notes

◄ Denotes estimate

n/a Not available for this report.

1. Intercity bus only.

2. For-hire freight carriers only.

3. Does not include highway-rail grade crossing fatalities.

Table 54b Highway Trends: United States (U.S. Measures)

	1987	1988	1989	1990	1991
<b>Highways, miles</b>	3,873,372	3,870,495	3,876,501	3,880,151	3,889,299
Motorways	51,709	52,175	52,422	52,735	52,944
National main roads	353,381	354,058	354,454	355,121	362,798
Secondary roads	435,340	436,194	436,111	436,512	438,084
Other roads	3,032,942	3,028,068	3,024,787	3,027,150	3,035,473
Paved roads, miles	2,172,962	2,190,700	2,255,746	2,257,870	2,274,859
Paved roads per 1,000 Pop.	8.95	8.94	9.12	9.03	9.00
<b>Vehicles</b>	183,871,730	188,981,016	191,693,742	193,057,376	192,548,972
Cars	137,208,090	141,251,695	143,025,658	143,453,040	142,955,623
Motorcycles	4,917,131	4,584,284	4,433,195	4,259,462	4,177,037
Buses	602,055	615,669	625,040	626,987	631,279
Trucks	41,144,454	42,529,368	43,609,849	44,717,887	44,785,033
Vehicles per 1,000 capita	757	771	775	772	762
<b>Vehicle-miles, millions</b>	1,921,204	2,026,059	2,096,456	2,144,362	2,172,214
Cars	1,355,330	1,429,579	1,477,769	1,513,184	1,533,668
Motorcycles	9,506	10,121	10,371	9,557	9,178
Buses	5,318	5,466	5,659	5,719	5,743
Trucks	551,050	580,893	602,657	615,902	623,625
Vehicle-miles per capita	7,915	8,266	8,474	8,580	8,596
Vehicle-miles per car	9,878	10,119	10,330	10,562	10,726
Vehicle-miles per truck	10,695	10,827	10,694	9,628	9,145
<b>Person-miles, millions</b>	2,735,126◀	2,920,998◀	3,035,232◀	3,060,855◀	3,077,040◀
Cars & personal trucks	2,712,130◀	2,897,901◀	3,011,236◀	3,037,859◀	3,053,540◀
Person-miles per car-mile	1.60◀	1.59◀	1.51◀	1.52◀	1.52◀
Bus <sup>1</sup>	23,000	23,100	24,000	23,000	23,500
Total person-miles per capita	11,263◀	11,920◀	12,271◀	12,247◀	12,175◀
<b>Truck tons, millions<sup>2</sup></b>	582	587	589	773	699
<b>Truck ton-miles, millions<sup>2</sup></b>	189,070	180,196	201,511	224,317	268,304
Average load, tons <sup>2</sup>	13.30	13.60	15.50	14.60	14.50
Ton trip length, miles <sup>2</sup>	325	342	349	389	391
Truck ton-miles per capita <sup>2</sup>	779	735	815	898	1,062
<b>Fuel gallons, millions</b>	127,748	129,886	131,865	131,583	128,624
Gasoline	108,702	109,816	110,632	110,184	107,948
Diesel	19,046	20,070	21,232	21,399	20,676
Other	n/a	n/a	n/a	n/a	n/a
Fuel gallons per capita	526	530	533	526	509
<b>Road fatalities<sup>3</sup></b>	46,385	47,093	45,555	44,529	41,150
Fatalities per million capita	191	192	184	178	163

## Notes

◀ Denotes estimate

n/a Not available for this report.

1. Intercity buses only.

2. Only for-hire freight carriers having revenue greater than one million U.S. dollars.

3. Excludes highway-rail grade crossing fatalities.

## **Aviation**

(Statistics supporting the trends described below appear in tables 55a and b.)

