### STATISTICAL REVIEW OF THE CANADIAN AUTOMOTIVE INDUSTRY: 2001 EDITION

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August 2002

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This edition reflects the latest revisions and estimates provided by the various data sources. Accordingly, some historical figures appearing in the 2000 Edition have been modified. As a variety of sources are utilized in this publication, some totals may not agree. All the figures presented in this publication are based on the North American Industry Classification System (NAICS). Some of the figures are still calculated on the Standard Industrial Classification (SIC), as they are not yet available by NAICS.







# Sales

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Passenger Cars									
North American Produced*	519	518	586	555	571	628	590	620	643
Daimler Chrysler	75	88	101	91	85	87	86	85	81
Ford	124	124	124	109	113	115	99	88	100
General Motors	235	214	235	227	215	242	222	258	255
Honda	29	31	41	41	59	75	72	90	100
Mazda	6	12	11	8	6	7	6	5	3
Nissan	17	19	16	14	12	12	13	12	20
Toyota	19	10	33	40	50	57	49	45	45
Other	14	20	25	25	31	33	43	37	39
Total Imports	279	222	164	117	89	109	151	187	209
Total Imports from Europe	32	25	24	23	20	24	30	47	47
Total Imports from Japan	218	176	117	72	50	65	98	106	107
Total Imports from South Korea	27	21	23	22	19	20	23	34	51
From Other Sources	2	0	0	0	0	0	0	0	4
Total Passenger Cars	798	740	750	672	660	737	741	807	852
Light Trucks									
North American Produced*	349	378	443	434	484	589	586	630	632
Daimler Chrysler	106	118	130	128	153	169	183	180	188
Ford	106	118	139	141	157	199	170	188	178
General Motors	132	135	161	153	161	203	199	213	214
Honda	0	0	0	0	0	0	2	12	14
Mazda	0	0	7	4	4	4	4	5	7
Nissan	1	4	3	4	5	5	4	5	6
Toyota	0	0	0	2	2	6	18	19	16
Other	4	3	3	2	2	3	6	8	9
Total Imports	56	47	32	21	25	57	56	57	63
Total Imports from Europe	2	3	2	2	2	3	2	1	2
Total Imports from Japan	54	44	30	19	23	54	54	56	55
From Other Sources	0	0	0	0	0	0	0	0	6
,									
Total Light Trucks	405	425	475	455	509	646	642	687	695
Total Light Vehicles	1 203	1 165	1 225	1 127	1 169	1 383	1 383	1 494	1 547

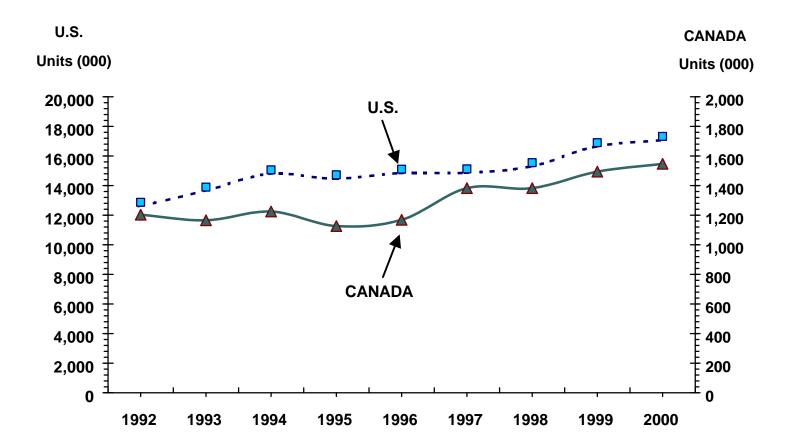
<sup>\*</sup> Includes Mexico

Source: Ward's AutoInfoBank, AIAMC

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Passenger Cars									
North American Produced*	6 286	6 742	7 255	7 129	7 256	6 916	6 762	6 980	6 830
Daimler Chrysler	617	766	783	771	828	737	739	745	649
Ford	1 731	1 837	1 899	1 732	1 700	1 576	1 532	1 581	1 527
General Motors	2 750	2 852	3 053	2 931	2 756	2 635	2 401	2 537	2 475
Honda	476	418	465	511	666	665	731	703	716
Mazda	79	100	109	106	86	79	92	87	71
Mitsubishi	65	76	117	101	126	101	102	137	168
Nissan	145	250	313	300	309	293	252	218	236
Toyota	341	368	384	499	556	594	623	637	632
Other	82	75	132	178	229	236	290	335	356
Total Imports	1 927	1 776	1 735	1 506	1 271	1 355	1 380	1 719	2 016
Total Imports from Europe	308	292	312	340	372	436	528	674	729
Total Imports from Japan	1 452	1 328	1 239	982	726	726	691	758	863
Total Imports from South Korea	144	135	173	183	172	182	152	277	401
From Other Sources	23	21	11	1	1	11	9	10	23
Total Passenger Cars	8 213	8 518	8 990	8 635	8 527	8 271	8 142	8 699	8 846
Light Trucks									
North American Produced*	4 247	5 000	5 659	5 691	6 132	6 271	6 745	7 421	7 651
General Motors	1 545	1 746	1 943	1 895	1 972	2 040	2 110	2 379	2 376
Ford	1 397	1 663	1 850	1 977	2 070	2 172	2 300	2 385	2 427
Daimler Chrysler	1 028	1 212	1 392	1 378	1 618	1 567	1 771	1 893	1 873
Honda	0	0	26	28	28	23	33	101	158
Mazda	8	30	64	45	43	38	42	39	51
Nissan	130	156	173	181	174	169	122	189	240
Toyota	65	112	130	113	142	161	234	297	361
Other	74	81	81	74	85	101	133	138	165
Total Imports	408	378	410	402	439	580	656	775	853
Total Imports from Europe	7	11	17	21	24	26	23	33	38
Total Imports from Japan	401	367	393	373	405	534	604	690	742
From Other Sources	0	0	0	8	10	20	29	52	73
Total Light Trucks	4 655	5 378	6 069	6 093	6 571	6 851	7 401	8 196	8 504
Total Light Vehicles	12 868	13 896	15 059	14 728	15 098	15 122	15 543	16 895	17 350

<sup>\*</sup> includes Mexico

Source: Ward's AutoInfoBank



Canadian Car Sales by Size\* (Thousands of Units)

Table 1.3

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Compact	480	405	355	335	288	276	309	311	339	426
Percent Share of Total	54.8	50.6	48.0	44.7	42.9	41.8	41.8	42.0	42.0	50.1
Percentage Change	-0.6	-15.6	-26.5	-5.6	-14.0	-4.2	12.0	0.6	9.0	25.7
Intermediate	293	306	281	294	272	279	313	318	344	302
Percent Share of Total	33.4	38.3	38.0	39.2	40.5	42.2	42.4	42.9	42.6	35.5
Percentage Change	5.0	4.4	0.7	4.6	-7.5	2.6	12.2	1.6	8.2	-12.2
Full-size	50	41	58	73	63	55	51	47	48	43
Percent Share of Total	5.7	5.1	7.8	9.7	9.4	8.3	6.9	6.3	5.9	5.1
Percentage Change	-35.1	-18.0	-24.7	25.9	-13.7	-12.7	-7.3	-7.8	2.1	-10.4
Luxury	53	48	46	48	48	51	66	65	76	79
Percent Share of Total	6.1	6.0	6.2	6.4	7.2	7.7	8.9	8.8	9.4	9.3
Percentage Change	15.2	-9.4	0.0	4.3	0.0	6.3	29.4	-1.5	16.9	3.9
Total Sales	876	800	740	750	671	661	739	741	807	850

<sup>\*</sup> Classified by Ward's segmentation

Source: Ward's AutoInfoBank

U.S. Car Sales by Size\* (Thousands of Units)

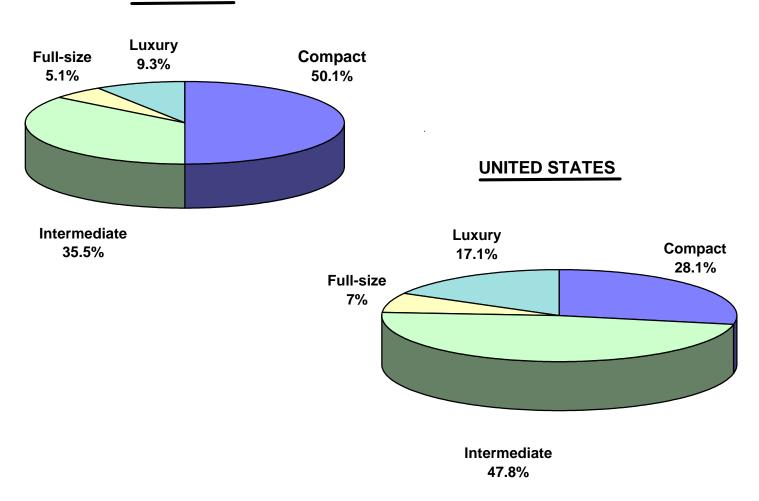
Table 1.4

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Compact	2 839	2 704	2 773	2 601	2 286	2 250	2 117	1 951	2 061	2 486
Percent Share of Total	34.7	32.9	32.6	28.9	26.5	26.4	25.6	24.0	23.7	28.1
Percentage Change	-8.3	-4.8	2.6	-6.2	-12.1	-1.6	-5.9	-7.8	5.6	20.6
Intermediate	3 502	3 633	3 696	4 120	4 244	4 286	4 152	4 221	4 545	4 227
Percent Share of Total	42.8	44.2	43.4	45.8	49.1	50.3	50.2	51.8	52.3	47.8
Percentage Change	-15.5	3.7	1.7	11.5	3.0	1.0	-3.1	1.7	7.7	-7.0
Full-size	685	752	943	1 054	932	843	782	669	660	623
Percent Share of Total	8.4	9.2	11.1	11.7	10.8	9.9	9.5	8.2	7.6	7.0
Percentage Change	-21.9	9.8	25.4	11.8	-11.6	-9.5	-7.2	-14.5	-1.3	-5.6
Luxury	1 164	1 124	1 106	1 216	1 173	1 147	1 221	1 301	1 432	1 510
Percent Share of Total	14.2	13.7	13.0	13.5	13.6	13.5	14.8	16.0	16.5	17.1
Percentage Change	-8.2	-3.4	-1.6	9.9	-3.5	-2.2	6.5	6.6	10.1	5.4
Total Sales	8 190	8 213	8 518	8 991	8 635	8 526	8 272	8 142	8 698	8 846

<sup>\*</sup> Classified by Ward's segmentation

**Source:** Ward's Automotive Reports, Ward's Yearbook, Ward's AutoInfoBank

#### CANADA

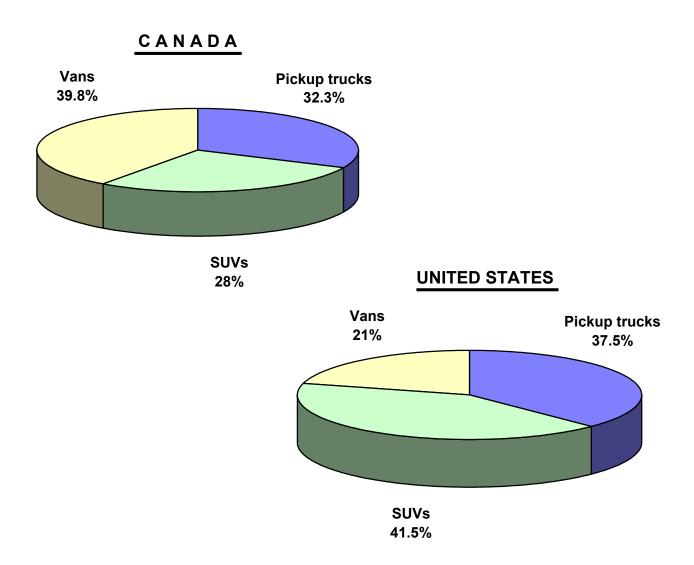


	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada**										
Pickup trucks	168 528	161 899	158 259	184 877	174 464	196 444	233 846	226 599	226 802	224 125
Percent Share of Total	43.3	40.2	37.5	39.2	38.3	38.6	36.3	35.3	33.0	32.3
Percentage Change	-9.1	-3.9	-2.2	16.8	-5.6	12.6	19.0	-3.1	0.1	-1.2
Sports Utility Vehicles	73 060	73 051	77 014	80 115	86 839	98 380	152 378	159 554	179 192	194 386
Percent Share of Total	18.8	18.2	18.3	17.0	19.0	19.3	23.6	24.9	26.1	28.0
Percentage Change	2.3	0.0	5.4	4.0	8.4	13.3	54.9	4.7	12.3	8.5
Vans	147 381	167 305	186 571	206 849	194 765	213 810	258 864	255 818	281 659	276 360
Percent Share of Total	37.9	41.6	44.2	43.8	42.7	42.0	40.1	39.8	41.0	39.8
Percentage Change	1.5	13.5	11.5	10.9	-5.8	9.8	21.1	-1.2	10.1	-1.9
Total	388 969	402 255	421 844	471 841	456 068	508 634	645 088	641 971	687 653	694 871
Percentage Change	-3.2	3.4	4.9	11.9	-3.3	11.5	26.8	-0.5	7.1	1.0
United States**										
Pickup trucks	2 020 739	2 145 389	2 417 230	2 792 063	2 656 949	2 810 868	2 769 562	2 959 749	3 193 458	3 182 020
Percent Share of Total	49.1	46.4	45.3	46.4	43.9	43.0	40.6	40.2	39.1	37.5
Percentage Change	-11.9	6.2	12.7	15.5	-4.8	5.8	-1.5	6.9	7.9	-0.4
Sports Utility Vehicles	909 555	1 133 141	1 379 600	1 556 075	1 753 417	2 140 455	2 435 301	2 794 206	3 218 503	3 519 575
Percent Share of Total	22.1	24.5	25.8	25.8	29.0	32.8	35.7	37.9	39. <i>4</i>	41.5
Percentage Change	-2.1	24.6	21.8	12.8	12.7	22.1	13.8	14.7	15.2	9.4
Vans	1 181 349	1 341 062	1 541 122	1 674 719	1 642 269	1 582 590	1 609 681	1 615 181	1 759 510	1 784 127
Percent Share of Total	28.7	29.0	28.9	27.8	27.1	24.2	23.6	21.9	21.5	21.0
Percentage Change	-9.8	13.5	14.9	8.7	-1.9	-3.6	1.7	0.3	8.9	1.4
Total	4 111 643	4 619 592	5 337 952	6 022 857	6 052 635	6 533 913	6 814 544	7 369 136	8 171 471	8 485 722
Percentage Change	-9.3	12.4	15.6	12.8	0.5	8.0	4.3	8.1	10.9	3.8

