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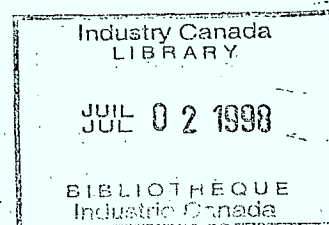
Gouvernement du Canada
Ministère des Communications

**TELECOMMUNICATIONS EXPENDITURES
WITHIN THE
GOVERNMENT OF CANADA
1979 / 80**

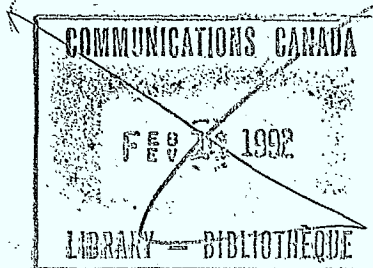
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GOVERNMENT TELECOMMUNICATIONS AGENCY
TELECOMMUNICATIONS PLANNING AND COORDINATION DIVISION

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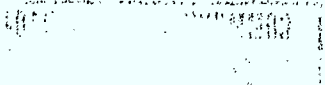
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TELECOMMUNICATIONS EXPENDITURES
WITHIN THE
GOVERNMENT OF CANADA,
1979 / 80



PREPARED BY:

Brian A. Edwards
BRIAN A. EDWARDS

TELECOMMUNICATIONS STATISTICAL ANALYST
TELECOMMUNICATIONS RESOURCES
DECEMBER 31, 1980



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TELECOMMUNICATIONS RESOURCE EXPENDITURES

PREFACE

This is the 4th annual report on Telecommunications Expenditures within the Federal Government prepared by the Telecommunications Planning and Coordination Division of the Government Telecommunications Agency. It is intended to present a detailed breakdown of telecommunications expenditures and personnel within the Federal Government.

SAMPLE, SELECTION, COVERAGE AND CHARACTERISTICS

Each year departments/agencies within the Federal Government whose telecommunications expenditures exceed \$20,000 are requested by Treasury Board to report detailed information on their telecommunications expenditures and personnel. This request is outlined in the Guide on Telecommunications Administration and relates to departments/agencies/branches named in Schedule A and B of the Financial Administration Act. For the year 1979/80, 52 departments/agencies were asked to report details of their telecommunications expenditures and personnel. These 52 departments/agencies included all major government organizations and constituted approximately 50% of the total number of departments/agencies in Federal Government which use telecommunications. ✓

This sample of 52 was two less than that of the previous year due to the disbandment of the Anti-inflation Board and The Department of Urban Affairs during 1977/78. The data collected from the 52 departments/agencies for the year 1979/80 covers 98.5% of the total federal government telecommunications expenditures and has been expanded by simple extrapolation to represent the total. ✓

Coverage of the sample was determined by comparing total government telecommunications expenditures extracted from DSS accounting records and the expenditures reported by the departments/agencies. Each month DSS forwards

to DPC, financial statements O2504 - telecommunications expenditures (economic objects O2, O7 and O9) by client and O2523 summary. It is through the use of these statements that the sample coverage is determined.

The sample is composed of all large government organizations but within the sample the magnitude of the telecommunication expenditures varies significantly. There are a few government organizations that report significantly larger telecommunications expenditures compared to the remaining majority of reporting departments/agencies. This becomes very obvious in Table 21, page 28, which shows that 6 departments account for 74.5% of the total telecommunications expenditures of the federal government and that the remaining 46 departments account for only 24.1%. As a result of the make up of the sample, trends of the large departments dominate the data presented for the total federal government.

For the year 1980/81 the sample will increase by nine departments if the same sample selection criteria are used as have been in the past. These 9 departments had telecommunications expenditures in 1979/80 of approximately \$665,000. Had they been included in the 1979/80 sample, sample coverage would have been higher by 0.2% at 98.7%. It is also interesting to note that if the criteria for sample selection had been changed to include only departments/agencies whose telecommunications expenditures exceed \$100,000 annually, only 44 departments/agencies would have been requested to respond in 1979/80 and sample coverage would have equalled 98.0%, 0.5% lower than it actually was. These observations raise doubts about the legitimacy of the sample selection criteria. As a result it appears logical to remove the burden of reporting from the smaller departments by redefining the sample selection criteria to include only those departments/agencies whose telecommunications expenditures exceed \$100,000 annually. The smaller departments should however be encouraged to maintain their knowledge of developments in telecommunications through the Annual Review.

QUESTIONNAIRE AND DATA REQUESTED

In February 1980, departments/agencies were requested to complete and return by June 30, 1980 a three part questionnaire dealing with telecommunications expenditures and personnel. Part I of the questionnaire requested that 1979/80 telecommunications expenditures data be reported by standard economic objects similar to those used by Public Accounts. The following is a detailed description of those standard economic objects for which data was requested.

- 01 - salaries and wages - telecommunications personnel
- 0220 - telephone
- 0221 - telegraph, cable and wireless
- 0222 - other communications services
- 04 - professional and special services - telecommunications
- 05 - rentals - telecommunications equipment
- 0621 - repair - telegraph and telephone lines
- 0655 - repair - communications and related equipment
- 0780 - parts - communications and related equipment
- 0906 - acquisition - communications and related equipment

Part 2 of the questionnaire requested that 1979/80 telecommunications expenditures be reported by application of expenditures cross referenced by source of billing. Part 3 of the questionnaire dealt with telecommunications personnel and requested information on number of personnel by functional area and by classification, number of uniformed and contracted personnel, cost of salaries, wages, training and contract personnel - all cross referenced by work location. A copy of the 1979/80 questionnaire can be found on pages 43-45 of this report.

FORECASTING TELECOMMUNICATIONS EXPENDITURES AND PERSONNEL

All telecommunications expenditures have been forecast for the five year period 1980/81 through 1984/85. The forecasting of telecommunication expenditures (excluding telecommunication personnel wages and salaries) was accomplished through the application of a mathematical exponential curve model that was derived from historical expenditure data (1970/71 through 1979/80). Personnel wages and salaries have been forecast by simply assuming an 8% increase annually for each of the years 1980/81 through 1984/85 while the number of personnel required for the next five years has been assumed constant at the 1979/80 level.

Through the use of these forecasting techniques Total Telecommunications Expenditures (including telecommunications personnel wages and salaries) are estimated to increase to \$647 million by 1984/85 (Table 13, Page 20).

TELECOMMUNICATIONS EXPENDITURES

OPERATIONAL TELECOMMUNICATIONS EXPENDITURES (Refer to Table 9, Page 16)

For the year 1979/80 operational telecommunications expenditures increased by only 0.2% to \$191,620,000 from \$191,280,000 in 1978/79. This constituted a significant deviation from the historical trend of operational expenditures which grew at an average rate of 13.2% from 1970/71 through 1978/79. The significant decline from previous growth rates has been attributed to the absence of rate increases by the common carriers, government restraint program i.e. reduction in the *size of the public service during 1979/80, improved management of telecommunications resources, and the introduction of a new authorized call code system. It is expected that in proceeding years, the growth of operational expenditures will return to a rate more consistent with past years. Already significant rate increases have been announced and it is unlikely that progress in finding new ways to increase telecommunications management efficiency will have such significant cost reducing effects. Operational telecommunications

* Current statistics indicate Public Service is growing again (80/81).

expenditures have been estimated to increase by 16.4% to \$223 million for the year 1980/81 and for the years 1981/82 through 1984/85 to grow an average of 13.0% annually to \$364 million for 1984/85.

CAPITAL COST EXPENDITURES (Refer to Table 10, Page 17)

For the year 1979/80 Capital Cost Expenditures declined by 13.9% to \$49,153,000 from \$57,069,000 in 1978/79. This decline is not characteristic of the past, during which time, growth of capital cost expenditures averaged 16.5% (1970/71 - 1978/79). The lower level capital cost expenditures have been attributed to the government restraint program in effect during that time. Future Capital Cost Expenditures have been estimated to increase by 40.9% to \$69,247,000 in 1980/81 and to increase at an average rate of 15.7% for the years 1981/82 through 1984/85.

Generally throughout the telecommunications products manufacturing industry it is felt that in the future with greater uses of chip, digital and fibre optic etc. technology, the cost of manufacturing telecommunications machinery and equipment will decline while its capabilities significantly increase.

This should encourage and provide some relief to areas that are attempting to automate. It should not be assumed however that in the future we will see a decline in the capital cost expenditures in the federal government. The need for more telecommunications equipment will be present as we are faced with greater amounts of work related to information and the automated office.

TELECOMMUNICATIONS PERSONNEL

The total number of telecommunications personnel reported by the 52 departments/agencies equalled for 6106 for 1979/80, an increase of approximately 6% from the reported number of 5732 for 1978/79. This increase is considered the result of more accurate reporting rather than real growth.

It is estimated that the number of telecommunications personnel will remain stable over the next five years given the present restraint on employment.

The general feeling within the telecommunications industry is that over the long term, employment in the telecommunications area (as well as other office areas) may decline as a result of the automated office technology. It is however, safer to say that many existing functions, i.e. data entry as it is known today, will cease to exist with the automated office, but that these may be replaced by new and different functions in response to the emerging technology.

Total wages and salaries for telecommunications personnel were reported to be equal \$106,582,000 in 1979/80. This represents a 13.4% increase over the previous years reported expenditure of \$94,022,000. When one considers the increase in the number of telecommunications personnel reported in 1979/80 this total increase in wages and salaries represents an increase in average per person wage/salary of approximately 8%. Therefore given the assumptions of stable levels of personnel over the next 5 years and that increases of wages and salaries will remain at the 8% rate of 1979/80, expenditures on telecommunications wages and salaries have been estimated to be \$116,763,000 for 1980/81 and to continue to increase annually at 8% to an expenditure in 1984/85 of \$158,854,000.

Today, as in the past, there is concern being voiced about the skill levels present in the telecommunications field, the career opportunities for telecommunications personnel, and the type of personnel required to ensure telecommunications moves in a timely controlled manner. As a result of this concern and the recommendations of the 1979 report of the TAC Working Group on Telecommunications Personnel, an ad hoc committee was established to survey departmental training requirements. Initially in conjunction with PSC and five Telecommunications Coordinators this committee developed an Occupational Profile for Telecommunications Coordinators which will be recommended as a government standard. Because of the profile

an occupational group can now be established for telecommunications staff which would provide a concrete statement of the skills required and the career development possible. Following the development of the profile, training needs were assessed and defined through a DOC/DPC survey involving government departments of various sizes. The findings of this survey were reported to TAC by DOC in September along with recommendations and an action plan.

In addition it is considered of value to be able to compare the cost and disposition of telecommunications personnel and EDP personnel. At this time attempts are being made to develop the basis to achieve this. This will probably mean that different breakdowns of personnel data will need to be collected.

TABLES

TABLE 1

TELECOMMUNICATIONS EXPENDITURES BY CATEGORY

| COSTS | OBJECT OF EXPENDITURE | 1977/78 (\$000) | 1978/79 (\$000) | 1979/80 (\$000) | % CHANGE OVER 78/79 |
|------------------------------|---|--------------------|--------------------|--------------------|---------------------------|
| OPERATING | (0220) Telephone | 93,006 | 111,583 | 112,735 | |
| | (0221) Telegraph, Cable & Wireless | 43,743 | 47,045 | 48,323 | |
| | (0222) Other Telecommunications Services | 9,042 | 16,193 | 15,031 | |
| | (0621) Repair - Telegraph & Telephone Lines | 45 | 32 | 10 | |
| | (0655) Repair - Communication & Related Equipment | 3,449 | 4,264 | 4,486 | |
| | (05) Rentals - Telecommunications Equipment | 7,780 | 12,163 | 11,035 | |
| | TOTAL | 157,065 | 191,280 | 191,620 | 0.2% |
| CAPITAL | (0780) Parts - Communication & Related Equipment | 15,458 | 17,109 | 15,781 | |
| | (0906) Acquisition - Communication & Related Equipment | 32,129 | 39,960 | 33,372 | |
| | TOTAL | 47,587 | 57,069 | 49,153 | - 14% |
| TELECOMMUNICATIONS PERSONNEL | (04) Professional & Special Services - Telecommunications | 854 | 646 | 656 | |
| | Salaries and Contracted Personnel | 69,541 | 94,022 | 108,114 | |
| | TOTAL | 70,395 | 94,668 | 108,770 | 15% |
| | TOTAL GOVERNMENT TELECOMMUNICATIONS EXPENDITURES | 275,047 | 343,017 | 349,543 | 2% |

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TABLE 2

DISTRIBUTION OF TELECOMMUNICATIONS EXPENDITURES BY PERCENTAGE (excluding salaries)

| EXPENDITURES | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| TELEPHONE (0220) | 28.6% | 33.2% | 37.0% | 37.5% | 41.0% | 42.1% | 42.0% | 45.3% | 44.8% | 46.7% |
| TELEGRAPH, CABLE & WIRELESS (0221) | 45.0% | 40.2% | 36.6% | 33.3% | 28.8% | 25.1% | 23.5% | 21.3% | 18.9% | 20.0% |
| OTHER TELECOM SERVICES (0222) | 1.0% | 0.9% | 1.1% | 3.0% | 3.3% | 3.6% | 3.9% | 4.4% | 6.5% | 6.2% |
| REPAIR - TELEGRAPH & TELEPHONE LINES (0621) | | | | | | | | * | * | * |
| REPAIR - COMMUNICATION & RELATED EQUIPMENT (0655) | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.9% |
| PARTS - COMMUNICATION & RELATED EQUIPMENT (0780) | 7.5% | 6.8% | 7.6% | 7.4% | 7.2% | 6.2% | 6.6% | 7.5% | 6.9% | 6.5% |
| ACQUISITION - COMMUNICATION & RELATED EQUIPMENT (0906) | 12.0% | 13.0% | 11.8% | 12.9% | 13.8% | 17.1% | 18.1% | 15.6% | 16.0% | 13.8% |
| PROFESSIONAL & SPECIAL SERVICES - TELECOM (04) | 0.4% | 0.4% | 0.4% | 0.4% | 0.4% | 0.4% | 0.4% | 0.4% | 0.3% | 0.3% |
| RENTALS - TELECOM EQUIPMENT (05) | 3.8% | 3.8% | 3.8% | 3.8% | 3.8% | 3.8% | 3.8% | 3.8% | 4.9% | 4.6% |

* Less than 0.1%

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0
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TABLE 3

DISTRIBUTION OF TELECOMMUNICATIONS EXPENDITURES (excluding salaries)

| EXPENDITURES | 1970-71 (\$ 000) | 1971-72 (\$000) | 1972-74 (\$000) | 1973-74 (\$000) | 1974-75 (\$ 000) | 1975-76 (\$ 000) | 1976-77 (\$ 000) | 1977-78 (\$ 000) | 1978-79 (\$000) | 1979-80 (\$000) |
|---|---------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|
| TELEPHONE (0220) | 25,463 | 30,856 | 37,071 | 42,993 | 52,860 | 65,565 | 75,617 | 93,006 | 111,583 | 112,735 |
| TELEGRAPH, CABLE & WIRELESS (0221) | 40,035 | 37,334 | 36,728 | 38,187 | 37,099 | 39,117 | 42,256 | 43,743 | 47,045 | 48,323 |
| OTHER TELECOM SERVICES (0222) | 892 | 864 | 1,150 | 3,361 | 4,228 | 5,667 | 6,964 | 9,042 | 16,193 | 15,031 |
| REPAIR - TELEGRAPH & TELEPHONE LINES (0621) | | | | | | | | 45 | 32 | 10 |
| REPAIR - COMMUNICATION & RELATED EQUIPMENT (0655) | 1,510 | 1,579 | 1,705 | 1,948 | 2,191 | 2,645 | 3,058 | 3,449 | 4,264 | 4,486 |
| PARTS - COMMUNICATION & RELATED EQUIPMENT (0780) | 6,635 | 6,310 | 7,604 | 8,474 | 9,330 | 9,708 | 11,842 | 15,458 | 17,109 | 15,781 |
| ACQUISITION - COMMUNICATION & RELATED EQUIPMENT (0906) | 10,609 | 12,072 | 11,868 | 14,787 | 17,780 | 26,398 | 32,642 | 32,129 | 39,960 | 33,372 |
| PROFESSIONAL & SPECIAL SERVICES - TELECOM (04) | 356 | 372 | 401 | 458 | 515 | 622 | 719 | 854 | 646 | 656 |
| RENTALS - TELECOM EQUIPMENT (05) | 3,377 | 3,531 | 3,812 | 4,353 | 4,898 | 5,915 | 6,837 | 7,780 | 12,163 | 11,035 |
| TOTALS | 88,877 | 92,918 | 100,339 | 114,561 | 128,901 | 155,637 | 179,935 | 205,506 | 248,995 | 241,429 |