Between 1987 and 1990, Canada's passenger-distance of air travel rose per capita. It experienced a decline in 1991; this was perhaps related to business cycles. In the United States, passenger-distance rose slightly in every year for which data are shown (1987 through 1990; data are not available for 1991). Weight-distance of air freight per capita also rose in the United States over the 1987-90 period, increasing from 51 in 1987 to 65 in both 1989 and 1990.

Mexico steadily increased its number of public airports during this period—from 1,757 in 1987 to 2,149 in 1991. The country's passenger-distance of air carrier service rose every year (except 1988); however, given Mexico's continued population growth, Mexican passenger-distance declined steadily per capita, dropping from 256 in 1987 to 237 in 1991.

## **Rail**

(Statistics supporting the trends described below appear in tables 56a and b.)

During the 1987-91 period, both Canada and the United States have gradually abandoned railroad track. Additionally, Canada's freight travel and freight travel per capita decreased from 1988 through 1990. Canadian rail passenger travel increased through 1989, but dropped 37 percent in 1990. Decreased government subsidization of rail passenger service may partially explain this dramatic decrease.

The length of Mexico's tracks has remained about the same. Freight cars, freight travel, and freight travel per capita, however, have steadily declined. Since 1989, freight travel per freight car has also decreased. Mexico's rail passenger travel declined in 1987 and 1988, and stayed at this reduced level in 1989 and 1990. Per capita rail passenger travel decreased each year.

U.S. rail freight travel grew each year, but its freight travel per capita has been relatively flat since 1989. Passenger travel increased each year, but per capita passenger-distance was roughly the same in 1990 and 1991. U.S. rail fatalities declined in 1990 and 1991.

## **Water**

(Statistics supporting the trends described below appear in tables 57a and b.)

Canada's coastwise (i.e., movement along east and west coasts) loadings and international freight handled per capita showed a downward trend from 1988 on. Available data show that fuel and fatalities decreased during the period.

Mexico's coastwise freight loadings per capita tended upward between 1988 and 1991. The international freight handled per capita varied without showing a robust trend for the period.

Both U.S. coastwise freight loadings and international freight handled per capita tended downward after 1988. U.S. fuel consumption tended upward, while fatalities declined.

## **Transit**

(Statistics supporting the trends described below appear in table 58. Note that Mexico's transit figures are for Mexico City alone; transit figures for Canada and the United States are national totals.)

Per million metropolitan residents, Mexico City had six times the number of electric vehicles as the United States, and almost three times as much as Canada. Mexico City's total transit vehicles exceeded those of the United States by three to one, and those of Canada one and a half times over.

Canada's transit fleet was relatively constant; the U.S. fleet decreased from 1989 to 1991. Mexico City's fleet decreased also, but it increased the number of heavy railcars in its fleet.