<sup>\*</sup> Classified by Ward's segmentation

Source: Ward's AutoInfoBank

<sup>\*\*</sup> Commercial Chassis are not included in totals



**Motor Vehicle Registrations in Canada** (Thousands of Units)

Table 1.6

	1988	1989	1990	1993	1994	1995	1996	1997	1998	1999*	2000
Passenger Cars	12 086	12 811	12 622	12 925	13 131	13 192	13 251	13 487	13 887	16 538	16 832
Trucks and Truck Tractors	3 706	3 396	3 867	3 345	3 393	3 411	3 476	3 527	3 625	2 607	2 418
Buses	60	62	64	65	65	64	64	65	68	73	77
Motorcycles	370	348	331	309	306	297	290	299	314	274	311
Mopeds	31	30	28	26	24	22	21	20	20	N/A	N/A
Other Vehicles	84	72	69	61	63	60	60	80	73	N/A	N/A
Total	16 337	16 719	16 981	16 731	16 982	17 046	17 162	17 478	17 987	19 492	19 638

<sup>\*</sup> Different grouping used for 1999; mopeds included in motorcycles

#### **Motor Vehicle Registrations in Major Markets** (Thousands of Units)

Source:

Table 1.7

	1980	1985	1990	1994	1995	1996	1997	1998	1999	2000
Australia	7 263	8 729	9 777	10 518	10 651	10 750	11 351	11 765	11 901	12 228
Belguim	3 513	3 634	4 277	4 619	4 696	4 780	4 862	5 001	5 119	5 256
Canada	13 719	14 818	16 553	17 440	17 046	17 231	17 478	17 987	17 964	18 285
France	21 705	25 070	28 460	30 040	30 295	30 755	31 470	32 310	33 090	33 813
Germany	24 853	27 822	32 685	42 545	43 319	43 971	44 552	44 979	45 793	47 306
Italy	19 115	24 405	29 910	32 455	33 164	33 736	34 398	34 596	35 363	36 165
Japan	37 856	46 157	57 678	65 011	66 854	68 801	70 003	70 815	71 727	72 649
Mexico	5 829	7 476	9 882	11 530	11 825	12 230	12 700	13 891	13 891	14 850
Netherlands	4 889	5 330	6 091	6 211	6 290	6 420	6 670	6 640	6 894	7 190
Spain	8 962	10 884	14 443	16 687	17 284	17 954	18 657	19 612	20 636	21 427
Sweden	3 077	3 383	3 925	3 912	3 953	3 982	4 040	4 145	4 259	4 387
U.K.	17 358	22 231	26 302	26 926	27 431	28 021	28 816	30 406	30 970	31 463
U.S.	188 796	171 354	188 656	195 469	200 446	206 365	207 754	209 750	216 309	221 474
Total	356 935	371 293	428 639	463 363	473 254	484 996	492 751	501 897	502 015	526 493

Data was compiled from various sources such as governments and associations' Internet-based databases, other printed publications, National Institute of Statistics (INEGI), Kama

#### **Passenger Cars**

	20	000		<u>1999</u>				
1	Honda Civic	60 407	1	Honda Civic	58 122			
2	Ford Focus	48 598	2	Chevrolet Cavalier	50 711			
3	Chevrolet Cavalier	45 966	3	Pontiac Sunfire	46 526			
4	Pontiac Sunfire	41 098	4	Toyota Corolla	41 630			
5	Toyota Corolla	40 692	5	Chrysler Neon	28 858			
6	Chrysler Neon	31 351	6	Ford Taurus	26 557			
7	Mazda Protegé	30 701	7	Dodge Intrepid	26 023			
8	Ford Taurus	27 291	8	Chevrolet Malibu	25 218			
9	Pontiac Grand Am	26 876	9	Pontiac Grand Am	25 152			
10	Honda Accord	24 635	10	Mazda Protegé	25 147			
11	Toyota Echo	24 611	11	Honda Accord	24 100			
12	Chevrolet Malibu	24 389	12	Toyota Camry	22 411			
13	Dodge Intrepid	22 935	13	Toyota Tercel*	21 246			
14	Volkswagen Jetta	22 455	14	Volkswagen Jetta	20 134			
15	Accent Hyundai	21 948	15	Escort	17 625			

Source: Ward's AutoInfoBank, AIAMC

<sup>\*</sup> Toyota Tercel replaced by Toyota Echo in 2000

Table 1.9

#### **Light Trucks**

	<u>2</u> 0	000			<u>1999</u>
1	Dodge Caravan	87 737	1	Dodge Caravan	73 930
2	Ford F-Series	71 115	2	Ford F-Series	73 748
3	Ford Windstar	49 636	3	Ford Windstar	55 528
4	Chevy Silverado	37 408	4	GMC-Sierra	36 829
5	GMC-Sierra	35 159	5	Chevy Silverado	34 234
6	Dodge Ram Pickup	29 124	6	Dodge Ram Pickup	30 064
7	Pontiac Montana	26 906	7	Ford Explorer	24 928
8	Chevrolet Venture	24 759	8	Chevrolet Venture	23 151
9	Ford Explorer	23 201	9	Jeep Grand Cherokee	19 003
10	Dodge Dakota	18 124	10	Pontiac Trans Sport*	17 838
11	Jeep Grand Cherokee	15 842	11	Toyota Sienna	15 763
12	Ford Econoline	14 534	12	Plymouth Voyager**	15 711
13	Honda CR-V	13 726	13	Ford Econoline	14 835
14	Odyssey Honda	13 512	14	Honda CR-V	14 511
15	PT Cruiser Chrysler	11 091	15	Dodge Dakota	14 411

<sup>\*</sup> Pontiac Trans Sport replaced by Pontiac Montana in 2000

<sup>\*\*</sup> Plymouth Voyager replaced by Chrysler Voyager in 2000

**Light Vehicle Dealerships by Company In Canada** 

**Table 1.10** 

Company	1985	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Acura			41	44	44	44	42	39	39	41	48	42	42
American Motors	189												
BMW	43	42	38	38	38	35	36	33	33	30	31	31	32
Daimler Chrysler	555	695	659	622	606	601	607	609	598	586	570	570	547
Daewoo											11	11	41
Fiat	88												
Ford	715	669	655	641	641	643	640	623	604	597	577	577	552
General Motors	969	964	947	938	918	906	868	847	824	868	848	848	768
Honda	188	256	218	219	219	217	213	205	203	203	206	205	209
Hyundai	173	157	144	151	145	156	146	139	139	142	143	143	146
Infiniti *					20	23	22	22	23				23
Jaguar	20	23	23	22	20	21	21	20	18	18	19	19	21
Kia												28	90
Lada	76	61	69	50	63	78	77	89	75	22	21	21	17
Land Rover											13	13	16
Lexus **					22	22	22	22	22				22
Mazda	137	168	176	175	185	184	181	176	167	159	151	151	149
Mercedes-Benz	53	54	56	55	55	39	57	58	56	53	49	49	51
Nissan	188	180	179	173	168	161	156	148	146	169	165	165	139
Passport/Saturn ***		59	70	63	67	66	65	62					
Porche											11	11	11
Saab***	41	32											
Skocar	60	23	34	30	30								
Subaru	80	89	87	90	91	87	93	95	97	100	97	97	96
Suzuki	86	103	107	101	100	103	106	108	91	86	89	89	90
Toyota	208	237	239	241	236	234	232	229	228	251	251	251	228
Volkswagen/Audi	200	189	184	187	181	180	174	162	160	155	190	190	188
Volvo	72	61	61	57	52	53	51	48	46	46	45	45	44
Total Light Vehicle Dealers	4 141	4 062	3 987	3 897	3 901	3 853	3 809	3 734	3 569	3 526	3 535	3 556	3 522

<sup>\*</sup> Figures are included with Nissan in 1997

Source: Canadian Automobile Dealers Association (CADA)

<sup>\*\*</sup> Figures are included with Toyota in 1997

<sup>\*\*\*</sup> Figures are included with General Motors starting in 1996

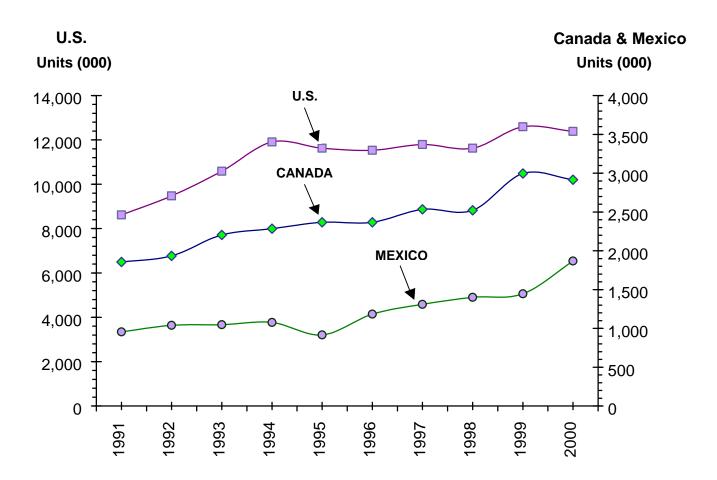


## PRODUCTION

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada										
Passenger Cars	1 060	1 028	1 353	1 216	1 337	1 280	1 373	1 481	1626	1551
Light Trucks	796	907	852	1 069	1 030	1 088	1 161	1 040	1370	1365
Light Vehicles	1 856	1 935	2 205	2 285	2 367	2 368	2 534	2 521	2 996	2 916
Heavy-Duty Trucks*	31	38	49	36	41	29	37	49	61	46
Total Vehicles	1 887	1 973	2 254	2 321	2 408	2 397	2 571	2 570	3 057	2 962
U.S.										
Passenger Cars	5 440	5 667	5 982	6 601	6 340	6 083	5 934	5 554	5 638	5 542
Light Trucks	3 177	3 808	4 608	5 305	5 285	5 449	5 859	6 074	6955	6840
Light Vehicles	8 617	9 475	10 590	11 906	11 625	11 532	11 793	11 628	12 593	12 382
Heavy-Duty Trucks*	173	217	265	333	370	299	338	374	432	391
Total Vehicles	8 790	9 692	10 855	12 239	11 995	11 831	12 131	12 002	13 025	12 773
Mexico										
Passenger Cars	720	776	835	857	699	798	855	956	994	1130
Light Trucks	235	264	213	220	217	386	454	445	451	738
Light Vehicles	955	1 040	1 048	1 077	916	1 184	1 309	1 401	1 445	1 868
Heavy-Duty Trucks*	31	38	29	45	18	34	46	59	89	55
Total Vehicles	986	1 078	1 077	1 122	934	1 218	1 355	1 460	1 534	1 923
North America Total										
Passenger Cars	7 220	7 471	8 170	8 674	8 376	8 161	8 162	7 991	8 258	8 223
Light Trucks	4 208	4 979	5 673	6 594	6 532	6 923	7 474	7 559	8 776	8 943
Light Vehicles	11 428	12 450	13 843	15 268	14 908	15 084	15 636	15 550	17 034	17 166
Heavy-Duty Trucks*	235	293	343	414	429	362	421	482	582	492
Total Vehicles	11 663	12 743	14 186	15 682	15 337	15 446	16 057	16 032	17 616	17 658

<sup>\*</sup> Includes motor homes and chassis

Source: Ward's AutoInfoBank



#### Company

Ranked by 2000 North American Production*	1997 <i>Ra</i>	anking	1998 <i>R</i> a	anking	1999 <i>Ra</i>	nking	2000 R	anking
General Motors	5 472	1	4 974	1	5 739	1	5 630	1
Ford	4 396	2	4 329	2	4 580	2	4 668	2
DaimlerChrysler	2 686	3	2 910	3	3 090	3	2 896	3
Honda	816	4	882	5	971	4	1 023	4
Toyota	541	6	648	4	745	5	809	5
Nissan	571	5	499	6	510	6	691	6
Volkswagen	257	8	339	8	410	7	426	7
NUMMI	358	7	362	7	367	8	344	8
Diamond Star	189	9	157	11	160	11	222	9
Subaru-Isuzu	187	10	216	9	192	9	209	10
CAMI	100	12	45	12	112	12	108	11
Auto Alliance (formerly Mazda)	100	11	167	10	165	10	107	12
Ranked by 2000 World Production								
General Motors	8 342	1	7 582	1	8 236	1	8 114	1
Ford	6 822	2	6 556	2	6 665	2	7 206	2
Toyota	4 834	3	5 210	3	5 496	3	5 897	3
Renault**	1 919	9	2 284	7	4 802	5	5 213	4
Volkswagen	3 148	4	4 809	4	4 786	6	5 106	5
DaimlerChrysler	3 034	5	4 512	5	4 822	4	4 666	6
Peugeot-Citroen	2 069	8	2 248	9	2 515	8	2 879	7
Fiat-Iveco	2 520	6	2 696	6	2 624	7	2 639	8
Hyundai	1 370	12	899	12	1 970	10	2 488	9
Honda	2 269	7	2 329	8	2 425	9	2 469	10
Mitsubishi	1 528	10	1 591	10	1 555	11	1 613	11
Suzuki	1 467	11	1 298	11	1 521	12	1 434	12

