



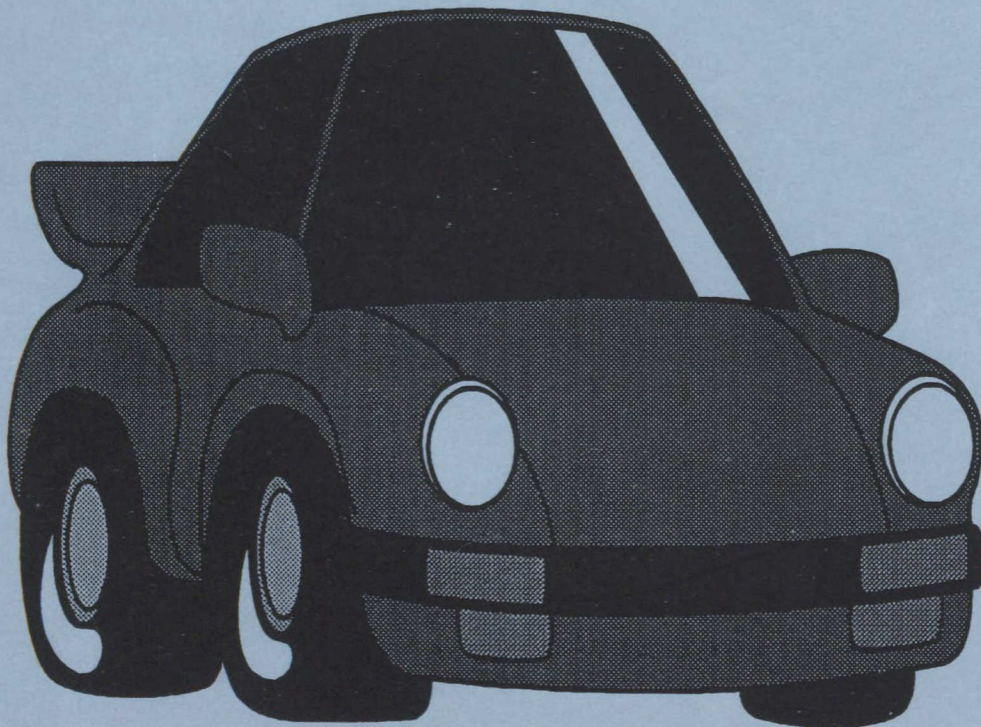
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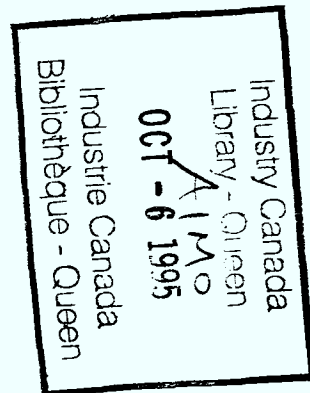
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# Statistical Review of the Canadian Automotive Industry

## 1995 Edition



# STATISTICAL REVIEW OF THE CANADIAN AUTOMOTIVE INDUSTRY: 1995 EDITION



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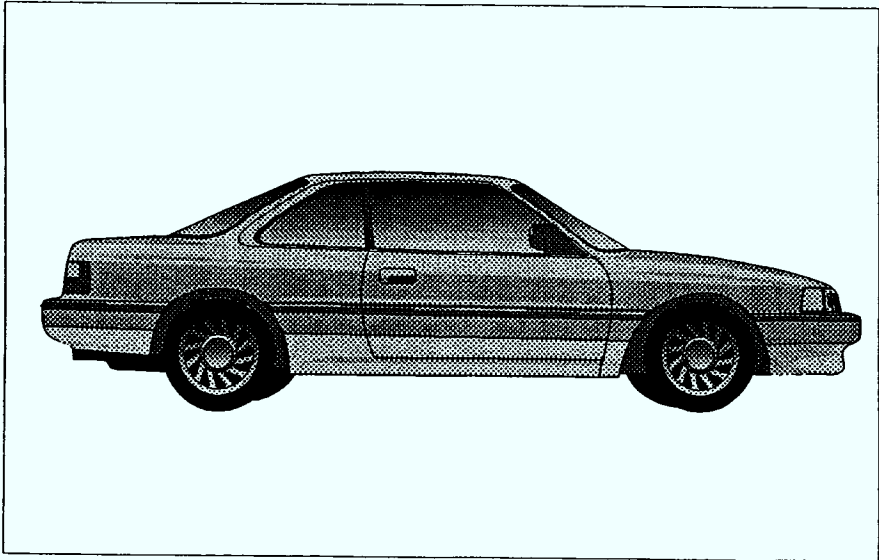
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This edition reflects the latest revisions and estimates provided by the various data sources. Accordingly, some historical figures appearing in the 1994 Edition have been modified.



\$ \$ \$ \$ sales \$



**Retail Sales of Motor Vehicles in Canada  
(Thousands of Units)**

Table 1.1

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
<b>Passenger Cars</b>										
North American Built	634	497	836	741	795	580	573	507	494	573
Overseas Import	75	143	154	191	342	305	300	291	245	175
<b>Total</b>	<b>709</b>	<b>640</b>	<b>990</b>	<b>932</b>	<b>1 137</b>	<b>885</b>	<b>873</b>	<b>798</b>	<b>739</b>	<b>748</b>
<b>Trucks*</b>										
North American Built	120	125	310	312	345	361	348	370	402	475
Overseas Import	2	9	17	22	48	72	67	59	52	36
<b>Total</b>	<b>122</b>	<b>134</b>	<b>327</b>	<b>334</b>	<b>393</b>	<b>433</b>	<b>415</b>	<b>429</b>	<b>454</b>	<b>511</b>
<b>Total Vehicles</b>	<b>831</b>	<b>774</b>	<b>1 317</b>	<b>1 266</b>	<b>1 530</b>	<b>1 318</b>	<b>1 288</b>	<b>1 227</b>	<b>1 193</b>	<b>1 259</b>

\* Includes mini-vans and vans

\*\* Includes Mexico

\*\*\* Includes captives

Source: Statistics Canada Catalogue Number 63-007.



**Retail Sales of Motor Vehicles in the U.S.  
(Thousands of Units)**

Table 1.2

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
<b>Passenger Cars</b>										
North American Built	8 763	7 120	7 053	6 578	8 205	6 897	6 138	6 277	6 742	7 255
Overseas Import	569	1 285	1 587	2 398	2 834	2 403	2 038	1 938	1 776	1 735
<b>Total</b>	<b>9 332</b>	<b>8 405</b>	<b>8 640</b>	<b>8 976</b>	<b>11 039</b>	<b>9 300</b>	<b>8 176</b>	<b>8 215</b>	<b>8 518</b>	<b>8 990</b>
<b>Trucks*</b>										
North American Built	1 539	1 746	2 249	2 002	3 912	3 956	3 606	4 247	5 000	5 662
Overseas Import	44	65	231	484	766	600	530	400	378	409
<b>Total</b>	<b>1 583</b>	<b>1 811</b>	<b>2 480</b>	<b>2 486</b>	<b>4 678</b>	<b>4 556</b>	<b>4 136</b>	<b>4 647</b>	<b>5 378</b>	<b>6 071</b>
<b>Total Vehicles</b>	<b>10 915</b>	<b>10 216</b>	<b>11 120</b>	<b>11 462</b>	<b>15 717</b>	<b>13 856</b>	<b>12 312</b>	<b>12 862</b>	<b>13 896</b>	<b>15 061</b>

\* Includes mini-vans and vans

\*\* Includes Mexico

\*\*\* Includes captives

Source: Ward's Automotive Reports.

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

Table 1.3

	1970	1975	1980	1989	1990*	1991*	1992*	1993*	1994*
Sub-compact	9	75	140	76	260	253	241	203	275
<i>Percent of Total</i>	<i>1.8</i>	<i>10.3</i>	<i>18.9</i>	<i>11.1</i>	<i>28.6</i>	<i>30.8</i>	<i>30.3</i>	<i>27.5</i>	<i>33.1</i>
Compact	101	186	229	314	356	314	307	289	262
<i>Percent of Total</i>	<i>20.4</i>	<i>25.7</i>	<i>30.9</i>	<i>45.8</i>	<i>39.1</i>	<i>38.2</i>	<i>38.6</i>	<i>39.1</i>	<i>31.6</i>
Inter-mediate	156	229	206	175	168	159	140	124	167
<i>Percent of Total</i>	<i>31.5</i>	<i>31.6</i>	<i>27.8</i>	<i>25.5</i>	<i>18.5</i>	<i>19.4</i>	<i>17.6</i>	<i>16.8</i>	<i>20.1</i>
Full-size	215	223	148	94	88	53	55	66	72
<i>Percent of Total</i>	<i>43.4</i>	<i>30.8</i>	<i>20.0</i>	<i>13.7</i>	<i>9.7</i>	<i>6.5</i>	<i>6.9</i>	<i>8.9</i>	<i>8.7</i>
Luxury	14	12	18	27	38	42	53	57	54
<i>Percent of Total</i>	<i>2.8</i>	<i>1.7</i>	<i>2.4</i>	<i>3.9</i>	<i>4.2</i>	<i>5.1</i>	<i>6.7</i>	<i>7.7</i>	<i>6.5</i>
<b>Total Sales</b>	<b>495</b>	<b>725</b>	<b>741</b>	<b>686</b>	<b>910</b>	<b>821</b>	<b>796</b>	<b>739</b>	<b>830</b>

\* Prior to 1990, data does not include import models; see Table 1.1 for total import sales for those years.

Source: Motor Vehicle Manufacturers' Association classified by Ward's segmentation.

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

Table 1.4

	1980	1985	1987	1988	1989	1990*	1991*	1992*	1993*	1994*
Sub-compact	1 671	1 297	1 100	1 019	926	928	878	998	1 096	754
<i>Percent of Total</i>	25.4	15.8	15.5	13.5	13.1	10.0	10.7	12.2	12.9	8.4
Compact	1 675	2 563	2 389	2 781	2 606	2 125	1 901	1 706	1 695	1869
<i>Percent of Total</i>	25.5	31.2	33.7	36.9	36.8	22.8	23.3	20.8	19.9	20.8
Inter-mediate	1 836	2 464	2 026	2 017	1 916	4 160	3 589	3 645	3 690	4098
<i>Percent of Total</i>	27.9	30.0	28.6	26.8	27.1	44.7	43.9	44.4	43.3	45.6
Full-size	1 075	1 077	925	1 052	955	877	676	752	943	1054
<i>Percent of Total</i>	16.3	13.1	13.1	14.0	13.5	9.4	8.3	9.2	11.1	11.7
Luxury	321	804	640	670	674	1 210	1 132	1 111	1 094	1215
<i>Percent of Total</i>	4.9	9.8	9.0	8.9	9.5	13.0	13.8	13.5	12.8	13.5
<b>Total Sales</b>	<b>6 578</b>	<b>8 205</b>	<b>7 080</b>	<b>7 539</b>	<b>7 077</b>	<b>9 300</b>	<b>8 176</b>	<b>8 212</b>	<b>8 518</b>	<b>8 990</b>

\* Prior to 1990, data does not include import models; see Table 1.2 for total imports for those years.  
Data incomplete prior to 1980

Source: Ward's Automotive Reports.