**Table 55a Aviation Trends: Canada, Mexico, and the United States (Metric)**

<b>Canada</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>
Public airports	n/a	n/a	n/a	n/a	2,500
Air carrier aircraft <sup>1</sup>	n/a	n/a	n/a	641	561
Passenger-km millions <sup>1</sup>	53,053	61,612	63,619	66,770	57,431
Pass-km per aircraft (thousands) <sup>1</sup>	n/a	n/a	n/a	104,165	102,373
Pass-km per capita	2,071	2,378	2,425	2,509	2,104
Tonne-km, millions <sup>1</sup>	1,755	1,612	n/a	n/a	n/a
Tonne-km per capita <sup>1</sup>	n/a	n/a	n/a	66	59
General aviation aircraft <sup>2</sup>	n/a	n/a	n/a	13,998	15,894
Fuel, liters, millions <sup>1</sup>	n/a	n/a	n/a	4,744	4,177
Gasoline	n/a	n/a	n/a	139	112
Jet fuel	n/a	n/a	n/a	4,605	4,065
Fuel liters per capita	n/a	n/a	n/a	178	153
Aviation fatalities <sup>3</sup>	97	95	150	87	373
<b>Mexico</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>
Public airports	1,757	1,854	1,906	2,149	2,318
Air Carrier aircraft <sup>1</sup>	n/a	n/a	n/a	n/a	691
Passenger-km millions <sup>1</sup>	27,444	27,156	29,503	31,567	34,250
Pass-km per aircraft (thousands)	n/a	n/a	n/a	n/a	49,566
Pass-km per capita	358	351	370	389	414
Tonne-km, millions <sup>1</sup>	n/a	n/a	n/a	n/a	n/a
Tonne-km, per capita	n/a	n/a	n/a	n/a	n/a
General aviation aircraft <sup>2</sup>	n/a	n/a	n/a	n/a	n/a
Fuel, liters, millions <sup>3</sup>	n/a	n/a	n/a	n/a	n/a
Gasoline	n/a	n/a	n/a	n/a	n/a
Jet fuel	n/a	n/a	n/a	n/a	n/a
Fuel liters per capita	n/a	n/a	n/a	n/a	n/a
Aviation fatalities <sup>3</sup>	n/a	n/a	n/a	n/a	n/a
<b>United States</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>
Public airports	4,984	5,043	5,084	5,078	n/a
Air carrier aircraft <sup>1</sup>	5,200	5,600	5,700	6,700	n/a
Passenger-km millions <sup>1</sup>	668,070	699,114	721,427	762,022	n/a
Pass-km per aircraft (thousands)	128,475	124,842	126,566	113,735	n/a
Pass-km per capita	2,751	2,853	2,917	3,049	n/a
Tonne-km, millions	17,977	20,861	23,527	23,654	n/a
Tonne-km per capita	74	85	95	95	n/a
General aviation aircraft <sup>2</sup>	217,200	210,300	219,700	212,200	n/a
Fuel, liters, millions <sup>3</sup>	57,960	61,113	63,664	66,219	n/a
Gasoline	1,510	1,506	1,503	1,518	n/a
Jet fuel	56,449	59,606	62,161	64,701	n/a
Fuel liters per capita	239	249	257	265	n/a
Aviation fatalities <sup>3</sup>	1,163	1,153	1,151	838	976

**Notes**

n/a Not available for this report

1. Nation's air carrier aircraft in domestic and international (Canada Level I and II except Level I-IV for fuel) service except Mexico. For Mexico the number includes aircraft of 32 foreign airlines.
2. All aircraft less air carrier aircraft.
3. All aviation.

