

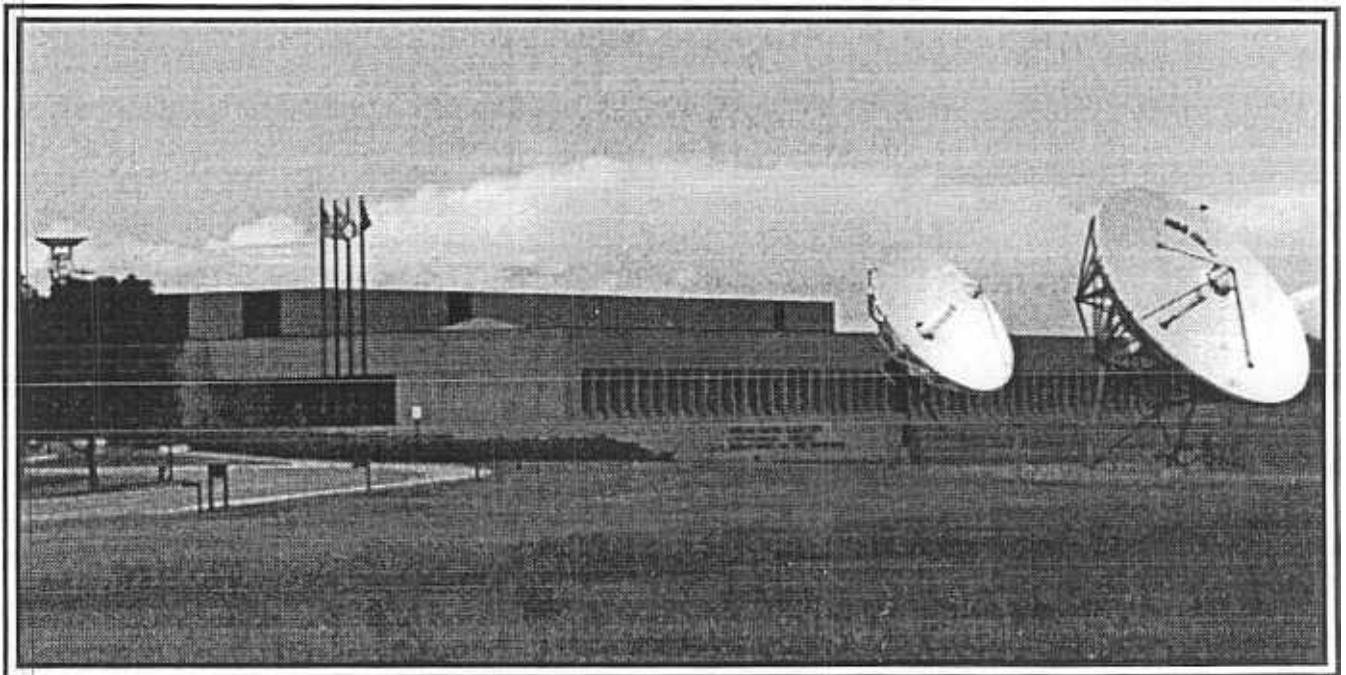
*Ron M. Cust. Serv.*

---

---

# EROS Data Center Annual Report Of Data Services

Fiscal Year 1991



Prepared by:  
Geny Austin  
William Draeger  
Data Services Branch  
EROS Data Center  
Sioux Falls, SD 57198



# Introduction

This report summarizes the EROS Data Center's (EDC's) data services activities for fiscal year 1991. Included is information on sales and distribution of products and services, revenue, customer profiles, historical trends, and the contents of EDC archives and data bases. The report contains information on both United States Geological Survey (USGS) data distributed by EDC and those Earth Observation Satellite Company (EOSAT) products and services that are produced or processed by EDC under its agreement with the National Oceanic and Atmospheric Administration (NOAA) and EOSAT.

In fiscal year 1991, EDC provided over \$4.6 million worth of USGS products and services (including sales from MSS data older than 2 years) and processed over \$9.3 million in EOSAT transactions for a grand total in excess of \$14 million. More than 15,000 user inquiries were received during the year, and over 14,000 individual orders were filled.

| PRODUCTS AND SERVICES       |                |                    |               |                    |
|-----------------------------|----------------|--------------------|---------------|--------------------|
|                             | USGS           |                    | EOSAT         |                    |
|                             | #              | \$                 | #             | \$                 |
| Photographic Products       | 168,963        | 2,961,405          | 1,160         | 51,360             |
| Digital Products/Processing | 14,088         | 1,496,787          | 4,394         | 2,905,392          |
| Reference Aids              | N/A            | 22,098             | N/A           | 23,187             |
| Service Charges             | N/A            | N/A                | 3,482         | 126,050            |
| Miscellaneous               | 1,427          | 184,119            | 2,541         | 6,245,103*         |
| <b>TOTAL</b>                | <b>184,478</b> | <b>\$4,664,409</b> | <b>11,577</b> | <b>\$9,351,092</b> |

*\*Primarily products produced at EOSAT but billed by EDC.*

---

---

# Annual Report Of Data Services

## Fiscal Year 1991

---

---

### TABLE OF CONTENTS

| <b>SECTION</b>                          | <b>PAGE</b> |
|---|-------------|
| I. USGS Products and Services.....      | 1           |
| II. Historical USGS Information .....   | 9           |
| III. EDC Archives and Data Bases .....  | 18          |
| IV. EOSAT Products and Services .....   | 24          |
| V. Historical Landsat Information ..... | 28          |

## Section i

---

---

### **USGS Products And Services**

This section summarizes EDC's fiscal year 1991 activities dealing with the sale and distribution of USGS products; i.e., exclusive of those Landsat products produced by EDC under its agreement with NOAA and EOSAT.