TABLE 4

1979/80 ANNUAL TELECOMMUNICATIONS REPORT
FORM 2 - DETAILS OF TELECOMMUNICATION EXPENDITURES FOR 1979/80

| APPLICATION EXPENDITURES | DOC (\$ 000) | TELCO (\$000) | CN/CP (\$000) | TELE- GLOBE (\$ 000) | OTHER (\$000) | TOTAL (\$ 000) |
|--------------------------------|-----------------|------------------|------------------|----------------------------|------------------|-------------------|
| VOICE - INTER - CITY - PUP LIC | 0 | 24232 | 501 | 0 | 275 | 25008 |
| VOICE - INTER - CITY - GOV'T. | 31047 | 0 | 0 | 0 | 0 | 31047 |
| VOICE - INTER - CITY - OTHER | 4338 | 2984 | 2245 | 204 | 2861 | 12632 |
| VOICE - LOCAL SERV - NCR | 912 | 14973 | 66 | 0 | 4479 | 20430 |
| VOICE - LOCAL SERV - NON - NCR | 1478 | 29559 | 416 | 0 | 19100 | 50553 |
| DATA - INTER - CITY - PUBLIC | 0 | 16595 | 6688 | 0 | 817 | 24100 |
| DATA - INTER - CITY - GOV'T. | 3290 | 0 | 0 | 0 | 0 | 3290 |
| DATA - INTER - CITY - OTHER | 3756 | 1990 | 10940 | 1743 | 4101 | 22530 |
| DATA - LOCAL SERV - NCR | 3 | 9921 | 3583 | 0 | 28123 | 41630 |
| DATA - LOCAL SERV - NON - NCR | 58 | 719 | 1003 | 0 | 5090 | 6870 |
| TOTAL EXPENDITURES | 44882 | 100973 | 25442 | 1947 | 64846 | 238090 |

TABLE 5
BREAKDOWN OF OPERATIONAL TELECOMMUNICATIONS
EXPENDITURES FOR 1978/79 AND 1979/80

| | SERVICE | TOTAL (02) OPERATIONAL TELECOMMUNICATIONS EXPENDITURES | | AMOUNT OF TOTAL (02) OPERATIONAL EXPENDITURES RECOVERED BY GTA | | |
|---------|----------------|--|-------|--|----------|---------------|
| | | \$ | % | \$ | % OF GTA | % OF OP. EXP. |
| 1979/80 | VOICE - | | | | | |
| | INTERCITY | 64,847,680 | 36.8 | 42,096,543 | 80.7 | 23.9 |
| | LOCAL SERVICES | 47,794,320 | 27.1 | 2,438,987 | 4.7 | 1.4 |
| | DATA - | | | | | |
| | INTERCITY | 47,837,725 | 27.2 | 7,634,622 | 14.6 | 4.3 |
| | LOCAL SERVICES | 15,514,275 | 8.9 | * | * | * |
| | TOTALS | 175,994,000 | 100.0 | 52,170,152 | 100.0 | 29.6 |
| 1978/79 | VOICE - | | | | | |
| | INTERCITY | 60,658,000 | 34.7 | 40,739,895 | 81.94 | 23.3 |
| | LOCAL SERVICES | 48,990,700 | 28.0 | 2,595,877 | 5.22 | 1.5 |
| | DATA - | | | | | |
| | INTERCITY | 49,843,500 | 28.5 | 6,382,440 | 12.84 | 3.7 |
| | LOCAL SERVICES | 15,328,800 | 8.8 | * | * | * |
| | TOTALS | 174,821,000 | 100.0 | 49,718,212 | 100.0 | 28.5 |

* Cost of data local services is included with data intercity

TABLE 6

PERCENTAGE OF TOTAL TELECOMMUNICATION EXPENDITURES
FOR VOICE AND DATA COMMUNICATIONS
RELATED TO SHARED, CUSTOMIZED AND DEPARTMENTAL SERVICES
1979 / 80

| SERVICE | % SHARED | % CUSTOMIZED | % DEPARTMENTAL |
|----------------------|----------|--------------|----------------|
| VOICE COMMUNICATIONS | 42.6490 | 3.8198 | 53.5312 |
| DATA COMMUNICATIONS | 3.2965 | 2.5279 | 94.1756 |

TABLE 7

1979/80 ANNUAL TELECOMMUNICATIONS REPORT
FORM 3 - NUMBER OF TELECOMMUNICATIONS PERSONNEL AND
RELATED COSTS 1979/80

| | CLASS | NCR | NON NCR | NON CDA | TOTAL |
|--|---------|-------|------------|------------|--------|
| TOTAL MAN - YEARS | | 90543 | 287372 | 4457 | 382372 |
| NUMBER OF TELECOM PERSONNEL (BY CLASS) | | | | | |
| NO. OF PERS. MAN & CON. | AS | 109 | 90 | 0 | 199 |
| | CS | 79 | 4 | 0 | 83 |
| | FI | 11 | 3 | 0 | 14 |
| | OM | 5 | 0 | 0 | 5 |
| | SX | 1 | 0 | 0 | 1 |
| | ENG | 1 | 0 | 0 | 1 |
| | EL | 7 | 0 | 1 | 8 |
| | PG | 1 | 0 | 0 | 1 |
| | CR | 4 | 1 | 0 | 5 |
| | PM | 0 | 1 | 0 | 1 |
| | LS | 1 | 0 | 0 | 1 |
| NO. OF PERS. - ADMIN. SUP. | CR | 126 | 282 | 0 | 408 |
| | ST | 37 | 36 | 0 | 73 |
| | AS | 33 | 16 | 0 | 49 |
| | GES-MES | 10 | 0 | 7 | 17 |
| | OTHERS | 15 | 0 | 0 | 15 |
| | CM | 6 | 33 | 0 | 39 |
| | EL | 3 | 0 | 0 | 3 |
| | DA | 0 | 4 | 0 | 4 |
| | OCE | 2 | 0 | 0 | 2 |
| | SCY | 0 | 1 | 0 | 1 |
| | CS | 5 | 0 | 0 | 5 |
| | DD | 2 | 0 | 0 | 2 |
| | PG | 1 | 1 | 0 | 2 |
| | GL-MAN | 0 | 1 | 0 | 1 |
| NO. OF PERS. - EQUIP OPER. | CM | 216 | 329 | 132 | 677 |
| | CR | 58 | 412 | 0 | 470 |
| | IS | 1 | 0 | 0 | 1 |
| | OA | 217 | 72 | 0 | 289 |
| | COM | 3 | 0 | 0 | 3 |
| | ST | 7 | 41 | 0 | 48 |
| | SCY | 1 | 0 | 0 | 1 |
| | RO | 0 | 5 | 0 | 5 |
| | OE | 0 | 2 | 0 | 2 |
| | OTHERS | 4 | 260 | 0 | 264 |
| | CON | 0 | 1 | 0 | 1 |
| | OCE | 1 | 0 | 0 | 1 |
| NO. OF PERS. - ENG/MAINT | EL | 47 | 43 | 33 | 123 |
| | EG | 0 | 1 | 0 | 1 |
| | EN | 1 | 0 | 0 | 1 |
| | GS | 15 | 2 | 0 | 17 |
| | GL | 0 | 5 | 0 | 5 |
| | CM | 1 | 0 | 0 | 1 |
| | CR | 0 | 3 | 0 | 3 |
| | EN-ENG | 0 | 1 | 0 | 1 |
| NO. OF PERS. - ENG SUPP. | OA | 1 | 0 | 0 | 1 |
| | ENG | 10 | 1 | 0 | 11 |
| | EL | 3 | 0 | 0 | 3 |
| | DD | 2 | 4 | 0 | 6 |
| | SI | 1 | 0 | 0 | 1 |
| | CR | 3 | 0 | 0 | 3 |
| | AS | 2 | 0 | 0 | 2 |
| | CS | 5 | 0 | 0 | 5 |
| | EN-ENG | 1 | 0 | 0 | 1 |
| TELECOM UNIF. PERS. | | 779 | 2327 | 9 | 3115 |
| TELECOM CONTR. PERS. | | 39 | 62 | 1 | 102 |
| TOTAL PERSONNEL | | 1877 | 4046 | 183 | 6106 |
| COST OF SALARIES (\$ 000) | | 31635 | 70390 | 3367 | 105392 |
| FUNDS FOR TRAINING (\$ 000) | | 60 | 272 | 0 | 332 |
| COST-CONT. PERS. (\$ 000) | | 718 | 125 | 15 | 858 |
| TOTAL COST | | 32413 | 70787 | 3382 | 106582 |

TABLE 8

TELECOMMUNICATIONS EMPLOYEES 1979/80

| PSC CATEGORY | GROUP NAME | NUMBER EMPLOYED |
|-----------------------------|-------------------------------------|-----------------|
| CR | CLERICAL & REGULATORY | 889 |
| CM | COMMUNICATION | 717 |
| DA | DATA CONVERSION | 294 |
| AS | ADMINISTRATIVE SERVICES | 250 |
| ME | MUNICIPAL EMPLOYEE | 197 |
| EL | ELECTRONICS | 137 |
| ST | SECRETARIAL, STENOGRAPHIC & TYPING | 121 |
| CS | COMPUTER SYSTEM ADMINISTRATION | 93 |
| - | OTHERS | 82 |
| GS | GENERAL SERVICES | 17 |
| GES/MES | MESSENGER SERVICE | 17 |
| ENG | ENGINEERING & LAND SURVEY | 15 |
| FI | FINANCIAL ADMINISTRATION | 14 |
| DD | DRAFTING & ILLUSTRATION | 8 |
| GL | GENERAL LABOUR & TRADE | 5 |
| RO | RADIO OPERATIONS | 5 |
| OM | ORGANIZATION & METHODS | 5 |
| PG | PURCHASING & SUPPLY | 3 |
| COM | COMMUNICATIONS CLERK | 3 |
| OCE | MACHINE OPERATOR | 3 |
| SCY | SECRETARY | 2 |
| OE | OFFICE EQUIPMENT | 2 |
| CO | COMMERCE | 2 |
| IS | INFORMATION SERVICES | 2 |
| SI | SOCIAL SCIENCE SUPPORT | 1 |
| EG | ENGINEERING & SCIENTIFIC SUPPORT | 1 |
| SX | SENIOR EXECUTIVE | 1 |
| GL-MAN | GENERAL LABOUR & TRADE-MANIPULATING | 1 |
| CON | DATA PROCESSING-DATA CONVERSION | 1 |
| PM | PROGRAM ADMINISTRATION | 1 |
| PSC TOTAL | | 2,889 |
| UNIFORMED PERSONNEL | | 3,115 |
| CONTRACTED & CONSULTANTS | | 102 |
| TOTAL | | 6,106 |

TABLE 9
OPERATIONAL EXPENDITURES ACTUAL AND FORECAST
 (0220, 0221, 0222, 05, 0621, 0655)

| YEAR | ACTUAL (\$ 000) | FORECAST (\$ 000) | RATE INCREASE (\$ 000) |
|---------|--------------------|----------------------|---------------------------|
| 1970/71 | 71,277 | | |
| 1971/72 | 74,164 | | 4.1 |
| 1972/73 | 80,466 | | 8.5 |
| 1973/74 | 90,842 | | 12.7 |
| 1974/75 | 101,276 | | 11.5 |
| 1975/76 | 118,910 | | 17.4 |
| 1976/77 | 134,732 | | 13.3 |
| 1977/78 | 157,065 | | 16.6 |
| 1978/79 | 191,280 | | 21.8 |
| 1979/80 | 191,620 | | 0.2 |
| 1980/81 | | 223,077 | 16.4 |
| 1981/82 | | 252,159 | 13.0 |
| 1982/83 | | 285,033 | 13.0 |
| 1983/84 | | 322,193 | 13.0 |
| 1984/85 | | 364,197 | 13.0 |
| | | | |

Average annual rate increase 1970/71 - 1984/85 is 12.5 %

TABLE 10
TELECOMMUNICATIONS EXPENDITURES ACTUAL AND FORECAST
 (0780, 0906)

| YEAR | ACTUAL (\$000) | FORECAST (\$ 000) | RATE INCREASE % |
|-----------|-------------------|----------------------|--------------------|
| 1970 / 71 | 17,244 | | |
| 1971 / 72 | 18,382 | | 6.6 |
| 1972 / 73 | 19,472 | | 5.9 |
| 1973 / 74 | 23,261 | | 19.5 |
| 1974 / 75 | 27,110 | | 16.5 |
| 1975 / 76 | 36,106 | | 33.2 |
| 1976 / 77 | 44,484 | | 23.2 |
| 1977 / 78 | 47,587 | | 7.0 |
| 1978 / 79 | 57,069 | | 19.9 |
| 1979 / 80 | 49,153 | | - 13.9 |
| 1980 / 81 | | 69,247 | 40.9 |
| 1981 / 82 | | 80,117 | 15.7 |
| 1982 / 83 | | 92,692 | 15.7 |
| 1983 / 84 | | 107,242 | 15.7 |
| 1984 / 85 | | 124,075 | 15.7 |
| | | | |

TABLE 11
TELEPHONE EXPENDITURES ACTUAL AND FORECAST
(0220)

| YEAR | ACTUAL (\$ 000) | FORECAST (\$ 000) | RATE INCREASE % |
|---------|--------------------|----------------------|--------------------|
| 1970/71 | 25,463 | | |
| 1971/72 | 30,856 | | 21.2 |
| 1972/73 | 37,071 | | 20.1 |
| 1973/74 | 42,993 | | 16.0 |
| 1974/75 | 52,860 | | 23.0 |
| 1975/76 | 65,565 | | 24.0 |
| 1976/77 | 75,617 | | 15.3 |
| 1977/78 | 93,006 | | 23.0 |
| 1978/79 | 111,583 | | 20.0 |
| 1979/80 | 112,735 | | 01.0 |
| 1980/81 | | 150,228 | 33.3 |
| 1981/82 | | 178,983 | 19.1 |
| 1982/83 | | 213,241 | 19.1 |
| 1983/84 | | 254,056 | 19.1 |
| 1984/85 | | 302,683 | 19.1 |
| | | | |