**Canadian Sales of New Passenger Cars by Origin  
(Thousands of Units)**

Table 1.5

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
North American*	634	497	836	741	795	580	573	507	494	573
<i>Percent</i>	<i>89.4</i>	<i>77.7</i>	<i>84.4</i>	<i>79.5</i>	<i>69.9</i>	<i>65.5</i>	<i>65.6</i>	<i>63.5</i>	<i>66.8</i>	<i>76.5</i>
Imports from Japan**	2	66	96	138	199	239	238	233	196	130
<i>Percent</i>	<i>0.3</i>	<i>10.3</i>	<i>9.7</i>	<i>14.8</i>	<i>17.5</i>	<i>27.0</i>	<i>27.3</i>	<i>29.2</i>	<i>26.5</i>	<i>17.4</i>
Other Imports**	73	77	58	53	143	66	62	58	49	46
<i>Percent</i>	<i>10.3</i>	<i>12.0</i>	<i>5.9</i>	<i>5.7</i>	<i>12.6</i>	<i>7.5</i>	<i>7.1</i>	<i>7.3</i>	<i>6.6</i>	<i>6.1</i>
<b>Total Sales Volume</b>	<b>709</b>	<b>640</b>	<b>990</b>	<b>932</b>	<b>1 137</b>	<b>885</b>	<b>873</b>	<b>798</b>	<b>739</b>	<b>749</b>

\* Includes Mexico

\*\* Includes captives

**U.S. Sales of New Passenger Cars by Origin  
(Thousands of Units)**

Table 1.6

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
North American*	8 763	7 116	7 050	6 578	8 205	6 897	6 138	6 277	6 734	7 255
<i>Percent</i>	<i>93.8</i>	<i>85.1</i>	<i>84.9</i>	<i>73.3</i>	<i>74.3</i>	<i>74.2</i>	<i>75.1</i>	<i>76.4</i>	<i>79.1</i>	<i>80.7</i>
Imports from Japan**	13	313	808	1 908	2 218	1 633	1 457	1 504	1 335	1 238
<i>Percent</i>	<i>0.1</i>	<i>3.7</i>	<i>9.7</i>	<i>21.3</i>	<i>20.1</i>	<i>17.6</i>	<i>17.8</i>	<i>18.3</i>	<i>15.7</i>	<i>13.8</i>
Other Imports**	569	936	443	492	616	770	581	434	449	497
<i>Percent</i>	<i>6.1</i>	<i>11.2</i>	<i>5.3</i>	<i>5.5</i>	<i>5.6</i>	<i>8.3</i>	<i>7.1</i>	<i>5.3</i>	<i>5.3</i>	<i>5.5</i>
<b>Total Sales</b>	<b>9 345</b>	<b>8 365</b>	<b>8 301</b>	<b>8 978</b>	<b>11 039</b>	<b>9 300</b>	<b>8 176</b>	<b>8 215</b>	<b>8 518</b>	<b>8 990</b>

\* Includes Mexico

\*\* Includes captive imports for 1980 and subsequent years

Source: Ward's Automotive Reports.

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

Table 1.7

	1980	1985	1987	1988	1989	1990	1991	1992	1993
<b>Passenger Cars</b>	10 256	11 118	11 773	12 086	12 811	12 622	13 061	13 322	13 478
<b>Trucks and Truck Tractors</b>	2 903	3 095	3 508	3 706	3 396	3 867	3 680	3 624	3 648
<b>Buses</b>	53	53	59	60	62	64	64	64	65
<b>Motorcycles</b>	389	453	414	370	348	331	324	313	309
<b>Mopeds</b>	*NA	35	34	31	30	28	27	26	26
<b>Other Vehicles</b>	118	64	76	84	72	69	67	61	61
<b>Total</b>	<b>13 719</b>	<b>14 818</b>	<b>15 864</b>	<b>16 337</b>	<b>16 719</b>	<b>16 981</b>	<b>17 223</b>	<b>17 410</b>	<b>17 587</b>

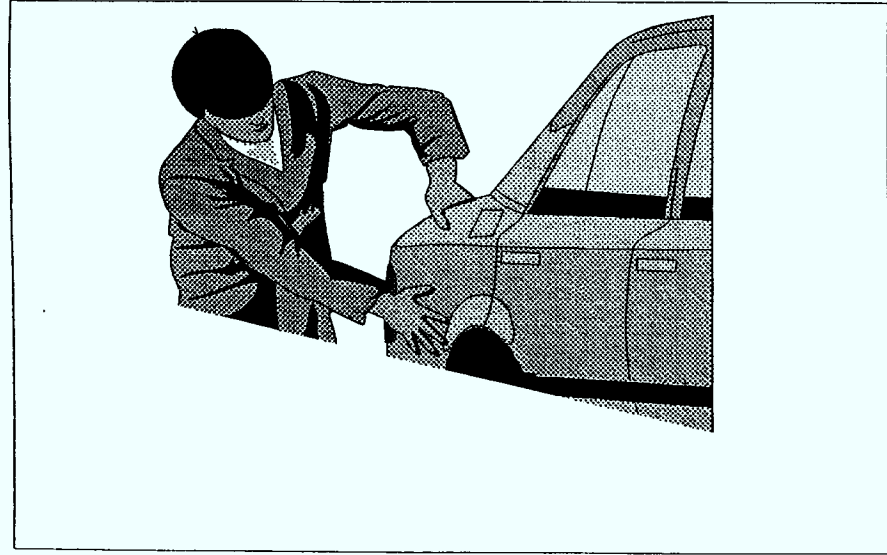
\* Not available

**World Motor Vehicle Registrations  
(Thousands of Units)**

Table 1.8

	1965	1970	1975	1980	1985	1990	1991	1992	1993
Argentina	1 488	2 269	3 296	4 329	5 310	5 737	5 836	5 971	6 520
Australia	3 737	4 784	6 214	7 263	8 729	9 777	9 650	9 944	10 506
Belguim	0	2 351	2 936	3 513	3 634	4 277	4 392	1 505	4 584
Canada	6 411	8 083	11 028	13 211	14 267	16 553	16 805	17 011	17 190
France	10 815	14 370	17 810	21 705	25 070	28 460	28 830	29 060	29 450
Germany	10 739	15 605	19 499	24 853	27 822	32 685	33 423	34 510	41 989
Italy	6 137	11 111	16 253	19 115	24 405	29 910	31 126	32 260	32 345
Japan	6 300	17 582	28 091	37 856	46 157	57 678	59 915	61 658	63 363
Netherlands	1 515	2 777	2 741	4 889	5 330	6 091	6 174	6 303	6 435
Spain	1 195	3 119	5 860	8 962	10 884	14 443	15 152	15 876	16 300
Sweden	1 935	2 447	2 931	3 077	3 383	3 925	3 944	3 906	3 882
U.K.	10 880	13 571	15 995	17 358	22 231	26 302	26 429	26 652	27 006
U.S.	90 358	108 418	132 949	188 796	171 354	188 656	188 372	190 362	194 036

Source: World Motor Vehicle Data, 1995; American Automobile Manufacturers' Association (AAMA)



Production





**North American Production of Motor Vehicles  
(Thousands of Units)**

Table 2.1

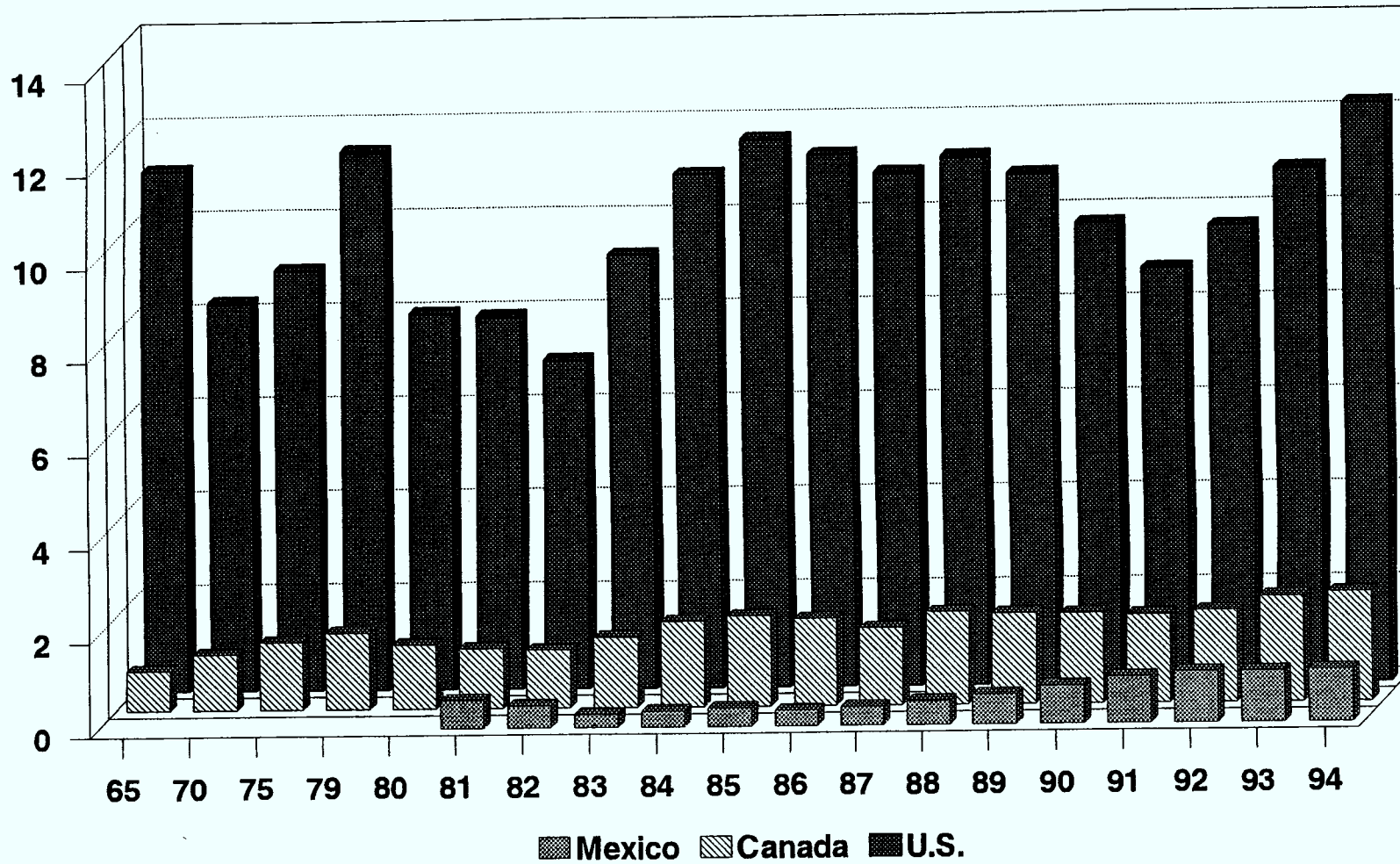
	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
Canada	846	1 193	1 442	1 374	1 930	1 948	1 887	1 958	2 246	2 322
<i>Percent of Total</i>	<i>7.1</i>	<i>12.6</i>	<i>13.9</i>	<i>14.6</i>	<i>13.8</i>	<i>15.5</i>	<i>16.1</i>	<i>15.4</i>	<i>15.8</i>	<i>14.8</i>
U.S.	11 114	8 263	8 965	8 010	11 648	9 780	8 819	9 703	10 899	12 250
<i>Percent of Total</i>	<i>92.9</i>	<i>87.4</i>	<i>86.1</i>	<i>85.4</i>	<i>83.3</i>	<i>78.0</i>	<i>75.4</i>	<i>76.1</i>	<i>76.6</i>	<i>78.1</i>
Mexico*	NA	NA	NA	NA	398	804	989	1 083	1 081	1 106
<i>Percent of Total</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>2.8</i>	<i>6.4</i>	<i>8.5</i>	<i>8.5</i>	<i>7.6</i>	<i>7.1</i>
<b>North America</b>	<b>11 960</b>	<b>9 456</b>	<b>10 407</b>	<b>9 384</b>	<b>13 976</b>	<b>12 532</b>	<b>11 695</b>	<b>12 744</b>	<b>14 226</b>	<b>15 678</b>

\* Data not available prior to 1981.