In 1991, EDC produced and distributed over \$4.6 million worth of USGS products and services, including over \$174,000 in sales of Landsat MSS data greater than 2 years old. Of the total, \$1.9 million were direct repay sales and \$1.6 million were products and services provided through full repay EDC projects, for a "reimbursable" total of over \$3.5 million. The remaining \$1.1 million were for products and services distributed to users within the U.S. Geological Survey, including internal EDC users, other National Mapping Division facilities, and other divisions of the USGS.

---

---

# EDC Annual Sales Report Fiscal Year 1991

|   | DIRECT REPAY<br>CUSTOMERS | EDC REPAY<br>PROJECTS | USGS<br>CUSTOMERS  |
|---|---------------------------|-----------------------|--------------------|
| <b>PHOTOGRAPHIC DATA</b>                |                           |                       |                    |
| <b>AERIAL</b>                           |                           |                       |                    |
| NAPP                                    | \$1,114,170               | \$ 10,154             | \$ 301,460         |
| SLAR                                    | 15,503                    | 0                     | 15,617             |
| Other                                   | 389,168                   | 748                   | 40,918             |
| <b>SATELLITE</b>                        |                           |                       |                    |
| AVHRR                                   | 7,425                     | 30,165                | 0                  |
| Other                                   | 19,927                    | 3,379                 | 1,031              |
| Digital Film Recorder Products          | 9,440                     | 289,700               | 114,880            |
| USGS Landsat MSS Data > 2 yrs.          | 34,095                    | 5,496                 | 19,375             |
| Other Photographic Data                 | 56,807                    | 289,858               | 192,089            |
| <b>TOTAL PHOTOGRAPHIC DATA</b>          | <b>\$1,646,535</b>        | <b>\$ 629,500</b>     | <b>\$ 685,370</b>  |
| <b>DIGITAL DATA PRODUCTS/PROCESSING</b> |                           |                       |                    |
| Data Processing                         | 22,606                    | 562,992               | 179,828            |
| SLAR                                    | 1,120                     | 960                   | 4,320              |
| AVHRR                                   | 83,388                    | 152,174               | 168,982            |
| NDCDB                                   | 94,240                    | 40                    | 3,359              |
| USGS Landsat MSS Data > 2 yrs.          | 46,200                    | 37,520                | 31,800             |
| NURE Data                               | 11,680                    | 0                     | 0                  |
| Other Digital Data Products             | 8,900                     | 62,811                | 23,867             |
| <b>TOTAL DIGITAL DATA/PROCESSING</b>    | <b>\$ 268,134</b>         | <b>\$ 816,497</b>     | <b>\$ 412,156</b>  |
| <b>MISCELLANEOUS</b>                    |                           |                       |                    |
| Reference Aids                          | 9,337                     | 400                   | 12,361             |
| Other Products and Services             | 9,487                     | 171,400               | 3,232              |
| <b>TOTAL MISCELLANEOUS</b>              | <b>\$ 18,824</b>          | <b>\$ 171,800</b>     | <b>\$ 15,593</b>   |
| <b>GRAND TOTAL</b>                      | <b>\$1,933,493</b>        | <b>\$1,617,797</b>    | <b>\$1,113,119</b> |
| Satellite Data Brokerage Fees           | \$ 128,420                | \$ 27,225             | \$ 2,381           |

# EDC Annual Data Distribution/Services (Number of Items) Fiscal Year 1991

|   | DIRECT REPAY<br>CUSTOMERS | EDC REPAY<br>PROJECTS | USGS<br>CUSTOMERS |
|---|---------------------------|-----------------------|-------------------|
| <b>PHOTOGRAPHIC DATA</b>                |                           |                       |                   |
| <b>AERIAL</b>                           |                           |                       |                   |
| NAPP                                    | 58,025                    | 1,164                 | 50,193            |
| SLAR                                    | 340                       | 0                     | 212               |
| Other                                   | 25,544                    | 246                   | 6,481             |
| <b>SATELLITE</b>                        |                           |                       |                   |
| AVHRR                                   | 169                       | 1,877                 | 0                 |
| Other                                   | 1,333                     | 174                   | 112               |
| Digital Film Recorder Products          | 59                        | 1,739                 | 717               |
| USGS Landsat MSS Data > 2 yrs.          | 1,049                     | 82                    | 191               |
| Other Photographic Data                 | 5,047                     | 5,987                 | 8,222             |
| <b>TOTAL PHOTOGRAPHIC DATA</b>          | <b>91,566</b>             | <b>11,269</b>         | <b>66,128</b>     |
| <b>DIGITAL DATA PRODUCTS/PROCESSING</b> |                           |                       |                   |
| Data Processing                         | 7                         | 349                   | 87                |
| SLAR                                    | 14                        | 12                    | 54                |
| AVHRR                                   | 788                       | 1,037                 | 716               |
| NDCDB                                   | 9,542                     | 1                     | 267               |
| USGS Landsat MSS Data > 2 yrs.          | 243                       | 204                   | 161               |
| NURE Data                               | 145                       | 0                     | 0                 |
| Other Digital Data/Products             | 123                       | 264                   | 74                |
| <b>TOTAL DIGITAL DATA/PROCESSING</b>    | <b>10,862</b>             | <b>1,867</b>          | <b>1,359</b>      |
| <b>MISCELLANEOUS</b>                    |                           |                       |                   |
| Other Products and Services             | 414                       | 700                   | 313               |
| <b>GRAND TOTAL</b>                      | <b>102,842</b>            | <b>13,836</b>         | <b>67,800</b>     |