**Source:** Ward's Automotive Yearbook

<sup>\*</sup> Includes Mexico\*\* Including Nissan from 1999

**Motor Vehicle Production by Major Producing Country** (Thousands of Units)

Table 2.3

	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000
U.S.	8 965	8 010	11 648	9 768	11 972	11 832	12 131	12 003	13 025	12 771
Japan	6 941	11 043	12 271	13 487	10 195	10 346	10 976	10 050	9 895	10 145
Germany	3 186	3 879	4 446	4 661	4 515	4 351	5 023	5 727	5 688	5 527
France	2 861	3 378	3 016	3 295	2 740	2 728	2 549	2 923	3 352	3 352
Spain	814	1 182	1 418	1 679	2 308	2 412	2 562	2 826	2 852	3 033
Canada	1 442	1 374	1 930	1 922	2 401	2 397	2 570	2 570	3 057	2 962
South Korea	36	123	378	1 322	2 679	2 813	2 410	1 787	2 604	2 858
Mexico	NA	NA	398	804	944	1 222	1 355	1 460	1 534	1 923
U.K.	1 648	1 313	1 311	1 296	1 738	1 929	1 936	1 976	1 973	1 814
Italy	1 459	1 612	1 573	1 875	1 623	1 547	1 817	1 693	1 701	1 738
Brazil	930	1 165	967	914	1 650	1 813	2 059	1 547	1 351	1 671
Russia	1 964	2 199	2 200	2 000	1 276	1 077	1 174	1 021	1 170	1 203

Source: Ward's Automotive Yearbook

**Average Unit Value of Canadian Produced Motor Vehicles** 

Table 2.4

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Number of Units Produced (Thousands)	1 973	2 254	2 321	2 408	2 397	2 571	2 570	3 057	2 962
Value of Shipments* ( NAICS 3361) (Millions of Dollars)	29 573	37 810	44 581	49 477	47 904	52 715	57 603	73 707	73 016
Unit Value (Dollars)	14 989	16 775	19 208	20 547	19 985	20 504	22 414	24 111	24 651

**Source:** Statistics Canada and Ward's Automotive Yearbook

<sup>\*</sup> Preliminary data based on Statistics Canada Catologue Number 31-001-XPB

Industrial Product Price Indices\* by Industry (1997=100)

Table 2.5

	1993	1994	1995	1996	1997	1998	1999	2000
Motor Vehicle Industry (NAICS 3361)	85.5	90.5	93.4	96.5	100.0	109.5	111.5	111.7
Trailer and Bus Body and Trailer Industry (NAICS 3362)	91.1	94.0	98.2	97.8	100.0	102.4	103.9	106.5
Motor Vehicle Parts and Accessories Industry (NAICS 3363)	92.6	95.2	97.9	99.9	100.0	103.2	103.3	103.2

<sup>\*</sup> The Industrial Product Price Indices (IPPI) measure price changes for major commodities sold by Canadian manufacturers

Source: Statistics Canada Catalogue 62-011-XPB

#### Value of Shipments in Canadian Automotive Industries (Millions of Dollars)

Table 2.6

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Motor Vehicle Manufacturers	29 573	37 810	44 581	49 477	47 904	52 715	57 603	73 707	73 016	62 234
Truck Body and Trailer Manufacturers	947	1 138	1 464	1 858	1 997	2 274	2 652	2 657	2 726	2 488
Motor Vehicle Parts and Accessories Manufacturers	12 833	14 741	17 360	19 750	21 059	24 121	26 045	30 424	31 117	29 829
Tire Manufacturing	1 342	1 485	1 570	1 719	1 760	1 810	1 905	2 142	2 809	2 522
Total	44 695	55 174	64 975	72 804	72 720	80 920	88 205	108 930	109 668	97 073

NOTE: All calculations are based on North American Industrial Classification System (NAICS)

Source: Statistics Canada Catalogue Numbers 31-001-XPB, 31-203-XPB and 42-251-XPB

**Canadian Light Vehicle Production by Company** (Units)

Table 2.7

	1993	1994	1995	1996	1997	1998	1999	2000	2000 % Market Share
CAMI (GM/Suzuki)	159 399	170 231	183 510	124 100	99 770	45 063	112 314	107 651	3.69
DaimlerChrysler	643 371	695 630	538 097	705 446	627 157	738 321	796 727	704 081	24.15
Ford	454 165	494 829	533 443	537 082	630 829	627 384	685 535	629 646	21.60
GM	747 471	723 903	907 833	752 371	894 974	750 907	915 507	963 409	33.05
Honda	100 621	108 308	106 133	144 482	165 181	179 797	274 908	326 823	11.21
Hyundai	14 585	0	0	0	0	0	0	0	0.00
Toyota	79 219	85 871	90 136	97 344	108 952	171 739	211 082	183 739	6.30
Volvo	5 504	6 436	7 588	7 127	6 548	8 373	0	0	0.00
Total Production	2 204 335	2 285 208	2 366 740	2 367 952	2 533 411	2 521 584	2 996 073	2 915 349	100.00

Source: Ward's Auto Infobank

U.S. Light Vehicle Production by Company (Units)

Table 2.8

	1993	1994	1995	1996	1997	1998	1999	2000	2000 % Market Share
Auto Alliance (Ford/Mazda)	219 096	247 004	149 562	129 441	100 394	167 268	165 143	107 431	0.87
BMW	0	385	11 877	50 278	62 943	54 802	50 806	83 672	0.68
DaimlerChrysler	1 427 555	1 693 535	1 718 583	1 694 121	1 705 657	1 809 342	1 960 110	1 783 634	14.40
Diamond Star/Mitsubishi	136 022	169 829	218 161	192 961	189 086	157 139	159 702	222 036	1.79
Ford	3 294 217	3 655 762	3 371 424	3 474 706	3 458 342	3 449 023	3 638 879	3 683 008	29.74
GM	4 040 453	4 403 909	4 222 624	3 994 720	4 233 144	3 863 421	4 436 252	4 189 673	33.84
Honda	403 775	498 710	552 995	634 374	648 268	694 703	686 043	677 090	5.47
Mercedes Benz	0	0	84	766	20 205	69 526	78 507	80 591	0.65
Nissan	386 973	444 608	465 786	414 031	398 308	308 837	324 645	377 275	3.05
NUMMI (GM/Toyota)	321 428	363 040	352 675	365 469	357 809	361 859	367 121	344 076	2.78
Subaru-Isuzu	126 558	153 883	180 174	194 871	186 891	216 198	192 200	208 676	1.69
Toyota	234 060	275 678	381 445	385 657	431 811	476 203	533 702	625 154	5.05
Total Production	10 590 137	11 906 343	11 625 390	11 531 395	11 792 858	11 628 321	12 593 110	12 382 316	100.00

Source: Ward's AutoInfoBank

**Mexico Light Vehicle Production by Company** (Units)

Table 2.9

	1993	1994	1995	1996	1997	1998	1999	2000	2000 % Market Share
BMW	0	0	245	487	970	1 932	1 596	1 594	0.09
DaimlerChrysler	222 609	238 888	205 192	360 333	352 847	361 802	332 786	408 372	21.86
Ford	208 530	226 329	213 531	188 228	221 523	186 002	177 205	264 784	14.17
GM	192 279	161 094	198 407	266 012	299 485	314 516	327 526	435 511	23.31
Honda	0	0	135	1 194	3 045	7 194	10 241	18 801	1.01
Mercedes Benz	0	590	814	1 043	955	722	190	0	0.00
Nissan	185 922	193 591	106 794	135 637	172 763	189 787	185 574	313 496	16.78
Porsche	0	0	0	32	20	13	9	0	0.00
Volkswagen	239 003	256 317	191 438	231 078	257 366	338 959	410 308	425 703	22.79
Total Production	1 048 343	1 076 809	916 556	1 184 044	1 308 974	1 400 927	1 445 435	1 868 261	100.00

Source: Ward's AutoInfoBank

**Total North American Light Vehicle Production by Company** (Units)

**Table 2.10** 

	1993	1994	1995	1996	1997	1998	1999	2000	2000 % Market Share
Auto Alliance (Ford/Mazda)	219 096	247 004	149 562	129 441	100 394	167 268	165 143	107 431	0.63
BMW	0	385	12 122	50 765	63 913	56 734	52 402	85 266	0.50
CAMI (GM/Suzuki)	159 399	170 231	183 510	124 100	99 770	45 063	112 314	107 651	0.63
DaimlerChrysler	2 293 535	2 628 053	2 461 872	2 759 900	2 685 661	2 909 465	3 089 623	2 896 087	16.87
Diamond Star/Mitsubishi	136 022	169 829	218 161	192 961	189 086	157 139	159 702	222 036	1.29
Ford	3 956 912	4 376 920	4 118 398	4 200 016	4 310 694	4 262 409	4 501 619	4 577 438	26.67
GM	4 980 203	5 288 906	5 328 864	5 013 103	5 427 603	4 928 844	5 679 285	5 588 593	32.56
Honda	504 396	607 018	659 263	780 050	816 494	881 694	971 192	1 022 714	5.96
Hyundai	14 585	0	0	0	0	0	0	0	0.00
Mercedes Benz	0	590	898	1 809	21 160	70 248	78 697	80 591	0.47
Nissan	572 895	638 199	572 580	549 668	571 071	498 624	510 219	690 771	4.02
NUMMI (GM/Toyota)	321 428	363 040	352 675	365 469	357 809	361 859	367 121	344 076	2.00
Porsche	0	0	0	32	20	13	9	0	0.00
Subaru-Isuzu	126 558	153 883	180 174	194 871	186 891	216 198	192 200	208 676	1.22
Toyota	313 279	361 549	471 581	483 001	540 763	647 942	744 784	808 893	4.71
Volkswagen	239 003	256 317	191 438	231 078	257 366	338 959	410 308	425 703	2.48
Volvo	5 504	6 436	7 588	7 127	6 548	8 373	0	0	0.00
Total Production	13 842 815	15 268 360	14 908 686	15 083 391	15 635 243	15 550 832	17 034 618	17 165 926	100.00

**Source:** Ward's AutoInfoBank and Automotive Reports

Cost of Materials\* in the Canadian Automotive Industry (Millions of Dollars)

**Table 2.11** 

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Motor Vehicles	36 787	37 777	41 416	53 804	62 951	65 386	60 377	52 073	56 862	66 948
Motor Vehicle Body	446	368	252	305	372	414	466	550	677	1 058
Truck Trailer Manufacturing	335	234	166	218	333	512	522	606	665	705
Motor Home, Travel and Camper	178	119	161	185	229	272	267	306	388	412
Total	959	721	579	708	934	1 198	1 255	1 462	1 730	2 175
Automotive Stampings	1 054	1 151	1 474	1 573	1 777	2 105	2 122	2 174	2 267	2 716
Electrical Systems	342	280	312	384	511	615	599	766	772	786
Engines and Assemblies	1 746	950	1 225	1 630	2 040	1 846	2 322	2 460	2 649	3 118
Motor Vehicles Trans. & Power Train	608	949	970	1 117	1 244	1 391	1 448	2 131	2 257	2 814
Plastic Parts	532	481	547	733	944	976	877	1 269	1 316	1 567
Seating and Interior Trim	1 157	1 102	1 208	1 321	1 841	2 174	2 258	2 867	3 012	3 445
Steering and Suspension Comp.	371	283	333	438	620	675	659	710	832	720
Wheel and Brake Systems	427	371	445	503	600	640	692	790	963	985
Other Parts and Accessories	1 636	1 538	1 634	1 508	2 063	2 252	2 285	2 222	2 210	2 340
Total Parts	7 873	7 105	8 148	9 207	11 640	12 674	13 262	15 389	16 278	18 491
Total Industry	45 619	45 603	50 143	63 719	75 525	79 258	74 894	68 924	74 870	87 614

NOTE: All calculations are based on North American Industrial Classification System (NAICS)

**Source:** Statistics Canada Catalogue Number 42-251B and 31-203-XPB

<sup>\*</sup> Represents cost of items used in the manufacturing process

Manufacturing Value Added in the Canadian Automotive Industry (Millions of Dollars)

**Table 2.12** 

	1991	1992	1993	1994	1995	1996	1997	1998	1999
									_
Light vehicles	3 624	4 595	5 252	6 964	7 538	8 997	10 001	11 275	19 969
Medium and Heavy Duty Trucks	416	364	765	1 005	1 184	789	871	1 187	1 945
Total Motor Vehicles	4 040	4 959	6 017	7 969	8 722	9 786	10 872	12 462	21 914
Motor vehicle body	216	220	263	272	345	440	492	520	842
Truck trailer manufacturing	143	107	129	225	278	281	295	381	367
Motor home, travel trailer and camper	70	83	102	122	132	139	191	189	234
Total	429	410	494	619	755	860	978	1 090	1 443
Auto Parts and Components									
Brake systems	350	424	509	589	642	625	703	831	796
Electrical and electronic equipment	274	281	357	488	417	510	592	681	597
Engines and parts	667	603	1 042	1 103	1 465	2 036	2 303	2 943	2 584
Metal stampings	758	873	1 216	1 375	1 562	1 533	1 657	1 520	1 875
Plastic parts	421	478	643	783	768	863	1 039	1 089	1 295
Seating and interior trim	687	696	712	987	1 066	1 182	1 315	1 388	1 535
Steering and suspension components	249	304	378	434	501	536	606	685	744
Transmission and power train parts	824	855	827	688	860	891	1 285	1 394	1 727
Other motor vehicle parts	1 132	1 290	1 331	1 477	1 683	1 638	1 766	1 910	2 072
Total	5 362	5 804	7 015	7 924	8 964	9 814	11 266	12 441	13 225
Total Industry									
	9 831	11 173	13 526	16 512	18 441	20 460	23 116	25 993	36 582