Source: Ward's Automotive Reports.

**North American Production of Motor Vehicles  
(Thousands of Units)**

**Graph 2.1**



**North American Production of Passenger Cars  
(Thousands of Units)**

Table 2.2

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
<b>Canada</b>	707	940	1 055	847	1 071	1 098	1 060	1 020	1 353	1 216
<i>Percent</i>	7.0	12.6	13.6	11.7	11.3	14.1	14.7	13.7	16.6	14.0
<b>U.S.</b>	9 329	6 546	6 706	6 372	8 186	6 078	5 440	5 665	5 982	6 601
<i>Percent</i>	93.0	87.4	86.4	88.3	86.1	78.2	75.3	75.9	73.2	76.3
<b>Mexico*</b>	NA	NA	NA	NA	247	598	720	778	835	840
<i>Percent</i>	NA	NA	NA	NA	2.6	7.7	10.0	10.4	10.2	9.7
<b>North America</b>	10 036	7 486	7 761	7 219	9 504	7 774	7 220	7 463	8 170	8 657

\* Data not available prior to 1981.

Source: Ward's Automotive Reports.

**Canadian Truck Production  
(Thousands of Units)**

Table 2.3

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
Light *	130	235	367	506	834	833	815	920	870	1 069
<i>Percent of Total</i>	90.3	93.6	94.8	96.0	97.4	98.0	98.5	98.1	97.4	96.7
Medium and Heavy-Duty	14	16	20	21	22	17	12	18	23	37
<i>Percent of Total</i>	9.7	6.4	5.2	4.0	2.6	2.0	1.5	1.9	2.6	3.3
<b>Total</b>	<b>144</b>	<b>251</b>	<b>387</b>	<b>527</b>	<b>856</b>	<b>850</b>	<b>827</b>	<b>938</b>	<b>893</b>	<b>1 106</b>

\* Includes mini-vans and full-size vans

Source: Ward's Automotive Reports.

**U.S. Truck Production  
(Thousands of Units)**

Table 2.4

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
Light*	1 325	1 359	1 945	1 387	3 046	3 474	3 172	3 808	4 608	5 322
<i>Percent of Total</i>	76.5	80.3	85.6	83.2	90.7	95.4	94.2	94.3	94.8	95.3
Medium	271	194	200	100	78	41	23	31	35	42
<i>Percent of Total</i>	15.7	11.5	8.8	6.0	2.3	1.1	0.7	0.8	0.7	0.8
Heavy-Duty	135	140	126	181	233	126	172	199	219	223
<i>Percent of Total</i>	7.8	8.3	5.5	10.9	6.9	3.5	5.1	4.9	4.7	4.7
<b>Total</b>	<b>1 731</b>	<b>1 693</b>	<b>2 271</b>	<b>1 668</b>	<b>3 357</b>	<b>3 641</b>	<b>3 367</b>	<b>4 038</b>	<b>4 862</b>	<b>5 587</b>

\* Includes mini-vans and full-size vans

Source: Ward's Automotive Reports.

**Mexico Truck and Bus Production  
(Thousands of Units)**

Table 2.5

	1981	1986	1987	1988	1989	1990	1991	1992	1993	1994
Light*	167	143	123	152	191	206	240	275	230	241
<i>Percent of Total</i>	92.8	94.7	95.3	98.1	94.1	92.4	89.6	90.2	93.9	90.6
Medium, Heavy-Duty and Buses	13	8	6	3	12	17	28	30	15	25
<i>Percent of Total</i>	7.2	5.3	4.7	1.9	5.9	7.6	10.4	9.8	6.1	9.4
<b>Total</b>	<b>180</b>	<b>151</b>	<b>129</b>	<b>155</b>	<b>203</b>	<b>223</b>	<b>268</b>	<b>305</b>	<b>245</b>	<b>266</b>

\* Includes mini-vans and full-size vans

Source: Ward's Automotive Reports.

# Vehicle Manufacturers by Total Output

Table 2.6

Company	Total Output (Units)					
<b>Ranked by 1993 North American Production*</b>	<b>1992</b>	<b>Ranking</b>	<b>1993</b>	<b>Ranking</b>	<b>1994</b>	<b>Ranking</b>
General Motors	4 616 220	1	4 991 254	1	5 266 869	1
Ford	3 581 341	2	3 976 907	2	4 346 937	2
Chrysler	1 982 663	3	2 297 361	3	2 591 339	3
Honda	562 377	4	504 483	5	738 972	4
Nissan	472 730	5	574 895	4	600 546	5
NUMMI	181 050	8	180 960	9	363 040	6
Toyota	308 474	6	313 285	6	361 549	7
Auto Alliance (formerly Mazda)	167 940	9	219 076	8	247 004	8
Volkswagen	188 488	7	238 992	7	198 263	9
CAMI	121 499	12	152 095	10	170 231	10
Diamond Star	139 783	10	136 022	11	169 829	11
Subaru-Isuzu	124 566	11	126 558	12	153 883	12
<b>Ranked by 1993 World Production</b>						
General Motors	7 146 000	1	7 299 000	1	8 420 000	1
Ford	5 764 374	2	5 700 000	2	6 600 000	2
Toyota	4 695 807	3	4 450 309	3	4 560 000	3
Volkswagen	3 466 000	4	3 000 000	4	3 042 383	4
Nissan	2 982 937	5	2 818 017	5	2 617 294	5
Chrysler	2 159 000	6	2 348 030	6	2 400 000	6
Fiat	1 900 000	9	1 600 000	11	2 300 000	7
Peugeot-Citroen	2 049 800	7	1 751 600	10	1 989 800	8
Mitsubishi	1 832 000	11	1 875 000	7	1 913 053	9
Renault	2 094 774	8	1 761 306	9	1 851 257	10
Honda	1 883 800	9	1 827 800	8	1 730 000	11
Mazda Motor Corp.	1 459 375	12	1 241 564	12	1 225 311	12

\* Includes Mexico

Source: *Ward's Automotive Reports, Automotive News.*



**World Motor Vehicle Production by Country  
(Thousands of Units)**

Table 2.7

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
U.S.	11 114	8 263	8 965	8 010	11 648	9 780	8 819	9 703	10 890	12 317
Japan	1 876	5 289	6 941	11 043	12 271	13 487	13 245	12 499	11 227	10 554
Germany*	2 976	3 842	3 186	3 879	4 446	4 661	5 015	5 194	3 991	4 352
France	1 642	2 750	2 861	3 378	3 016	3 295	3 611	3 764	3 131	4 017
South Korea	-	29	36	123	378	1 322	1 498	1 730	2 050	2 312
Canada	846	1 193	1 442	1 374	1 930	1 922	1 887	1 958	2 239	2 303
Spain	229	536	814	1 182	1 418	1 679	2 082	2 304	1 541	2 142
U.K.	2 177	2 098	1 648	1 313	1 311	1 296	1 454	1 540	1 496	1 695
Brazil	185	416	930	1 165	967	914	960	1 092	1 422	1 581
Italy	1 176	1 854	1 459	1 612	1 573	1 875	1 877	1 686	1 267	1 534
Mexico	NA	NA	NA	NA	398	804	989	1 083	1 080	1 081
C.I.S.**	634	916	1 964	2 199	2 200	2 000	1 845	1 448	1 589	952

\* Includes the former East Germany

\*\* Formerly the Soviet Union

Source: *Automotive News* (ranked by 1993 production).

**Average Unit Value of Canadian Motor Vehicle Production**

Table 2.8

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	1986	1987	1988	1989	1990	1991	1992	1993	1994
Number of Units Produced (Thousands)	1 859	1 648	1 977	1 940	1 948	1 887	1 958	2 246	2 322
Value of SIC 3231 Shipments (Millions of Dollars)	25 094	22 154	28 114	27 519	27 239	26 017	29 564	37 657	43 632 *
Unit Value (Dollars)	13 499	13 443	14 221	14 185	13 983	13 787	15 099	16 766	18 791

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\* Preliminary data based on Statistics Canada Catalogue Number 31-001

*Source: Statistics Canada and Ward's Automotive Reports.*

## Industrial Product Price Indices\* by Industry

Table 2.9

	1986	1987	1988	1989	1990	1991	1992	1993	1994
Motor Vehicle Industry (SIC 323)	100.0	99.6	95.2	94.6	95.2	97.6	104.6	112.9	120.4
Trailer and Bus Body and Trailer Industry (SIC 324)	100.0	102.7	105.0	105.0	108.4	111.4	115.7	120.9	118.6
Motor Vehicle Parts and Accessories Industry (SIC 325)	100.0	99.9	98.3	97.3	96.7	97.4	99.8	102.5	105.9

\*The Industrial Product Price Indices (IPPI) Measure price changes for major commodities sold by Canadian manufacturers

Source: Statistics Canada Catalogue 62-011.

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

Table 2.10

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994 ***
Motor Vehicle Manufacturers	2 120	2 963	6 024	10 071	24 599	27 239	26 017	29 564	37 657	43 632
Truck Body and Trailer Manufacturers	103	244	774	978	1 148	1 411	1 094	1 183	1 249	1 517
Motor Vehicle Parts and Accessories Manufacturers	756*	1 408*	2 552*	4 034	12 923	13 902	12 707	14 099	16 311	18 391
Automotive Tire and Tube Manufacturers**	NA	NA	NA	NA	1 653	1 350	1 342	1 454	1 450	1 500
<b>Total</b>	<b>2 223</b>	<b>3 207</b>	<b>6 798</b>	<b>15 083</b>	<b>40 323</b>	<b>43 902</b>	<b>41 160</b>	<b>46 300</b>	<b>56 667</b>	<b>65 040</b>

\* Includes automobile fabric and accessories manufacturers

\*\* Information supplied by companies

\*\*\* Estimate based on preliminary shipments

Source: Statistics Canada Catalogue Number 31-001 and Catalogue Numbers 42-251 and 31-203.

**International Sourcing Pattern of Original Equipment Parts of Five Major Motor Vehicle Manufacturers\* Table 2.11**  
**(Purchases from In-house and Independent Suppliers)**  
**(Millions of Dollars)**

	1965	1970	1975	1980	1985	1989	1990	1991	1992	1993	1994
U.S. Purchases from In-House Suppliers in Canada	17	454	797	1 604	4 621	4 845	4 621	3 148	4 272	5 288	4 939
Canadian Purchases from In-House Suppliers in U.S.	522	1 153	2 209	3 992	8 490	8 494	8 981	8 337	9 004	6 571	11 409
U.S. Purchases from Independent Suppliers in Canada	74	487	876	1 253	3 381	3 486	2 661	2 822	2 508	2 522	2 686
Canadian Purchases from Independent Suppliers in U.S.	236	505	1 051	1 226	3 871	6 226	5 647	4 434	5 447	4 393	8 140

\* General Motors, Ford, Chrysler (includes AMC before 1987), CAMI (starting in 1989) and Navistar

Source: 1965-1977 data prepared by the Reisman Commission. 1978-1994 data prepared by Industry Canada.