TABLE 12
TOTAL TELECOMMUNICATIONS EXPENDITURES
 (02, 04, 05, 06, 07, 09)

| YEAR | ACTUAL (\$ 000) | FORECAST (\$ 000) | RATE INCREASE % |
|---------|--------------------|----------------------|--------------------|
| 1970/71 | 88,877 | | |
| 1971/72 | 92,918 | | 4.6 |
| 1972/73 | 100,339 | | 8.0 |
| 1973/74 | 114,501 | | 14.1 |
| 1974/75 | 128,901 | | 12.6 |
| 1975/76 | 155,637 | | 20.7 |
| 1976/77 | 179,935 | | 15.6 |
| 1977/78 | 205,506 | | 14.2 |
| 1978/79 | 248,995 | | 21.2 |
| 1979/80 | 241,429 | | - 03.0 |
| 1980/81 | | 293,079 | 21.4 |
| 1981/82 | | 332,905 | 13.6 |
| 1982/83 | | 378,141 | 13.6 |
| 1983/84 | | 429,525 | 13.6 |
| 1984/85 | | 487,891 | 13.6 |
| | | | |

TABLE 13
TOTAL TELECOMMUNICATIONS EXPENDITURES
(01, 02, 04, 05, 06, 07, 09)

| YEAR | ACTUAL (\$000) | FORECAST (\$ 000) | RATE INCREASE % |
|---------|-------------------|----------------------|--------------------|
| 1976/77 | 241,510 | | |
| 1977/78 | 275,047 | | 13.9 |
| 1978/79 | 343,017 | | 24.7 |
| 1979/80 | 349,543 | | 01.9 |
| 1980/81 | | 409,842 | 17.3 |
| 1981/82 | | 459,009 | 12.0 |
| 1982/83 | | 514,333 | 12.1 |
| 1983/84 | | 576,612 | 12.1 |
| 1984/85 | | 646,745 | 12.2 |
| | | | |

TABLE 14

TELEPHONE EXPENDITURE PER PERSON - YEAR
ACTUAL AND FORECAST

| YEAR | TOTAL PERSON-YEAR | TELEPHONE EXPENDITURES (\$ 000) | TELEPHONE EXPENDITURES PER PERSON-YR. (\$) | RATE INCREASE % |
|---------|----------------------|---------------------------------------|---|-----------------------|
| 1970/71 | 311,476 | 25,463 | 81.65 | 20.6 |
| 1971/72 | 312,928 | 30,856 | 98.60 | 17.7 |
| 1972/73 | 319,571 | 37,071 | 116.01 | 12.1 |
| 1973/74 | 330,740 | 42,993 | 129.99 | 18.1 |
| 1974/75 | 344,474 | 52,860 | 153.45 | 19.1 |
| 1975/76 | 358,603 | 65,565 | 182.83 | 13.8 |
| 1976/77 | 363,411 | 75,617 | 208.07 | 20.8 |
| 1977/78 | 369,985 | 93,006 | 251.38 | 11.3 |
| 1978/79 | 398,864 | 111,583 | 279.75 | 5.4 |
| 1979/80 | 382,372 | 112,735 | 294.91 | 33.2 |
| 1980/81 | 382,372 | 150,228 | 392.88 | 19.1 |
| 1981/82 | 382,372 | 178,983 | 468.09 | 19.1 |
| 1982/83 | 382,372 | 213,241 | 557.68 | 19.1 |
| 1983/84 | 382,372 | 254,056 | 664.42 | 19.1 |
| 1984/85 | 382,372 | 302,683 | 791.59 | |

TABLE 15
GTA REVOLVING FUND

| YEAR | ACTUAL AND PROGRAM FORECAST (\$ 000) | RATE INCREASE % | EXPONENTIAL FORECAST (\$ 000) | RATE INCREASE % |
|-----------|---|-----------------------|-------------------------------------|-----------------------|
| 1972 / 73 | 13,213 | | | |
| 1973 / 74 | 16,438 | 24.4 | | |
| 1974 / 75 | 20,407 | 24.1 | | |
| 1975 / 76 | 26,776 | 31.2 | | |
| 1976 / 77 | 33,098 | 23.6 | | |
| 1977 / 78 | 40,187 | 21.4 | | |
| 1978 / 79 | 49,343 | 22.8 | | |
| 1979 / 80 | 52,170 | 05.7 | | |
| 1980 / 81 | 64,359 | 23.4 | 71,593 | 37.2 |
| 1981 / 82 | 72,841 | 13.2 | 88,023 | 22.9 |
| 1982 / 83 | 78,649 | 8.0 | 108,223 | 22.9 |
| 1983 / 84 | 85,159 | 8.3 | 133,058 | 22.9 |
| 1984 / 85 | * 94,139 | 10.5 | 163,593 | 22.9 |

* PROGRAM FORECAST FOR 1984 / 85 WAS NOT AVAILABLE AND THEREFORE IT WAS DERIVED FROM EXPONENTIAL REGRESSION CURVE FITTING USING 1980 / 81 - 1983 / 84 FORECAST DATA

TABLE 16
GOVERNMENT TELECOMMUNICATIONS AGENCY
COST RECOVERY vs TOTAL OPERATIONAL
TELECOMMUNICATION EXPENDITURES

| YEAR | GOVERNMENT TELECOMM. AGENCY | OPERATIONAL TELECOMM. EXPENDITURES | % GTA / OPER. TELECOMM. EXPENDITURES |
|-----------|-----------------------------------|--|--|
| 1972 / 73 | 13,231,000 | 74,949,000 | 17.7 |
| 1973 / 74 | 16,438,000 | 84,541,000 | 19.4 |
| 1974 / 75 | 20,407,000 | 94,187,000 | 21.7 |
| 1975 / 76 | 26,776,000 | 110,349,000 | 24.3 |
| 1976 / 77 | 33,098,000 | 124,837,000 | 26.5 |
| 1977 / 78 | 40,187,000 | 145,791,000 | 27.6 |
| 1978 / 79 | 49,343,000 | 174,821,000 | 28.2 |
| 1979 / 80 | 52,170,000 | 176,089,000 | 29.6 |
| | | | |



TABLE 17

GTA COST RECOVERY PERCENTAGE
OF TOTAL OPERATIONAL EXPENDITURES
ACTUAL AND FORECAST

| YEAR | % OF TOTAL OPERATIONAL EXPENDITURES | FORECAST % |
|---------|---|---------------|
| 1972/73 | 17.7 | |
| 1973/74 | 19.4 | |
| 1974/75 | 21.7 | |
| 1975/76 | 24.3 | |
| 1976/77 | 26.5 | |
| 1977/78 | 27.6 | |
| 1978/79 | 28.2 | |
| 1979/80 | 29.6 | |
| 1980/81 | | 32.5 |
| 1981/82 | | 34.3 |
| 1982/83 | | 36.1 |
| 1983/84 | | 38.0 |
| 1984/85 | | 39.8 |
| | | |

TABLE 18
BREAKDOWN OF OPERATIONAL EXPENDITURES
BY DEPT / AGENCY

| | DEPT/AGENCY | OPERATIONAL EXPENDITURES | | | |
|-----|--|--------------------------|-------|-------|--------|
| | | 0220 | 0221 | 0222 | TOTAL |
| 1. | NATIONAL DEFENCE | 12793 | 31207 | 16 | 44016 |
| 2. | TRANSPORT CANADA | 8660 | 5464 | 4939 | 19063 |
| 3. | EMPLOYMENT AND IMMIGRATION | 12888 | 2091 | 1040 | 16019 |
| 4. | ENVIRONMENT | 5603 | 412 | 4305 | 10320 |
| 5. | EXTERNAL AFFAIRS | 4023 | 4998 | 44 | 9065 |
| 6. | REVENUE CANADA (TAXATION) | 7419 | 184 | 924 | 8527 |
| 7. | SOLICITOR GENERAL RCMP | 7643 | 301 | 21 | 7965 |
| 8. | NATIONAL HEALTH AND WELFARE | 4901 | 154 | 24 | 5079 |
| 9. | SUPPLY AND SERVICES | 3736 | 420 | 615 | 4771 |
| 10. | POST OFFICE | 3947 | 207 | 416 | 4570 |
| 11. | INDIAN AND NORTHERN AFFAIRS | 3927 | 266 | 28 | 4221 |
| 12. | FISHERIES AND OCEANS | 3059 | 164 | 22 | 3245 |
| 13. | CORRECTIONAL SERVICES | 2820 | 256 | 54 | 3130 |
| 14. | AGRICULTURE | 2734 | 102 | 188 | 3024 |
| 15. | PUBLIC WORKS | 2352 | 242 | 272 | 2866 |
| 16. | REVENUE CANADA (CUSTOMS AND EXCISE) | 2408 | 96 | 217 | 2721 |
| 17. | INDUSTRY, TRADE AND COMMERCE | 2118 | 123 | 169 | 2410 |
| 18. | STATISTICS CANADA | 2013 | 16 | 187 | 2216 |
| 19. | SECRETARY OF STATE | 1687 | 28 | 89 | 1804 |
| 20. | ENERGY, MINES AND RESOURCES | 1340 | 99 | 323 | 1762 |
| 21. | PUBLIC SERVICE COMMISSION | 1472 | 66 | 69 | 1607 |
| 22. | REGIONAL ECONOMIC EXPANSION | 1342 | 20 | 120 | 1482 |
| 23. | COMMUNICATIONS | 1217 | 78 | 98 | 1393 |
| 24. | NATIONAL RESEARCH COUNCIL | 969 | 40 | 201 | 1210 |
| 25. | VETERANS AFFAIRS | 1180 | 21 | 6 | 1207 |
| 26. | CONSUMER AND CORPORATE AFFAIRS | 1083 | 13 | 24 | 1120 |
| 27. | JUSTICE | 913 | 12 | 0 | 925 |
| 28. | CHIEF ELECTORAL OFFICER | 664 | 239 | 0 | 903 |
| 29. | NATIONAL FILM BOARD | 785 | 21 | 92 | 898 |
| 30. | PRIVY COUNCIL | 596 | 28 | 0 | 624 |
| 31. | NATIONAL MUSEUMS | 447 | 2 | 142 | 591 |
| 32. | CANADIAN TRANSPORT COMMISSION | 469 | 65 | 0 | 534 |
| 33. | FINANCE | 448 | 7 | 10 | 465 |
| 34. | TREASURY BOARD | 445 | 7 | 11 | 463 |
| 35. | LABOUR | 417 | 26 | 0 | 443 |
| 36. | CANADIAN INTERNATIONAL DEVELOPMENT AGENCY | 369 | 6 | 0 | 375 |
| 37. | CANADIAN RADIO-TV AND TELECOM. COMMISSION | 273 | 9 | 13 | 295 |
| 38. | NATIONAL ENERGY BOARD | 256 | 31 | 2 | 289 |
| 39. | AUDITOR GENERAL | 261 | 1 | 26 | 288 |
| 40. | SOLICITOR GENERAL | 245 | 1 | 2 | 248 |
| 41. | PUBLIC ARCHIVES | 198 | 4 | 23 | 225 |
| 42. | NATIONAL LIBRARY | 114 | 29 | 73 | 216 |
| 43. | NATIONAL PAROLE BOARD | 156 | 33 | 0 | 189 |
| 44. | ECONOMIC COUNCIL OF CANADA | 103 | 0 | 0 | 103 |
| 45. | ATOMIC ENERGY CONTROL BOARD | 91 | 8 | 1 | 100 |
| 46. | SCIENCE AND TECHNOLOGY | 94 | 2 | 0 | 96 |
| 47. | COMMISSIONER OF OFFICIAL LANGUAGES | 83 | 1 | 2 | 86 |
| 48. | PUBLIC SERVICE STAFF RELATIONS BOARD | 80 | 2 | 0 | 82 |
| 49. | CANADIAN GOVERNMENTAL CONFERENCE SECRETARIAT | 64 | 5 | 0 | 69 |
| 50. | IMMIGRATION APPEAL BOARD | 59 | 1 | 0 | 60 |
| 51. | SCIENCE COUNCIL OF CANADA | 57 | 1 | 0 | 58 |
| 52. | INSURANCE | 48 | 0 | 1 | 49 |
| | GRAND TOTALS | 111069 | 47609 | 14809 | 173487 |

TABLE 19
TOTAL PERSONNEL EXPENDITURES RANKED BY DEPARTMENT

| | DEPT / AGENCY | TOTAL TELECOM PERSONNEL EXPENDITURES (\$ 000) | % OF TOTAL | CUMULATIVE % |
|-----|--|--|---------------|-----------------|
| 1. | NATIONAL DEFENCE | 51,979 | 48.8 | 48.8 |
| 2. | ROYAL CANADIAN MOUNTED POLICE | 30,177 | 28.3 | 77.1 |
| 3. | EXTERNAL AFFAIRS | 7,113 | 6.7 | 83.8 |
| 4. | EMPLOYMENT AND IMMIGRATION | 6,729 | 6.3 | 90.1 |
| 5. | ENVIRONMENT | 3,327 | 3.1 | 93.2 |
| 6. | SUPPLY AND SERVICES | 1,820 | 1.7 | 94.9 |
| 7. | REVENUE CANADA (TAXATION) | 585 | 0.5 | 95.4 |
| 8. | TRANSPORT CANADA | 579 | 0.5 | 95.9 |
| 9. | CORRECTIONAL SERVICES | 525 | 0.5 | 96.4 |
| 10. | INDIAN AND NORTHERN AFFAIRS | 343 | 0.3 | 96.7 |
| 11. | POST OFFICE | 321 | 0.3 | 97.0 |
| 12. | FISHERIES AND OCEANS | 320 | 0.3 | 97.3 |
| 13. | REGIONAL ECONOMIC EXPANSION | 295 | 0.3 | 97.6 |
| 14. | AGRICULTURE | 276 | 0.3 | 97.9 |
| 15. | INDUSTRY, TRADE AND COMMERCE | 274 | 0.3 | 98.2 |
| 16. | PUBLIC WORKS | 274 | 0.3 | 98.5 |
| 17. | REVENUE CANADA (CUSTOMS AND EXCISE) | 248 | 0.2 | 98.7 |
| 18. | ENERGY, MINES AND RESOURCES | 180 | 0.2 | 98.9 |
| 19. | COMMUNICATIONS | 135 | 0.1 | 99.0 |
| 20. | NATIONAL HEALTH AND WELFARE | 134 | 0.1 | 99.1 |
| 21. | NATIONAL LIBRARY | 112 | 0.1 | 99.2 |
| 22. | NATIONAL ENERGY BOARD | 95 | 0.1 | 99.3 |
| 23. | PUBLIC SERVICE COMMISSION | 81 | 0.1 | 99.4 |
| 24. | FINANCE | 65 | 0.1 | 99.5 |
| 25. | NATIONAL PAROLE BOARD | 54 | 0.1 | 99.6 |
| 26. | VETERANS AFFAIRS | 53 | 0.0 | |
| 27. | CANADIAN TRANSPORT COMMISSION | 49 | 0.0 | |
| 28. | CHIEF ELECTORAL OFFICER | 48 | 0.0 | |
| 29. | NATIONAL MUSEUMS | 35 | 0.0 | |
| 30. | CONSUMER AND CORPORATE AFFAIRS | 34 | 0.0 | |
| 31. | SECRETARY OF STATE | 34 | 0.0 | |
| 32. | PUBLIC ARCHIVES | 32 | 0.0 | |
| 33. | NATIONAL RESEARCH COUNCIL | 31 | 0.0 | |
| 34. | JUSTICE | 30 | 0.0 | |
| 35. | LABOUR | 28 | 0.0 | |
| 36. | NATIONAL FILM BOARD | 24 | 0.0 | |
| 37. | IMMIGRATION APPEAL BOARD | 21 | 0.0 | |
| 38. | CANADIAN INTERNATIONAL DEVELOPMENT AGENCY | 19 | 0.0 | |
| 39. | CANADIAN RADIO-TV AND TELECOM. COMMISSION | 19 | 0.0 | 0.4 |
| 40. | SOLICITOR GENERAL | 19 | 0.0 | |
| 41. | STATISTICS CANADA | 19 | 0.0 | |
| 42. | CANADIAN GOVERNMENTAL CONFERENCE SECRETARIAT | 18 | 0.0 | |
| 43. | SCIENCE AND TECHNOLOGY | 16 | 0.0 | |
| 44. | AUDITOR GENERAL | 12 | 0.0 | |
| 45. | ATOMIC ENERGY CONTROL BOARD | 0 | 0.0 | |
| 46. | COMMISSIONER OF OFFICIAL LANGUAGES | 0 | 0.0 | |
| 47. | ECONOMIC COUNCIL OF CANADA | 0 | 0.0 | |
| 48. | INSURANCE | 0 | 0.0 | |
| 49. | PRIVY COUNCIL | 0 | 0.0 | |
| 50. | PUBLIC SERVICE STAFF RELATIONS BOARD | 0 | 0.0 | |
| 51. | SCIENCE COUNCIL OF CANADA | 0 | 0.0 | |
| 52. | TREASURY BOARD | 0 | 0.0 | |
| | GRAND TOTAL | 106,582 | 100.0 | 100.0 |