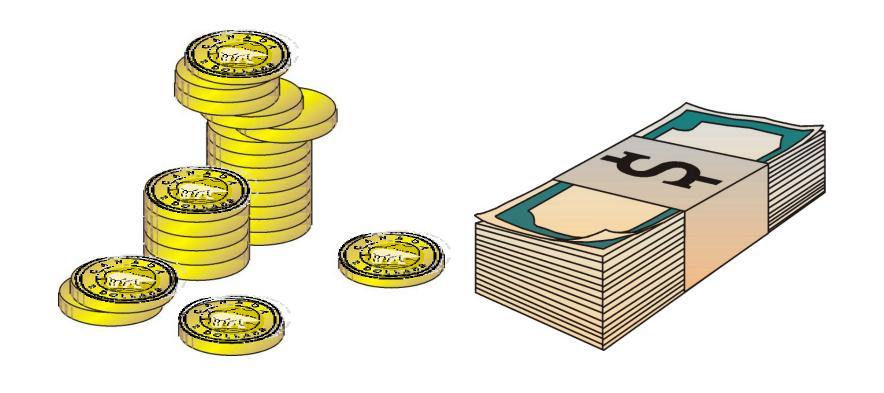
NOTE: Methodology and grouping underwent major modifications starting 1990 (NAICS - North American Industry Classification System)

Manufacturing Value Added in the Canadian Automotive Industry (Millions of Dollars)

**Table 2.12** 

Manufacturing Value Added in the Canadian Automotive Industry (Millions of Dollars)

**Table 2.12** 



# Investment/Research and Development/Exchange Rates/Prices/GDP

**New Capital Expenditures in Canadian Automotive Industries** (Millions of Dollars)

Table 3.1

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Motor Vehicle Manufacturers (NAICS 3361)	1 221	1 247	1 581	1 378	1 606	2 539	3 056	2 593	2 495	1 738
Truck Body Manufacturers (NAICS 3362)	19	10	20	62	80	77	91	36	74	65
Motor Vehicle Parts and Accessories Manufacturers (NAICS 3363)	514	458	630	1 779	1 583	767	996	1 389	755	838
Automotive Dealers (NAICS 441)	470	670	484	692	636	608	720	427	270	318
Total	2 224	2 385	2 715	3 911	3 905	3 991	4 863	4 445	3 594	2 959

**Source:** Statistics Canada catalogue Number 61-205-XPB

## Research and Development in the Motor Vehicle Industries (SIC 323, 324 and 325)

Table 3.2

	1985	1990	1991	1992	1993	1994	1995	1996	1997*	1998*	1999**
Number of R&D Performers	39	46	39	50	53	153	143	131	98	103	94
Total R&D Personnel (Person Years)	1 050	895	860	865	975	1 534	1 478	1 463	1 338	1 480	1 278
Total R&D Expenditures (Millions of Dollars)	78	69	77	83	125	212	185	170	197	183	196
R&D Expenditures as Percentage of Shipments	0.19	0.16	0.19	0.18	0.22	0.29	0.21	0.23	0.24	0.21	0.18

<sup>\*</sup> Revised figures

R&D data for 1991 has been revised due to reclassification of the largest category of R&D performer. Starting in 1996, data may be incomplete due to new methodology adopted by Statistics Canada.

Source: Statistics Canada catologue number 88-202-XIB

<sup>\*\*</sup> Preliminary

Exchange Rates (Canadian dollars)

	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000
U.S. Dollar	1.017	1.169	1.366	1.167	1.372	1.364	1.385	1.484	1.486	1.485
British Pound	2.259	2.720	1.771	2.082	2.166	2.130	2.268	2.459	2.404	2.250
French Franc	0.238	0.277	0.153	0.215	0.275	0.267	0.237	0.252	0.242	0.209
German Mark	0.414	0.644	0.468	0.724	0.959	0.907	0.799	0.845	0.811	0.701
Japanese Yen (000)	3.430	5.190	5.770	8.100	14.680	12.540	11.450	11.400	13.110	13.780

Source: Statistics Canada, Canadian Economic Observer, Catalogue Numbers 11-210-XPB and 11-010-XPB

Average Prices of Passenger Cars (\$ Canadian)

Table 3.4

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
North American	15 290	16 339	16 876	15 766	16 785	17 459	18 478	20 009	21 066	21 937	22 181	22 612	23 537
Japan	15 522	16 228	16 761	15 940	17 128	18 139	18 110	20 875	23 345	22 921	21 474	21 808	22 735
Other Countries	21 013	22 114	22 390	20 519	20 513	22 389	27 136	29 036	33 025	35 259	35 518	33 680	32 255
Total all Countries	17 275	18 227	18 676	17 408	18 142	19 329	21 241	23 307	25 812	26 706	26 391	26 033	26 176

Source: Statistics Canada Catalogue Number 63-007-XPB

Gross Domestic Product (1992 Factor Cost) (\$ Millions)

Table 3.5

	1994	1995	1996	1997	1998	1999	2000
Total Industry	645 957	663 082	672 799	700 039	721 879	753 047	786 725
Manufacturing Industries	108 859	114 239	115 659	122 320	127 335	135 419	143 200
Motor Vehicle Industry	5 855	6 103	5 644	6 005	6 246	7 744	7 650
Truck and bus body and trailer industries	585	682	723	836	929	992	945
Motor vehicle engine and engine parts	633	630	877	1 033	1 144	1 323	1 268
Motor vehicle wiring assemblies	473	423	425	410	393	360	369
Motor vehicle stampings	1 200	1 427	1 486	1 637	1 802	2 140	2 129
Motor vehicle steering and supension parts	547	610	655	714	825	822	799
Motor vehicle wheel and brakes	473	485	444	513	557	605	568
Plastic parts and accessories	748	884	944	1 106	1 093	1 270	1 384
Motor vehicle fabric accessories	640	722	767	831	846	945	897
Other motor vehicle parts and accessories	2 328	2 542	2 596	3 222	3 232	3 807	4 111
Motor vehicle parts and accessories industries	7 042	7 723	8 194	9 466	9 892	11 272	11 525
Total Automotive Industry	13 482	14 508	14 561	16 307	17 067	20 008	20 120
Percent of Manufacturing GDP	12.38	12.70	12.59	13.33	13.40	14.77	14.05
Percent of Total Industry GDP	2.09	2.19	2.16	2.33	2.36	2.66	2.56

 $\textbf{NOTE:} \hspace{0.2cm} \textbf{All calculations are based on Standard Industrial Classification (SIC) code} \\$ 

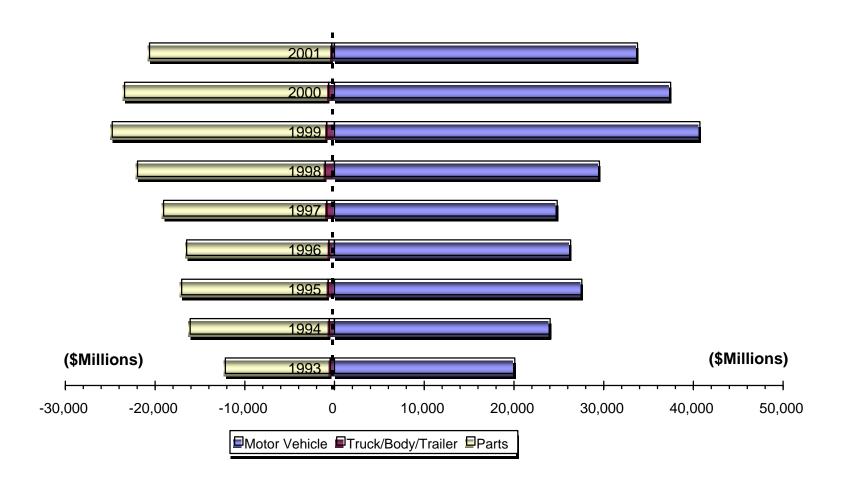
**Source:** Statistics Canada, Catalogue Number 15-001-XPB



## Trade Data

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Canadian Exports				ı					
Motor Vehicle	35 491 711	42 864 242	46 165 148	45 400 015	49 308 181	54 696 092	68 767 738	67 505 593	63 413 249
Truck/Body/Trailer Manufacturing	363 285	371 958	420 819	461 987	551 121	734 098	928 877	1 104 076	1 127 735
Automotive Stampings	1 996 859	2 416 010	2 375 278	2 496 849	2 672 940	2 700 571	3 111 978	3 440 981	3 328 844
Electrical Systems	218 217	271 207	249 158	273 748	291 462	353 485	379 803	408 041	433 229
Engines and Assemblies	2 320 648	2 495 055	2 351 633	3 329 488	3 714 773	4 533 037	5 493 825	5 541 416	4 984 578
Motor Vehicle Trans. & Power Train	1 572 683	1 435 823	1 760 836	1 445 493	1 964 617	2 395 972	3 269 366	3 315 741	3 163 357
Plastic Part	728 436	986 739	1 093 749	1 302 603	1 583 125	1 633 774	1 875 654	2 210 966	2 025 466
Seating and Interior Trim	532 100	1 017 658	974 332	1 068 823	1 199 879	1 385 913	1 346 948	1 462 270	1 346 863
Steering and Suspension Component	590 881	705 710	716 464	663 237	625 278	596 968	685 652	716 030	709 499
Wheel and Brake Systems	1 044 816	1 090 183	1 167 843	1 181 447	1 241 275	1 478 660	1 516 362	1 333 941	1 254 378
Other Parts and Accessories	2 269 228	2 639 870	2 618 612	2 620 340	2 679 374	2 780 591	3 072 755	3 264 469	3 209 385
Total Exports	47 128 864	56 294 455	59 893 872	60 244 030	65 832 025	73 289 161	90 448 958	90 303 524	84 996 583
Canadian Imports									
Motor Vehicle	15 402 737	18 835 544	18 593 402	19 084 392	24 490 954	25 165 055	28 047 330	30 035 336	29 638 235
Truck/Body/Trailer Manufacturing	826 331	948 198	1 122 580	1 065 384	1 384 864	1 758 823	1 792 415	1 754 796	1 419 233
Automotive Stampings	1 825 953	1 770 721	2 223 966	2 143 981	2 398 253	2 204 357	2 370 617	2 315 647	2 122 113
Electrical Systems	2 052 632	2 557 586	2 600 035	2 681 291	2 998 467	3 266 198	3 707 551	3 644 741	3 269 835
Engines and Assemblies	4 679 425	5 711 494	5 893 820	6 498 653	7 217 408	8 753 342	10 702 131	10 811 634	9 538 122
Motor Vehicle Trans. & Power Train	4 180 331	4 968 390	5 269 664	5 148 712	6 203 116	6 971 381	7 906 977	7 506 221	6 832 097
Plastic Part	67 843	134 339	144 223	138 238	165 573	197 148	240 698	234 138	217 644
Seating and Interior Trim	988 826	1 213 140	807 662	845 072	945 786	952 397	1 039 878	1 111 019	1 205 815
Steering and Suspension Component	1 813 140	2 081 422	2 175 199	2 097 585	2 488 779	2 849 222	3 313 074	3 332 416	3 060 941
Wheel and Brake Systems	1 279 635	1 557 561	1 619 264	1 662 016	1 915 972	2 020 662	2 205 496	2 022 989	1 909 768
Other Parts and Accessories	6 096 387	8 581 419	8 912 430	9 042 833	9 858 922	11 579 539	13 173 903	13 467 104	12 619 332
Total Imports	39 213 240	48 359 814	49 362 245	50 408 157	60 068 094	65 718 124	74 500 070	76 236 041	71 833 135
Trade Balances									
Motor Vehicle	20 088 974	24 028 698	27 571 746	26 315 623	24 817 227	29 531 037	40 720 408	37 470 257	33 775 014
Truck/Body/Trailer Manufacturing	- 463 046	- 576 240	- 701 761	- 603 397	- 833 743	-1 024 725	- 863 538	- 650 720	- 291 498
Automotive Stampings	170 906	645 289	151 312	352 868	274 687	496 214	741 361	1 125 334	1 206 731
Electrical Systems	-1 834 415	-2 286 379	-2 350 877	-2 407 543	-2 707 005	-2 912 713	-3 327 748	-3 236 700	-2 836 606
Engines and Assemblies	-2 358 777	-3 216 439	-3 542 187	-3 169 165	-3 502 635	-4 220 305	-5 208 306	-5 270 218	-4 553 544
Motor Vehicle Trans. & Power Train	-2 607 648	-3 532 567	-3 508 828	-3 703 219	-4 238 499	-4 575 409	-4 637 611	-4 190 480	-3 668 740
Plastic Part	660 593	852 400	949 526	1 164 365	1 417 552	1 436 626	1 634 956	1 976 828	1 807 822
Seating and Interior Trim	- 456 726	- 195 482	166 670	223 751	254 093	433 516	307 070	351 251	141 048
Steering and Suspension Component	-1 222 259	-1 375 712	-1 458 735	-1 434 348	-1 863 501	-2 252 254	-2 627 422	-2 616 386	-2 351 442
Wheel and Brake Systems	- 234 819	- 467 378	- 451 421	- 480 569	- 674 697	- 542 002	- 689 134	- 689 048	- 655 390
Other Parts and Accessories	-3 827 159	-5 941 549	-6 293 818	-6 422 493	-7 179 548	-8 798 948	-10 101 148	-10 202 635	-9 409 947
					-				
Total Trade Balances	7 915 624	7 934 641	10 531 627	9 835 873	5 763 931	7 571 037	15 948 888	14 067 483	13 163 448