# Customer Profile USGS Digital Data Products & Processing Fiscal Year 1991

---

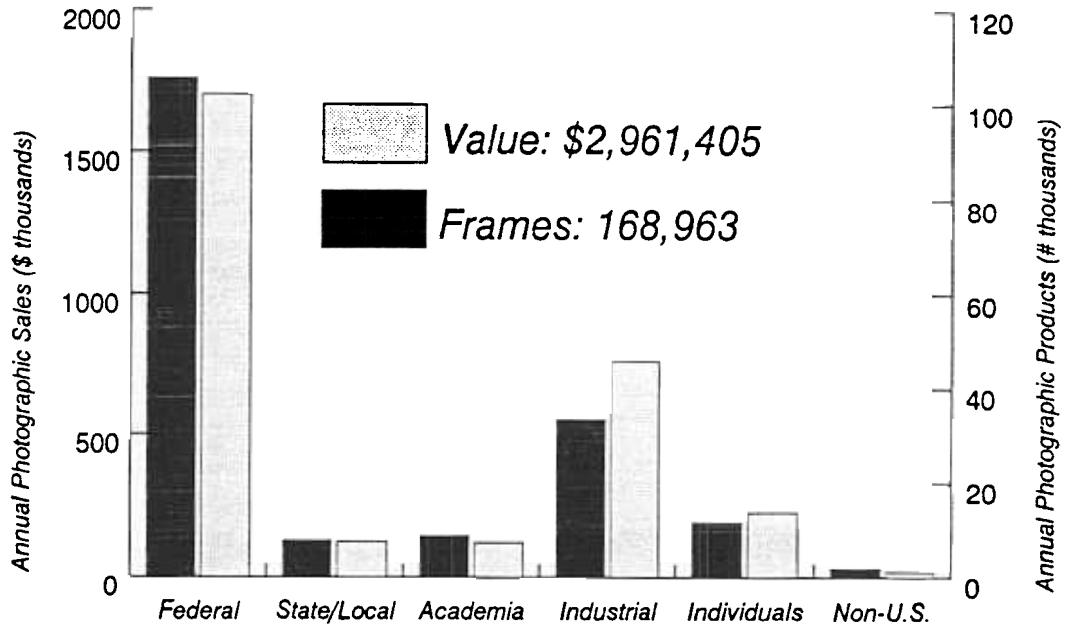
## Digital Data Products

| CUSTOMER CATEGORY  | ITEMS         | DOLLARS          |
|--------------------|---------------|------------------|
| USGS               | 2,790         | \$485,833        |
| OTHER FEDERAL      | 1,073         | 66,268           |
| TOTAL FED. GOV'T.  | 3,863         | 552,101          |
| STATE/LOCAL GOV'T. | 385           | 4,211            |
| ACADEMIA           | 2,522         | 47,362           |
| INDUSTRY           | 6,104         | 110,229          |
| INDIVIDUALS        | 302           | 9,995            |
| NON-U.S.           | 469           | 7,463            |
| <b>TOTAL</b>       | <b>13,645</b> | <b>\$731,361</b> |

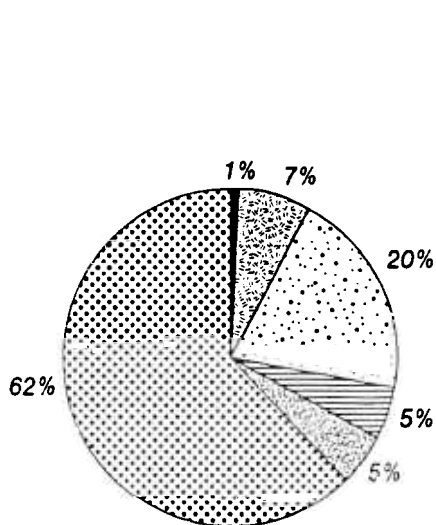
## Digital Data Processing

| CUSTOMER CATEGORY  | TEMS       | DOLLARS          |
|--------------------|------------|------------------|
| USGS               | 436        | \$742,820        |
| OTHER FEDERAL      | 6          | 22,529           |
| TOTAL FED. GOV'T.  | 442        | 765,349          |
| STATE/LOCAL GOV'T. | 0          | 0                |
| ACADEMIA           | 0          | 0                |
| INDUSTRY           | 1          | 77               |
| INDIVIDUALS        | 0          | 0                |
| NON-U.S.           | 0          | 0                |
| <b>TOTAL</b>       | <b>443</b> | <b>\$765,426</b> |

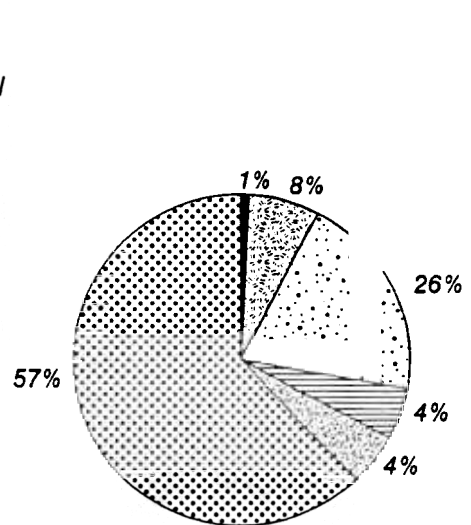
# Customer Profile: USGS Photographic Data Fiscal Year 1991