TABLE 20
TOTAL TELECOM EXPENDITURES (EXCLUDING SALARIES)
RANKED BY DEPARTMENT

| | DEPT/AGENCY | TOTAL EXPENDITURES (EXCLUDING SALARIES) (\$000) | % OF TOTAL | CUMULATIVE % |
|-----|--|---|---------------|-----------------|
| 1. | NATIONAL DEFENCE | 78826 | 32.7 | 32.7 |
| 2. | ROYAL CANADIAN MOUNTED POLICE | 21311 | 8.9 | 41.6 |
| 3. | TRANSPORT CANADA | 20263 | 8.4 | 50.0 |
| 4. | EMPLOYMENT AND IMMIGRATION | 17033 | 7.1 | 57.1 |
| 5. | EXTERNAL AFFAIRS | 11673 | 4.8 | 61.9 |
| 6. | ENVIRONMENT | 11489 | 4.8 | 66.7 |
| 7. | REVENUE CANADA (TAXATION) | 8660 | 3.6 | 70.3 |
| 8. | COMMUNICATIONS | 6995 | 2.9 | 73.2 |
| 9. | SUPPLY AND SERVICES | 5811 | 2.4 | 75.6 |
| 10. | NATIONAL HEALTH AND WELFARE | 5213 | 2.2 | 77.8 |
| 11. | POST OFFICE | 4973 | 2.1 | 79.9 |
| 12. | INDIAN AND NORTHERN AFFAIRS | 4374 | 1.8 | 81.7 |
| 13. | FISHERIES AND OCEANS | 4112 | 1.7 | 83.4 |
| 14. | CORRECTIONAL SERVICES | 3651 | 1.5 | 84.9 |
| 15. | AGRICULTURE | 3372 | 1.4 | 86.3 |
| 16. | PUBLIC WORKS | 3048 | 1.3 | 87.6 |
| 17. | REVENUE CANADA (CUSTOMS AND EXCISE) | 2832 | 1.2 | 88.8 |
| 18. | INDUSTRY, TRADE AND COMMERCE | 2812 | 1.2 | 90.0 |
| 19. | STATISTICS CANADA | 2221 | 0.9 | 90.9 |
| 20. | ENERGY, MINES AND RESOURCES | 1827 | 0.8 | 91.7 |
| 21. | SECRETARY OF STATE | 1805 | 0.7 | 92.4 |
| 22. | PUBLIC SERVICE COMMISSION | 1610 | 0.7 | 93.1 |
| 23. | REGIONAL ECONOMIC EXPANSION | 1530 | 0.6 | 93.7 |
| 24. | NATIONAL RESEARCH COUNCIL | 1246 | 0.5 | 94.2 |
| 25. | VETERANS AFFAIRS | 1207 | 0.5 | 94.7 |
| 26. | CONSUMER AND CORPORATE AFFAIRS | 1133 | 0.5 | 95.2 |
| 27. | JUSTICE | 944 | 0.4 | 95.6 |
| 28. | NATIONAL FILM BOARD | 920 | 0.4 | 96.0 |
| 29. | CHIEF ELECTORAL OFFICER | 902 | 0.4 | 96.4 |
| 30. | PRIVY COUNCIL | 631 | 0.3 | 96.7 |
| 31. | NATIONAL MUSEUMS | 590 | 0.2 | 96.9 |
| 32. | CANADIAN TRANSPORT COMMISSION | 562 | 0.2 | 97.1 |
| 33. | CANADIAN INTERNATIONAL DEVELOPMENT AGENCY | 492 | 0.2 | 97.3 |
| 34. | FINANCE | 486 | 0.2 | 97.5 |
| 35. | TREASURY BOARD | 469 | 0.2 | 97.7 |
| 36. | LABOUR | 443 | 0.2 | 97.9 |
| 37. | NATIONAL LIBRARY | 331 | 0.1 | 98.0 |
| 38. | CANADIAN RADIO-TV AND TELECOM COMMISSION | 300 | 0.1 | 98.1 |
| 39. | NATIONAL ENERGY BOARD | 296 | 0.1 | 98.2 |
| 40. | AUDITOR GENERAL | 291 | 0.1 | 98.3 |
| 41. | SOLICITOR GENERAL | 251 | 0.1 | 98.4 |
| 42. | PUBLIC ARCHIVES | 232 | 0.1 | 98.5 |
| 43. | NATIONAL PAROLE BOARD | 189 | 0.1 | 98.6 |
| 44. | ATOMIC ENERGY CONTROL BOARD | 118 | 0.0 | 98.6 |
| 45. | ECONOMIC COUNCIL OF CANADA | 103 | 0.0 | 98.6 |
| 46. | SCIENCE AND TECHNOLOGY | 98 | 0.0 | 98.6 |
| 47. | COMMISSIONER OF OFFICIAL LANGUAGES | 84 | 0.0 | 98.6 |
| 48. | PUBLIC SERVICE STAFF RELATIONS BOARD | 82 | 0.0 | 98.6 |
| 49. | CANADIAN GOVERNMENTAL CONFERENCE SECRETARIAT | 71 | 0.0 | 98.6 |
| 50. | SCIENCE COUNCIL OF CANADA | 68 | 0.0 | 98.6 |
| 51. | IMMIGRATION APPEAL BOARD | 60 | 0.0 | 98.6 |
| 52. | INSURANCE | 50 | 0.0 | 98.6 |
| | TOTAL DEPT. NOT SURVEYED | 3339 | | |
| | TOTAL DEPT. SURVEYED | 238090 | 98.6 | |
| | GRAND TOTAL | 241429 | | |

TABLE 21
TOTAL TELECOM EXPENDITURES (INCLUDING SALARIES)
RANKED BY DEPARTMENT

| | DEPT / AGENCY | TOTAL EXPENDITURES (INCLUDING SALARIES) (\$000) | % OF TOTAL | CUMULATIVE % |
|-----|--|---|---------------|-----------------|
| 1. | NATIONAL DEFENCE | 130,806 | 37.4 | 37.4 |
| 2. | ROYAL CANADIAN MOUNTED POLICE | 51,488 | 14.7 | 52.1 |
| 3. | EMPLOYMENT AND IMMIGRATION | 23,755 | 6.8 | 58.9 |
| 4. | TRANSPORT CANADA | 20,842 | 6.0 | 64.9 |
| 5. | EXTERNAL AFFAIRS | 18,786 | 5.4 | 70.3 |
| 6. | ENVIRONMENT | 14,816 | 5.4 | 74.5 |
| 7. | REVENUE CANADA (TAXATION) | 9,145 | 2.6 | 77.1 |
| 8. | SUPPLY AND SERVICES | 7,634 | 2.2 | 79.3 |
| 9. | COMMUNICATIONS | 7,130 | 2.0 | 81.3 |
| 10. | NATIONAL HEALTH AND WELFARE | 5,349 | 1.5 | 82.8 |
| 11. | POST OFFICE | 5,294 | 1.5 | 84.3 |
| 12. | INDIAN AND NORTHERN AFFAIRS | 4,717 | 1.3 | 85.6 |
| 13. | FISHERIES AND OCEANS | 4,432 | 1.3 | 86.9 |
| 14. | CORRECTIONAL SERVICES | 4,176 | 1.2 | 88.1 |
| 15. | AGRICULTURE | 3,645 | 1.0 | 89.1 |
| 16. | PUBLIC WORKS | 3,321 | 1.0 | 90.1 |
| 17. | INDUSTRY, TRADE AND COMMERCE | 3,085 | 0.9 | 91.0 |
| 18. | REVENUE CANADA (CUSTOMS AND EXCISE) | 3,080 | 0.9 | 91.9 |
| 19. | STATISTICS CANADA | 2,240 | 0.6 | 92.5 |
| 20. | ENERGY, MINES AND RESOURCES | 2,006 | 0.6 | 93.1 |
| 21. | SECRETARY OF STATE | 1,838 | 0.5 | 93.6 |
| 22. | REGIONAL ECONOMIC EXPANSION | 1,825 | 0.5 | 94.1 |
| 23. | PUBLIC SERVICE COMMISSION | 1,691 | 0.5 | 94.6 |
| 24. | NATIONAL RESEARCH COUNCIL | 1,276 | 0.4 | 95.0 |
| 25. | VETERANS AFFAIRS | 1,260 | 0.4 | 95.4 |
| 26. | CONSUMER AND CORPORATE AFFAIRS | 1,167 | 0.3 | 95.7 |
| 27. | JUSTICE | 974 | 0.3 | 96.0 |
| 28. | CHIEF ELECTORAL OFFICER | 951 | 0.3 | 96.3 |
| 29. | NATIONAL FILM BOARD | 944 | 0.3 | 96.6 |
| 30. | PRIVY COUNCIL | 631 | 0.2 | 96.8 |
| 31. | NATIONAL MUSEUMS | 626 | 0.2 | 97.0 |
| 32. | CANADIAN TRANSPORT COMMISSION | 611 | 0.2 | 97.2 |
| 33. | FINANCE | 551 | 0.2 | 97.4 |
| 34. | CANADIAN INTERNATIONAL DEVELOPMENT AGENCY | 511 | 0.1 | 97.5 |
| 35. | LABOUR | 478 | 0.1 | 97.6 |
| 36. | TREASURY BOARD | 469 | 0.1 | 97.7 |
| 37. | NATIONAL LIBRARY | 444 | 0.1 | 97.8 |
| 38. | NATIONAL ENERGY BOARD | 391 | 0.1 | 97.9 |
| 39. | CANADIAN RADIO-TV TELECOM. COMMISSION | 319 | 0.1 | 98.0 |
| 40. | AUDITOR GENERAL | 303 | 0.1 | 98.1 |
| 41. | SOLICITOR GENERAL | 270 | 0.1 | 98.2 |
| 42. | PUBLIC ARCHIVES | 264 | 0.1 | 98.3 |
| 43. | NATIONAL PAROLE BOARD | 243 | 0.1 | 98.4 |
| 44. | ATOMIC ENERGY CONTROL BOARD | 119 | 0.0 | 98.4 |
| 45. | SCIENCE AND TECHNOLOGY | 114 | 0.0 | 98.4 |
| 46. | ECONOMIC COUNCIL OF CANADA | 103 | 0.0 | 98.4 |
| 47. | CANADIAN GOVERNMENT CONFERENCE SECRETARIAT | 89 | 0.0 | 98.4 |
| 48. | COMMISSIONER OF OFFICIAL LANGUAGES | 86 | 0.0 | 98.4 |
| 49. | PUBLIC SERVICE STAFF RELATIONS BOARD | 82 | 0.0 | 98.4 |
| 50. | IMMIGRATION APPEAL BOARD | 81 | 0.0 | 98.4 |
| 51. | SCIENCE COUNCIL OF CANADA | 67 | 0.0 | 98.4 |
| 52. | INSURANCE | 51 | 0.0 | 98.4 |
| | TOTAL DEPT NOT SURVEYED | 4,967 | 1.4 | 99.8 |
| | TOTAL DEPT SURVEYED | 344,576 | 98.6 | |
| | GRAND TOTAL | 349,543 | | |

TABLE 22
TELECOM PERSONNEL RANKED BY DEPARTMENT / AGENCY

| | DEPT / AGENCY | NO. OF PERSONNEL |
|-----|--|------------------|
| 1. | NATIONAL DEFENCE | 2915 |
| 2. | ROYAL CANADIAN MOUNTED POLICE | 1572 |
| 3. | EXTERNAL AFFAIRS | 378 |
| 4. | EMPLOYMENT AND IMMIGRATION | 336 |
| 5. | COMMUNICATIONS | 293 |
| 6. | ENVIRONMENT | 156 |
| 7. | SUPPLY AND SERVICES | 123 |
| 8. | TRANSPORT CANADA | 52 |
| 9. | REVENUE CANADA (TAXATION) | 32 |
| 10. | POST OFFICE | 24 |
| 11. | INDIAN AND NORTHERN AFFAIRS | 23 |
| 12. | AGRICULTURE | 20 |
| 13. | REVENUE CANADA (CUSTOMS AND EXCISE) | 19 |
| 14. | REGIONAL ECONOMIC EXPANSION | 18 |
| 15. | PUBLIC WORKS | 18 |
| 16. | FISHERIES AND OCEANS | 16 |
| 17. | INDUSTRY, TRADE AND COMMERCE | 16 |
| 18. | ENERGY, MINES AND RESOURCES | 13 |
| 19. | NATIONAL HEALTH AND WELFARE | 10 |
| 20. | NATIONAL LIBRARY | 8 |
| 21. | CORRECTIONAL SERVICES | 7 |
| 22. | NATIONAL ENERGY BOARD | 6 |
| 23. | PUBLIC SERVICE COMMISSION | 4 |
| 24. | NATIONAL PAROLE BOARD | 4 |
| 25. | FINANCE | 4 |
| 26. | CHIEF ELECTORAL OFFICER | 4 |
| 27. | CANADIAN TRANSPORT COMMISSION | 4 |
| 28. | PUBLIC ARCHIVES | 3 |
| 29. | VETERANS AFFAIRS | 3 |
| 30. | SECRETARY OF STATE | 3 |
| 31. | LABOUR | 3 |
| 32. | NATIONAL RESEARCH COUNCIL | 2 |
| 33. | NATIONAL MUSEUMS | 2 |
| 34. | NATIONAL FILM BOARD | 2 |
| 35. | JUSTICE | 2 |
| 36. | IMMIGRATION APPEAL BOARD | 2 |
| 37. | CONSUMER AND CORPORATE AFFAIRS | 2 |
| 38. | STATISTICS CANADA | 1 |
| 39. | SOLICITOR GENERAL | 1 |
| 40. | SCIENCE AND TECHNOLOGY | 1 |
| 41. | CANADIAN RADIO-TV AND TELECOM. COMMISSION | 1 |
| 42. | CANADIAN INTERNATIONAL DEVELOPMENT AGENCY | 1 |
| 43. | CANADIAN GOVERNMENTAL CONFERENCE SECRETARIAT | 1 |
| 44. | AUDITOR GENERAL | 1 |
| 45. | TREASURY BOARD | 0 |
| 46. | SCIENCE COUNCIL OF CANADA | 0 |
| 47. | PUBLIC SERVICE STAFF RELATIONS BOARD | 0 |
| 48. | PRIVY COUNCIL | 0 |
| 49. | INSURANCE | 0 |
| 50. | ECONOMIC COUNCIL OF CANADA | 0 |
| 51. | COMMISSIONER OF OFFICIAL LANGUAGES | 0 |
| 52. | ATOMIC ENERGY CONTROL BOARD | 0 |
| | GRAND TOTAL | 6106 |