NOTE: All calculations are based on North American Industry Classification System (NAICS)



Canada-U.S. Trade in Automotive Products (Thousands of Dollars )

Table 4.2

(Thousands of Dollars )									
	1993	1994	1995	1996	1997	1998	1999	2000	2001
Canadian Exports									
Motor Vehicle	34 971 575	42 221 051	45 166 159	44 774 914	48 765 470	54 235 843	68 128 454	66 896 838	62 938 946
Truck/Body/Trailer Manufacturing	331 627	340 917	389 149	430 227	516 838	699 051	897 776	1 076 411	1 086 037
Automotive Stampings	1 760 625	2 145 604	2 032 261	2 244 939	2 349 229	2 476 491	2 922 584	3 124 461	3 050 623
Electrical Systems	198 421	241 949	228 299	249 037	272 176	330 079	358 894	387 601	408 337
Engines and Assemblies	2 261 166	2 430 528	2 243 829	3 232 953	3 630 082	4 460 365	5 408 205	5 418 992	4 740 597
Motor Vehicle Trans. & Power Train	1 450 396	1 339 087	1 522 072	1 271 720	1 689 304	2 273 650	3 055 810	3 024 014	2 923 319
Plastic Part	563 088	798 857	890 860	1 176 230	1 305 548	1 441 981	1 727 689	1 906 529	1 777 010
Seating and Interior Trim	445 635	914 369	867 275	1 004 895	1 058 829	1 276 659	1 221 667	1 251 101	1 171 994
Steering and Suspension Component	550 085	659 532	650 913	610 392	584 138	567 068	655 653	682 018	672 095
Wheel and Brake Systems	1 030 304	1 069 015	1 148 518	1 162 825	1 218 625	1 452 910	1 485 811	1 307 506	1 229 734
Other Parts and Accessories	2 004 733	2 357 282	2 244 179	2 300 129	2 350 578	2 527 055	2 863 401	3 001 045	2 977 552
Total Exports	45 567 655	54 518 191	57 383 514	58 458 261	63 740 817	71 741 152	88 725 944	88 076 516	82 976 244
Canadian Imports									
Motor Vehicle	11 281 172	14 971 691	14 735 272	15 172 131	18 907 507	19 379 448	20 963 186	21 243 493	19 891 301
Truck/Body/Trailer Manufacturing	779 087	893 252	1 069 398	1 016 416	1 335 356	1 669 078	1 729 262	1 672 954	1 342 414
Automotive Stampings	1 638 311	1 663 129	2 188 065	2 111 813	2 372 946	2 173 217	2 338 556	2 281 148	2 089 897
Electrical Systems	1 728 127	2 061 719	1 965 383	1 887 593	2 018 670	2 083 482	2 436 371	2 345 907	2 231 305
Engines and Assemblies	3 690 953	4 394 666	4 620 533	5 181 556	6 079 382	7 975 170	9 429 316	9 584 207	8 647 770
Motor Vehicle Trans. & Power Train	3 657 988	4 403 781	4 680 757	4 593 358	5 682 697	6 319 324	7 082 918	6 720 589	6 188 682
Plastic Part	50 591	101 662	108 755	108 314	138 067	175 830	222 478	210 078	194 421
Seating and Interior Trim	626 801	804 278	631 144	683 967	780 536	722 719	787 712	784 835	790 378
Steering and Suspension Component	1 613 584	1 847 559	1 949 162	1 910 322	2 294 498	2 611 717	3 037 864	3 058 277	2 787 764
Wheel and Brake Systems	1 110 706	1 373 756	1 422 107	1 464 706	1 686 857	1 804 291	1 955 832	1 756 488	1 630 314
Other Parts and Accessories	5 295 745	7 452 180	7 921 797	8 240 555	9 000 544	10 326 010	11 930 444	12 062 238	11 271 608
Total Imports	31 473 065	39 967 673	41 292 373	42 370 731	50 297 060	55 240 286	61 913 939	61 720 214	57 065 854
Trade Balances									
Motor Vehicle	23 690 403	27 249 360	30 430 887	29 602 783	29 857 963	34 856 395	47 165 268	45 653 345	43 047 645
Truck/Body/Trailer Manufacturing	- 447 460	- 552 335	- 680 249	- 586 189	- 818 518	- 970 027	- 831 486	- 596 543	- 256 377
Automotive Stampings	122 314	482 475	- 155 804	133 126	- 23 717	303 274	584 028	843 313	960 726
Electrical Systems	-1 529 706	-1 819 770	-1 737 084	-1 638 556	-1 746 494	-1 753 403	-2 077 477	-1 958 306	-1 822 968
Engines and Assemblies	-1 429 787	-1 964 138	-2 376 704	-1 948 603	-2 449 300	-3 514 805	-4 021 111	-4 165 215	-3 907 173
Motor Vehicle Trans. & Power Train	-2 207 592	-3 064 694	-3 158 685	-3 321 638	-3 993 393	-4 045 674	-4 027 108	-3 696 575	-3 265 363
Plastic Part	512 497	697 195	782 105	1 067 916	1 167 481	1 266 151	1 505 211	1 696 451	1 582 589
Seating and Interior Trim	- 181 166	110 091	236 131	320 928	278 293	553 940	433 955	466 266	381 616
Steering and Suspension Component	-1 063 499	-1 188 027	-1 298 249	-1 299 930	-1 710 360	-2 044 649	-2 382 211	-2 376 259	-2 115 669
Wheel and Brake Systems	- 80 402	- 304 741	- 273 589	- 301 881	- 468 232	- 351 381	- 470 021	- 448 982	- 400 580
Other Parts and Accessories	-3 291 012	-5 094 898	-5 677 618	-5 940 426	-6 649 966	-7 798 955	-9 067 043	-9 061 193	-8 294 056
Total Trade Balances	14 094 590	14 550 518	16 091 141	16 087 530	13 443 757	16 500 866	26 812 005	26 356 302	25 910 390

NOTE: All calculations are based on North American Industry Classification System (NAICS)

(Thousands of Donars )	1993	1994	1995	1996	1997	1998	1999	2000	2001
Canadian Exports									
Motor Vehicle	4 970	61 407	43 583	64 265	36 726	20 138	81 627	112 588	118 034
Truck/Body/Trailer Manufacturing	360	286	41	200	13	149	37	178	273
Automotive Stampings	27 264	22 984	38 202	35 849	32 201	33 275	32 082	41 291	48 112
Electrical Systems	862	483	388	126	74	354	326	391	1 179
Engines and Assemblies	11 978	14 812	44 798	41 020	47 280	41 791	48 063	55 563	92 911
Motor Vehicle Trans. & Power Train	43 143	8 954	45 212	53 677	67 303	59 769	83 760	127 319	129 254
Plastic Part	15 752	12 264	12 919	13 366	7 502	9 494	8 998	10 197	14 418
Seating and Interior Trim	10 665	9 683	9 092	6 054	4 276	13 222	50 108	58 355	51 454
Steering and Suspension Component	4 732	4 994	8 870	7 141	8 635	8 976	8 693	11 447	13 078
Wheel and Brake Systems	2 081	6 246	2 614	3 165	5 401	11 221	19 513	15 396	12 757
Other Parts and Accessories	23 434	19 644	53 507	57 005	69 115	61 392	65 192	89 842	86 126
Total Exports	145 241	161 757	259 226	281 868	278 526	259 781	398 399	522 567	567 596
Canadian Imports									
Motor Vehicle	962 186	1 159 075	1 568 463	1 669 416	1 744 300	1 401 094	1 672 299	2 730 478	2 910 902
Truck/Body/Trailer Manufacturing	615	4 374	5 207	3 054	3 827	30 835	17 881	28 749	17 739
Automotive Stampings	143 813	64 686	5 185	5 403	2 505	2 591	2 490	5 098	5 122
Electrical Systems	181 234	288 319	435 755	559 454	735 381	902 832	911 580	866 897	703 604
Engines and Assemblies	238 031	360 024	317 434	365 900	274 608	209 907	426 901	454 855	276 605
Motor Vehicle Trans. & Power Train	106 768	56 460	3 083	3 308	6 851	25 878	44 756	47 296	34 527
Plastic Part	1 702	3 760	12 331	12 270	10 181	7 346	1 095	1 479	1 762
Seating and Interior Trim	320 654	369 981	119 353	110 396	132 927	204 665	222 297	282 446	379 826
Steering and Suspension Component	38 393	37 206	36 996	32 785	37 017	48 472	55 166	50 792	45 073
Wheel and Brake Systems	23 362	26 554	30 090	43 425	60 652	53 757	56 477	59 413	55 875
Other Parts and Accessories	195 441	334 277	244 625	166 360	201 931	326 354	419 767	405 338	390 623
Total Imports	2 212 199	2 704 716	2 778 522	2 971 771	3 210 180	3 213 731	3 830 709	4 932 841	4 821 658
Trade Balances									
Motor Vehicle	- 957 216	-1 097 668	-1 524 880	-1 605 151	-1 707 574	-1 380 956	-1 590 672	-2 617 890	-2 792 868
Truck/Body/Trailer Manufacturing	- 255	- 4 088	- 5 166	- 2 854	- 3 814	- 30 686	- 17 844	- 28 571	- 17 466
Automotive Stampings	- 116 549	- 41 702	33 017	30 446	29 696	30 684	29 592	36 193	42 990
Electrical Systems	- 180 372	- 287 836	- 435 367	- 559 328	- 735 307	- 902 478	- 911 254	- 866 506	- 702 425
Engines and Assemblies	- 226 053	- 345 212	- 272 636	- 324 880	- 227 328	- 168 116	- 378 838	- 399 292	- 183 694
Motor Vehicle Trans. & Power Train	- 63 625	- 47 506	42 129	50 369	60 452	33 891	39 004	80 023	94 727
Plastic Part	14 050	8 504	588	1 096	- 2 679	2 148	7 903	8 718	12 656
Seating and Interior Trim	- 309 989	- 360 298	- 110 261	- 104 342	- 128 651	- 191 443	- 172 189	- 224 091	- 328 372
Steering and Suspension Component	- 33 661	- 32 212	- 28 126	- 25 644	- 28 382	- 39 496	- 46 473	- 39 345	- 31 995
Wheel and Brake Systems	- 21 281	- 20 308	- 27 476	- 40 260	- 55 251	- 42 536	- 36 964	- 44 017	- 43 118
Other Parts and Accessories	- 172 007	- 314 633	- 191 118	- 109 355	- 132 816	- 264 962	- 354 575	- 315 496	- 304 497
Total Trade Balances	-2 066 958	-2 542 959	-2 519 296	-2 689 903	-2 931 654	-2 953 950	-3 432 310	-4 410 274	-4 254 062

NOTE: All calculations are based on North American Industry Classification System (NAICS)

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Canadian Exports									
Motor Vehicle	31 952	56 967	128 287	107 066	65 479	52 893	149 616	144 006	119 217
Truck/Body/Trailer Manufacturing	4 802	7 882	10 173	7 722	6 572	5 243	1 433	1 961	1 400
Automotive Stampings	3 339	3 059	2 096	1 443	4 800	3 269	2 144	2 051	2 232
Electrical Systems	335	588	509	1 724	592	335	795	915	1 100
Engines and Assemblies	2 241	1 484	876	827	1 541	818	631	794	752
Motor Vehicle Trans. & Power Train	1 052	581	1 070	931	1 653	2 838	1 100	1 154	2 020
Plastic Part	2 574	2 926	772	580	2 213	1 045	700	736	457
Seating and Interior Trim	1 769	6 252	1 797	633	574	350	365	437	672
Steering and Suspension Component	465	287	518	333	871	754	493	439	639
Wheel and Brake Systems	111	107	95	520	1 456	754	1 066	730	313
Other Parts and Accessories	39 797	42 610	24 320	31 743	33 906	20 154	10 113	4 599	4 014
Total Exports	88 437	122 743	170 513	153 522	119 657	88 453	168 456	157 822	132 816
Canadian Imports									
Motor Vehicle	2 445 218	1 699 070	1 405 073	1 267 092	2 561 275	2 695 552	3 120 233	3 420 042	3 670 190
Truck/Body/Trailer Manufacturing	2 818	1 679	2 166	2 499	3 170	3 922	9 011	7 151	5 430
Automotive Stampings	19 955	24 741	23 677	17 322	14 184	13 891	16 554	15 339	12 078
Electrical Systems	73 816	71 823	81 298	90 814	69 215	69 819	75 100	106 746	115 467
Engines and Assemblies	630 639	812 719	775 266	776 526	674 501	378 960	640 117	482 054	305 473
Motor Vehicle Trans. & Power Train	305 445	383 165	460 817	360 378	335 380	427 576	603 304	590 004	447 603
Plastic Part	3 315	5 968	7 393	4 171	3 604	2 901	3 802	5 505	4 185
Seating and Interior Trim	26 706	23 584	35 866	21 749	11 357	7 668	17 876	27 559	18 025
Steering and Suspension Component	87 655	80 574	90 673	66 433	58 391	76 028	93 133	106 882	116 239
Wheel and Brake Systems	56 801	63 963	69 514	42 659	38 874	36 730	60 601	54 072	63 952
Other Parts and Accessories	330 241	409 017	377 604	262 399	232 485	433 288	325 810	474 833	411 037
Total Imports	3 982 609	3 576 303	3 329 347	2 912 042	4 002 436	4 146 335	4 965 541	5 290 187	5 169 679
Trade Balances									
Motor Vehicle	-2 413 266	-1 642 103	-1 276 786	-1 160 026	-2 495 796	-2 642 659	-2 970 617	-3 276 036	-3 550 973
Truck/Body/Trailer Manufacturing	1 984	6 203	8 007	5 223	3 402	1 321	- 7 578	- 5 190	- 4 030
Automotive Stampings	- 16 616	- 21 682	- 21 581	- 15 879	- 9 384	- 10 622	- 14 410	- 13 288	- 9 846
Electrical Systems	- 73 481	- 71 235	- 80 789	- 89 090	- 68 623	- 69 484	- 74 305	- 105 831	- 114 367
Engines and Assemblies	- 628 398	- 811 235	- 774 390	- 775 699	- 672 960	- 378 142	- 639 486	- 481 260	- 304 721
Motor Vehicle Trans. & Power Train	- 304 393	- 382 584	- 359 308	- 334 449	- 425 923	- 600 466	- 588 904	- 588 850	- 445 583
Plastic Part	- 741	- 3 042	- 6 621	- 3 591	- 1 391	- 1 856	- 3 102	- 4 769	- 3 728
Seating and Interior Trim	- 24 937	- 17 332	- 34 069	- 21 116	- 10 783	- 7 318	- 17 511	- 27 122	- 17 353
Steering and Suspension Component	401	- 87 368	- 80 056	- 90 340	- 65 562	- 57 637	- 75 535	- 106 443	- 115 600
Wheel and Brake Systems	- 56 690	- 63 856	- 69 419	- 42 139	- 37 418	- 35 976	- 59 535	- 53 342	- 63 639
Other Parts and Accessories	- 290 444	- 366 407	- 353 284	- 230 656	- 198 579	- 413 134	- 315 697	- 470 234	- 407 023
Total Trade Balances	-3 894 172	-3 453 560	-3 158 834	-2 758 520	-3 882 779	-4 057 882	-4 797 085	-5 132 365	-5 036 863