## Frames



## Dollars

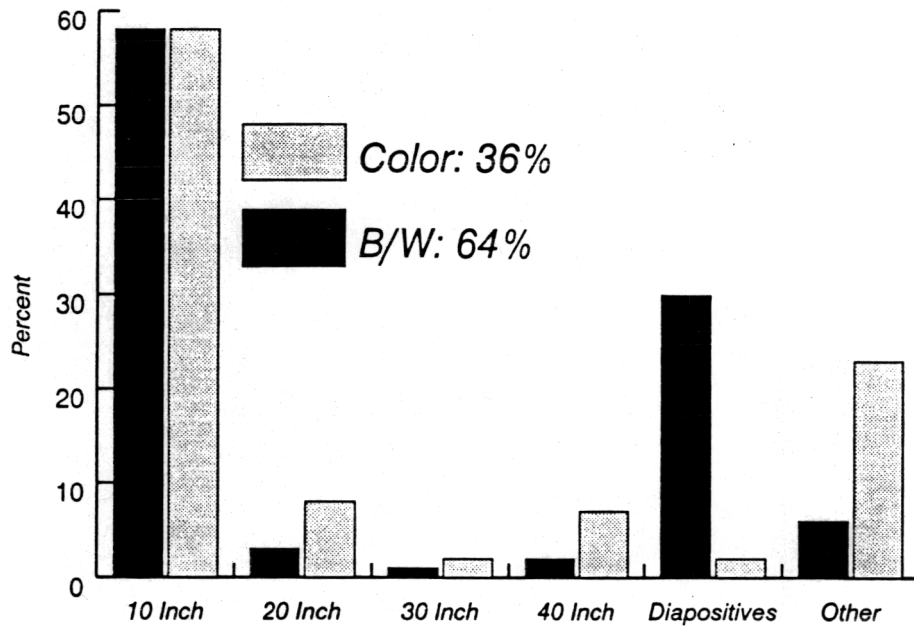




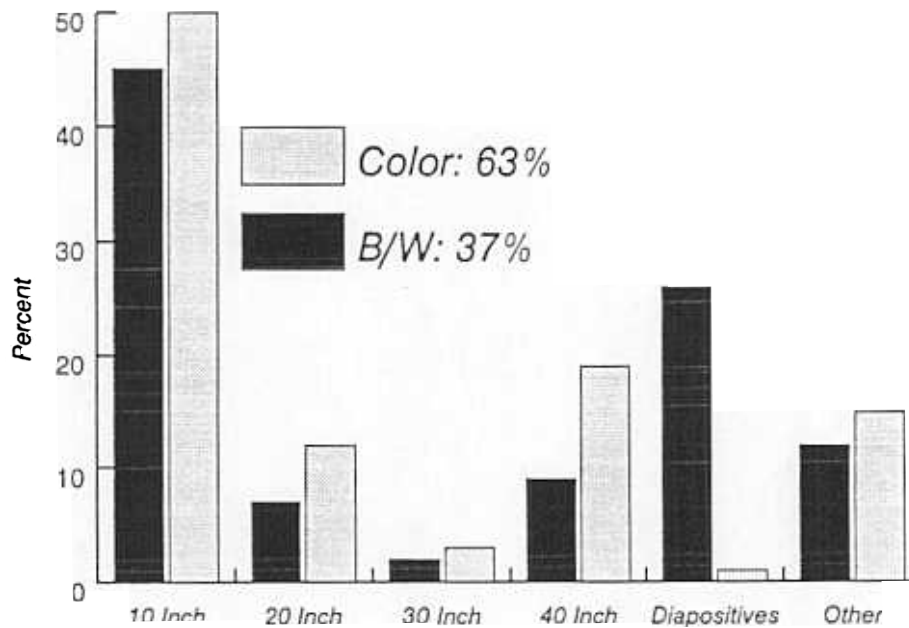
# Product Profile: USGS Photographic Data Fiscal Year 1991

---

**Total Frames: 168,963**



**Total Data Value: \$2,961,405**



# National Aerial Photography Program (NAPP) Annual Activity Report

| ACTIVITY                                  | FY 1991            | FY 1990            |
|---|--------------------|--------------------|
| <b>NUMBER OF FRAMES RECEIVED</b>          |                    |                    |
| Black and White                           | 56,517             | 27,428             |
| Color infrared                            | 26,885             | 27,053             |
| <b>TOTAL</b>                              | <b>83,402</b>      | <b>54,481</b>      |
| <b>NUMBER OF MASTER FRAMES DUPLICATED</b> |                    |                    |
| Black and White                           | 103,590            | 76,428             |
| Color Infrared                            | 24,695             | 30,053             |
| <b>TOTAL</b>                              | <b>128,285</b>     | <b>106,481</b>     |
| <b>COST TO EDC FOR DUPLICATION</b>        |                    |                    |
| Black and White (\$3/frame)               | 310,770            | 229,284            |
| Color Infrared (\$6/frame)                | 148,170            | 180,318            |
| <b>TOTAL</b>                              | <b>\$ 458,940</b>  | <b>\$ 409,602</b>  |
| <b>NUMBER OF FRAMES SOLD</b>              |                    |                    |
| Black and White Film/Paper                | 77,997             | 83,054             |
| Color Infrared Film/Paper                 | 31,221             | 25,512             |
| Other                                     | 164                | 378                |
| <b>TOTAL</b>                              | <b>109,382</b>     | <b>108,944</b>     |
| <b>NAPP PARTICIPANT PURCHASES</b>         |                    |                    |
| Bureau of Indian Affairs                  | 0                  | 1,140              |
| Bureau of Land Management                 | 52,372             | 34,212             |
| Corps of Engineers                        | 0                  | 1,401              |
| Defense Mapping Agency                    | 0                  | 106                |
| Fish and Wildlife Service                 | 5,412              | 24,871             |
| Forest Service                            | 69,133             | 26,914             |
| National Park Service                     | 57                 | 300                |
| Soil Conservation Service                 | 1,067              | 1,424              |
| State of Maryland                         | 10,478             | 12,254             |
| State of South Carolina                   | 0                  | 381                |
| Tennessee Valley Authority                | 4,470              | 1,874              |
| U.S. Geological Survey                    | 292,277            | 405,585            |
| <b>TOTAL</b>                              | <b>\$ 435,266</b>  | <b>\$ 510,462</b>  |
| <b>PURCHASES BY ALL OTHERS</b>            | <b>\$ 990,518</b>  | <b>\$ 846,726</b>  |
| <b>REVENUE FROM FRAMES SOLD</b>           |                    |                    |
| Black and White Film/Paper                | 587,174            | 635,056            |
| Color Infrared Film/Paper                 | 837,941            | 720,953            |
| Other                                     | 669                | 1,179              |
| <b>TOTAL</b>                              | <b>\$1,425,784</b> | <b>\$1,357,188</b> |