TABLE 23

TOTAL PERSONNEL RANKED BY DEPARTMENT / AGENCY

| | DEPT / AGENCY | NO OF PERSONNEL |
|-----|--|-----------------|
| 1. | NATIONAL OFFENCE | 116,809 |
| 2. | POST OFFICE | 52,819 |
| 3. | EMPLOYMENT AND IMMIGRATION | 24,917 |
| 4. | TRANSPORT | 21,096 |
| 5. | ROYAL CANAOIAN MOUNTEO POLICE | 19,937 |
| 6. | REVENUE CANAOA (TAXATION) | 16,601 |
| 7. | ENVIRONMENT | 11,604 |
| 8. | AGRICULTURE | 11,066 |
| 9. | SUPPLY AND SERVICES | 10,243 |
| 10. | CORRECTIONAL SERVICES | 9,729 |
| 11. | PUBLIC WORKS | 9,201 |
| 12. | REVENUE CANAOA (CUSTOMS AND EXCISE) | 9,003 |
| 13. | NATIONAL HEALTH AND WELFARE | 8,648 |
| 14. | INOIAN AND NORTHERN AFFAIRS | 6,867 |
| 15. | EXTERNAL AFFAIRS | 5,036 |
| 16. | VETERANS AFFAIRS | 4,900 |
| 17. | FISHERIES AND OCEANS | 4,591 |
| 18. | STATISTICS CANAOA | 4,453 |
| 19. | ENERGY, MINES AND RESOURCES | 4,178 |
| 20. | SECRETARY OF STATE | 3,130 |
| 21. | INDUSTRY, TRADE AND COMMERCE | 3,103 |
| 22. | NATIONAL RESEARCH COUNCIL | 3,019 |
| 23. | PUBLIC SERVICE COMMISSION | 2,552 |
| 24. | CONSUMER AND CORPORATE AFFAIRS | 2,433 |
| 25. | REGIONAL ECONOMIC EXPANSION | 2,045 |
| 26. | COMMUNICATIONS | 1,973 |
| 27. | JUSTICE | 1,227 |
| 28. | CANAOIAN INTERNATIONAL DEVELOPMENT AGENCY | 1,018 |
| 29. | NATIONAL MUSEUMS | 1,006 |
| 30. | TREASURY BOARD | 1,001 |
| 31. | NATIONAL FILM BOARD | 998 |
| 32. | CANAOIAN TRANSPORT COMMISSION | 886 |
| 33. | FINANCE | 764 |
| 34. | PUBLIC ARCHIVES | 736 |
| 35. | LABOUR | 700 |
| 36. | PRIVY COUNCIL | 529 |
| 37. | NATIONAL LIBRARY | 515 |
| 38. | AUOITOR GENERAL | 479 |
| 39. | CANAOIAN RADIO-TV AND TELECOM. COMMISSION | 447 |
| 40. | NATIONAL ENERGY BOARD | 388 |
| 41. | NATIONAL PAROLE BOARD | 280 |
| 42. | SOLICITOR GENERAL | 252 |
| 43. | INSURANCE | 199 |
| 44. | ATOMIC ENERGY CONTROL BOARD | 183 |
| 45. | PUBLIC SERVICE STAFF RELATIONS BOARD | 182 |
| 46. | ECONOMIC COUNCIL OF CANAOA | 170 |
| 47. | SCIENCE AND TECHNOLOGY | 156 |
| 48. | COMMISSIONER OF OFFICIAL LANGUAGES | 98 |
| 49. | IMMIGRATION APPEAL BOARD | 66 |
| 50. | SCIENCE COUNCIL OF CANAOA | 63 |
| 51. | CHIEF ELECTORAL OFFICER | 49 |
| 52. | CANAOIAN GOVERNMENTAL CONFERENCE SECRETARIAT | 27 |
| | GRAND TOTAL | 382,372 |

TABLE 24

TOTAL TELECOM PERSONNEL / TOTAL PERSONNEL RATIO

| | DEPT / AGENCY | TELECOM PERSONNEL BY OEPT./AGENCY | TOTAL PERSONNEL BY OEPT./AGENCY | TELECOM/ TOTAL PERSONNEL RATIO (%) |
|-----|--|--|--|---|
| 1. | COMMUNICATIONS | 293 | 1973 | 14.85 |
| 2. | CHIEF ELECTORIAL OFFICER | 4 | 49 | 8.16 |
| 3. | ROYAL CANADIAN MOUNTED POLICE | 1572 | 19937 | 7.88 |
| 4. | EXTERNAL AFFAIRS | 378 | 5036 | 7.51 |
| 5. | CANADIAN GOVERNMENT CONFERENCE SECRETARIAT | 1 | 27 | 3.70 |
| 6. | IMMIGRATION APPEAL BOARD | 2 | 66 | 3.03 |
| 7. | NATIONAL DEFENCE | 2915 | 116809 | 2.50 |
| 8. | NATIONAL LIBRARY | 8 | 515 | 1.55 |
| 9. | NATIONAL ENERGY BOARD | 6 | 388 | 1.55 |
| 10. | NATIONAL PAROLE BOARD | 4 | 280 | 1.43 |
| 11. | EMPLOYMENT & IMMIGRATION | 336 | 24917 | 1.35 |
| 12. | ENVIRONMENT | 156 | 11604 | 1.34 |
| 13. | SUPPLY & SERVICES | 123 | 10243 | 1.20 |
| 14. | REGIONAL ECONOMIC EXPANSION | 18 | 2045 | 0.88 |
| 15. | SCIENCE & TECHNOLOGY | 1 | 156 | 0.64 |
| 16. | INDUSTRY TRADE AND COMMERCE | 16 | 3103 | 0.52 |
| 17. | FINANCE | 4 | 764 | 0.52 |
| 18. | CANADIAN TRANSPORT COMMISSION | 4 | 886 | 0.45 |
| 19. | LABOUR | 3 | 700 | 0.43 |
| 20. | PUBLIC ARCHIVES | 3 | 736 | 0.41 |
| 21. | SOLICITOR GENERAL | 1 | 252 | 0.40 |
| 22. | FISHERIES AND OCEANS | 16 | 4591 | 0.35 |
| 23. | INDIAN AND NORTHERN AFFAIRS | 23 | 6867 | 0.33 |
| 24. | ENERGY MINES AND RESOURCES | 13 | 4178 | 0.31 |
| 25. | TRANSPORT CANADA | 52 | 21096 | 0.25 |
| 26. | CANADIAN RADIO-TV TELECOM COMMISSION | 1 | 447 | 0.22 |
| 27. | REVENUE CANADA CUSTOMS AND EXCISE | 19 | 9003 | 0.21 |
| 28. | AUDITOR GENERAL | 1 | 479 | 0.21 |
| 29. | PUBLIC WORKS | 18 | 9201 | 0.20 |
| 30. | NATIONAL MUSEUMS | 2 | 1006 | 0.20 |
| 31. | NATIONAL FILM BOARD | 2 | 998 | 0.20 |
| 32. | REVENUE CANADA TAXATION | 32 | 16601 | 0.19 |
| 33. | AGRICULTURE | 20 | 11066 | 0.18 |
| 34. | PUBLIC SERVICE COMMISSION | 4 | 2552 | 0.16 |
| 35. | JUSTICE | 2 | 1227 | 0.16 |
| 36. | NATIONAL HEALTH AND WELFARE | 10 | 8648 | 0.12 |
| 37. | SECRETARY OF STATE | 3 | 3130 | 0.10 |
| 38. | CANADIAN INTERNATIONAL DEVELOPMENT AGENCY | 1 | 1018 | 0.10 |
| 39. | CONSUMER AND CORPORATE AFFAIRS | 2 | 2433 | 0.08 |
| 40. | CORRECTIONAL SERVICES | 7 | 9729 | 0.07 |
| 41. | NATIONAL RESEARCH COUNCIL | 2 | 3019 | 0.07 |
| 42. | VETERAN AFFAIRS | 3 | 4900 | 0.06 |
| 43. | POST OFFICE | 24 | 52819 | 0.05 |
| 44. | STATISTICS CANADA | 1 | 4453 | 0.02 |
| 45. | TREASURY BOARD | 0 | 1001 | 0.00 |
| 46. | SCIENCE COUNCIL OF CANADA | 0 | 63 | 0.00 |
| 47. | PUBLIC SERVICE STAFF RELATIONS BOARD | 0 | 182 | 0.00 |
| 48. | PRIVY COUNCIL | 0 | 529 | 0.00 |
| 49. | INSURANCE | 0 | 199 | 0.00 |
| 50. | ECONOMIC COUNCIL OF CANADA | 0 | 170 | 0.00 |
| 51. | COMMISSIONER OF OFFICIAL LANGUAGES | 0 | 98 | 0.00 |
| 52. | ATOMIC ENERGY CONTROL BOARD | 0 | 183 | 0.00 |
| | GRAND TOTAL | 6106 | 382372 | |

TABLE 25

OPERATIONAL EXPENDITURES / TOTAL PERSONNEL RATIO

| | DEPT/AGENCY | OPERATIONAL EXPENDITURES (000) | TOTAL PERSONNEL | OPERATIONAL EXPENDITURES - TOTAL PERSONNEL RATIO |
|-----|--|--------------------------------------|--------------------|--|
| 1. | CHIEF ELECTORAL OFFICER | 903 | 49 | 18428.6 |
| 2. | CANADIAN GOVERNMENTAL CONFERENCE SECRETARIAT | 69 | 27 | 2555.6 |
| 3. | EXTERNAL AFFAIRS | 9065 | 5036 | 1800.0 |
| 4. | PRIVY COUNCIL | 624 | 529 | 1179.6 |
| 5. | SOLICITOR GENERAL | 248 | 252 | 984.1 |
| 6. | SCIENCE COUNCIL OF CANADA | 58 | 63 | 920.6 |
| 7. | IMMIGRATION APPEAL BOARD | 60 | 66 | 909.1 |
| 8. | TRANSPORT CANADA | 19063 | 21096 | 903.6 |
| 9. | NATIONAL FILM BOARD | 898 | 998 | 899.8 |
| 10. | ENVIRONMENT | 10320 | 11604 | 889.3 |
| 11. | COMMISSIONER OF OFFICIAL LANGUAGES | 86 | 98 | 877.6 |
| 12. | INDUSTRY, TRADE AND COMMERCE | 2410 | 3103 | 776.7 |
| 13. | JUSTICE | 925 | 1227 | 753.9 |
| 14. | NATIONAL ENERGY BOARD | 289 | 388 | 744.8 |
| 15. | REGIONAL ECONOMIC EXPANSION | 1482 | 2045 | 724.7 |
| 16. | FISHERIES AND OCEANS | 3245 | 4591 | 706.8 |
| 17. | COMMUNICATIONS | 1393 | 1973 | 706.0 |
| 18. | NATIONAL PAROLE BOARD | 189 | 280 | 675.0 |
| 19. | CANADIAN RADIO-TV AND TELECOM COMMISSION | 295 | 447 | 660.0 |
| 20. | EMPLOYMENT AND IMMIGRATION | 16019 | 24917 | 642.9 |
| 21. | LABOUR | 443 | 700 | 632.9 |
| 22. | PUBLIC SERVICE COMMISSION | 1607 | 2552 | 629.7 |
| 23. | SCIENCE AND TECHNOLOGY | 96 | 156 | 615.4 |
| 24. | INDIAN AND NORTHERN AFFAIRS | 4221 | 6867 | 614.7 |
| 25. | FINANCE | 465 | 764 | 608.6 |
| 26. | ECONOMIC COUNCIL OF CANADA | 103 | 170 | 605.9 |
| 27. | CANADIAN TRANSPORT COMMISSION | 534 | 886 | 602.7 |
| 28. | AUDITOR GENERAL | 288 | 479 | 601.3 |
| 29. | NATIONAL MUSEUMS | 591 | 1006 | 587.5 |
| 30. | NATIONAL HEALTH AND WELFARE | 5079 | 8648 | 587.3 |
| 31. | SECRETARY OF STATE | 1804 | 3130 | 576.4 |
| 32. | ATOMIC ENERGY CONTROL BOARD | 100 | 183 | 546.4 |
| 33. | REVENUE CANADA (TAXATION) | 8527 | 16601 | 513.6 |
| 34. | STATISTICS CANADA | 2216 | 4453 | 497.6 |
| 35. | SUPPLY AND SERVICES | 4771 | 10243 | 465.8 |
| 36. | TREASURY BOARD | 463 | 1001 | 462.5 |
| 37. | CONSUMER AND CORPORATE AFFAIRS | 1120 | 2433 | 460.3 |
| 38. | PUBLIC SERVICE STAFF RELATIONS BOARD | 82 | 182 | 450.5 |
| 39. | ENERGY, MINES AND RESOURCES | 1762 | 4178 | 421.7 |
| 40. | NATIONAL LIBRARY | 216 | 515 | 419.4 |
| 41. | NATIONAL RESEARCH COUNCIL | 1210 | 3019 | 400.8 |
| 42. | ROYAL CANADIAN MOUNTED POLICE | 7965 | 19937 | 399.5 |
| 43. | NATIONAL DEFENCE | 44016 | 116809 | 376.8 |
| 44. | CANADIAN INTERNATIONAL DEVELOPMENT AGENCY | 375 | 1018 | 368.4 |
| 45. | CORRECTIONAL SERVICES | 3130 | 9729 | 321.7 |
| 46. | PUBLIC WORKS | 2866 | 9201 | 311.5 |
| 47. | PUBLIC ARCHIVES | 225 | 736 | 305.7 |
| 48. | REVENUE CANADA (CUSTOMS AND EXCISE) | 2721 | 9003 | 302.2 |
| 49. | AGRICULTURE | 3024 | 11066 | 273.3 |
| 50. | VETERANS AFFAIRS | 1207 | 4900 | 246.3 |
| 51. | INSURANCE | 49 | 199 | 246.2 |
| 52. | POST OFFICE | 4570 | 52819 | 86.5 |
| | GRAND TOTALS | 173487 | 382372 | 453.7 |