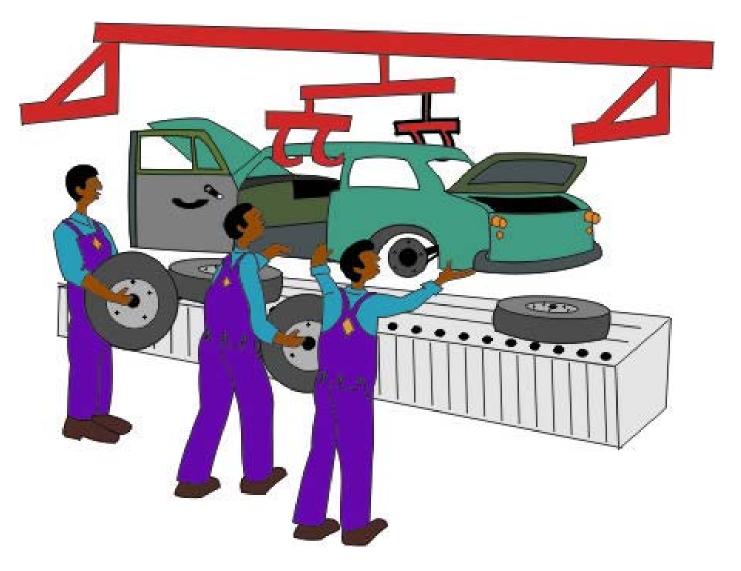
NOTE: All calculations are based on North American Industry Classification System (NAICS)

## Canadian Trade in Automotive Products (Other Countries) (Thousands of Dollars )

Ta	ıbl	le	4	5

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Canadian Exports									
Motor Vehicle	483 214	524 817	827 119	453 770	440 506	387 218	408 041	352 161	237 052
Truck/Body/Trailer Manufacturing	26 496	22 873	21 456	23 838	27 698	29 655	29 631	25 526	40 025
Automotive Stampings	205 631	244 363	302 719	214 618	286 710	187 536	155 168	273 178	227 877
Electrical Systems	18 599	28 187	19 962	22 861	18 620	22 717	19 788	19 134	22 613
Engines and Assemblies	45 263	48 231	62 130	54 688	35 870	30 063	36 926	66 067	150 318
Motor Vehicle Trans. & Power Train	78 092	87 201	192 482	119 165	206 357	59 715	128 696	163 254	108 764
Plastic Part	147 022	172 692	189 198	112 427	267 862	181 254	138 267	293 504	233 581
Seating and Interior Trim	74 031	87 354	96 168	57 241	136 200	95 682	74 808	152 377	122 743
Steering and Suspension Component	35 599	40 897	56 163	45 371	31 634	20 170	20 813	22 126	23 687
Wheel and Brake Systems	12 320	14 815	16 616	14 937	15 793	13 775	9 972	10 309	11 574
Other Parts and Accessories	201 264	220 334	296 606	231 463	225 775	171 990	134 049	168 983	141 693
Total Exports	1 327 531	1 491 764	2 080 619	1 350 379	1 693 025	1 199 775	1 156 159	1 546 619	1 319 927
Canadian Imports									
Motor Vehicle	714 161	1 005 708	884 594	975 753	1 277 872	1 688 961	2 291 612	2 641 323	3 165 842
Truck/Body/Trailer Manufacturing	43 811	48 893	45 809	43 415	42 511	54 988	36 261	45 942	53 650
Automotive Stampings	23 874	18 165	7 039	9 443	8 618	14 658	13 017	14 062	15 016
Electrical Systems	69 455	135 725	117 599	143 430	175 201	210 065	284 500	325 191	219 459
Engines and Assemblies	119 802	144 085	180 587	174 671	188 917	189 305	205 797	290 518	308 274
Motor Vehicle Trans. & Power Train	110 130	124 984	125 007	191 668	178 188	198 603	175 999	148 332	161 285
Plastic Part	12 235	22 949	15 744	13 483	13 721	11 071	13 323	17 076	17 276
Seating and Interior Trim	14 665	15 297	21 299	28 960	20 966	17 345	11 993	16 179	17 586
Steering and Suspension Component	73 508	116 083	98 368	88 045	98 873	113 005	126 911	116 465	111 865
Wheel and Brake Systems	88 766	93 288	97 553	111 226	129 589	125 884	132 586	153 016	159 627
Other Parts and Accessories	274 960	385 945	368 404	373 519	423 962	493 887	497 882	524 695	546 064
Total Imports	1 545 367	2 111 122	1 962 003	2 153 613	2 558 418	3 117 772	3 789 881	4 292 799	4 775 944
Trade Balances									
Motor Vehicle	- 230 947	- 480 891	- 57 475	- 521 983	- 837 366	-1 301 743	-1 883 571	-2 289 162	-2 928 790
Truck/Body/Trailer Manufacturing	- 17 315	- 26 020	- 24 353	- 19 577	- 14 813	- 25 333	- 6 630	- 20 416	- 13 625
Automotive Stampings	181 757	226 198	295 680	205 175	278 092	172 878	142 151	259 116	212 861
Electrical Systems	- 50 856	- 107 538	- 97 637	- 120 569	- 156 581	- 187 348	- 264 712	- 306 057	- 196 846
Engines and Assemblies	- 74 539	- 95 854	- 118 457	- 119 983	- 153 047	- 159 242	- 168 871	- 224 451	- 157 956
Motor Vehicle Trans. & Power Train	- 32 038	- 37 783	67 475	- 72 503	- 142 318	- 138 888	- 47 303	14 922	- 52 521
Plastic Part	134 787	149 743	173 454	98 944	192 636	170 183	124 944	276 428	216 305
Seating and Interior Trim	59 366	72 057	74 869	28 281	246 896	78 337	62 815	136 198	105 157
Steering and Suspension Component	- 37 909	- 75 186	- 42 205	- 42 674	37 327	- 92 835	- 106 098	- 94 339	- 88 178
Wheel and Brake Systems	- 76 446	- 78 473	- 80 937	- 96 289	- 97 955	- 112 109	- 122 614	- 142 707	- 148 053
Other Parts and Accessories	- 73 696	- 165 611	- 71 798	- 142 056	- 408 169	- 321 897	- 363 833	- 355 712	- 404 371
Total Trade Balances	- 217 836	- 619 358	118 616	- 803 234	- 865 393	-1 917 997	-2 633 722	-2 746 180	-3 456 017

NOTE: All calculations are based on North American Industry Classification System (NAICS)



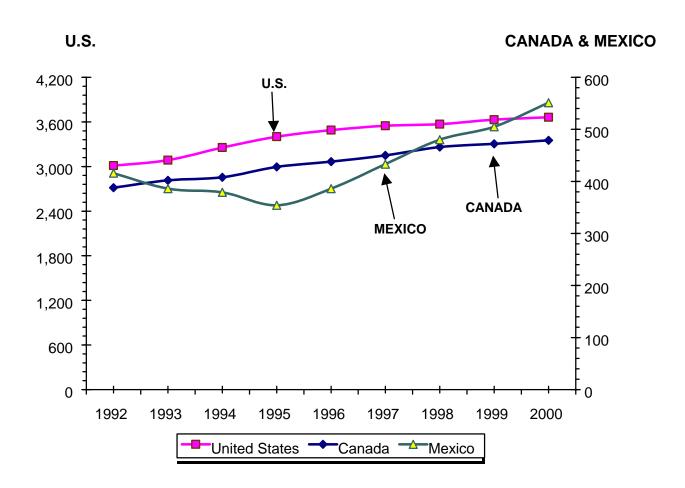
# Employment

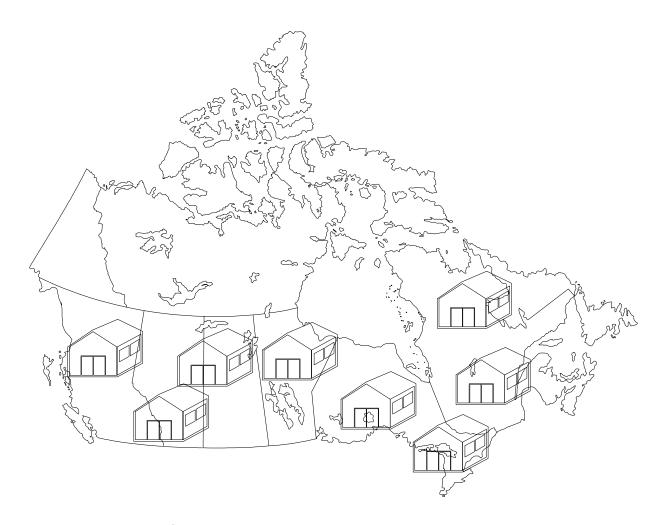
	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada									
Total Manufacturing	127	133	141	145	152	152	163	168	172
Motor Vehicle Assembly (NAICS 3361)	53	55	56	56	58	55	58	57	56
Truck Bodies and Trailers (NAICS 3362)	11	10	12	12	14	16	18	18	18
Automotive Parts and Accessories (NAICS 3363)*	63	68	73	77	80	81	87	93	98
Total Retail	261	269	267	283	286	298	303	304	307
Automotive Dealers/Distribution (NAICS 415, 441 excl. 4413)	129	130	125	134	136	143	148	149	150
Aftermarket (NAICS 8111, 4413, 415 excl. 4151)**	132	139	142	149	150	155	155	155	157
Total Automotive Industries	388	402	408	428	438	450	466	472	479
United States									
Total Manufacturing	867	889	962	1 028	1 032	1 048	1 051	1 075	1 071
Motor Vehicle Assembly (SIC 3711)	315	320	341	357	346	348	345	353	351
Truck and Bus Bodies (SIC 3713)	34	35	38	39	39	41	43	48	48
Parts and Accessories (SIC 3714)*	420	433	475	516	530	544	547	552	550
Automotive Stamping (SIC 3465)	98	101	108	116	117	115	116	122	122
Total Retail	2 145	2 196	2 294	2 374	2 457	2 500	2 518	2 554	2 592
Automotive Dealers (SIC 551)	875	908	963	996	1 031	1 046	1 047	1 080	1 114
Aftermarket (SIC 501, 554, 7538)**	1 270	1 288	1 331	1 378	1 426	1 454	1 471	1 474	1 478
Total Automotive Industries	3 012	3 085	3 256	3 402	3 489	3 548	3 569	3 629	3 663
Mexico									
Vehicle manufacturers	60	55	50	42	44	49	54	57	60
Components industry	285	258	256	253	280	320	356	377	413
of which Maquiladora components industry***	126	101	103	119	136	159	173	189	190
Dealer network	71	73	74	59	62	64	70	71	78
Total Automotive Industries	416	386	379	354	386	433	480	505	551
Total North American Employment	3 816	3 873	4 043	4 184	4 313	4 431	4 515	4 606	4 693

<sup>\*</sup> Includes aftermarket manufacturing

<sup>\*\*</sup> Includes wholesale and retail stores, service stations and repair shops