Table 55b

## Aviation Trends: Canada, Mexico, and the United States (U.S. Measures)

Canada	1987	1988	1989	1990	1991
Public airports	n/a	n/a	n/a	n/a	2,500
Air carrier aircraft <sup>1</sup>	n/a	n/a	n/a	641	561
Passenger-miles, millions <sup>1</sup>	32,973	38,292	39,539	41,491	35,688
Passenger-miles per aircraft, thousands	n/a	n/a	n/a	64,728	63,614
Passenger-miles per capita	1,287	1,478	1,507	1,559	1,307
Ton-miles, millions <sup>1</sup>	n/a	n/a	n/a	1,202	1,104
Ton-miles per capita	n/a	n/a	n/a	45	40
General aviation aircraft <sup>2</sup>	n/a	n/a	n/a	15,480	15,894
Fuel, gallons, millions <sup>1</sup>	n/a	n/a	n/a	1,253	1,104
Gasoline	n/a	n/a	n/a	37	30
Jet fuel	n/a	n/a	n/a	1,217	1,074
Fuel gallons per capita	n/a	n/a	n/a	47	40
Aviation fatalities <sup>3</sup>	97	95	150	87	373
<b>Mexico</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>
Public airports	1,757	1,854	1,906	2,149	2,318
Air carrier aircraft <sup>1</sup>	n/a	n/a	n/a	n/a	691
Passenger-miles, millions <sup>1</sup>	17,057	16,818	18,336	19,619	21,287
Passenger-miles per aircraft, thousands	n/a	n/a	n/a	n/a	30,805
Passenger-miles per capita	223	218	230	242	257
Ton-miles, millions	n/a	n/a	n/a	n/a	n/a
Ton-miles per capita	n/a	n/a	n/a	n/a	n/a
General aviation aircraft	n/a	n/a	n/a	n/a	n/a
Fuel, gallons, millions	n/a	n/a	n/a	n/a	n/a
Gasoline	n/a	n/a	n/a	n/a	n/a
Jet fuel	n/a	n/a	n/a	n/a	n/a
Fuel gallons per capita	n/a	n/a	n/a	n/a	n/a
Aviation fatalities <sup>2</sup>	n/a	n/a	n/a	n/a	n/a
<b>United States</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>
Public airports	4,984	5,043	5,084	5,078	n/a
Air carrier aircraft <sup>1</sup>	5,200	5,600	5,700	6,700	n/a
Passenger-miles, millions <sup>1</sup>	415,208	434,502	448,370	473,600	n/a
Pass-miles per aircraft, thousands	79,848	77,590	78,661	70,687	n/a
Pass-miles per capita	1,710	1,773	1,813	1,895	n/a
Ton-miles, millions <sup>1</sup>	12,312	14,287	16,113	16,200	n/a
Ton-miles per capita	51	58	65	65	n/a
General aviation aircraft <sup>2</sup>	217,200	210,300	219,700	212,200	n/a
Fuel, gallons, millions <sup>3</sup>	15,313	16,146	16,820	17,495	n/a
Gasoline	399	398	397	401	n/a
Jet fuel	14,914	15,748	16,423	17,094	n/a
Fuel gallons per capita	63	66	68	70	n/a
Aviation fatalities <sup>3</sup>	1,163	1,153	1,151	838	976

## Notes

n/a Not available for this report.

1. Nation's air carrier aircraft in domestic and international (Canada Level I and II except Level I-IV for fuel) service except Mexico. For Mexico the number includes aircraft of 32 foreign airlines.

2. All aircraft less air carrier aircraft.

3. All aviation.

Table 56a Rail Trends: Canada, Mexico, and the United States (Metric)

Canada	1987	1988	1989	1990	1991
Track operated, km	94,184	91,344	89,104	86,880	n/a
Vehicles	126,160	139,225	n/a	127,944	n/a
Locomotives	3,855	3,836	n/a	3,719	n/a
Freight cars	121,379	134,156	n/a	123,137	n/a
Passenger cars	926	1,233	n/a	1,088	n/a
Tonne-km, millions	285,455	293,835	280,779	268,737	n/a
Tonne-km per freight car	2,351,762	2,190,249	n/a	2,182,424	n/a
Tonne-km per capita	11,143	11,341	10,700	10,099	n/a
Passenger-km, millions	2,709	2,989	3,178	2,004	n/a
Passenger-km/passenger car	2,925,131	2,424,304	n/a	1,841,912	n/a
Passenger-km per capita	106	115	121	75	n/a
Fuel, liters millions	2,317	2,329	2,167	2,064	n/a
Rail fatalities	106	111	141	103	n/a
Mexico	1987	1988	1989	1990	1991
Track operated, km	26,287	26,399	26,361	26,361	26,361
Vehicles	58,352	51,886	50,341	49,680	47,808
Locomotives	1,757	1,742	1,737	1,677	1,700
Freight cars	55,918	49,401	47,603	47,010	45,196
Passenger cars	677	743	1,001	993	912
Tonne-km, millions	40,475	41,177	38,570	36,417	33,732
Tonne-km per freight car	723,828	833,526	810,243	774,665	746,349
Tonne-km per capita	528	527	484	448	407
Passenger-km, millions	5,828	5,619	5,383	5,404	n/a
Passenger-km/passenger car	8,608,272	7,562,853	5,378,022	5,442,095	n/a
Passenger-km per capita	76	72	68	67	n/a
Fuel, liters, millions	n/a	n/a	n/a	n/a	n/a
Rail fatalities	n/a	n/a	n/a	n/a	n/a
United States	1987	1988	1989	1990	1991
Track operated, km	244,846	237,863	238,243	234,880	231,347
Vehicles	1,315,990	1,268,625	1,241,901	1,241,853	1,219,088
Locomotives	21,325	23,190	23,108	23,181	22,908
Freight cars	1,288,129	1,238,941	1,212,364	1,212,261	1,189,660
Passenger cars	6,536	6,494	6,429	6,411	6,520
Tonne-km, millions	1,419,241	1,501,008	1,530,211	1,563,794	1,572,554
Tonne-km per freight car	1,101,785	1,211,525	1,262,171	1,289,981	1,321,852
Tonne-km per capita	5,844	6,125	6,187	6,257	6,223
Passenger-km, millions	8,553	9,149	9,512	9,862	10,056
Passenger-km/passenger car	1,308,666	1,408,804	1,479,609	1,538,255	1,542,370
Passenger-km per capita	35	37	38	39	40
Fuel, liters, millions	12,207	12,474	12,888	12,726	11,827
Rail fatalities	1,165	1,199	1,324	1,297	1,194