TABLE 26
RELATIONSHIP OF DEPARTMENTAL EXPENDITURES
AND PERSON-YEARS FOR 1979/80

| | DEPARTMENT / AGENCY | A | B | C | D | E | F | G | H |
|-----|------------------------------------|-----------------------------|---------------------------|----------|----------------------------|-------------------------|----------|-----------|----------------|
| | | TELECOM PERSON- YEARS | TOTAL PERSON- YEARS | % A/B | O2 OPER. EXP (\$000) | TOTAL EXP (\$000) | % D/E | D/A \$ | D/B (\$000) |
| 1. | NATIONAL DEFENCE | 2915 | 116809 | 2.50 | 44016 | 78826 | 55.84 | 15.10 | .38 |
| 2. | SOLICITOR GENERAL RCMP | 1572 | 19937 | 7.88 | 7965 | 21311 | 37.38 | 5.07 | .40 |
| 3. | EXTERNAL AFFAIRS | 378 | 5036 | 7.51 | 9065 | 11673 | 77.66 | 23.98 | 1.80 |
| 4. | EMPLOYMENT & IMMIGRATION | 336 | 24917 | 1.35 | 16019 | 17033 | 94.09 | 47.68 | .64 |
| 5. | COMMUNICATIONS | 293 | 1973 | 4.85 | 1393 | 6995 | 19.91 | 4.75 | .71 |
| 6. | ENVIRONMENT | 156 | 11604 | 1.34 | 10320 | 11489 | 89.83 | 66.15 | .89 |
| 7. | SUPPLY & SERVICES | 123 | 10243 | 1.20 | 4771 | 5814 | 82.06 | 38.79 | .47 |
| 8. | TRANSPORT CANADA | 52 | 21096 | .25 | 19063 | 20263 | 94.08 | 366.60 | .90 |
| 9. | REVENUE CANADA (TAXATION) | 32 | 16601 | .19 | 8527 | 8660 | 99.61 | 266.47 | .51 |
| 10. | POST OFFICE | 24 | 52819 | .05 | 4570 | 4973 | 91.90 | 190.42 | .09 |
| 11. | INDIAN & NORTHERN AFFAIRS | 23 | 6867 | .33 | 4221 | 4374 | 96.50 | 183.52 | .61 |
| 12. | AGRICULTURE | 20 | 11066 | .18 | 3024 | 3372 | 89.76 | 151.20 | .27 |
| 13. | REVENUE CANADA (CUSTOMS & EXCISE) | 19 | 9003 | .21 | 2721 | 2832 | 96.08 | 143.21 | .30 |
| 14. | REGIONAL ECONOMIC EXPANSION | 18 | 2045 | .88 | 1482 | 1530 | 96.86 | 82.33 | .72 |
| 15. | PUBLIC WORKS | 18 | 9201 | .20 | 2866 | 3048 | 94.06 | 159.22 | .31 |
| 16. | FISHERIES & OCEANS | 16 | 4591 | .35 | 3245 | 4112 | 78.92 | 202.81 | .71 |
| 17. | INDUSTRY TRADE & COMMERCE | 16 | 3103 | .52 | 2410 | 2812 | 85.73 | 150.63 | .78 |
| 18. | ENERGY MINES & RESOURCES | 13 | 4178 | .31 | 1762 | 1827 | 96.50 | 135.54 | .42 |
| 19. | NATIONAL HEALTH & WELFARE | 10 | 8648 | .12 | 5079 | 5213 | 97.39 | 507.90 | .59 |
| 20. | NATIONAL LIBRARY | 8 | 515 | 1.55 | 216 | 331 | 65.06 | 27.00 | .42 |
| 21. | CORRECTIONAL SERVICES | 7 | 9729 | .07 | 3130 | 3651 | 85.73 | 447.14 | .32 |
| 22. | NATIONAL ENERGY BOARD | 6 | 388 | 1.55 | 289 | 296 | 97.64 | 48.17 | .74 |
| 23. | PUBLIC SERVICE COMMISSION | 4 | 2552 | .16 | 1607 | 1610 | 99.81 | 401.75 | .63 |
| 24. | NATIONAL PAROLE BOARD | 4 | 280 | 1.43 | 189 | 189 | 100.00 | 47.25 | .67 |
| 25. | FINANCE | 4 | 764 | .52 | 465 | 486 | 95.68 | 116.25 | .61 |
| 26. | CHIEF ELECTORIAL OFFICER | 4 | 49 | 8.16 | 903 | 902 | 100.00 | 225.75 | 18.43 |
| 27. | CANADIAN TRANSPORT COMMISSION | 4 | 886 | .45 | 534 | 562 | 95.02 | 133.50 | .60 |
| 28. | PUBLIC ARCHIVES | 3 | 736 | .41 | 225 | 232 | 96.98 | 75.00 | .31 |
| 29. | VETERANS AFFAIRS | 3 | 4900 | .06 | 1207 | 1207 | 100.00 | 402.33 | .25 |
| 30. | SECRETARY OF STATE | 3 | 3130 | .10 | 1804 | 1805 | 100.00 | 601.33 | .58 |
| 31. | LABOUR | 3 | 700 | .43 | 443 | 443 | 98.44 | 147.67 | .63 |
| 32. | NATIONAL RESEARCH COUNCIL | 2 | 3019 | .07 | 1210 | 1246 | 97.19 | 605.00 | .40 |
| 33. | NATIONAL MUSEUMS | 2 | 1006 | .20 | 591 | 590 | 100.00 | 295.50 | .59 |
| 34. | NATIONAL FILM BOARD | 2 | 998 | .20 | 898 | 920 | 97.61 | 449.00 | .90 |
| 35. | JUSTICE | 2 | 1227 | .16 | 925 | 944 | 97.99 | 462.50 | .75 |
| 36. | IMMIGRATION APPEAL BOARD | 2 | 66 | 3.03 | 60 | 60 | 100.00 | 30.00 | .91 |
| 37. | CONSUMER & CORPORATE AFFAIRS | 2 | 2433 | .08 | 1120 | 1133 | 98.85 | 560.85 | .46 |
| 38. | STATISTICS CANADA | 1 | 4453 | .02 | 2216 | 2221 | 99.77 | 216.00 | .50 |
| 39. | SOLICITOR GENERAL | 1 | 252 | .40 | 248 | 251 | 98.80 | 248.00 | .98 |
| 40. | SCIENCE & TECHNOLOGY | 1 | 156 | .64 | 96 | 98 | 97.96 | 96.00 | .52 |
| 41. | CANADIAN RADIO-TV & TELECOM. COMM. | 1 | 447 | .22 | 295 | 300 | 98.33 | 295.00 | .66 |
| 42. | CANADIAN INT'L DEVELOPMENT AGENCY | 1 | 1018 | .10 | 375 | 492 | 76.22 | 375.00 | .37 |
| 43. | CANADIAN GOVERNMENTAL CONFERENCE | 1 | 27 | 3.70 | 69 | 71 | 97.18 | 69.00 | 2.56 |
| 44. | AUDITOR GENERAL | 1 | 479 | .21 | 288 | 291 | 98.97 | 288.00 | .60 |
| 45. | TREASURY BOARD | 0 | 1001 | .00 | 463 | 460 | 98.72 | .00 | .46 |
| 46. | SCIENCE COUNCIL OF CANADA | 0 | 63 | .00 | 58 | 68 | 86.57 | .00 | .92 |
| 47. | PUBLIC SERVICE STAFF REL. BOARD | 0 | 182 | .00 | 82 | 82 | 100.00 | .00 | .45 |
| 48. | PRIVY COUNCIL | 0 | 529 | .00 | 624 | 631 | 98.89 | .00 | 1.18 |
| 49. | INSURANCE | 0 | 199 | .00 | 49 | 50 | 96.08 | .00 | .25 |
| 50. | ECONOMIC COUNCIL OF CANADA | 0 | 170 | .00 | 103 | 103 | 100.00 | .00 | .61 |
| 51. | COMMISSIONER OF OFFICIAL LANGUAGES | 0 | 98 | .00 | 86 | 84 | 100.00 | .00 | .88 |
| 52. | ATOMIC ENERGY CONTRDL BOARD | 0 | 183 | .00 | 100 | 118 | 84.03 | .00 | .55 |
| | GRAND TOTALS | 6106 | 382372 | 1.60 | 173487 | 238090 | 72.90 | 28.41 | .45 |

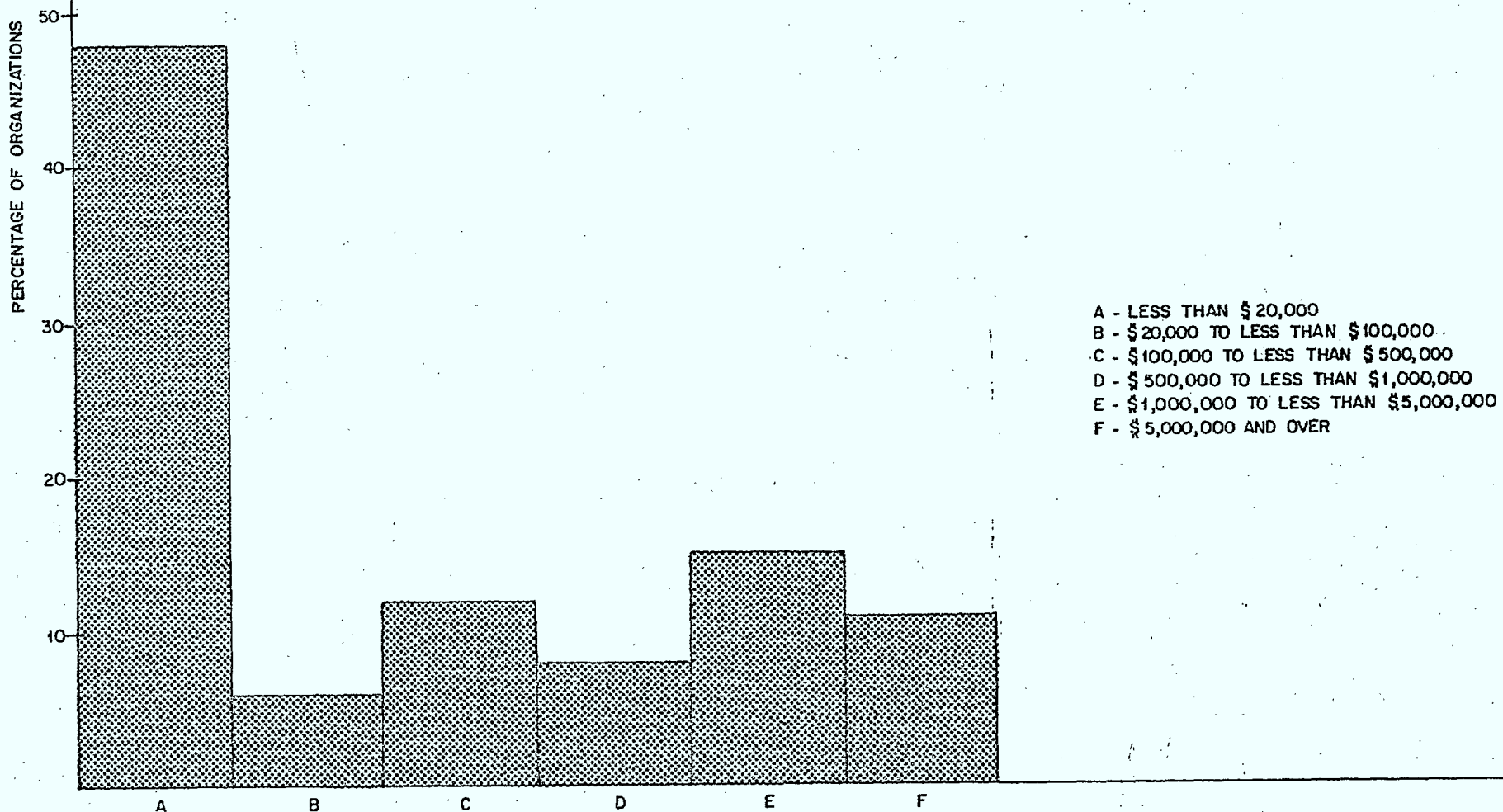
TABLE 27
PERCENTAGE DISTRIBUTION OF GOVERNMENT
TELECOMMUNICATION AGENCY COST RECOVERY
1979/80

| DEPT./AGENCY | PERCENTAGE DISTRIBUTION OF GTA COST RECOVERY (%) | | | CUMULATIVE PERCENTAGE DISTRIBUTION OF GTA COST RECOVERY (%) | PERCENTAGE OF DEPT. GTA COST/ DEPTS TOTAL TELECOM EXPENDITURES (%) | TOTAL TELECOM EXPENDITURES BY DEPT. (\$ 000) |
|---|--|------|-------|---|--|--|
| | VOICE | DATA | TOTAL | | | |
| 1. EMPLOYMENT AND IMMIGRATION | 7.4 | 4.9 | 12.3 | 12.3 | 37.7 | 23,755 |
| 2. NATIONAL REVENUE (TAXATION) | 7.1 | 2.1 | 9.2 | 21.5 | 55.3 | 9,145 |
| 3. NATIONAL DEFENCE | 8.1 | 0.0 | 8.1 | 29.6 | 5.4 | 130,806 |
| 4. TRANSPORT CANADA | 5.6 | 0.5 | 6.1 | 35.7 | 15.7 | 20,842 |
| 5. SUPPLY AND SERVICES | 3.2 | 0.9 | 4.1 | 39.8 | 37.1 | 7,634 |
| 6. ENVIRONMENT | 3.4 | 0.0 | 3.4 | 43.2 | 15.6 | 14,816 |
| 7. HEALTH AND WELFARE | 2.9 | 0.2 | 3.1 | 46.3 | 31.3 | 5,349 |
| 8. ROYAL CANADIAN MOUNTED POLICE | 3.0 | 0.0 | 3.0 | 49.3 | 7.4 | 51,488 |
| 9. POST OFFICE | 2.1 | 0.6 | 2.7 | 52.0 | 28.0 | 5,294 |
| 10. EXTERNAL AFFAIRS | 1.5 | 1.0 | 2.5 | 54.5 | 11.1 | 18,786 |
| 11. PUBLIC WORKS | 2.1 | 0.3 | 2.4 | 56.9 | 41.8 | 3,321 |
| 12. INDUSTRY, TRADE AND COMMERCE | 1.9 | 0.5 | 2.4 | 59.3 | 45.3 | 3,085 |
| 13. NATIONAL REVENUE (CUSTOMS AND EXCISE) | 1.7 | 0.6 | 2.3 | 61.6 | 41.9 | 3,080 |
| 14. AGRICULTURE | 2.1 | 0.2 | 2.3 | 63.9 | 35.0 | 3,645 |
| 15. STATISTICS CANADA | 1.8 | 0.1 | 1.9 | 65.8 | 44.5 | 2,240 |
| 16. INDIAN AND NORTHERN AFFAIRS | 1.9 | 0.0 | 1.9 | 67.7 | 22.0 | 4,717 |
| 17. CORRECTIONAL SERVICES | 1.6 | 0.0 | 1.6 | 69.3 | 22.7 | 4,176 |
| 18. PUBLIC SERVICE COMMISSION | 1.3 | 0.1 | 1.4 | 70.7 | 46.7 | 1,691 |
| 19. SECRETARY OF STATE | 1.3 | 0.1 | 1.4 | 72.1 | 41.0 | 1,838 |
| 20. COMMUNICATIONS | 1.0 | 0.3 | 1.3 | 73.4 | 9.4 | 7,130 |
| 21. ENERGY, MINES AND RESOURCES | 1.1 | 0.1 | 1.2 | 74.6 | 33.8 | 2,006 |
| 22. REGIONAL ECONOMIC EXPANSION | 1.0 | 0.1 | 1.1 | 75.7 | 38.9 | 1,825 |
| 23. FISHERIES AND OCEANS | 1.0 | 0.0 | 1.0 | 76.7 | 12.1 | 4,432 |
| 24. CONSUMER AND CORPORATE AFFAIRS | 0.9 | 0.0 | 0.9 | 77.6 | 43.4 | 1,167 |
| 25. JUSTICE | 0.8 | 0.0 | 0.8 | 78.4 | 45.1 | 974 |
| 26. NATIONAL FILM BOARD | 0.6 | 0.2 | 0.8 | 79.2 | 45.7 | 944 |
| 27. NATIONAL RESEARCH COUNCIL | 0.7 | 0.1 | 0.8 | 80.0 | 32.6 | 1,276 |
| 28. VETERANS AFFAIRS | 0.7 | 0.1 | 0.8 | 80.8 | 32.6 | 1,260 |
| 29. NATIONAL MUSEUMS | 0.3 | 0.3 | 0.6 | 81.4 | 53.7 | 626 |
| 30. CANADIAN TRANSPORT COMMISSION | 0.6 | 0.0 | 0.6 | 82.0 | 53.4 | 611 |
| 31. OTHER DEPTS - REPORTING | | | 4.0 | 86.0 | 31.6 | 6,617 |
| 32. OTHER DEPTS - NOT REPORTING | | | 14.0 | 100.0 | 71.0 | 4,967 |