<sup>\*\*\*</sup> Estimate - 2000





# Automotive Plants in Canada

### **Major Motor Vehicle Assembly Plants in Canada**

Table 6.1

Company/Plant Name	Location	Products
Light Vehicle Manufacturers		1
Canadian Automobile Mfg. Inc. (CAMI http://www.cami.ca/start.htm	Ingersoll, Ontario	Suzuki Swift, Suzuki Vitara, Chevrolet Tracker
Daimler Chrysler Canada Ltd.	Bramalea, Ontario	Concorde, Dodge Intrepid, LHS, 300M
http://www.daimlerchrysler.ca	Windsor, Ontario	Dodge Caravan, Grand Caravan, Plymouth Voyager, Grand Voyager
	Windsor, Ontario (Pilette Road)	Dodge Ram, Ram wagon
Ford of Canada Ltd.	Oakville, Ontario	Windstar, F series
http://www.ford.ca/	Oakville, Ontario	F series
	St. Thomas, Ontario	Crown Victoria, Mercury Grand Marquis
Honda Canada Manufacturing Inc.	Alliston, Ontario	Acura EL, Civic, Acura MD-X
http://www.honda.ca	Alliston, Ontario	Odyssey
General Motors of Canada Ltd.	Oshawa, Ontario	Lumina, Monte Carlo, Impala
http://www.gmcanada.com/english/home/home.html	Oshawa, Ontario	Century, Regal, Impala
	Oshawa, Ontario	GMC Sierra (extended cab), Silverado (extended cab)
	Sainte-Thérèse, Quebec	Camaro/ Firebird
Toyota Motor Manufacturing Canada Inc.	Cambridge, Ontario	Corolla
http://www.toyota.ca/toyota/homeE.html	Cambridge, Ontario	Lexus RX-300
Heavy-Duty Truck Manufacturers		
Navistar International Corporation Canada http://www.navistar.com	Chatham, Ontario	Heavy-duty trucks
Sterling Trucks (Division of Freightliner of Canada Ltd. http://www.sterlingtrucks.com	St. Thomas, Ontario	Heavy-duty trucks
Western Star Trucks Inc. http://www.westernstartrucks.com	Kelowna, British Colubmia	Heavy-duty trucks

### Major Motor Vehicle Assembly Plants in Canada

Table 6.1

Bus Manufacturers		
Canadian Bluebird Coach Ltd.	Brantford, Ontario	School buses
DaimlerChrysler Canada Ltd. http://www.daimlerchrysler.ca	Windsor, Ontario	Mini-buses (10-15 passenger)
Entreprise Michel Corbeil http://www.autobus-corbeil.qc.ca/	Ville de Laurentide, Quebec	School buses
Girardin Inc. http://girardin.com/	Drummondville, Quebec	Mini school buses
Novabus http://novabus.com/	Saint-Eustache, Quebec	Urban transit buses
Motor Coach Industries Ltd. http://www.motorcoach.ca	Winnipeg, Manitoba	Highway buses
New Flyer Industries Ltd. http://www.newflyer.com	Winnipeg, Manitoba	Urban transit buses
Orion http://www.orionbus.com/	Mississauga, Ontario	Urban transit buses
Prévost Car Inc. http://www.prevostcar.com	Sainte-Claire, Quebec	Highway buses
Thomas Built Buses of Canada http://www.thomasbus.com/base/	Woodstock, Ontario	School buses



Glossary

**Aftermarket (Replacement Market)** - all products and services used in the repair and maintenance of vehicles.

**Aftermarket part** - goods not for use as original equipment in the production of light-duty vehicles or heavy-duty vehicles, i.e. products and services used in the repair and maintenance of these vehicles, or accessories.

**Agent or broker** - an intermediary with legal authority to operate on behalf of the manufacturer.

American Automobile Labelling Act (AALA) - regulations requiring vehicle manufacturers to include content information on vehicle labels for cars and trucks for sale in the U.S. after October 1, 1994.

**Anti-lock braking system (ABS)** - System that automatically controls wheel slip or prevents sustained wheel-locking on braking.

Asia Pacific Economic Cooperation (APEC) - An organization established in 1989 to promote trade and investment in the Pacific Basin. APEC now comprises eighteen countries located in and around the Pacific Ocean: Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, Malaysia, Mexico, New Zealand, Papua New Guinea, the Philippines, Singapore, South Korea, Taiwan, Thailand, and the United States.

Association of South East Asian Nations (ASEAN) - an organization of states (including Brunei, Myanmar, Burma, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, and Vietnam) founded in 1967 to present an united front that addresses the political, economic, and strategic dynamics of the region.

**Auto Pact base year** - With respect to the Auto Pact, the 12 month period beginning on August 1, 1963, and ending on July 31, 1964.

**Auto Pact Canadian value added** - the aggregate of the costs of parts, material, labour costs, and transportation costs that are reasonably attributed to the production of vehicles or parts by manufacturers producing vehicles in Canada.

**Automated Guided Vehicle System (AGVS)** - vehicles equipped with automatic guidance equipment which follow a prescribed path, stopping at each machining or assembly station for manual loading and unloading of parts.

**Autodealership or auto dealer** - a retail outlet that carries one (or in some cases in the U.S., a number of) manufacturer's product lines and sells to general consumers and fleet operators. The outlet will also provide service and sell parts for the brands of vehicles that it carries. In some instances, a dealer may dual for another manufacturer's product line.

**Automobile** - four-wheeled passenger motor vehicle having a seating capacity for not more than 10 people including police cars and racing cars but not including ambulances or hearses.

**Auto parts store** - jobber and retail auto parts stores which primarily sell automotive products and conduct business at the retail level.

**Average weekly earnings** - gross taxable payrolls divided by the number of employees; includes overtime pay.

Big Three - General Motors, Ford and Chrysler.

**Body shop** - service outlet specializing in vehicle body repair work.

**Bus** - passenger motor vehicle or chassis having seating capacity for more than 10 people.

**Buying decisions** - the act of determining whether or not a product purchase or repair, will be made, and/or which product or service will be purchased.

**Canada-U.S. Free Trade Agreement (FTA)** - Implemented in January 1989 to eliminate all tariffs on U.S. and Canadian goods by January 1998 and to reduce or eliminate many non-tariff barriers.

Canadian Automotive Repair and Service Council (CARS) - a not-for-profit organization established to serve the human resource and training needs of the Canadian car and truck repair and service industry.

Canadian cross border shopping - cross border shopping describes the purchasing by Canadian consumers of products in the United States. Of particular interest is the decision by these buyers to obtain their products in the U.S., even though similar products are available in the Canadian market.

**Canadian Environmental Protection Act (CEPA)** - act where the goal is to pollution prevention and protection of Canadians from toxic substances.

**Capacity** - maximum production attainable under normal conditions. With regard to normal conditions, the company's operating practices are to be followed with respect to the use of production facilities, overtime, workshifts, holidays, etc.

**Capital Expenditures** - expenditures to acquire or add to capital assets that will yield benefits over several accounting periods. Included are cost of procuring, construction, installing new durable

plants, machinery and equipment where for replacement, addition or for lease or rent to other companies including subsidies.

**Captive Import** - an imported motor vehicle or part manufactured by another automaker usually for sale under the brand name of the importer.

**Casting** - a process technology that delivers a liquid molten metal or plastic into a purpose-built mould. After cooling, the solid metal surface has the shape of the mould cavity.

**Census value added -** residual representing the difference between the value of goods and industrial services produced and the direct material costs associated with the production of goods.

**Changeover** - the refitting of equipment to either neutralize the effects of the just completed production or to prepare equipment for production of the next scheduled item, or both.

**Climate Change** - the international concern that increasing concentrations of greenhouse gases (GHGs) in the atmosphere are changing the climate in ways detrimental to our social and economic well-being.

**Component** - a raw material, ingredient, part or subassembly that at goes into a higher level assembly, compound, or other item.

**Component assembly** - a combination of two or more parts or sub-components to form an assembly.

**Component Design** - the activity for the design of specific components including responsibility for material, cost, weight, reliability, durability, function, appearance, serviceability.

**Concept Vehicle** - a current production vehicle modified for installation of new design concepts for evaluation of functional feasibility.

**Consumer factors** - demographic characteristics of consumers including age, gender, income and geographic location, afford ability.

**Corporate Average Fuel Economy (CAFE)** - regulation enacted in 1975 which requires a motor vehicle manufacturer to classify its U.S. vehicle fleet sales as either domestic or import for the purpose of fuel economy averaging.

**Cost of production** - actual cost to the manufacturer of producing a vehicle (does not include mark-up).

**Customs duties** - customs duties levied on imported goods under the Customs Tariff.

**Days' Supply** - number of days needed to sell all vehicles in inventory, based on the previous month's sales rate.

**Dealer** - a firm that buys and sells, adding some value for the consumer in the process. Dealer often means a firm which operates closer in the distribution channel to the consumer than a distributor or wholesaler, and may add more value for consumers than either of the above-mentioned terms.

**Dealer principal** - the individual or corporation that owns and controls one or a number of auto dealerships.

**Die -** solid or hollow form used for shaping materials by stamping, pressing, extruding, drawing or threading.

**Diffusion** - the way in which innovations spread through market or non-market channels.

**Distributor** - synonymous with wholesalers; distributors perform many of the same functions as wholesalers, such as selling, physical distribution, credit, etc. Some industries use the term distributor instead of wholesaler.

**Distribution channel -** is the path goods take as their title transfers from producer to consumer. The title transfer for consumer goods is usually accompanied by transfer of the physical goods, as well.

**Do-it-Yourself Market (DIY)** - the vehicle maintenance and repairs conducted by the vehicle owner or friend/relative who purchase auto parts from a retail outlet.

**Domestic** - a vehicle produced in Canada, United States or Mexico.

**Door rates** - the hourly rates charged by dealers on standardized units of service work. Hourly rates may or may not correspond to an actual hour of work.

**Duty drawback** - import duties or taxes repaid by a government in whole or in part, when the imported goods are re-exported or used in the manufacture of exported goods.

**Duty paid value** - in respect to imported goods, is the aggregate value for duty on imported goods.

**Duty waiver** - forgiveness, in whole or in part, of import duties when certain conditions are met.

**Electric Vehicle** - cars, buses, vans or trucks which use dedicated or hybrid electric systems as their power source.

**Employment** - total employment in each manufacturing facility, including total manufacturing employees, total support staff, and total engineering/R&D staff. Production workers relate to the average

number actually engaged in the manufacturing process. Administrative and non-manufacturing includes employees at head offices and sales offices.

**Employee Benefits** - the provision of direct (salary, bonuses, etc.) indirect (vacation leave, medical and dental plans, etc.) and deferred employee compensation (pensions, etc.)

**Establishment** - smallest operating entity producing a homogenous set of goods and services and is capable of reporting full range of production account variables to calculate "value added".

Free Trade Agreement of the Americas (FTAA) - an effort to unite the economies of the Western Hemisphere into a single free trade arrangement. The Heads of State of the 34 democracies in the region agreed to construct a "Free Trade Area of the Americas" and to complete negotiations for the agreement by 2005.

**Finance & control** - ownership of company (ie. Canadian, U.S., Japanese, German, etc.); public or private; capital investments: buildings, machinery and equipment, tooling programs

**Firm** - a business or institution comprising sole proprietorships, partnerships, companies and other forms of organizations.

**Fixed or One Price Selling** - published fixed price displayed on a new vehicle eliminating need for negotiation with the dealer.

**Fixture** - device for holding goods in process while working tools are in operation that does not contain any special arrangements for guiding the working tools.

**Fleet sales** - the purchase of vehicles by a business that meet a minimum requirement of units sold.

**Forecast** - prediction of future production or sales in the automotive industry.

**Forging** - a process that transforms solid metal into shapes of varying cross-sectional material thickness, often involving heating.

**Franchise** - establishment that has the right to exercise the powers of a corporation.

**G7 (Group of Seven)** - Seven industrial countries consisting of the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, whose leaders have met at annual economic summits since 1975 to coordinate economic policies.

**General Agreement on Tariffs and Trade (GATT)** - Signed in 1947, the GATT was formal multilateral agreement aimed at expanding and liberalizing world trade. The World Trade Organization which is the successor to the GATT came into existence on January 1, 1995.

**Generalized Preferential Tariff (GPT)** - system of non-reciprocal tariff preferences for the benefit of developing countries. It grants duty-free or preferential entry to imports for eligible developing countries up to a certain dollar value or import percentage limit.

**Greenhouse gases (GHGs)** - group of gases which individually act to trap solar energy near the earth. GHGs for which emission levels have been estimated are carbon dioxide(CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>0), sulphur hexafluoride (SF<sub>6</sub>), carbon tetrafluoride (CF<sub>4</sub>), carbon hexafluoride (C<sub>2</sub>F<sub>6</sub>) and hydro fluorocarbons (HFCs).

**Grey market** - the grey market describes the purchase by intermediaries of vehicles which are not supplied to them by the "authorized" distribution channel of the supplier. Thus, a dealer in the U.S. that sells a vehicle bought in Canada from other than the manufacturer is supplying grey market goods. While grey market

products are frequently the same as would be available from conventional channels in the U.S. or Canada, the grey market assumes responsibility for service or repair where the manufacturer declines this support.

**Gross Vehicle Weight (GVW)** -Maximum legal weight at which a vehicle can be operated.

**Heavy-duty truck** - vehicle weighing from 26,001 to 33,001 lbs. Also included off-highway trucks.

**Ignition System** - Electrical system devised to produce timed sparks from engine spark plugs. Consisting of a battery, induction coil, capacitor, distributor, spark plugs and relevant switches and wiring.

**Importer** - an organization that typically operates at arms length or under contractual agreement with manufacturers to bring products made in another country into Canada

**Import Nameplate** - vehicles sold by manufacturers primarily located outside North America whether assembled Overseas or in North America

**Independent Repair Shop** - small service outlet offering specialized repair services. They usually do not sell gasoline

**Intellectual Property Rights (IPR)** - the right to possess or control the use of intellectual property, such as trademarks, copyrights, patents and trade secrets.

**Interchannel competition** - rivalry between different channels of the distribution system. For example, independent retailers competing with manufacturers' outlets.

**Intermediary** - firm or organization that operates between the producer of the goods and the end purchaser. Thus, the members of the distribution channel noted above are intermediaries or "middlemen".

**Intrachannel competition** - rivalry between channel participants at the same level in the distribution channel. For example, department stores competing with one another.

Inventories - book value of inventory owned and held in Canada.

**Jigs** - device used in the accurate machining of good in process by holding the goods firmly and guiding tools exactly to position.

