

## 1.—Total Research and Development Expenditures, 1955-64

Year	Expenditure on Research and Development in Canada		Expenditure on Research and Development Outside Canada	Total
	Done Within Reporting Company	Done Outside Reporting Company		
	\$'000,000	\$'000,000	\$'000,000	\$'000,000
1955.....	51.4	1.9	12.1	65.4
1957.....	124.5	4.2	19.8	148.5
1958 (estimate).....	132.5	1	27.0	159.5
1959.....	96.6	3.3	21.7	121.6
1960 (estimate).....	81.7	1	27.3	109.0
1961.....	114.0	4.3	31.2	147.1 <sup>1</sup>
1962 (estimate).....	124.5	1	35.4	159.9
1963.....	160.2	8.0	37.8	201.2 <sup>2</sup>
1964 (estimate).....	190.0	1	38.5	228.5

<sup>1</sup> Included with expenditures outside Canada. <sup>2</sup> Since extramural payments include a number of payments which become intramural expenditures for the recipient firms, the totals have been adjusted to exclude duplication.

Three industries—transportation equipment, electrical products, and chemicals and chemical products—have accounted for more than one half of all research and development performed in Canada every year since 1955. In 1961, for the first time, the research and development expenditures of the transportation equipment industry, which are used largely for aircraft development, did not exceed those of every other industry. In that year the electrical products industry, which includes electronic equipment, was the leading performer of industrial research and development. In 1963, the transportation equipment industry, with \$31,200,000 assigned to research and development expenditures, was still behind the electrical products industry; however, if payments made outside Canada are included, the transportation equipment industry was first (\$39,300,000) and the electrical products industry was second (\$34,500,000).

## 2.—Research and Development Expenditures in Canada, by Major Industrial Group, 1961 and 1963

Group	1961		1963	
	Amount	P.C. of Total	Amount	P.C. of Total
	\$		\$	
Transportation equipment.....	17,373,490	15.0	31,202,042	19.1
Electrical products.....	28,199,659	24.3	33,435,679	20.5
Chemicals and chemical products.....	20,292,535	17.5	25,021,027	15.3
<b>Totals.....</b>	<b>65,865,674</b>	<b>56.8</b>	<b>89,658,748</b>	<b>54.9</b>
Other industries.....	50,018,214	43.2	73,788,892	45.1
<b>Grand Totals.....</b>	<b>115,883,888</b>	<b>100.0</b>	<b>163,447,640</b>	<b>100.0</b>

Table 3 shows intramural research and development expenditures over the four years 1961-64. The transportation equipment industry is given separately because of substantial fluctuations in its expenditures. Most of the other industries have increased their research and development activities over the period; the chemical and electrical products industries reported the greatest absolute increases, together having accounted for over 45 p.c. of total intramural expenditures (excluding those of transportation equipment) since 1961.