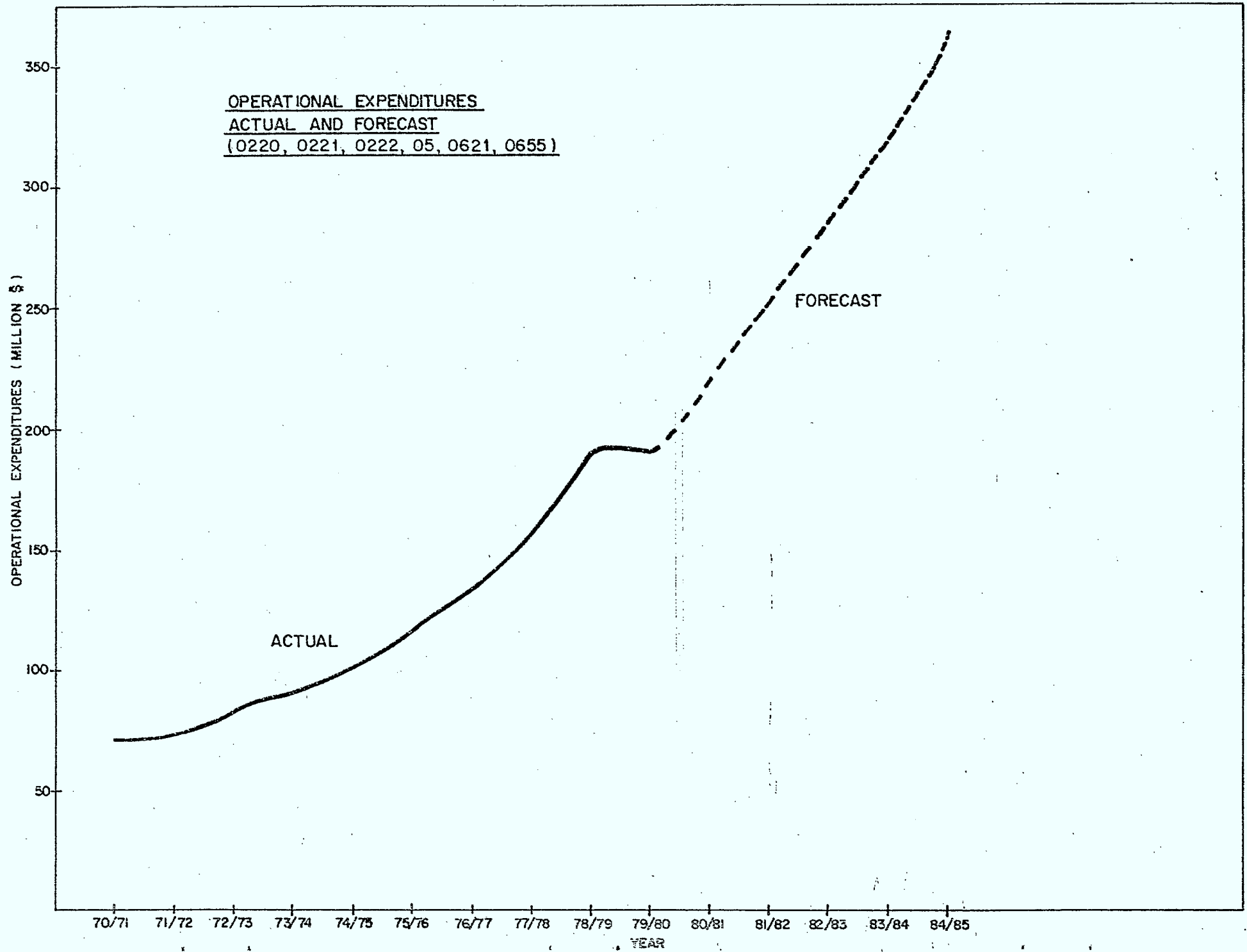
GRAPHS

GRAPH 1

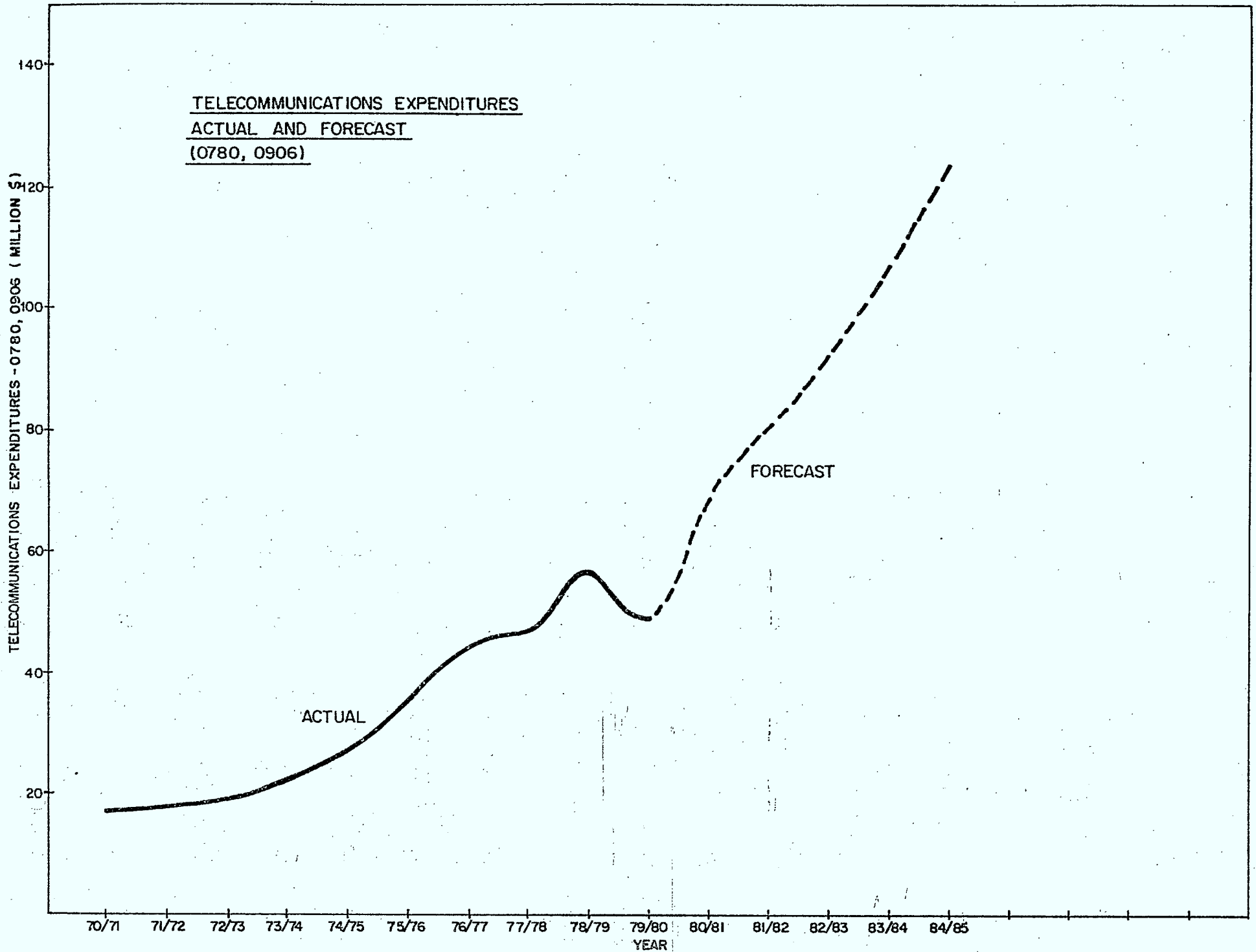
DISTRIBUTION OF APPROXIMATELY 100 ORGANIZATIONS
IN RELATION TO TELECOMMUNICATIONS EXPENDITURES