# Landsat Data Purchased By USGS Via Brokerage Agreement With EOSAT Fiscal Year 1991

| BROKER                     | ITEMS        | DOLLARS            |
|----------------------------|--------------|--------------------|
| Ag/FAS/Domestic            | 3,810        | 1,331,850          |
| Ag/FAS/Foreign             | 2,245        | 820,010            |
| Ag/Forest Service          | 9            | 13,409             |
| Ag/Soil Conserv. Serv.     | 18           | 52,811             |
| CIA                        | 410          | 160,919            |
| Commerce/NOAA/NESDIS       | 17           | 93,640             |
| Defense                    | 218          | 468,867            |
| Interior/BIA               | 7            | 26,255             |
| Interior/BLM               | 2            | 6,410              |
| Interior/BR                | 17           | 46,056             |
| Interior/NPS               | 3            | 8,915              |
| Interior/Survey            | 17           | 36,181             |
| Interior/Survey/GD         | 78           | 71,655             |
| Interior/Survey/WRD        | 13           | 41,431             |
| NASA/Ames                  | 8            | 22,681             |
| NASA/GSFC                  | 0            | -345               |
| NASA/GSFC - Science Office | 15           | 58,715             |
| NASA/Langley               | 0            | 750                |
| <b>TOTAL</b>               | <b>6,887</b> | <b>\$3,260,210</b> |

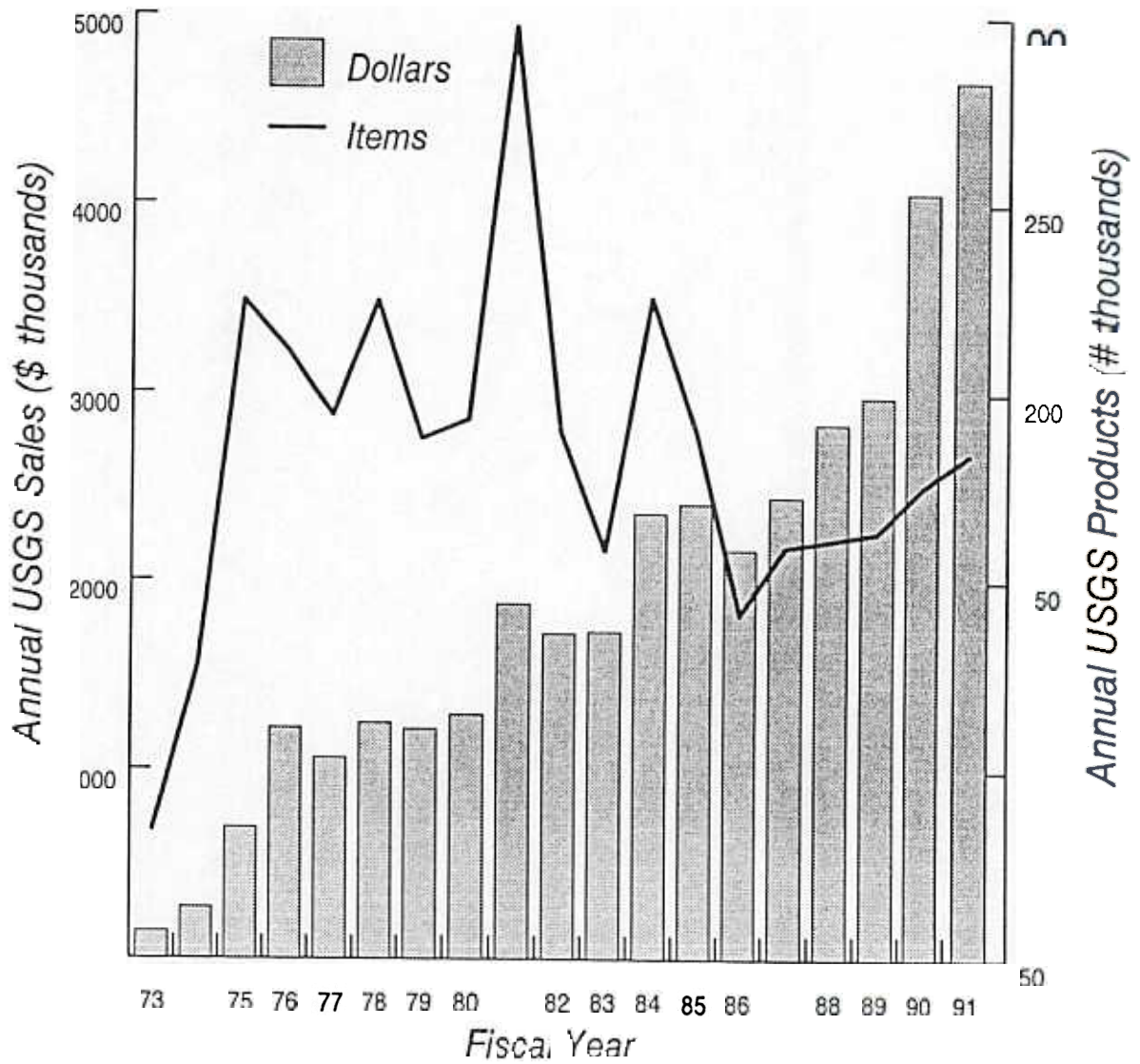
## Section II

---

### **Historical USGS Information**

This section provides historical information on USGS data produced and distributed by EDC from fiscal year 1973 through fiscal year 1991.