## Canadian Light Vehicle Production by Company

Table 2.12

	1989	1990	1991	1992	1993	1994	<i>1994 % Market Share</i>
GM	739,679	707,434	701,286	668,203	757,677	723,903	31.68
Ford	590,965	516,537	428,167	494,151	473,331	494,829	21.65
Chrysler	480,145	394,157	406,866	464,523	641,531	695,630	30.44
Cami	660	86,309	128,151	113,521	152,095	170,231	7.45
Honda	86,447	104,582	98,044	104,123	100,708	108,308	4.74
Toyota	20,859	60,793	67,843	68,092	79,219	85,781	3.75
Hyundai	43,250	27,409	28,201	15,186	14,585	0	0.00
Volvo	8,004	8,064	8,062	6,288	5,504	6,436	0.28
<b>Total Production</b>	<b>1,970,009</b>	<b>1,905,285</b>	<b>1,866,620</b>	<b>1,934,087</b>	<b>2,224,650</b>	<b>2,285,118</b>	<b>100.00</b>

Source: Ward's Automotive Reports

# U.S. Light Vehicle Production by Company

Table 2.13

	1989	1990	1991	1992	1993	1994	<i>1994 % Market Share</i>
GM	4,701,615	4,121,640	3,622,767	3,718,894	4,041,298	4,403,912	36.53
Ford	3,062,171	2,762,441	2,425,850	2,784,448	3,294,217	3,672,687	30.47
Chrysler	1,566,188	1,252,968	1,074,101	1,283,365	1,427,402	1,693,535	14.05
Nissan	238,640	235,248	265,070	300,326	386,973	444,608	3.69
Honda	361,670	435,438	451,199	458,254	403,775	630,664	5.23
Toyota	151,150	211,131	190,543	240,382	234,066	275,678	2.29
NUMMI						363,040	3.01
Diamond Star						169,829	1.41
Auto Alliance	216,200	184,368	166,573	168,859	219,076	247,004	2.05
Subaru-Isuzu	2,600	66,866	57,945	124,491	126,558	153,883	1.28
<b>Total Production</b>	<b>10,300,234</b>	<b>9,270,100</b>	<b>8,254,048</b>	<b>9,079,019</b>	<b>10,133,365</b>	<b>12,054,840</b>	<b>100.00</b>

Source: Ward's Automotive Reports

**Mexico Light Vehicle Production**

Table 2.14

	1989	1990	1991	1992	1993	1994	<i>1994 % Market Share</i>
GM	112,786	136,086	192,514	200,360	192,279	139,054	18.23
Ford	126,271	170,494	222,523	257,200	209,359	179,421	19.84
Chrysler	161,446	167,453	194,121	234,797	228,428	202,174	21.65
VW	108,374	193,196	208,901	188,488	238,992	198,263	22.65
Nissan	120,880	136,462	142,824	172,562	185,922	155,938	17.62
<b>Total Production</b>	<b>629,757</b>	<b>803,691</b>	<b>960,883</b>	<b>1,053,407</b>	<b>1,054,980</b>	<b>874,850</b>	<b>100.00</b>

Source: *Ward's Automotive Reports*



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

Table 2.15

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<b>Motor Vehicles</b>	16 492	19 026	19 600	34 309	40 279	39 326	36 847	21 801	24 601	31 512
Truck and bus body	175	199	248	290	367	401	287	279	210	219
Commerical trailers	222	264	308	430	442	368	310	166	1 459	185
Non-commerical trailers	163	176	220	266	329	300	240	125	156	177
Mobile homes	59	77	58	59	79	99	112	98	102	116
<b>Engines and parts</b>	2 080	2 170	1 645	2 028	2 143	2 357	1 720	881	1 129	1 495
Wiring assemblies	126	148	187	185	172	253	239	200	230	439
Stampings	897	680	1 060	1 133	1 321	1 421	1 305	1 298	1 430	1 572
Steering and suspension	298	295	288	307	429	480	155	345	428	564
Wheel and brake	445	442	419	472	540	597	535	416	476	532
Plastic parts	632	551	551	669	720	838	598	527	571	693
Fabrics	445	488	488	524	609	648	740	699	862	995
Other motor vehicle parts	1 443	1 589	1 589	1 669	2 086	2 381	2 430	2 635	2 869	3 082

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

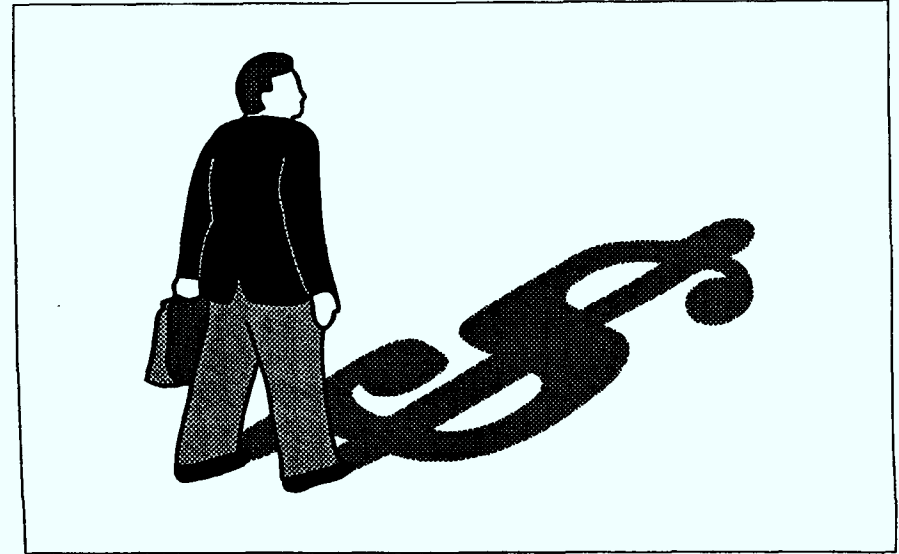
**Value Added in the Canadian Automobile Industry  
(\$ Millions)**

Table 2.16

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Motor Vehicles	4 109	4 713	4 474	4 751	6 270	6 630	6 161	6 101	4 957	6 013
Truck and bus body	143	173	186	241	267	295	182	166	217	230
Commerical trailers	114	137	162	195	214	238	188	119	106	136
Non-commerical trailers	93	89	111	126	137	143	118	77	84	101
Mobile homes	31	36	30	32	40	77	73	55	71	83
Engines and parts	1 494	1 662	1 399	1 566	1 565	1 696	1 168	609	327	964
Wiring assemblies	139	141	209	193	194	234	212	185	190	395
Stampings	743	949	1 023	979	991	853	842	833	895	1 211
Steering and suspension	327	353	356	405	411	428	390	328	393	524
Wheel and brake	513	543	494	507	512	513	459	412	47	551
Plastic parts	282	438	576	606	603	605	526	476	506	695
Fabrics	360	387	410	404	409	464	480	505	592	628
Other motor vehicle parts	1 502	1 709	1 624	1 696	1 725	1 837	1 916	2 166	2 286	2 391

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





Investment/  
Research and Development/  
Exchange Rates



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

Table 3.1

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994 **	1995 ***
Motor Vehicle Manufacturers (SIC 323)	66	32	61	136	714	787	1 305	1 628	1 960	1 754	1 539
Truck Body Manufacturers (SIC 324)	25	13	19	47	9	8	23	12	20	25	17
Motor Vehicle Parts and Accessories (SIC 325)	107	170	81	781	332	457	553	588	680	1 790	1 576
Automotive Dealers (SIC 631)*	NA	NA	NA	192	292	316	1 382	1 202	957	1 099	1 043
<b>Total</b>	<b>198</b>	<b>215</b>	<b>161</b>	<b>1 156</b>	<b>1 347</b>	<b>1 568</b>	<b>3 263</b>	<b>3 430</b>	<b>3 617</b>	<b>4 668</b>	<b>4 175</b>

\* Data for 1991-1994 also includes recreational vehicle dealers, gasoline service stations, repair shops and parts and accessories dealers. Revised data for previous years is not yet available.

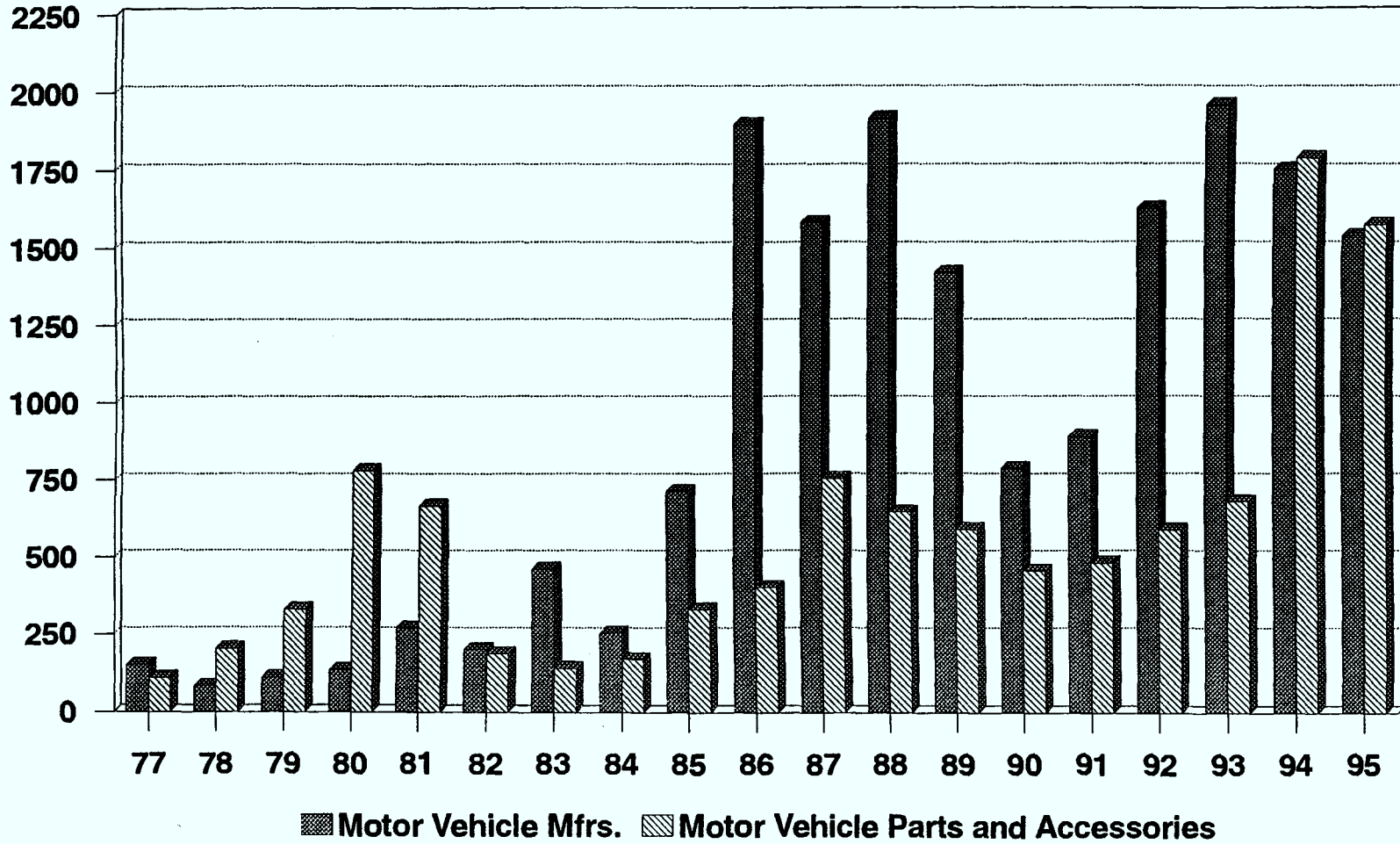
\*\* Preliminary

\*\*\* Intentions

Source: Statistics Canada Catalogue Number 61-214 and 61-205.

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

**Graph 3.1**



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

Table 3.2

	1965	1970	1975	1981	1986	1990	1991	1992 *	1993 *	1994 *
Number of R&D Performers	20	28	28	33	55	45	38	41	41	41
Total R&D Personnel (Person Years)	NA	NA	545	890	1 029	835	794	737	NA	NA
Total R&D Expenditures (Millions of Dollars)	3	12	14	50	75	64	72	71	61	63
<i>R&amp;D Expenditures as Percentage of Shipments</i>	<i>0.08</i>	<i>0.21</i>	<i>0.10</i>	<i>0.28</i>	<i>0.28</i>	<i>0.16</i>	<i>0.16</i>	<i>0.13</i>	<i>0.11</i>	<i>0.11</i>

\* Preliminary figures

R&D data from 1986 to 1991 has been revised due to the industry reclassification of a larger R&D performer.