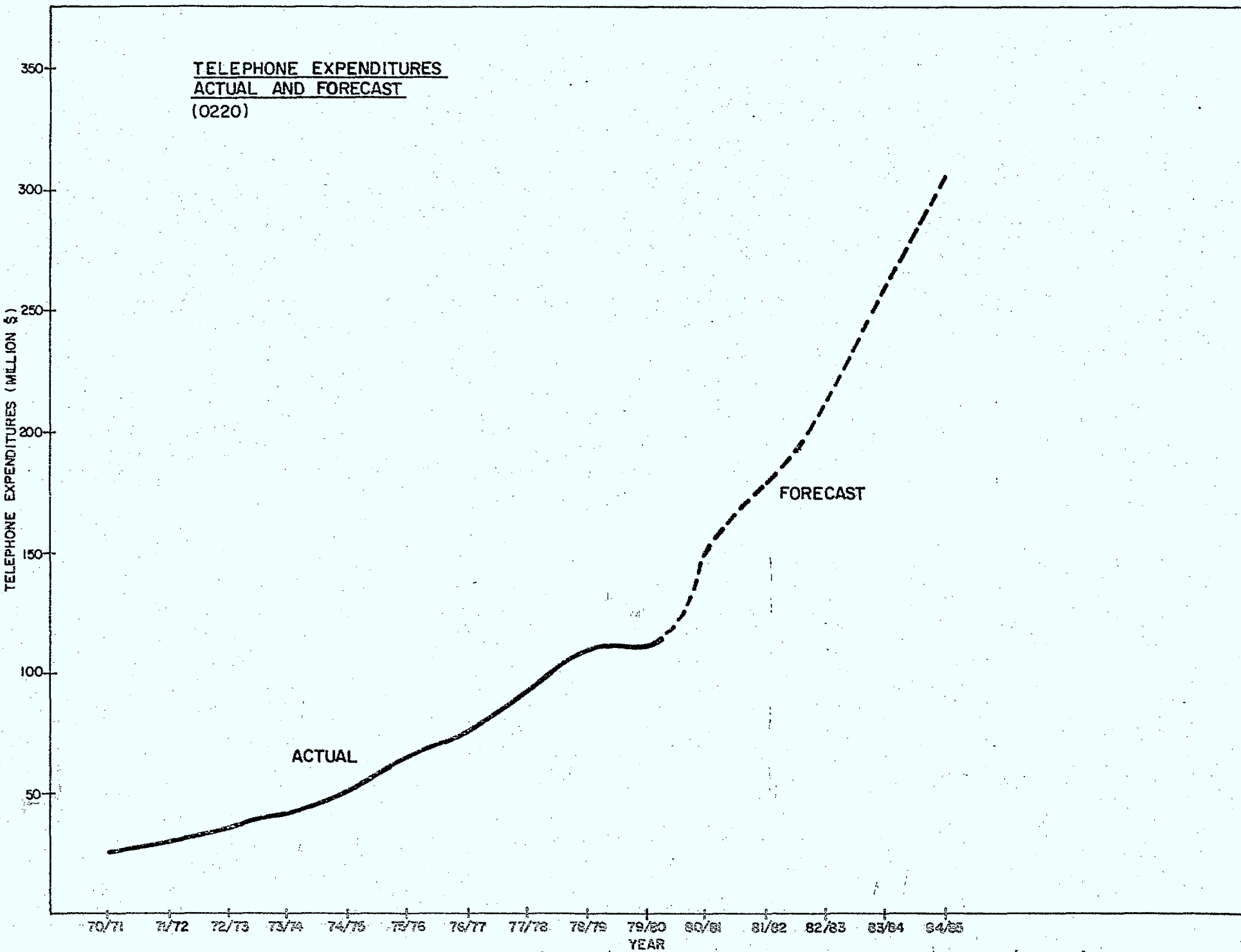
GRAPH 2



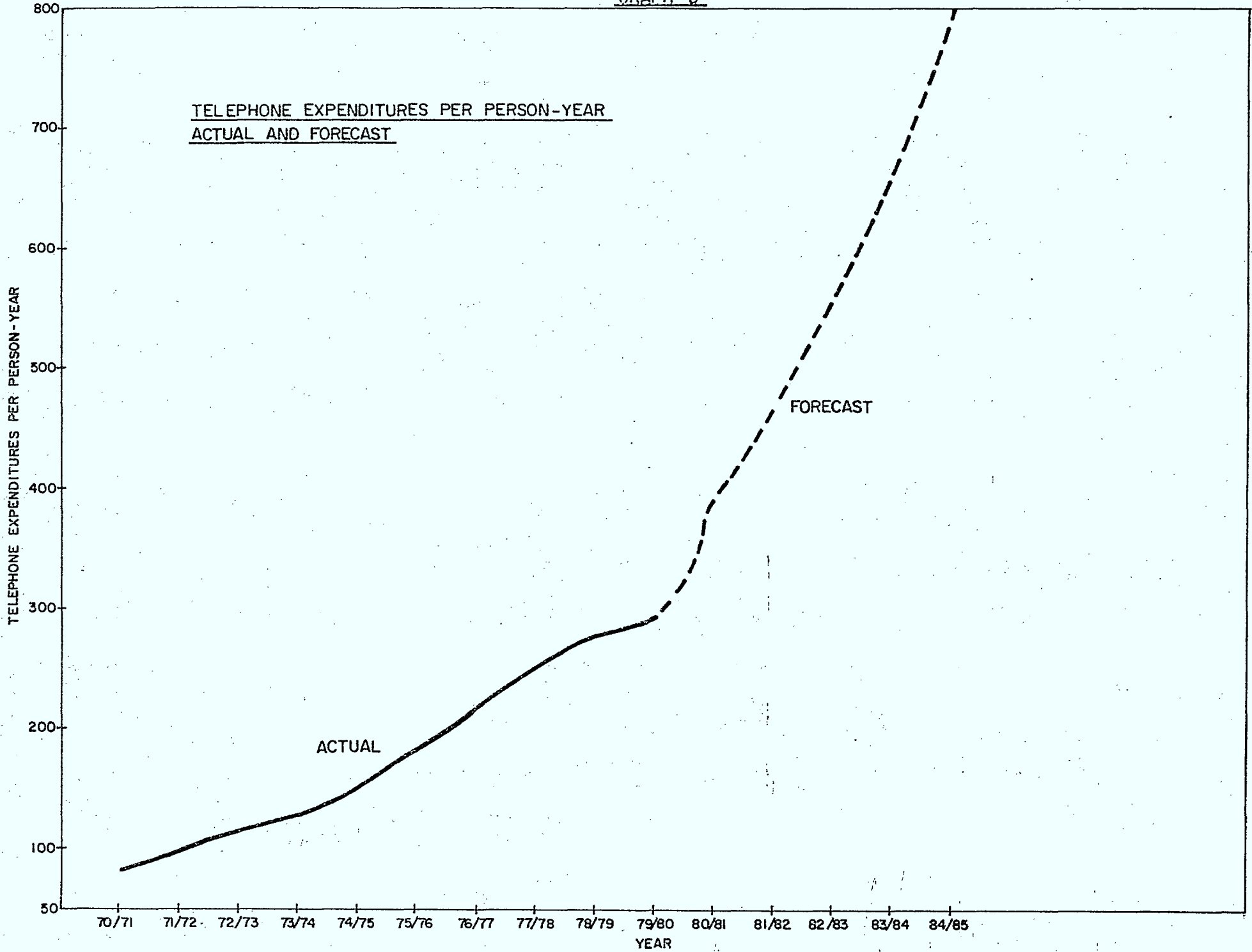
GRAPH 3



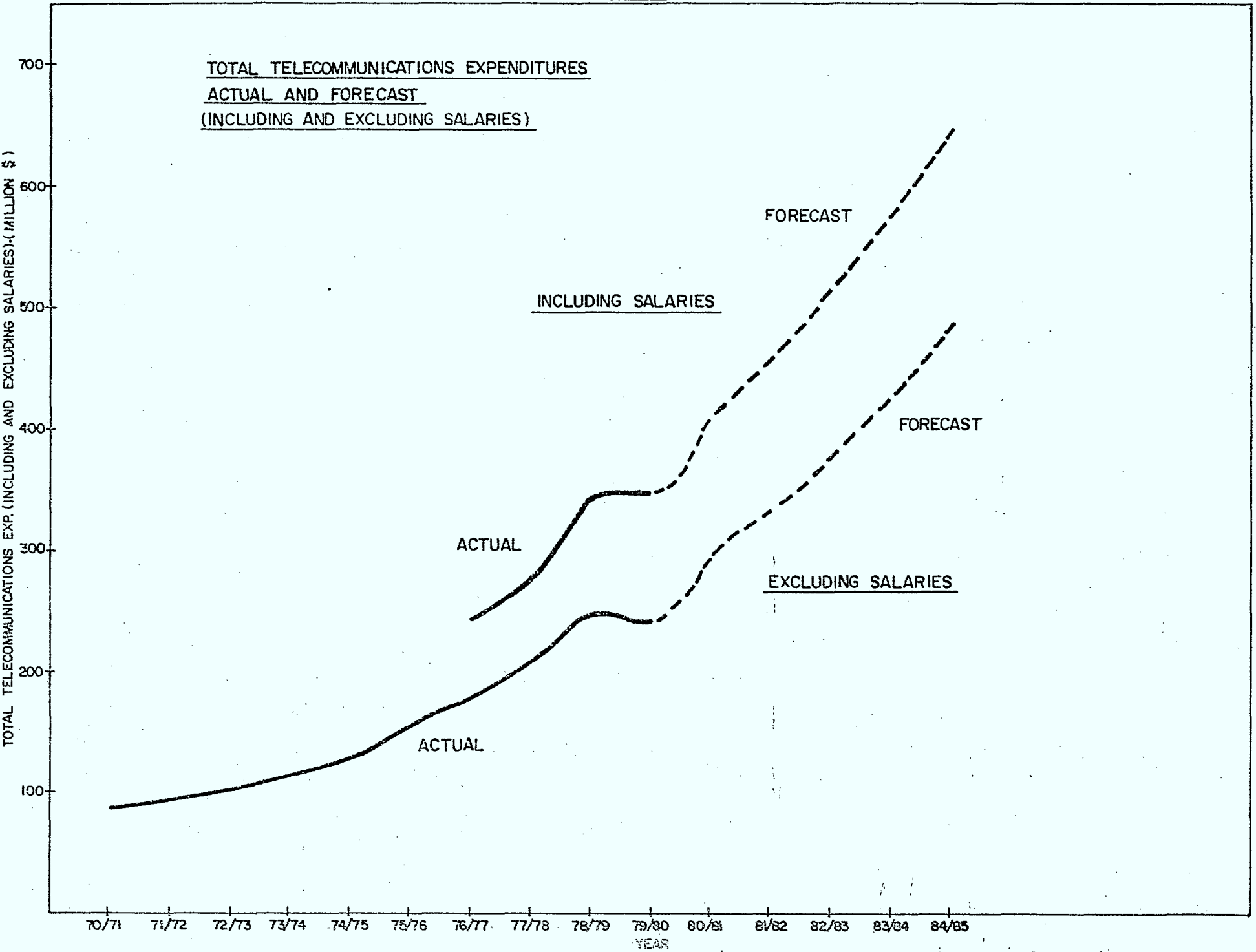
GRAPH 4



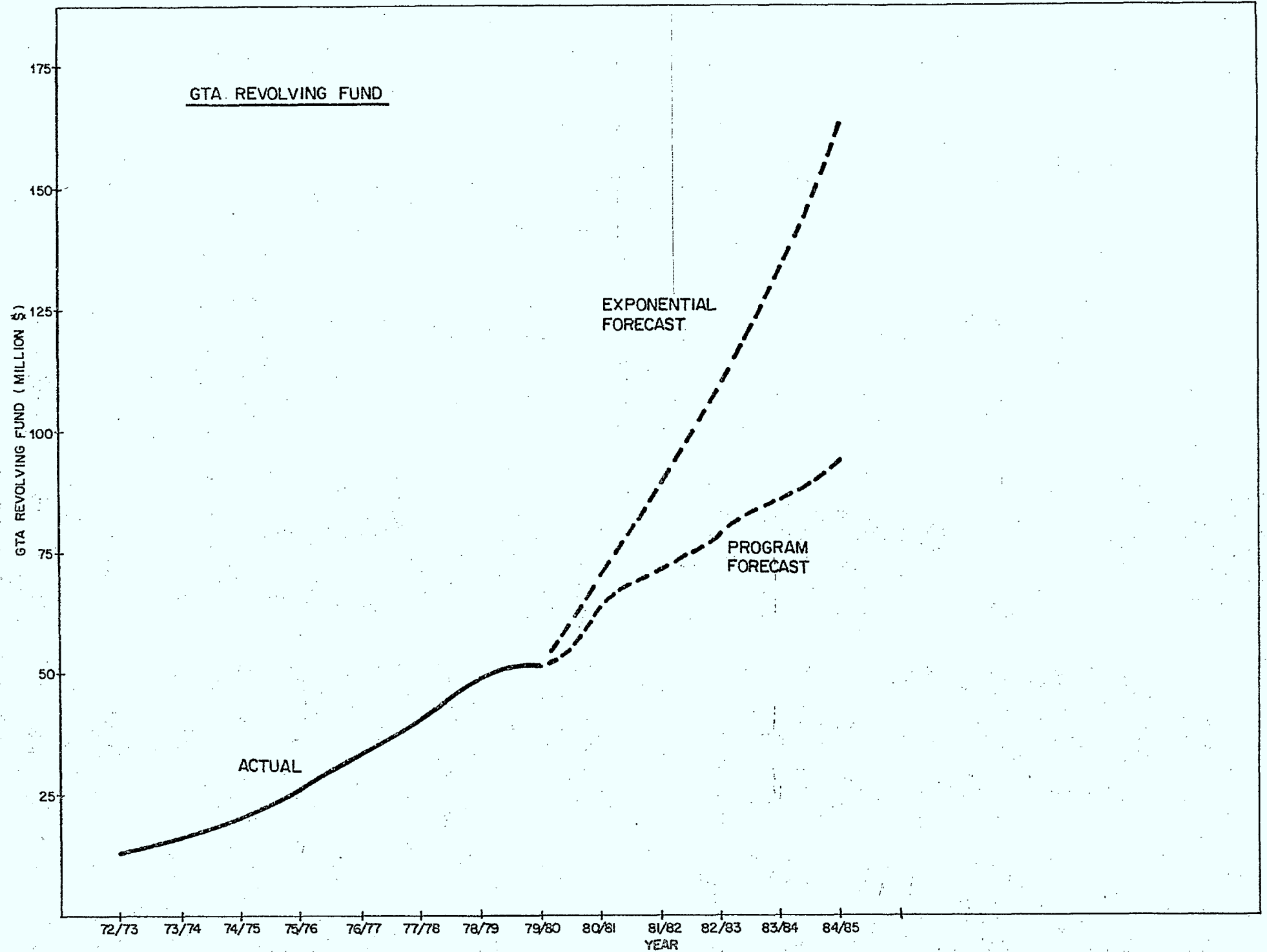
GRAPH 5



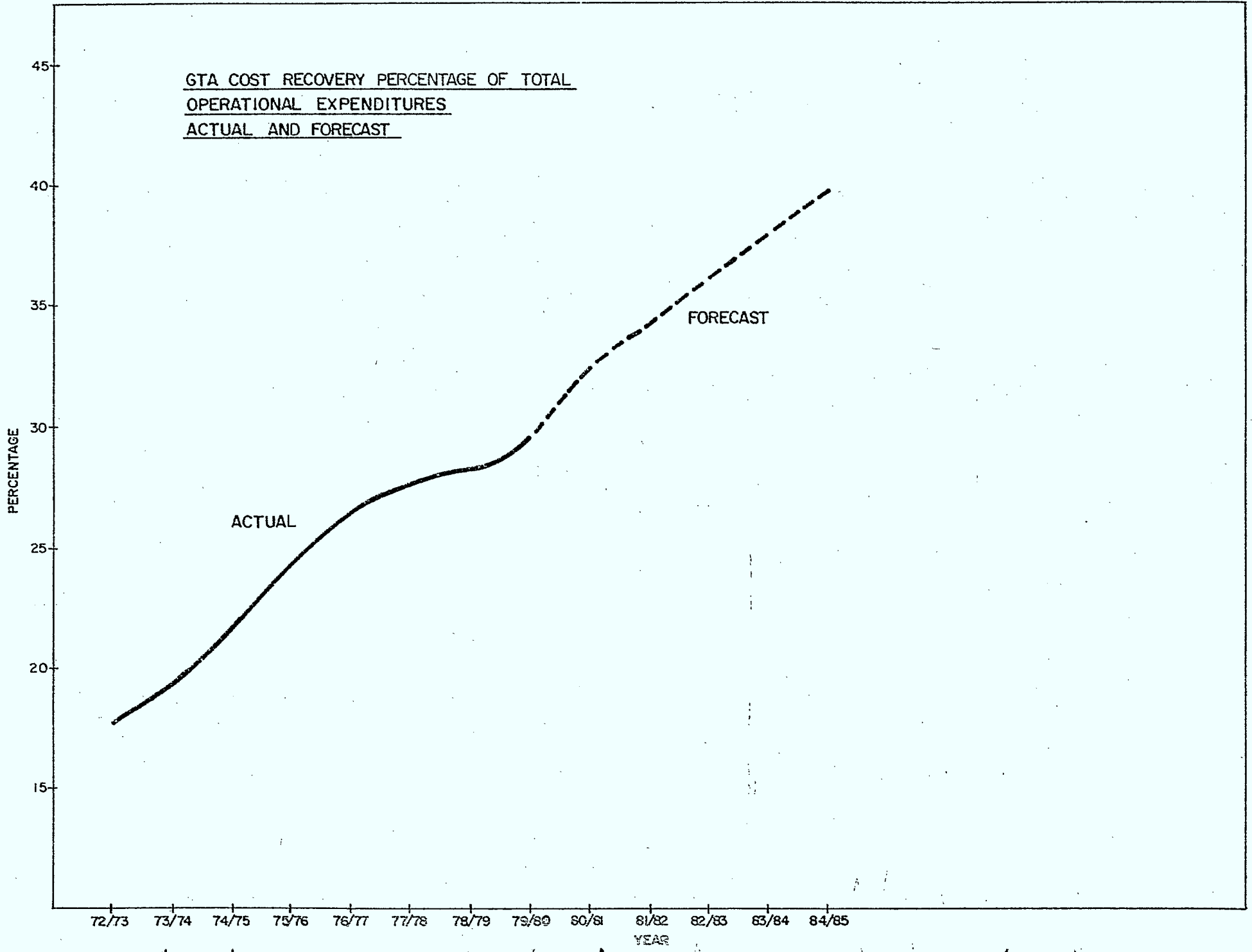
GRAPH 6



GRAPH 7



GRAPH 8



QUESTIONNAIRE

1979/80 ANNUAL TELECOMMUNICATIONS REPORT
FORM I - TELECOMMUNICATION EXPENDITURES

DEPARTMENT/AGENCY _____

TELECOMMUNICATIONS COORDINATOR _____

TELEPHONE NUMBER _____

| ITEMS (A) | 1979-1980(PY) (\$000) (B) |
|--|---------------------------------|
| TELEPHONE 0220 | |
| TELEGRAPH, CABLE & WIRELESS 0221 | |
| OTHER COMM. SERVICES 0222 | |
| REPAIR-TELEGRAPH & TELE- PHONE LINES 0621 | |
| REPAIR-COMMUNICATION & RELATED EQUIPMENT 0655 | |
| PARTS-COMMUNICATION & RELATED EQUIPMENT 0780 | |
| ACQUISITION-COMMUNICATION & RELATED EQUIPMENT 0906 | |
| PROFESSIONAL & SPECIAL SERVICES - TELECOM. 04 | |
| RENTALS - TELECOM. EQUIPMENT 05 | |
| | |
| | |
| TOTALS | |

1979-80 ANNUAL TELECOMMUNICATIONS REPORT

FORM 2 - DETAILS OF TELECOMMUNICATION EXPENDITURES FOR 1979/80 (PY)

DEPARTMENT / AGENCY _____

| APPLICATION OF EXPENDITURES | SOURCE OF BILLING | | | | | |
|--|------------------------------|----------------------------|-------------------------|-----------------------------|-------------------------|-------------------------|
| | * DOC /GTA (\$000) (A) | TEL. CO. (\$000) (B) | CN/CP (\$000) (C) | TELEGLOBE (\$000) (D) | OTHER (\$000) (E) | TOTAL (\$000) (F) |
| 1. <u>VOICE COMMUNICATIONS</u> | | | | | | |
| (a) Inter-City Services (Public Network) | X | | | | | |
| (b) Inter-City Services (Government Network) | | X | X | X | X | |
| (c) Inter-City Services (Other Network) | | | | | | |
| (d) Local Services (NCR) | | | | | | |
| (e) Local Services (Outside NCR) | | | | | | |
| 2. <u>DATA COMMUNICATIONS</u> | | | | | | |
| (a) Inter-City Services (Public Network) | X | | | | | |
| (b) Inter-City Services (Government Networks) | | X | X | X | X | |
| (c) Inter-City Services (Other Networks) | | | | | | |
| (d) Local Services (NCR) | | | | | | |
| (e) Local Services (Outside NCR) | | | | | | |
| 3. <u>TOTAL EXPENDITURES</u> | | | | | | |

- 4 -

* Column A will be provided by DOC/GTA

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1979-80 ANNUAL TELECOMMUNICATIONS REPORT

FORM - 3 - NUMBER OF TELECOMMUNICATION PERSONNEL & RELATED COSTS FOR 1979-80(PY)

| DEPARTMENT / AGENCY: _____ | | NCR (A) | CANADA LESS NCR (B) | OUTSIDE CANADA (C) |
|--|-------|------------|---------------------------|--------------------------|
| 1. TOTAL NUMBER OF PERSON/YRS (INCLUDING TELECOM PERSONNEL) | | | | |
| 2. NUMBER OF TELECOM PERSONNEL IN FOLLOWING FUNCTIONAL AREAS (LIST BY CLASSIFICATION) | | X | X | X |
| FUNCTIONAL AREAS | CLASS | | | |
| a) Management & Control | | | | |
| | | | | |
| | | | | |
| b) Administration Support (Include Training Staff) | | | | |
| | | | | |
| | | | | |
| c) Equipment Operating | | | | |
| | | | | |
| | | | | |
| d) Engineering / Maintenance (Include Installation Engineers & Field Maintenance Personnel) | | | | |
| | | | | |
| | | | | |
| e) Engineering Support (Include HQ staff associated with the development of procedures, standards, engineering orders and policies) | | | | |
| | | | | |
| | | | | |
| 3. TELECOM UNIFORMED PERSONNEL | | | | |
| 4. TELECOM CONTRACTED PERSONNEL & CONSULTANTS | | | | |
| 5. TOTAL OF 2, 3, & 4 | | | | |
| 6. COST OF SALARIES & WAGES FOR TELECOM PERSONNEL (\$000) | | | | |
| 7. FUNDS BUDGETED FOR TRAINING TELECOM PERSONNEL (\$000) | | | | |
| 8. COST OF CONTRACTED PERSONNEL & CONSULTANTS (\$000) | | | | |
| 9. TOTAL OF 6, 7 & 8 (\$000) | | | | |