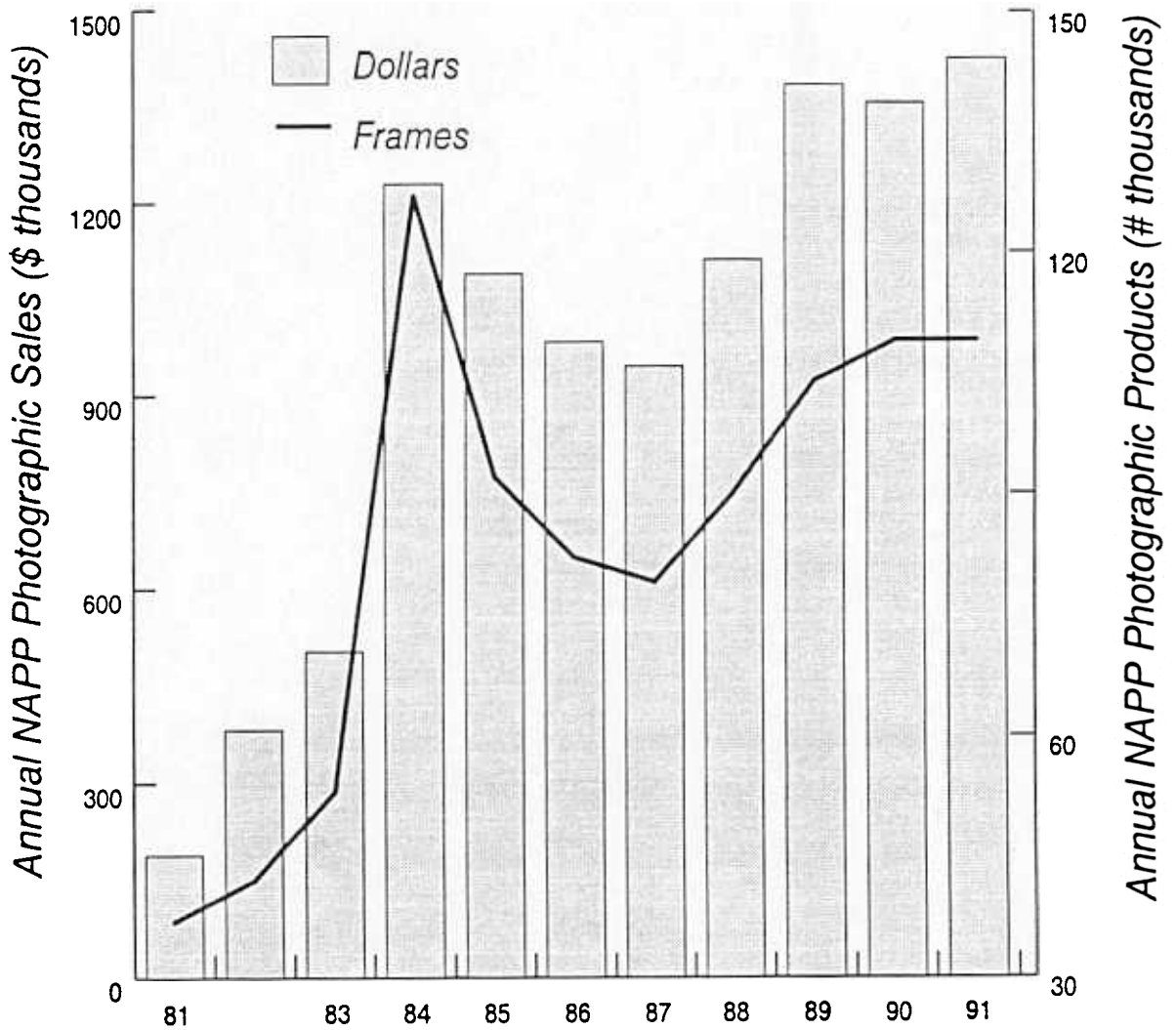
# Historical USGS Sales Fiscal Year 1973-1999



# Historical Aerial Photographic Data Sales Fiscal Year 1973-1991



# Fiscal Year 1981-1991



## Historical Customer Profile Aerial Photographic Data

| FISCAL YEAR | CATEGORY           | FRAMES         | % OF TOTAL  | DOLLARS            | % OF TOTAL  |
|-------------|--------------------|----------------|-------------|--------------------|-------------|
| 1989        | FEDERAL GOVERNMENT |                |             |                    |             |
|             | USGS               | 58,609         | 42%         | \$ 476,317         | 26%         |
|             | OTHER FEDERAL      | 15,621         | 11%         | 211,280            | 12%         |
|             | STATE/LOCAL GOV'T. | 10,114         | 7%          | 169,734            | 9%          |
|             | ACADEMIA           | 7,564          | 6%          | 94,837             | 5%          |
|             | INDUSTRY           | 34,711         | 25%         | 618,666            | 34%         |
|             | INDIVIDUAL         | 12,482         | 9%          | 250,228            | 14%         |
|             | NON-U.S.           | 598            | 0%          | 6,541              | 0%          |
|             | <b>TOTAL</b>       | <b>139,699</b> | <b>100%</b> | <b>\$1,827,603</b> | <b>100%</b> |
| 1990        | FEDERAL GOVERNMENT |                |             |                    |             |
|             | USGS               | 64,369         | 46%         | \$ 490,424         | 27%         |
|             | OTHER FEDERAL      | 21,529         | 15%         | 257,865            | 14%         |
|             | STATE/LOCAL GOV'T. | 3,941          | 3%          | 76,727             | 4%          |
|             | ACADEMIA           | 8,858          | 6%          | 128,345            | 7%          |
|             | INDUSTRY           | 30,478         | 22%         | 621,597            | 34%         |
|             | INDIVIDUAL         | 11,578         | 8%          | 239,968            | 13%         |
|             | NON-U.S.           | 685            | 0%          | 6,122              | 1%          |
|             | <b>TOTAL</b>       | <b>141,438</b> | <b>100%</b> | <b>\$1,821,048</b> | <b>100%</b> |
| 1991        | FEDERAL GOVERNMENT |                |             |                    |             |
|             | USGS               | 77,397         | 46%         | \$1,314,870        | 44%         |
|             | OTHER FEDERAL      | 27,963         | 16%         | 384,503            | 13%         |
|             | STATE/LOCAL GOV'T. | 7,786          | 5%          | 126,393            | 4%          |
|             | ACADEMIA           | 8,846          | 5%          | 123,904            | 4%          |
|             | INDUSTRY           | 33,364         | 20%         | 762,951            | 26%         |
|             | INDIVIDUAL         | 11,673         | 7%          | 228,491            | 8%          |
|             | NON-U.S.           | 1,934          | 1%          | 20,293             | 1%          |
|             | <b>TOTAL</b>       | <b>168,963</b> | <b>100%</b> | <b>\$2,961,405</b> | <b>100%</b> |