Source: Statistics Canada.

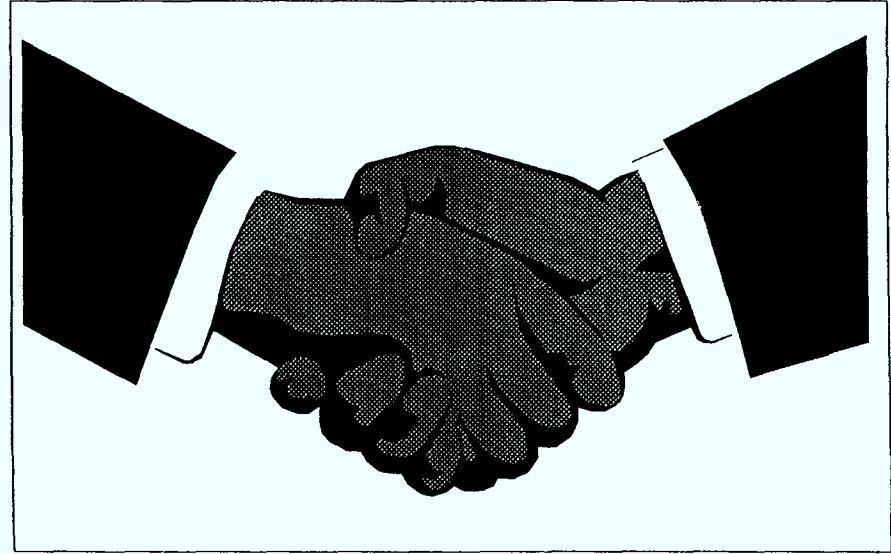


**Exchange Rates  
(Canadian dollars)**

Table 3.3

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
U.S. dollar	1.078	1.077	1.017	1.169	1.366	1.167	1.146	1.209	1.290	1.366
British pound	3.014	2.502	2.259	2.720	1.771	2.082	2.028	2.130	1.938	2.093
French franc	0.220	0.189	0.238	0.277	0.153	0.215	0.204	0.229	0.228	0.247
German mark	0.270	0.286	0.414	0.644	0.468	0.724	0.694	0.776	0.781	0.844
Japanese yen	3.000	2.920	3.430	5.190	5.770	8.100	8.530	9.550	11.650	13.390

Source: Statistics Canada, *Canadian Economic Observer*, Catalogue Number 11-210



Trade and Auto  
Pact Data

**Total Canadian Trade in Automotive Products**  
(Millions of Dollars)

Table 4.1

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
<b>Canadian Exports</b>										
Cars	156	1 604	3 021	4 859	16 672	16 318	16 518	17 837	24 488	31 898
Trucks and Other Vehicles*	31	664	1 190	2 445	6 609	8 077	7 755	10 119	11 294	11 947
Parts	183	1 226	2 225	3 825	11 819	10 480	9 136	10 391	13 078	14 789
Tires and Tubes	8	18	73	262	637	721	773	898	1 092	1 219
<b>Total</b>	<b>378</b>	<b>3 512</b>	<b>6 509</b>	<b>11 391</b>	<b>35 737</b>	<b>35 596</b>	<b>34 182</b>	<b>39 245</b>	<b>49 952</b>	<b>59 853</b>
<b>Canadian Imports</b>										
Cars	207	876	2 548	4 417	11 293	10 671	11 665	11 588	11 779	13 641
Trucks and Other Vehicles*	62	298	987	1 347	2 950	3 114	3 221	3 254	4 147	5 464
Parts	818	2 237	4 631	7 955	18 897	19 175	18 471	21 696	27 881	33 423
Tires and Tubes	12	43	256	354	471	675	725	772	894	1 021
<b>Total</b>	<b>1 099</b>	<b>3 454</b>	<b>8 422</b>	<b>14 073</b>	<b>33 611</b>	<b>33 635</b>	<b>34 082</b>	<b>37 310</b>	<b>44 701</b>	<b>53 549</b>
<b>Balances</b>										
Cars	( 51)	728	473	442	5 379	5 647	4 853	6 249	12 709	18 257
Trucks and Other Vehicles*	( 31)	366	203	1 098	3 659	4 963	4 534	6 865	7 147	6 483
Parts	( 635)	(1 011)	(2 406)	(4 130)	(7 078)	(8 695)	(9 335)	(11 305)	(14 803)	(18 634)
Tires and Tubes	( 4)	( 25)	( 183)	( 92)	166	46	48	126	198	198
<b>Total</b>	<b>( 721)</b>	<b>58</b>	<b>(1 913)</b>	<b>(2 682)</b>	<b>2 126</b>	<b>1 961</b>	<b>100</b>	<b>1 935</b>	<b>5 251</b>	<b>6 304</b>

\* Trucks include mini-vans, light and heavy-duty trucks.

Other vehicles include buses, specialty vehicles and motor homes.

Data for years following 1989 compiled by Industry Canada using Statistics Canada data and definitions.

**Canadian Trade in Automotive Products (Other Than U.S.)**  
**(Millions of Dollars)**

Table 4.2

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
<b>Canadian Exports</b>										
Cars	82	66	163	407	39	147	157	151	503	579
Trucks and Other Vehicles*	10	75	258	227	187	95	91	96	112	369
Parts	32	99	180	420	307	491	556	466	1 020	1 199
Tires and Tubes	4	3	5	31	45	13	13	11	25	21
<b>Total</b>	<b>128</b>	<b>243</b>	<b>606</b>	<b>1 085</b>	<b>578</b>	<b>746</b>	<b>817</b>	<b>724</b>	<b>1 660</b>	<b>2 168</b>
<b>Canadian Imports</b>										
Cars	113	217	365	1 029	2 727	3 786	4 668	4 471	3 783	3 636
Trucks and Other Vehicles*	2	23	45	130	380	318	309	502	472	375
Parts	21	130	206	355	1 459	2 923	3 244	3 374	4 023	5 241
Tires and Tubes	2	19	82	208	207	233	250	241	272	310
<b>Total</b>	<b>138</b>	<b>389</b>	<b>698</b>	<b>1 722</b>	<b>4 773</b>	<b>7 260</b>	<b>8 471</b>	<b>8 588</b>	<b>8 550</b>	<b>9 562</b>
<b>Balances</b>										
Cars	( 31)	( 151)	( 202)	( 622)	(2 688)	(3 639)	(4 511)	(4 320)	(3 280)	(3 057)
Trucks and Other Vehicles*	8	52	213	97	( 193)	( 223)	( 218)	( 406)	( 360)	( 6)
Parts	11	( 31)	( 26)	65	(1 152)	(2 432)	(2 688)	(2 908)	(3 003)	(4 042)
Tires and Tubes	2	( 16)	( 77)	( 177)	( 162)	( 220)	( 237)	( 230)	( 247)	( 289)
<b>Total</b>	<b>( 10)</b>	<b>( 146)</b>	<b>( 92)</b>	<b>( 637)</b>	<b>(4 195)</b>	<b>(6 514)</b>	<b>(7 654)</b>	<b>(7 864)</b>	<b>(6 890)</b>	<b>(7 394)</b>

\* Trucks include mini-vans, light and heavy-duty trucks.

Other vehicles include buses, specialty vehicles and motor homes.

Data for years following 1989 compiled by Industry Canada using Statistics Canada data and definitions.

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

Table 4.3

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
<b>U.S. Imports from Canada</b>										
Cars	74	1 538	2 858	4 452	15 277	16 171	16 361	17 686	23 985	31 319
Trucks and Other Vehicles*	21	589	932	2 218	6 422	7 982	7 664	10 023	11 182	11 578
Parts	151	1 127	2 045	3 405	11 512	9 989	8 580	9 925	12 058	13 590
Tires and Tubes	4	15	68	231	592	708	760	887	1 067	1 198
<b>Total</b>	<b>250</b>	<b>3 269</b>	<b>5 903</b>	<b>10 306</b>	<b>33 803</b>	<b>34 850</b>	<b>33 365</b>	<b>38 521</b>	<b>48 292</b>	<b>57 685</b>
<b>Canadian Imports from the U.S.</b>										
Cars	94	659	2 183	3 388	8 566	6 885	6 997	7 117	7 996	10 005
Trucks and Other Vehicles*	60	275	942	1 217	2 570	2 736	2 912	2 752	3 675	5 089
Parts	797	2 107	4 425	7 600	17 438	16 252	15 227	18 322	23 858	28 182
Tires and Tubes	10	24	174	146	264	442	475	531	622	711
<b>Total</b>	<b>961</b>	<b>3 065</b>	<b>7 724</b>	<b>12 351</b>	<b>28 838</b>	<b>26 315</b>	<b>25 611</b>	<b>28 722</b>	<b>36 151</b>	<b>43 987</b>
<b>Balances</b>										
Cars	( 20)	879	675	1 064	6 711	9 286	9 364	10 569	15 989	21 314
Trucks and Other Vehicles*	( 39)	314	( 10)	1 001	3 852	5 246	4 752	7 271	7 507	6 489
Parts	( 646)	( 980)	(2 380)	(4 195)	(5 926)	(6 263)	(6 647)	(8 397)	(11 800)	(14 592)
Tires and Tubes	( 6)	( 9)	( 106)	85	328	266	285	356	445	487
<b>Total</b>	<b>( 711)</b>	<b>204</b>	<b>(1 821)</b>	<b>(2 045)</b>	<b>4 965</b>	<b>8 535</b>	<b>7 754</b>	<b>9 799</b>	<b>12 141</b>	<b>13 698</b>

\* Trucks include mini-vans, light and heavy-duty trucks.

Other vehicles include buses, specialty vehicles and motor homes.

Data for years following 1989 compiled by Industry Canada using Statistics Canada data and definitions.

Source: Statistics Canada Catalogue Numbers 65-001P and 11-001E (1965-1989).

**Canada-Japan Trade in Automotive Products**  
(Millions of Dollars)

Table 4.4

	1988	1989	1990	1991	1992	1993	1994
<b>Canadian Exports</b>							
Cars	5	7	11	6	1	33	57
Trucks and Other Vehicles*	5	3	2	4	1	10	16
Parts	28	27	41	49	43	56	63
Tires and Tubes	1	1	0	4	5	10	7
<b>Total</b>	<b>39</b>	<b>38</b>	<b>54</b>	<b>63</b>	<b>50</b>	<b>109</b>	<b>143</b>
<b>Canadian Imports</b>							
Cars	2 464	2 632	2 700	2 993	3 131	2 212	1 585
Trucks and Other Vehicles*	412	367	323	332	384	335	226
Parts	699	905	1 195	1 239	1 353	1 622	1 277
Tires and Tubes	126	118	113	101	97	105	109
<b>Total</b>	<b>3 701</b>	<b>4 022</b>	<b>4 331</b>	<b>4 665</b>	<b>4 965</b>	<b>4 274</b>	<b>3 197</b>
<b>Balances</b>							
Cars	(2 457)	(2 621)	(2 689)	(2 987)	(3 130)	(2 179)	(1 528)
Trucks and Other Vehicles*	( 409)	( 365)	( 321)	( 328)	( 383)	( 325)	( 210)
Parts	( 672)	( 864)	(1 154)	(1 190)	(1 310)	(1 566)	(1 214)
Tires and Tubes	( 125)	( 118)	( 113)	( 97)	( 92)	( 95)	( 102)
<b>Total</b>	<b>(3 662)</b>	<b>(3 984)</b>	<b>(4 277)</b>	<b>(4 602)</b>	<b>(4 915)</b>	<b>(4 165)</b>	<b>(3 054)</b>

\* Trucks include mini-vans, light and heavy-duty trucks.