n/a Not available for this report.

Table 56b

## Rail Trends: Canada, Mexico, and the United States (U.S. Measures)

Canada	1987	1988	1989	1990	1991
Track operated, miles	58,526	56,761	55,369	53,987	n/a
Vehicles	126,160	139,225	n/a	127,944	n/a
Locomotives	3,855	3,836	n/a	3,719	n/a
Freight cars	121,379	134,156	n/a	123,137	n/a
Passenger cars	926	1,233	n/a	1,088	n/a
Ton-miles, millions	195,500	201,240	192,298	184,051	n/a
Ton-miles per freight car	1,610,659	1,500,042	n/a	1,494,683	n/a
Ton-miles per capita	7,632	7,767	7,328	6,917	n/a
Passenger-miles, millions	1,683	1,857	1,975	1,245	n/a
Passenger-miles/passenger car	1,817,676	1,506,463	n/a	1,144,564	n/a
Passenger-miles per capita	66	72	75	47	n/a
Fuel, gallons, millions	8,769	8,814	8,202	7,813	n/a
Rail fatalities	106	111	141	103	n/a
<b>Mexico</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>
Track operated, miles	16,335	16,404	16,381	16,381	16,381
Vehicles	58,352	51,886	50,341	49,680	47,808
Locomotives	1,757	1,742	1,737	1,677	1,700
Freight cars	55,918	49,401	47,603	47,010	45,196
Passenger cars	677	743	1,001	993	912
Ton-miles, millions	27,720	28,201	26,416	24,941	23,102
Ton-miles per freight car	495,730	570,859	554,914	530,547	511,154
Ton-miles per capita	362	361	331	307	279
Passenger-miles, millions	3,621	3,492	3,345	3,358	n/a
Passenger-miles/passenger car	5,349,180	4,699,557	3,341,903	3,381,718	n/a
Passenger-miles per capita	47	45	42	41	n/a
Fuel, gallons, millions	n/a	n/a	n/a	n/a	n/a
Rail fatalities	n/a	n/a	n/a	n/a	n/a
<b>United States</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>
Track operated, miles	152,173	147,833	148,069	145,979	143,783
Vehicles	1,315,990	1,268,625	1,241,901	1,241,853	1,219,088
Locomotives	21,325	23,190	23,108	23,181	22,908
Freight cars	1,288,129	1,238,941	1,212,364	1,212,261	1,189,660
Passenger cars	6,536	6,494	6,429	6,411	6,520
Ton-miles, millions	972,000	1,028,000	1,048,000	1,071,000	1,077,000
Ton-miles per freight car	754,583	829,741	864,427	883,473	905,301
Ton-miles per capita	4,003	4,195	4,237	4,285	4,262
Passenger-miles, millions	5,316	5,686	5,912	6,129	6,250
Passenger-miles/passenger car	813,341	875,577	919,583	956,013	958,589
Passenger-miles per capita	22	23	24	25	25
Fuel, gallons, millions	3,225	3,296	3,405	3,362	3,125
Rail fatalities	1,165	1,199	1,324	1,297	1,194

n/a. Not available for this report.