**Joint venture** - an international business collaboration between foreign interests and private parties from a host country in which two or more parties establish a new business enterprise to which each contributes and where ownership and control are shared.

**Just-in-Time (JIT)** - refers to the movement of material to the necessary place at the necessary time. It is part of a business philosophy based on achieving excellence in a manufacturing company through the continuous elimination of waste.

**Kaizen** - a production system for continuous improvement in process, quality, cost, etc.

**Kyoto Protocol** - international agreement among industrialized countries negotiated in Kyoto, Japan in December 1997 to reduce greenhouse gas emissions. Canada committed to reduce its greenhouse gas emissions by 6 percent of 1990 levels between 2008 and 2012.

**Lease** - form of contract transferring the use of a vehicle in consideration of payment.

Light truck - vehicle weighing less than 14,000 lbs.

Light vehicles - passenger cars and light trucks.

**Loss Leader** - products whose rices are cut with the idea that they will attract customers to the store.

**Make** - brand name of a car or truck (i.e. Chevrolet, Ford, Dodge, Honda).

**Manufacturer's Suggested Retail Price (MSRP)** - Dealers typically sell at a discount to this price.

**Machining** - an operation which shapes metal parts by carving away excess material as chips produced in a sequential process of turning, milling and grinding operations.

**Manufacturing** - process technology (ie. metal forming, machining, injection moulding, blow moulding, die casting, forgings, electronics/electrical, assembly, coating/plating); capacity utilization (in percent); production volumes; strategic alliances (eg. joint ventures, technology agreements).

**Market share** - the percentage of total sales represented by an individual manufacturer/importer, make or nameplate.

**Margin or gross margin** - the return an intermediary achieves on the selling price of the article. That is, if the intermediary buys a product for \$1 and sells it for \$1.50, the margin is calculated. For example, .50 divided by \$1.50, or 33%.

**Mark-up** - Mark-up is the return an intermediary achieves on the cost price of an article. Using the same example described above, mark-up is .50 divided by \$1, or 50%.

**Maquila (maquiladora)** - Mexican plants located in a zone near the U.S.-Mexican border where most production is exported to the United States.

**Mechanic installed market (MIL)** - vehicle maintenance and repair conducted by a mechanic/professional at a service outlet.

**Medium-duty truck** - vehicle weighing from 14,001 to 26,000 lbs.

**Mercosur** - the southern cone common market of Argentina, Brazil, Paraguay and Uruguay. Mercosur enacted a common external tariff on January 1, 1995 for almost 85 percent of tariff items of the four countries; most trade among members will be duty-free.

**Metal forming** - solid metal and molten metal process such as casting, forging, stamping and machining.

**Methylcyclopentadienyl Manganese Tricarbonyl (MMT)** - organic manganese compound used as a fuel additive to enhance octane levels in gasoline.

**Model line** - group of motor vehicles having the same platform or model name.

**Model name** - word, group of words, letter, number or similar designation assigned to a motor vehicle by a marketing division of a motor vehicle assembler.

**Most-Favoured-Nation (MFN) Treatment** - one country's commitment to extend to another country the lowest tariff rates that it applies to any third country.

Motor Vehicle Safety Act (MVSA) - act which regulates the manufacture and importation of motor vehicles and motor vehicle

equipment to reduce risk of death, injury and damage to property and the environment.

**Mould** - hollow form, matrix or cavity into which materials are placed to produce goods of desired shapes.

North American Industrial Classification System (NAICS) - Industry classification between Canada, the United States and Mexico to increase compatibility of data with these countries. The classification is based on establishment rather commodity. This classification system will be implemented with reference to year 1997 and data will be available in 1999.

**Net sales value** - the selling price received by the manufacturer for the vehicle including the cost of transporting the vehicle in Canada (includes mark-up).

**New car dealer -** major car dealership with a parts and service operation.

**North American Free Trade Agreement (NAFTA)** - Agreement creating free trade among the United States, Canada and Mexico. The NAFTA went into effect on January 1, 1994.

**North American produced** - motor vehicles assembled in Canada, the United States or Mexico.

**Off-Highway Vehicle** - Vehicle intended for operation on unmade surfaces or rough terrain (i.e. for construction or agriculture).

On Board Diagnostics (OBD) - a unit that monitors the Electronic Control Unit and system responses for errors during normal vehicle operations. When the vehicle is serviced, this information on the errors can be down loaded and displayed to the service personnel which will facilitate the trouble shooting process.

**Operating profit -** pre-tax earnings after deducting all operating expenses from gross margin.

Organization for Economic Co-operation and Development (OECD) - an organization whose purpose is to provide its 29 Member countries with a forum in which governments can compare their experiences, discuss the problems they share and seek solutions which can then be applied within their own national contexts. Each member country is committed to the principles of the market economy and pluralistic democracy.

**Outlet** - synonymous with vehicle dealership.

**Overcapacity** - the situation where maximum global production of automobiles exceeds the total global demand for automobiles.

**Overtime** - includes pay received for the number of hours worked in excess of the standard workday or workweek.

Partnership for a New Generation of Vehicles (PNGV) - established in 1993, this partnership, between the United States Federal Government and the automotive industry, was founded to establish global technical leadership in the development and production of affordable, fuel-efficient, low emission vehicles that meet today's performance standards.

**Passenger vehicle** - four wheeled motor vehicle that also includes mini-vans and sport utility vehicles.

**Plastic moulding** - a process that converts organic-based materials, by means of a general-purpose press and purpose-built tooling under controlled heat and pressure, and injects the hot material into a die cavity shaped in the final form of the intended part.

**Platform** - primary load-bearing structural assembly of a motor vehicle determining the basic size of the motor vehicle, and is the structural base that supports the drive line and links the suspension components of the motor vehicle. Also serves as a base common design for other models of vehicles.

**Process Innovation** - a significant change in the technology of the production of an item which may involve new equipment, new management and organization methods.

**Product Innovation** - commercialization of a technologically changed product, whose design characteristics are changed in ways which deliver new or improved services to the consumer.

**Pneumatic Tire** - Flexible, hollow rubber forming the outer part of the vehicle wheel and inflated by air pressure.

**Product design** - the process of planning the product's specifications.

**Product testing** - rigorous methods whereby a product's quality and durability are measured.

**Product planning** - a function whereby an enterprise is responsible for the efficient, planning, scheduling and coordination of production activities.

**Production engineering** - planning and control of the mechanical means of changing the shape, condition of materials toward greater effectiveness and value.

**Productivity** - relative measure of output per labour and/or machine output.

**Program cars** - automobiles sold by manufacturers for fleet use. Usually applies to very large fleets, such as those of car rental companies.

**Program Objectives** - A consensus of what has been determined to be the most marketable product for a given model year.

**Purchasing** - total materials purchased for manufacturing/assembly into auto parts (ie. steel, plastics, rubber, textiles, etc.)

QDC - quick die change

**Quality** - conformance to requirements in relation to a degree of excellence.

**Refit** - closure of a plant for the purpose of plant conversion or retooling.

**Registration** - motor vehicle ownership that is filed with the province/state.

**Research & development** - R&D expenditures (product and process development).

**SAE** - Society of Automotive Engineers.

**Sales** - total automotive product sales (vehicles, automotive parts, including OE and aftermarket)

Scientific Research and Experimental Development (SR&ED)
Program - incentive for industrial research and development in
Canada which allows individuals and companies to deduct 100
percent of qualified current SR and ED expenditures and capital SR
and ED expenditures.

**Scrappage** - a vehicle registered in the previous year but not reregistered in the current year.

**Service station** - outlets which sell gasoline and are operated by the major oil companies.

**Shipments (value of)** - summation of value of shipments produced by establishment, receipts of custom and repair revenue.

**Special Import Measures Act (SIMA)** - legislation that helps to protect Canadian producers from harm or injury caused by the dumping of goods into Canada by foreign exporters or the subsidizing of goods by foreign governments.

**Special services** - a category that describes plants which add value to automotive parts manufactured by others by using process such as painting, plating, heat treatment, etc.

**Specialty repair shop** - retail outlet which offers specialized vehicle products and service.

**Stamping** - a process technology which manufactures automotive parts by shaping rolled sheet metal or by bending or stretching it in a sequence of purpose-built tools fitted to a general purpose press.

**Standard Industrial Classification (SIC)** - industry class that represents a level of organization of production by type of specialization. Currently the 1980 Standard Industrial Classification is in effect identifying each industry at the 4 digit level. In 1997, the North American Industrial Classification System (NAICS) comes into effect.

**Standard Work Week** - average number of hours worked normally scheduled in a work week.

**Subsidiary** - a subsidiary is an organization operating in Canada that is owned or controlled by a foreign company which may or may not manufacture in Canada.

**Supplier Cost Reduction Effort (SCORE)** - a United States program that urges suppliers to develop processes to cut costs. Suppliers are allowed to keep half the savings and pass on the other half to the automakers.

SUV - Sports Utility Vehicle

**Tariff** - A duty or tax imposed on imports

**Tier 1 Supplier** - direct supplier to the vehicle assemblers, and who are responsible for delivery of a finished assembly, product development and continued technology renewal.

**Tier 2 Supplier** - producer of parts providing value-added to minor sub-assembly.

**Tier 3 Supplier** - supplier of engineered materials and special services, such as rolls of sheet steel, bars and heat treating, surface treatments.

**Tire store** - retail outlet selling tires and offering vehicle repair services.

**Total Quality Management (TQM)** - A management technique to improve the quality of goods and services, reduce operating costs and increase customer satisfaction.

**Tool** - device for use in, or attachment to, production machinery that is for the assembling of materials or the working of materials by turning, milling, grinding, polishing, drilling, punching, boring, shaping, shearing, pressing or planning.

**Tooling** - set of required standard or special tools needed to produce a particular part; includes jigs, fixtures, gages and cutting tools, but excluding machined tools.

**Trim Level** - vehicle designation assigned by vehicle manufacturers that represent specific equipment packages.

**Used vehicle** - vehicle that has been previously owned or driven.

**United States Council for Automotive Research (USCAR)** - an organization founded by Chrysler, Ford, and General Motors to strengthen the technology base of the domestic automotive industry through research and co-operation.

VA - Value analysis

**VE** - Value engineering

**VER** - Voluntary export restraint in relation to Japanese manufacturers exporting to Canada (no longer in effect).

**VRA** - Voluntary restraint agreement in relation to Japanese manufacturers exporting to the United States (no longer in effect).

**Vehicle Identification Number (VIN)** - Number assigned to a vehicle by the manufacturer primarily for registration and identification purposes (consisting of numerals and letters).

**Windsor Experiment** - Chrysler Canada, in partnership with government and educational institutions, has launched a number of initiatives collectively referred to as the Windsor Experiment. The Windsor Experiment conducts studies to benchmark "best practice" training and education in Europe, and applied the results in various skills development programs.

**World Trade Organization (WTO)** - Created by the Uruguay Round and successor to the GATT, this new organization began operations on January 1, 1995.

**Wholesaler** - an intermediary which sells to other intermediaries, such as a firm that buys from a manufacturer and sells to a retailer.

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Ward's Automotive Yearbook 1998

#### Web sites for glossary terms

http://www.ethyl.com/mmtqa.html http://www.rc.gc.ca/~paulb/smallbus/bic/1098e.htm http://fox.nstn.ca/~carskn/ http://www.ftaa-alca.org/EnglishVersion/Alca\_e.htm http://www.rc.gc.ca/sima/

http://www.oecd.org/

#### **Automotive Associations**

## Association of International Automobile Manufacturers of Canada

Suite 1618 438 University Ave. TORONTO, Ont. M5G 2K8

Tel.: (416) 595-8251 Fax: (416) 595-2864 E-mail: auto@aiamc.com Web site: www.aiamc.com

## Automotive Industries Association of Canada

1272 Wellington Street OTTAWA, Ont. KIY 3A7

Tel.: (613) 728-5821 Fax: (613) 728-6021

E-mail: aia@aia.canada.com Web site: www.aiacanada.com

### Automotive Parts Manufacturers' Association of Canada

Suite 516 195 The West Mall TORONTO, Ont. M9C 5K1

Tel.: (416) 620-4220 Fax: (416) 620-9730

E-mail: apma@interware.net Web site: www.capma.com

## Canadian Association of Japanese Automobile Dealers (CAJAD)

Suite 101 1 Eva Road ETOBICOKE, Ont. M9C 4Z5

Tel.: (416) 620-9717 Fax: (416) 620-0392 E-mail: cajad@cajad.com Web site: www.cajad.com

#### Canadian Auto Workers' (CAW)

205 Placer Court WILLOWDALE, Ont.

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Tel.: (416) 497-4110 Fax: (416) 495-6552 E-mail: caw@caw.ca Web site: www.caw.ca

## Canadian Automobile Dealers Association of Canada

85 Renfrew Drive MARKHAM, Ont. L3R 0N9

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#### Canadian Plastics Industry Association

Suite 500 5925 Airport Rd. MISSISSAUGA, Ontario L4V 1W1

Tel.: (905) 678-7748 Fax: (905) 678-0774 E-mail: info@plastics.ca Web site: www.plastics.ca

## Canadian Vehicle Manufacturers' Association

Suite 1602

25 Adelaide Street East TORONTO, Ont. M5C 3A1

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#### Japan Automobile Manufacturers' Association of Canada

Suite 460 151 Bloor St. W. TORONTO, Ont.

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Tel.: (416) 968-0150 Fax: (416) 968-7095 E-mail: JAMA@jama.ca Web site: www.jama.ca

#### Rubber Association of Canada (The)

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2000 Argentia Road, Plaza 4 MISSISSAUGA, Ont.

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#### Used Car Dealers Association of Ontario

Suite 205

4174 Dundas Street West TORONTO, Ont.

MOV 1V2

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