Other vehicles include buses, specialty vehicles and motor homes.

Data from 1989 is compiled by Industry Canada using Statistics Canada data and definitions.

**Canada-Mexico Trade in Automotive Products**  
(Millions of Dollars)

Table 4.5

	1988	1989	1990	1991	1992	1993	1994
<b>Canadian Exports</b>							
Cars	0	0	1	1	0	5	61
Trucks and Other Vehicles*	3	0	0	1	1	0	0
Parts	52	76	69	83	155	139	63
Tires and Tubes	2	2	1	1	1	1	7
<b>Total</b>	<b>57</b>	<b>78</b>	<b>71</b>	<b>86</b>	<b>157</b>	<b>145</b>	<b>131</b>
<b>Canadian Imports</b>							
Cars	10	73	117	673	534	881	1 059
Trucks and Other Vehicles*	1	1	17	43	68	81	101
Parts	578	678	789	1 030	1 125	1 442	1 672
Tires and Tubes	0	0	0	0	0	0	2
<b>Total</b>	<b>589</b>	<b>752</b>	<b>923</b>	<b>1 746</b>	<b>1 727</b>	<b>2 404</b>	<b>2 834</b>
<b>Balances</b>							
Cars	( 10)	( 72)	( 116)	( 673)	( 534)	( 876)	- 998
Trucks and Other Vehicles*	( 1)	( 1)	( 17)	( 42)	( 67)	( 81)	- 101
Parts	( 502)	( 609)	( 720)	( 947)	( 970)	(1 303)	-1 609
Tires and Tubes	2	1	1	1	1	1	5
<b>Total</b>	<b>( 532)</b>	<b>( 674)</b>	<b>( 852)</b>	<b>(1 660)</b>	<b>(1 570)</b>	<b>(2 259)</b>	<b>-2 703</b>

\* Trucks include mini-vans, light and heavy-duty trucks.

Other vehicles include buses, specialty vehicles and motor homes.

Data from 1989 compiled by Industry Canada using Statistics Canada data and definitions.

**Overall Net Production to Net Sales-Value Ratios\* Achieved by Auto Pact Companies\*\*  
in Canada (Percent)**

Table 4.6

	Model Year										
	1965	1970	1975	1980	1985	1989	1990	1991	1992	1993	1994
<b>Passenger Cars</b>											
(Required Ratio: range 95-100)											
Net Sales-Value Ratio Achieved											
(All Companies)											
	100	161	122	106	174	138	158	170	166	197	201
<b>Trucks and Commercial Vehicles</b>											
(Required Ratio: range 75-100)											
Net Sales-Value Ratio Achieved											
(All Companies)											
	94	129	101	115	192	188	197	203	215	285	199
<b>Buses</b>											
(Required Ratio: range 85-100)											
Net Sales-Value Ratio Achieved											
(All Companies)											
	99	154	114	199	324	230	342	330	232	242	359

\* Net production to net sales-value ratio of the total value of Canadian vehicle production to the total net sales value of vehicle sales for all Auto Pact companies

\*\* Based on 18 major manufacturers

Source: Compiled from company Auto Pact reports to Industry Canada.



**Canadian Value Added/Cost of Sales Achieved by Auto Pact Producers\***  
**(Millions of Dollars)**

Table 4.7

	Model Year										
	1965	1970	1975	1980	1985	1989	1990	1991	1992	1993	1994
<b>Cost of Sales in Canada of Auto Pact Producers (All Companies)</b>	1 534	1 891	4 545	8 757	13 022	15 402	13 244	12 487	13 170	12 907	17 425
<b>Total Canadian Value Added (All Companies)</b>	956	1 643	2 987	4 659	10 210	11 438	11 238	10 599	10 517	10 964	11 732
<b>Difference between Cost of Sales and Canadian Value Added</b>	578	248	1 558	4 098	2 812	3 964	2 006	1 888	2 653	1 943	5 693
<b>Canadian Value Added</b>											
<i>Total achieved Canadian Value Added as Percentage of Cost of Sales</i>	63	91	66	53	78	74	85	85	80	85	67

\* Based on 18 major manufacturers

Source: Compiled from company Auto Pact reports to Industry Canada.

**Total Canadian Value Added by Category of Production for the Four Major Auto Pact Vehicle Manufacturers in Canada\***  
(Millions of Dollars)

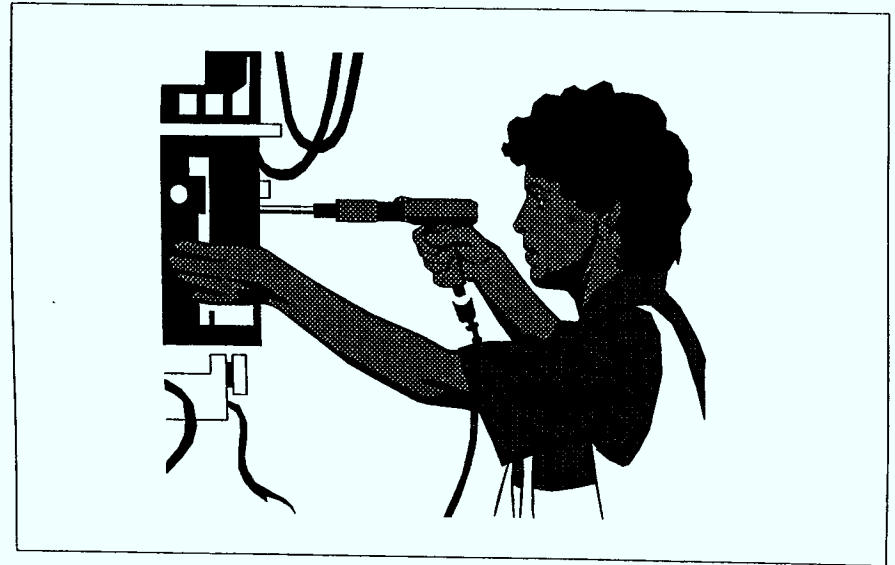
Table 4.8

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
Non-Parts CVA ** in Vehicle Production (A)	380	483	876	1 322	2 182	3 132	2 998	3 453	3 768	3 530
Parts CVA in Vehicle Production (B)	576	510	733	1 087	3 094	3 401	2 577	3 328	3 743	3 275
CVA in Original Equipment Parts Exp.(C)	100	651	1 106	1 755	5 095	4 551	4 268	3 634	3 637	4 068
<b>Total CVA Produced (D=A+B+C)</b>	<b>1 056</b>	<b>1 644</b>	<b>2 715</b>	<b>4 164</b>	<b>10 371</b>	<b>11 084</b>	<b>9 843</b>	<b>10 415</b>	<b>11 148</b>	<b>10 873</b>
<i>Parts CVA as Percent of Total CVA ((B+C)/D)</i>	<i>64.0</i>	<i>70.6</i>	<i>67.7</i>	<i>68.3</i>	<i>79.0</i>	<i>71.7</i>	<i>69.5</i>	<i>66.8</i>	<i>66.2</i>	<i>67.5</i>
<i>In-Vehicle CVA as Percent of Total CVA ( (A+B)/D)</i>	<i>90.5</i>	<i>60.4</i>	<i>59.3</i>	<i>57.9</i>	<i>50.9</i>	<i>58.9</i>	<i>56.6</i>	<i>65.1</i>	<i>67.4</i>	<i>62.6</i>

\* General Motors, Ford, Chrysler (includes AMC before 1987) and CAMI (starting in 1989)

\*\* Canadian Value Added

Source: 1965-1977 data prepared by the Reisman Commission; 1978-1994 data prepared by Industry Canada.



Employment



## Employment Related to Automotive Industries in Canada (Annual Average)

Table 5.1

	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994 *
<b>Manufacturing</b>										
Motor Vehicle Assembly (SIC 323)	42 900	38 100	45 300	44 900	56 900	56 100	55 700	54 700	51 900	57 700
Truck Bodies and Trailers (SIC 323)	5 400	10 100	17 700	14 800	11 400	12 300	9 100	10 200	9 600	12 600
Automotive Parts** and Accessories (SIC 325)	31 900	38 900	42 600	52 000	84 400	86 400	78 200	83 100	75 700	81 700
<b>Total Manufacturing</b>	<b>80 200</b>	<b>87 100</b>	<b>105 600</b>	<b>111 700</b>	<b>152 700</b>	<b>154 800</b>	<b>143 000</b>	<b>148 000</b>	<b>137 200</b>	<b>152 000</b>
<b>Retail</b>										
Automotive Dealers/Distribution (SIC 631)	NA	NA	NA	NA	95 600	128 400	120 400	117 000	119 000	118 200
Aftermarket *** (SIC 552, 633, 634, 635)	NA	NA	NA	NA	213 600	238 500	210 500	205 000	208 000	223 200
<b>Total Automotive Industries</b>	<b>80 200</b>	<b>87 100</b>	<b>105 600</b>	<b>111 700</b>	<b>461 900</b>	<b>521 700</b>	<b>473 900</b>	<b>470 000</b>	<b>464 200</b>	<b>493 400</b>

\* Figures for manufacturing are from the Survey of Earnings, Payroll and Hours (SEPH).

Previous years are from the Census of Manufacturers.

\*\* Includes aftermarket manufacturing

\*\*\* Includes wholesale and retail stores, service stations and repair shops

Source: Statistics Canada Catalogue Number 42-251B (up to 1986) and 31-203 (1986 and subsequent years) and 72-002.

**Employment Related to Automotive Industries in the U.S. (Annual Average)**  
**(Thousands)**

Table 5.2

	1972	1977	1982	1987	1988	1989	1990	1991	1992	1993	1994
<b>Manufacturing</b>											
Motor Vehicles (SIC 3711)	415	443	317	381	353	350	329	313	314	316	338
Truck and Bus Bodies (SIC 3713)	46	46	31	42	43	42	39	35	34	35	37
Parts and Accessories (SIC3714)	383	427	323	394	409	416	400	401	417	422	459
Automotive Stampings (SIC 3465)	105	110	81	99	103	107	101	94	98	99	105
<b>Total Manufacturing</b>	<b>949</b>	<b>1 026</b>	<b>752</b>	<b>916</b>	<b>908</b>	<b>915</b>	<b>869</b>	<b>843</b>	<b>863</b>	<b>872</b>	<b>939</b>
<b>Retail</b>											
Automotive Dealers (SIC 551)	775	802	694	925	958	954	924	879	876	907	975
Aftermarket (SIC 501, 554, 7538)	1 012	1 042	1 126	1 249	1 275	1 306	1 320	1 280	1 270	1 289	1 347
<b>Total Automotive Industries</b>	<b>2 736</b>	<b>2 870</b>	<b>2 572</b>	<b>3 090</b>	<b>3 141</b>	<b>3 175</b>	<b>3 113</b>	<b>3 002</b>	<b>3 009</b>	<b>3 068</b>	<b>3 261</b>

Source: U.S. Bureau of Labor Statistics.