Table 57a Water Trends: Canada, Mexico, and the United States (Metric)

Canada	1987	1988	1989	1990	1991
Ports	n/a	n/a	n/a	n/a	n/a
Coastal tonnes loaded, millions	n/a	70	62	60	n/a
National ships	n/a	n/a	n/a	n/a	n/a
Foreign ships	n/a	n/a	n/a	n/a	n/a
Coastal tonnes per capita	n/a	2.70	2.36	2.27	n/a
Int'l trade tonnes handled, millions	227	250	239	232	234
National ships	n/a	n/a	n/a	45	39
Foreign ships	n/a	n/a	n/a	187	195
International tonnes per capita	8.86	9.65	9.12	8.73	8.57
Fuel liters, millions	n/a	n/a	n/a	1,521	1,491
Fatalities	n/a	n/a	n/a	390	200
Mexico	1987	1988	1989	1990	1991
Ports	85	85	85	85	n/a
Coastal tonnes loaded, millions	51	53	56	57	58
National ships	39	40	40	42	n/a
Foreign ships	15	16	17	17	n/a
Coastal tonnes per capita	0.67	0.68	0.71	0.71	0.71
Int'l trade tonnes handled, millions	107	104	103	108	n/a
National ships	4	3	2	3	n/a
Foreign ships	103	102	101	106	n/a
International tonnes per capita	1.37	1.31	1.27	1.31	n/a
Fuel liters, millions	n/a	n/a	n/a	n/a	n/a
Fatalities	n/a	n/a	n/a	n/a	n/a
United States	1987	1988	1989	1990	1991
Ports	n/a	n/a	n/a	n/a	n/a
Coastal tonnes loaded, millions	294	295	274	266	n/a
National ships	294	295	274	266	n/a
Foreign ships	0	0	0	0	0
Coastal tonnes per capita	1.21	1.20	1.11	1.06	n/a
Int'l trade tonnes handled, millions	760	833	800	797	n/a
National ships	n/a	n/a	n/a	n/a	n/a
Foreign ships	n/a	n/a	n/a	n/a	n/a
International tonnes per capita	3.13	3.40	3.24	3.19	n/a
Fuel liters, millions	32,783	33,223	34,137	36,886	40,361
Fatalities	1,036	946	896	865	924

n/a Not available for this report.