## Historical Customer Profile Aerial Photographic Data

| FISCAL YEAR | CATEGORY           | FRAMES         | % OF TOTAL  | DOLLARS            | % OF TOTAL  |
|-------------|--------------------|----------------|-------------|--------------------|-------------|
| 1985        | FEDERAL GOVERNMENT |                |             |                    |             |
|             | USGS               | 65,311         | 41%         | \$ 466,099         | 27%         |
|             | OTHER FEDERAL      | 26,172         | 16%         | 324,603            | 19%         |
|             | STATE/LOCAL GOV'T. | 5,500          | 3%          | 87,348             | 5%          |
|             | ACADEMIA           | 10,126         | 6%          | 98,878             | 6%          |
|             | INDUSTRY           | 39,444         | 25%         | 537,464            | 32%         |
|             | INDIVIDUAL         | 12,646         | 8%          | 174,386            | 10%         |
|             | NON-U.S.           | 1,816          | 1%          | 11,087             | 1%          |
|             | <b>TOTAL</b>       | <b>161,015</b> | <b>100%</b> | <b>\$1,699,865</b> | <b>100%</b> |
| 1986        | FEDERAL GOVERNMENT |                |             |                    |             |
|             | USGS               | 44,178         | 36%         | \$ 339,818         | 24%         |
|             | OTHER FEDERAL      | 16,487         | 13%         | 222,072            | 16%         |
|             | STATE/LOCAL GOV'T. | 5,197          | 4%          | 102,840            | 7%          |
|             | ACADEMIA           | 9,278          | 8%          | 84,200             | 6%          |
|             | INDUSTRY           | 39,081         | 32%         | 532,502            | 37%         |
|             | INDIVIDUAL         | 9,015          | 7%          | 149,631            | 10%         |
|             | NON-U.S.           | 282            | 0%          | 3,260              | 0%          |
|             | <b>TOTAL</b>       | <b>123,518</b> | <b>100%</b> | <b>\$1,434,323</b> | <b>100%</b> |
| 1987        | FEDERAL GOVERNMENT |                |             |                    |             |
|             | USGS               | 62,512         | 45%         | \$ 461,300         | 30%         |
|             | OTHER FEDERAL      | 20,977         | 15%         | 246,573            | 16%         |
|             | STATE/LOCAL GOV'T. | 5,545          | 4%          | 81,457             | 5%          |
|             | ACADEMIA           | 11,270         | 8%          | 113,052            | 7%          |
|             | INDUSTRY           | 26,929         | 20%         | 457,368            | 30%         |
|             | INDIVIDUAL         | 10,108         | 7%          | 170,686            | 11%         |
|             | NON-U.S.           | 853            | 1%          | 8,243              | 1%          |
|             | <b>TOTAL</b>       | <b>138,194</b> | <b>100%</b> | <b>\$1,538,679</b> | <b>100%</b> |
| 1988        | FEDERAL GOVERNMENT |                |             |                    |             |
|             | USGS               | 51,962         | 38%         | \$ 434,463         | 27%         |
|             | OTHER FEDERAL      | 24,252         | 18%         | 293,599            | 18%         |
|             | STATE/LOCAL GOV'T. | 5,641          | 4%          | 71,849             | 5%          |
|             | ACADEMIA           | 8,804          | 7%          | 93,193             | 6%          |
|             | INDUSTRY           | 33,223         | 24%         | 508,406            | 31%         |
|             | INDIVIDUAL         | 11,113         | 8%          | 211,341            | 13%         |
|             | NON-U.S.           | 785            | 1%          | 6,494              | 0%          |
|             | <b>TOTAL</b>       | <b>135,780</b> | <b>100%</b> | <b>\$1,619,345</b> | <b>100%</b> |