Canadian Automotive Parts Industry by Number of Employees, 1992

Table 5.3

<b>Number of Employees</b>	<b>Number of Establishments</b>	<b><i>Percent of Total Establishments</i></b>	<b>Value of Shipments (Millions of Dollars)</b>	<b><i>Percent of Total Shipments</i></b>
1 to 19	166	<i>29.9</i>	113 321	<i>0.8</i>
20 to 199	269	<i>48.5</i>	3 068 138	<i>21.8</i>
200-499	86	<i>15.5</i>	6 092 288	<i>43.2</i>
500 or more	34	<i>6.1</i>	4 825 226	<i>34.2</i>
<b>Total</b>	<b>555</b>	<b><i>100.0</i></b>	<b>14 098 973</b>	<b><i>100.0</i></b>

Source: Statistics Canada Catalogue Number 42-251B (up to 1986) and 31-203 (1986 and subsequent years)

**Employment Related to Automotive Industries in Mexico**

Table 5.4

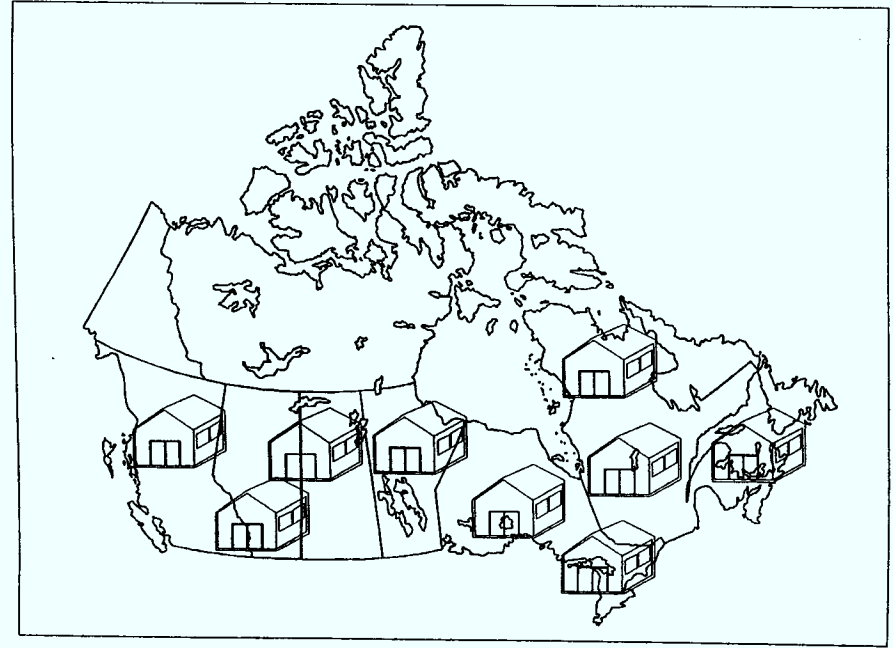
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	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>
Vehicle manufacturers	52 400	52 700	68 800	72 000	57 500
Components industry	155 200	173 600	184 200	201 500	231 500
Dealer network	89 300	69 000	78 000	81 000	79 000
Maquiladoras	90 000	89 100	112 000	124 400	128 900
<b>Total motor industry</b>	<b>386 900</b>	<b>384 400</b>	<b>443 000</b>	<b>478 900</b>	<b>496 900</b>

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*Source: Secofi*





## Major Automotive Plants in Canada

Table 6.1

## Major Motor Vehicle Assembly Plants in Canada

Company/Plant Name	Location	Products
<b>Light Vehicle Manufacturers</b>		
Canadian Automobile Mfg. Inc. (CAMI)	Ingersoll, Ontario	Geo Metro, Swift, Tracker/Sunrunner
Chrysler Canada Ltd.	Bramalea, Ontario	Concorde, Intrepid, New Yorker, Vision, LHS
	Windsor, Ontario Windsor, Ontario	Caravan, Voyager, Mini Ram van Ram van, Ram wagon
Ford of Canada Ltd.	Oakville, Ontario	Windstar Van
	Oakville, Ontario	F series (pick-up trucks)
	St. Thomas, Ontario	Crown Victoria, Grand Marquis
Honda Canada Inc.	Alliston, Ontario	Civic (2 and 3 door)
Hyundai Auto Canada Inc.	Bromont, Quebec	Sonata*
General Motors of Canada Ltd.	Oshawa, Ontario	Lumina
	Oshawa, Ontario	Regal
	Oshawa, Ontario	C-K Pickup, Sierra
	Sainte-Thérèse, Quebec	Camaro/Firebird
Toyota Canada Inc.	Cambridge, Ontario	Corolla
Volvo Canada Inc.	Halifax, Nova Scotia	940 series

\* Plant idle since October 1993.

Table 6.1

## Major Motor Vehicle Assembly Plants in Canada

Company/Plant Name	Location	Products
<b>Truck Manufacturers</b>		
Canadian Kenworth (division of Paccar Canada Ltd.)	Sainte-Thérèse, Quebec	Heavy-duty trucks
Freightliner of Canada Ltd.	St. Thomas, Ontario	Heavy-duty trucks
Navistar International Corporation Canada	Chatham, Ontario	Heavy-duty trucks
Western Star Trucks Inc.	Kelowna, British Columbia	Heavy-duty trucks
<b>Bus Manufacturers</b>		
Canadian Bluebird Coach Ltd.	Brantford, Ontario	School buses
Chrysler Canada Ltd.	Windsor, Ontario	10-15 passenger mini-buses
Novabus	Saint-Eustache, Quebec	Urban transit buses
Motor Coach Industries Ltd.	Winnipeg, Manitoba	Highway buses
New Flyer Industries Ltd.	Winnipeg, Manitoba	Urban transit buses
Ontario Bus Industries Inc.	Mississauga, Ontario	Urban transit buses
Prévost Car Inc.	Sainte-Claire, Quebec	Highway buses
Thomas Built Buses of Canada	Woodstock, Ontario	School buses

Source: Compiled from information supplied by the companies.

Table 6.2

### A Partial Listing of Major Automotive Plants in Canada

Company/Plant Name	Location	Products
<b>In-house Facilities</b>		
<b>Chrysler Canada Ltd.</b>		
Trim plant	Ajax, Ontario	Door panels, seat cushions, backs
Aluminum casting plant	Etobicoke, Ontario	Pistons, water pump bodies, transmissions, transfer cases
Trim plant	Stratford, Ontario	Soft interior trim components
<b>Ford Motor Company of Canada Ltd.</b>		
Essex engine plant	Windsor, Ontario	V6 engines
Ensite engine plant #1	Windsor, Ontario	V8 engines
Foundry and casting plant	Windsor, Ontario	Iron castings
Essex aluminum plant	Windsor, Ontario	Aluminum castings
Ford Electronics Manufacturing Corp.	Markham, Ontario	Radio and electronic components

Table 6.2

### A Partial Listing of Major Automotive Plants in Canada

Company/Plant Name	Location	Products
<b>General Motors of Canada Ltd.</b>		
Fabrication plant	Oshawa, Ontario	Stampings, batteries, instrument clusters, plastics, reaction injection moulding
Engine plant	St. Catharines, Ontario	V6 and V8 engines
Trim plant	Windsor, Ontario	Trim sets, door covers
Transmission plant	Windsor, Ontario	Front-wheel-drive automatic transmissions
<b>Tire and Tube Manufacturers</b>		
Bridgestone/Firestone Canada Inc.	Joliette, Quebec	Passenger car and light truck tires
Goodyear Canada Inc.	Medicine Hat, Alberta Napanee, Ontario Valleyfield, Quebec	Passenger, truck, bus and off-highway tires
Michelin Tires (Canada) Ltd.	Bridgewater, Nova Scotia Granton, Nova Scotia Waterville, Nova Scotia	Passenger, truck, bus and off-highway tires
Trent Rubber Services Ltd.	Lindsay, Ontario	Tubes
Uniroyal-Goodrich Canada Inc.	South-Kitchener, Ontario	Passenger, truck, bus and off-highway tires
United Tire and Rubber Company Ltd.	Rexdale, Ontario	Truck, bus, and off-highway tires

Table 6.2

## A Partial Listing of Major Automotive Plants in Canada

Company/Plant Name	Location	Products
<b>Foreign-owned Independent Original Equipment Manufacturers (larger facilities)</b>		
AP Parts of Canada	Rexdale, Ontario	Mufflers, tail and exhaust pipes
Allied Signal Corp.	Chatham, Ontario London, Ontario Stratford, Ontario	Induction systems, engine cooling fans, electric drive cooling modules, cooling air blowers, EGR valves, electronic vacuum regulators, sensors and actuators,
Alois Berger	Brampton, Ontario	Precision machined components secondary air valves, etc.
Bellemar Parts Industries Canada Inc.	Alliston, Ontario	Automotive seating
Budd Canada Inc.	Kitchener, Ontario Winnipeg, Manitoba	Frames, engine heaters
Canadian Auto Parts Toyota Inc.	Tottenham, Ontario	Aluminum cast wheels
Cooper Automotive Products Inc.	Brampton, Ontario	Steering parts, suspension parts, stampings
F&P Manufacturing	Delta, British Columbia	Heavy stampings
Gates Canada	Brantford, Ontario	Rubber hose and tubing, automotive belts
Hayes-Dana Inc.	Barrie, Ontario Burlington, Ontario Cambridge, Ontario Georgetown, Ontario Magog, Quebec Pickering, Ontario St. Catharines, Ontario Thorold, Ontario	Drive shafts, frames, axles, etc.

Table 6.2

### A Partial Listing of Major Automotive Plants in Canada

Company/Plant Name	Location	Products
<b>Foreign-owned Independent Original Equipment Manufacturers (larger facilities)</b>		
Joh Rubber	Leamington, Ontario	Vulcanized-in-place seals for heads and manifolds
Johnson Controls Ltd.	Lachine, Quebec St. Thomas, Ontario Winnipeg, Manitoba	Batteries, seating
Kralinator Filters (Division of Hayes-Dana)	Cambridge, Ontario	Oil, fuel and air filters
Lear Seating Canada	Ajax, Ontario Whitby, Ontario Lindsay, Ontario Kitchener, Ontario	Automotive seating
PPG Canada Inc.	Toronto, Ontario Mississauga, Ontario Hawkesbury, Ontario	Glass for automobiles, adhesives, coatings, paint, phosphating compounds
Rockwell International of Canada Ltd.	Chatham, Ontario Tilbury, Ontario Mississauga, Ontario Bracebridge, Ontario Milton, Ontario	Coil springs, brakes, mechanical stampings, plastic components
TRW Canada Limited, Thompson Products Division	St. Catharines, Ontario	Steering components, valves, electro-mechanical devices
Volkswagen Canada Inc.	Barrie, Ontario	Transmission parts, brake parts, wheels
Walker Exhausts	Cambridge, Ontario	Mufflers, tail and exhaust pipes
Waterville T.G. Inc.	Waterville, Quebec	Automotive weatherstripping

Table 6.2

### A Partial Listing of Major Automotive Plants in Canada

Company/Plant Name	Location	Products
<b>Canadian-owned Original Equipment Manufacturers</b>		
ABC Group of Companies	Rexdale, Ontario	Blow-moulded automotive components
A.G. Simpson Co. Ltd.	Cambridge, Ontario Oakville, Ontario Oshawa, Ontario Scarborough, Ontario Windsor, Ontario	Heavy stampings
Amcan Castings	Hamilton, Ontario	Large aluminum castings, hi-pressure diecastings, transmission castings
Butler Metal Products Co. Ltd.	Cambridge, Ontario	Stampings
Canadian General Tower Ltd.	Cambridge, Ontario	Vinyl seat covers
Complax Corporation (The)	Cobourg, Ontario	Compression and injection-moulded components
Court Industries Limited	St. Catharines	Surface treatment services, chrome and zinc-plating, bonderizing, screw machine products, transmission parts
Do-Ray Lamp Company (Canada)	Toronto, Ontario	Truck lighting and safety equipment
Fabricated Steel Products Ltd.	Windsor, Ontario	Stampings
Hudson Bay Die Casting	Brampton, Ontario	Zinc components, hi-pressure die castings
Huron Steel Products Inc.	Windsor, Ontario	Stampings
Kendan Manufacturing Ltd.	Windsor, Ontario	Diesel engine components