1. Commercial shipping only. For Canada, on Canadian ships only. U.S. fuel includes sales to foreign ships.

2. All water includes recreational boating.

Table 57b

## Water Trends: Canada, Mexico, and the United States (U.S. Measures)

	1987	1988	1989	1990	1991
<b>Canada</b>					
Ports	n/a	n/a	n/a	n/a	n/a
Coastal tons loaded, millions	n/a	77	68	67	n/a
National ships	n/a	n/a	n/a	n/a	n/a
Foreign ships	n/a	n/a	n/a	n/a	n/a
Coastal tons per capita	n/a	2.98	2.60	2.50	n/a
Int'l trade tons handled, millions	250	276	264	256	258
National ships	n/a	n/a	n/a	50	43
Foreign ships	n/a	n/a	n/a	206	214
International tons per capita	9.77	10.63	10.05	9.62	9.44
Fuel gallons, millions <sup>1</sup>	n/a	n/a	5,755	5,643	n/a
Fatalities <sup>2</sup>	n/a	n/a	n/a	390	200
<b>Mexico</b>					
Ports	85	85	85	85	n/a
Coastal tons loaded, millions	56	59	62	63	64
National ships	42	44	44	46	n/a
Foreign ships	16	18	19	18	n/a
Coastal tons per capita	0.74	0.75	0.78	0.78	0.78
Int'l trade tons handled, millions	118	115	114	119	n/a
National ships	4	3	2	3	n/a
Foreign ships	114	112	111	116	n/a
International tons per capita	1.51	1.44	1.40	1.44	n/a
Fuel gallons, millions	n/a	n/a	n/a	n/a	n/a
Fatalities	n/a	n/a	n/a	n/a	n/a
<b>United States</b>					
Ports	n/a	n/a	n/a	n/a	n/a
Coastal tons loaded, millions	324	325	302	293	n/a
National ships	324	325	302	293	n/a
Foreign ships	0	0	0	0	0
Coastal tons per capita	1.33	1.33	1.22	1.17	n/a
Int'l trade tons handled, millions	838	918	882	878	n/a
National ships	n/a	n/a	n/a	n/a	n/a
Foreign ships	n/a	n/a	n/a	n/a	n/a
International tons per capita	3.45	3.75	3.57	3.51	n/a
Fuel gallons, millions <sup>2</sup>	8,661	8,778	9,019	9,745	10,663
Fatalities <sup>2</sup>	1,036	946	896	865	924

## Notes

n/a Not available for this report.

1. Commercial shipping only. For Canada, on Canadian ships only. U.S. fuel includes sales to foreign ships.

2. All water includes recreational boating.

Table 58

## Transit Trends: Canada, Mexico, and the United States

Canada	1987	1988	1989	1990	1991
Active vehicles	12,912	12,978	12,694	12,945	n/a
Heavy rail	1,449	1,439	1,652	1,381	n/a
Light rail	516	524	593	532	n/a
Trolley	513	523	488	472	n/a
Motor bus	10,434	10,492	9,961	10,560	n/a
Electric vehicles	2,478	2,486	2,733	2,385	n/a
Metropolitan population (thousands)	16,210	16,463	16,716	17,054	16,358
Nation's population, (thousands)	25,617	25,909	26,240	26,610	27,296
Percent of Metro population	63.28	63.54	63.70	64.09	59.93
Elec. veh./million metro population	153	151	163	140	n/a
Transit veh./million metro population	797	788	759	759	n/a
<b>Mexico City</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>
Active vehicles	10,817	10,643	9,969	9,329	6,946
Heavy rail	2,242	2,304	2,304	2,304	2,424
Light rail	17	17	17	29	24
Trolley	1,115	1,159	812	812	638
Motor bus	7,443	7,163	6,836	6,184	3,860
Electric vehicles	3,374	3,480	3,133	3,145	3,086
Metropolitan population (thousands)	n/a	n/a	n/a	8,237	n/a
Nation's population (thousands)	76,600	78,120	79,700	81,249	82,800
Percent of Metro population	n/a	n/a	n/a	10.1	n/a
Elec. veh./million metro population	n/a	n/a	n/a	382	n/a
Transit veh./million metro population	n/a	n/a	n/a	1,133	n/a
<b>United States</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>
Active vehicles	74,622	74,652	70,905	70,878	70,012
Heavy rail	10,168	10,539	10,506	10,419	10,170
Light rail	766	831	755	913	1,058
Trolley	671	710	725	832	919
Motor bus	63,017	62,572	58,919	58,714	57,865
Electric vehicles	11,605	12,080	11,986	12,164	12,147
Metropolitan population (thousands)	187,292	189,413	192,726	n/a	n/a
Nation's population, (thousands)	242,836	245,057	247,343	249,924	n/a
Percent of Metro population	77.13	77.29	n/a	77.11	n/a
Elec. veh./million metro population	62	64	n/a	63	n/a
Transit veh./million metro population	398	394	n/a	368	n/a

n/a Not available for this report.