Table 6.2

## A Partial Listing of Major Automotive Plants in Canada

Company/Plant Name	Location	Products
<b>Canadian-owned Original Equipment Manufacturers</b>		
Linamar Machine Limited	Guelph, Ontario	Transmission parts, machining axles
Magna International Incorporated Atoma Division Cosma Division Decoma Division Tesda Division	Newmarket, Ontario Brampton, Ontario Concord, Ontario Concord, Ontario	Seatings, interior trim Stampings, exterior parts Plastic interior and exterior parts Steel engine components
Magnesium Products Ltd.	Strathroy, Ontario	Magnesium parts
National Auto Radiator Manufacturing Co. Ltd.	Windsor, Ontario	Stampings
Stelco Inc. (parts manufacturing only)	Gananoque, Ontario Toronto, Ontario Brantford, Ontario	Fasteners and forgings
Tamco Ltd.	Windsor, Ontario	Gear-shift levers, steering-column jackets
Western Foundry	Brantford, Ontario Wingham, Ontario	Exhaust manifolds
Woodbridge Foam Corporation	St. Jerome, Quebec Tilbury, Ontario Whitby, Ontario Windsor, Ontario Woodbridge, Ontario	Seats, other foam rubber components
<b>Aftermarket Manufacturers</b>		
AP Parts of Canada	Rexdale, Ontario	Mufflers, tail and exhaust pipes
Crila Plastic Industries Ltd.	Bolton, Ontario	Aftermarket trim

Table 6.2

### A Partial Listing of Major Automotive Plants in Canada

Company/Plant Name	Location	Products
<b>Aftermarket Manufacturers</b>		
Distex Industries Inc.	Anjou, Quebec	Disc brake pads
Dominion Automotive Industries	Uxbridge, Ontario	Protective lighting, mirrors, directional signals
Frictiontech	Guelph, Ontario	Disc brake pads
Gates Canada	Brantford, Ontario	Rubber hose and tubing, automotive belts
ITT Automotive Aftermarket Division	Mississauga, Ontario	Brake components
Kralinator Filters (Division of Hayes-Dana)	Cambridge, Ontario	Oil, fuel and air filters
Les Caoutchouc Polymat Inc.	Sherbrooke, Quebec	Rubber runner matting
Monroe Auto Equipment Company	Owen Sound, Ontario	Shock absorber parts, strut assemblies, suspensions
North West Rubber Mats Ltd.	Pitt Meadows, B.C.	Rubber matting
PPG Canada Inc.	Toronto, Ontario	Glass for automobiles, adhesives, coatings, paint, phosphating compounds
Walker Exhausts	Cambridge, Ontario	Mufflers, tail and exhaust pipes

Table 6.3

## New Entrant Assembly Investment in North America

Company	Location	Announced Capacity (Thousands)	Date Open	Products
	<b>Canada</b>			
CAMI *	Ingersoll, Ontario	200	1989	Geo Metro, Geo Tracker, Sidekick
Honda	Alliston, Ontario	120	1986	Civic (3 dr.hatchback, 2 dr. coupe)
Toyota	Cambridge, Ontario (2 plants)	200	1988	Corolla , Acura line
	<b>U.S.</b>			
Diamond Star	Bloomington-Normal, Illinois	240	1988	Talon, Gallant, LeBaron, Avenger, Sebring
Honda	Marysville, Ohio	430	1982	Accord
	Liberty, Ohio	210	1991	Civic
Auto Alliance	Flat Rock, Michigan	240	1987	626, MX-6, Probe
Nissan	Smyrna, Tennessee	240	1983	Altima, Sentra
	Smyrna, Tennessee	200	1992	Nissan pickup
	Avon Lake, Ohio (Ford)	100	1992	Nissan Quest, Mercury Villager
NUMMI *	Fremont, California	150 125	1984	Corolla, Prizm Compact pick-up
Saturn Corp.	Spring Hill, Tennessee	300	1991	Saturn
Subaru/Isuzu	Lafayette, Indiana	220	1989	Rodeo, Legacy
Toyota	Georgetown, Kentucky	200	1993	Camry, Avalon
	Georgetown, Kentucky	200	1988	Camry, Avalon
	<b>Mexico</b>			
Nissan	Aguascalientes, Mexico	200	1993	Tsura
Volkswagen	Puebla, Mexico	300	1992	Beetle, Golf, Jetta

\* Joint venture with General Motors

# Light Vehicle Dealerships by Company In Canada

Table 6.4

Company	1980	1985	1987	1988	1989	1990	1991	1992	1993	1994
Acura	--	--	--	--	--	41	44	44	44	42
American Motors	256	189	--	--	--	--	--	--	--	--
BMW	39	43	40	43	42	38	38	38	35	36
Chrysler	566	555	721	722	695	659	622	606	601	607
Fiat	53	88	--	--	--	--	--	--	--	--
Ford	781	715	723	680	669	655	641	641	643	640
General Motors	1,091	969	974	969	964	947	938	918	906	868
Honda	160	188	262	268	256	218	219	219	217	213
Hyundai	--	173	180	172	157	144	151	145	156	146
Infiniti	--	--	--	--	--	--	--	20	23	22
Jaguar	97	20	21	21	23	23	22	20	21	21
Lada	44	76	57	57	61	69	50	63	78	77
Lexus	--	--	--	--	--	--	--	22	22	22
Mazda	130	137	156	164	168	176	175	185	184	181
Mercedes	57	53	52	51	54	56	55	55	39	57
Nissan	212	188	195	187	180	179	173	168	161	156
Passport/Saturn	--	--	--	40	59	70	63	67	66	65
Saab*	52	41	32	30	32	--	--	--	--	--
Skocar	--	60	51	27	23	34	30	30	--	--
Subaru	102	80	85	81	89	87	90	91	87	93
Suzuki	--	86	100	99	103	107	101	100	103	106
Toyota	195	208	233	233	237	239	241	236	234	232
Volkswagen	202	200	192	192	189	184	187	181	180	174
Volvo	94	72	66	64	61	61	57	52	53	51
<b>Total Light Vehicle Dealers</b>	<b>4,131</b>	<b>4,141</b>	<b>4,140</b>	<b>4,100</b>	<b>4,062</b>	<b>3,946</b>	<b>3,853</b>	<b>3,857</b>	<b>3,809</b>	<b>3,767</b>

\* Figures are included with General Motors starting in 1990.

## **Glossary of Automotive Terms**

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**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.

**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.

**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 line and sells to general consumers and fleet operators. The

outlet will also provide service and sell parts for the brand of vehicle 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.

**Big Three** - General Motors, Ford and Chrysler.

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

**Bus** - passenger motor vehicle or chassis having a 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.

**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.

## **Glossary of Automotive Terms**

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**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 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.

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

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

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

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

**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.

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

**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.

**Distributor** - synonymous with wholesalers; distributors perform many of the same functions as wholesalers, such as selling,

## **Glossary of Automotive Terms**

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**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.

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

**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

Average number of workers employed by an establishment during the year. 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".

**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.

**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.

## **Glossary of Automotive Terms**

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**Grey market** - the grey market describes the purchase by intermediaries of product which is not supplied to them by the "authorized" distribution channel of the supplier. Thus, a warehouse club in Canada that sells a stereo bought in the U.S. or elsewhere 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 Canada, the grey market assumes responsibility for service or repair where the manufacturer declines this support.

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

**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

**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.

**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 activities** - activity through which continuous improvement is sought.

**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.

**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,



## Glossary of Automotive Terms

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forgings, electronics/electrical, assembly, coating/plating); capacity utilization (in percent); production volumes; strategic alliances (eg. joint ventures, technology agreements)

**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%.

**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.

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

**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.

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

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

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

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

**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 driveline and links the suspension components of the motor vehicle.

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

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**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.

**Product validation** -

**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.

**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.

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

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

**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 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** - 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.

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

## Automotive Associations

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*Association of International  
Automobile Manufacturers of Canada*  
Suite 700  
210 Dundas Street West  
TORONTO, Ont.  
M5G 2E8  
Tel.: (416) 595-5333  
Fax: (416) 595-8226

*Automotive Industries Association  
of Canada*  
1272 Wellington Street  
OTTAWA, Ont.  
K1Y 3A7  
Tel.: (613) 728-5821  
Fax: (613) 728-6021

*Automotive Parts Manufacturers'  
Association of Canada*  
Suite 516  
195 The West Mall  
ETOBICOKE, Ont.  
M9C 5K1  
Tel.: (416) 620-4220  
Fax: (416) 620-9730

*Canadian Association of Japanese  
Automobile Dealers (CAJAD)*  
Suite 101  
1 Eva Road  
ETOBICOKE, Ont.  
M9C 4Z5  
Tel.: (416) 620-9717  
Fax: (416) 620-0392

*Canadian Auto Workers' (CAW)*  
205 Placer Court  
WILLOWDALE, Ont.  
M2H 3H9  
Tel.: (416) 497-4110  
Fax: (416) 495-6554

*Canadian Bus Association*  
Suite 900  
155 Queen Street  
OTTAWA, Ont.  
K1P 6L1  
Tel.: (613) 238-1800  
Fax: (613) 563-9596

*Canadian Automobile  
Dealers Association of Canada*  
85 Renfrew Drive  
MARKHAM, Ont.  
L3R 0N9  
Tel.: (905) 940-4959  
Fax: (905) 940-6870

*Japan Automobile Manufacturers'  
Association of Canada*  
Suite 1406  
2 Sheppard Ave. East  
WILLOWDALE, Ont.  
M2N 5Y7  
Tel.: (416) 222-9515  
Fax: (416) 226-6774

*Motor Vehicle Manufacturers'  
Association*  
Suite 1602  
25 Adelaide Street East  
TORONTO, Ont.  
M5C 1Y7  
Tel.: (416) 364-9333  
Fax: (416) 367-3221

*Pacific Automotive Co-Operation Inc.*  
Suite 1408  
2 Sheppard Ave. East  
WILLOWDALE, Ont.  
M2N 5Y7  
Tel.: (416) 222-0700  
Fax: (416) 226-6774

*Rubber Association of Canada (The)*  
Suite 308  
89 Queensway West  
MISSISSAUGA, Ont.  
L5B 2V2  
Tel.: (905) 270-8322  
Fax: (905) 270-2640

*Society of the Plastics Industry of Canada*  
Suite 104  
1262 Don Mills Rd.  
DON MILLS, Ont.  
M3B 2W7  
Tel.: (416) 449-3444  
Fax: (416) 449-5685

## **Selected Publications Available on the Automotive Industry**

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### **Available from Automotive Branch**

*Automotive Insight* - September 1995 (diskettes)

*Automotive Strategic Framework* - April 1995

*Automotive Trade Statistics* - published annually

*Canada's Automotive Industry Today* - September 1995

*The Mexican Automotive Aftermarket* - 1994

*Quarterly Automotive Circular* - published quarterly

### **Available from Statistics Canada**

*Canadian Economic Observer* - Catalogue Number 11-210

*Capital and repair expenditures manufacturing sub-industries*  
Catalogue Number 61-214

*Employment, earnings and hours* (monthly) Catalogue Number  
72-002

*Industry Price Indexes* Catalogue Number 62-011

*Manufacturing Industries of Canada: National and Provincial Areas* -  
Catalogue Number 31-203

*Monthly survey of manufacturing* Catalogue Number 31-001

*New motor vehicle sales* (monthly) Catalogue Number 63-007

*Private and public investment in Canada - Intentions 1995* -  
Catalogue Number 61-205

*Preliminary statement of international trade* (monthly) Catalogue  
Number 65-001P

*Road motor vehicles, registrations* (annual) Catalogue Number  
53-219

*The Daily* Catalogue Number 11-001E

*Transportation equipment industries* (annual) Catalogue Number  
42-251