## Historical Customer Profile Aerial Photographic Data

| FISCAL YEAR  | CATEGORY           | FRAMES         | % OF TOTAL     | DOLLARS            | % OF TOTAL         |
|--------------|--------------------|----------------|----------------|--------------------|--------------------|
| 1981         | FEDERAL GOVERNMENT | 125,533        | 48%            | \$ 587,373         | 41%                |
|              | STATE/LOCAL GOV'T. | 8,735          | 3%             | 54,140             | 4%                 |
|              | ACADEMIA           | 20,270         | 8%             | 113,880            | 8%                 |
|              | INDUSTRY           | 78,568         | 30%            | 487,839            | 34%                |
|              | INDIVIDUAL         | 22,979         | 9%             | 172,825            | 12%                |
|              | NON-U.S.           | 3,739          | 2%             | 13,937             | 1%                 |
|              | <b>TOTAL</b>       |                | <b>259,824</b> | <b>100%</b>        | <b>\$1,429,994</b> |
| 1982         | FEDERAL GOVERNMENT | 82,360         | 51%            | \$ 528,020         | 42%                |
|              | STATE/LOCAL GOV'T. | 6,728          | 4%             | 41,799             | 3%                 |
|              | ACADEMIA           | 11,622         | 7%             | 100,712            | 8%                 |
|              | INDUSTRY           | 45,837         | 28%            | 424,905            | 34%                |
|              | INDIVIDUAL         | 14,639         | 9%             | 147,509            | 12%                |
|              | NON-U.S.           | 1,635          | 1%             | 14,058             | 1%                 |
|              | <b>TOTAL</b>       |                | <b>162,821</b> | <b>100%</b>        | <b>\$1,257,003</b> |
| 1983         | FEDERAL GOVERNMENT | 73,664         | 56%            | \$517,153          | 45%                |
|              | STATE/LOCAL GOV'T. | 3,718          | 3%             | 48,505             | 4%                 |
|              | ACADEMIA           | 10,003         | 8%             | 84,094             | 7%                 |
|              | INDUSTRY           | 32,806         | 25%            | 359,879            | 31%                |
|              | INDIVIDUAL         | 10,949         | 8%             | 131,244            | 12%                |
|              | NON-U.S.           | 682            | 0%             | 5,791              | 1%                 |
|              | <b>TOTAL</b>       |                | <b>131,822</b> | <b>100%</b>        | <b>\$1,147,666</b> |
| 1984         | FEDERAL GOVERNMENT |                |                |                    |                    |
|              | USGS               | 78,526         | 38%            | \$ 601,702         | 33%                |
|              | OTHER FEDERAL      | 26,386         | 13%            | 213,783            | 12%                |
|              | STATE/LOCAL GOV'T. | 7,992          | 4%             | 157,336            | 9%                 |
|              | ACADEMIA           | 11,517         | 5%             | 102,772            | 5%                 |
|              | INDUSTRY           | 67,327         | 33%            | 560,185            | 31%                |
|              | INDIVIDUAL         | 12,728         | 6%             | 163,716            | 9%                 |
|              | NON-U.S.           | 1,769          | 1%             | 12,891             | 1%                 |
| <b>TOTAL</b> |                    | <b>206,245</b> | <b>100%</b>    | <b>\$1,812,385</b> | <b>100%</b>        |

# Historical Customer Profile Aerial Photographic Data

| FISCAL YEAR | CATEGORY           | FRAMES         | % OF TOTAL     | DOLLARS           | % OF TOTAL        |
|-------------|--------------------|----------------|----------------|-------------------|-------------------|
| 1977        | FEDERAL GOVERNMENT | 104,475        | 55%            | \$ 330,145        | 42%               |
|             | NASA INVESTIGATORS | 2,010          | 1%             | 10,629            | 1%                |
|             | STATE/LOCAL GOV'T. | 13,562         | 7%             | 47,483            | 6%                |
|             | ACADEMIA           | 11,670         | 6%             | 68,162            | 9%                |
|             | INDUSTRY           | 44,757         | 24%            | 235,600           | 30%               |
|             | INDIVIDUAL         | 12,763         | 7%             | 92,175            | 12%               |
|             | NON-U.S.           | 934            | 0%             | 3,500             | 0%                |
|             | UNCATEGORIZED      | 300            | 0%             | 1,091             | 0%                |
|             | <b>TOTAL</b>       | <b>190,471</b> | <b>100%</b>    | <b>\$ 788,785</b> | <b>100%</b>       |
| 1978        | FEDERAL GOVERNMENT | 97,355         | 50%            | \$ 446,387        | 46%               |
|             | NASA INVESTIGATORS | 792            | 0%             | 2,611             | 0%                |
|             | STATE/LOCAL GOV'T. | 3,840          | 2%             | 23,854            | 3%                |
|             | ACADEMIA           | 17,176         | 9%             | 81,049            | 8%                |
|             | INDUSTRY           | 61,752         | 31%            | 317,644           | 33%               |
|             | INDIVIDUAL         | 13,179         | 7%             | 91,198            | 9%                |
|             | NON-U.S.           | 2,781          | 1%             | 11,098            | 1%                |
|             |                    | <b>TOTAL</b>   | <b>196,875</b> | <b>100%</b>       | <b>\$ 973,841</b> |
| 1979        | FEDERAL GOVERNMENT | 76,731         | 48%            | \$ 358,866        | 42%               |
|             | STATE/LOCAL GOV'T. | 5,450          | 3%             | 33,949            | 4%                |
|             | ACADEMIA           | 15,451         | 10%            | 74,305            | 8%                |
|             | INDUSTRY           | 49,976         | 31%            | 300,376           | 35%               |
|             | INDIVIDUAL         | 13,298         | 8%             | 96,885            | 11%               |
|             | NON-U.S.           | 415            | 0%             | 1,963             | 0%                |
|             | <b>TOTAL</b>       | <b>161,321</b> | <b>100%</b>    | <b>\$ 866,344</b> | <b>100%</b>       |
| 1980        | FEDERAL GOVERNMENT | 55,217         | 33%            | \$ 286,055        | 31%               |
|             | STATE/LOCAL GOV'T. | 6,208          | 4%             | 38,091            | 4%                |
|             | ACADEMIA           | 28,676         | 17%            | 118,700           | 13%               |
|             | INDUSTRY           | 56,067         | 34%            | 340,509           | 37%               |
|             | INDIVIDUAL         | 19,383         | 11%            | 133,347           | 14%               |
|             | NON-U.S.           | 1,088          | 1%             | 5,567             | 1%                |
|             | <b>TOTAL</b>       | <b>166,639</b> | <b>100%</b>    | <b>\$ 922,269</b> | <b>100%</b>       |

## Historical Customer Profile Aerial Photographic Data

| FISCAL YEAR         | CATEGORY           | FRAMES         | % OF TOTAL     | DOLLARS          | % OF TOTAL       |
|---------------------|--------------------|----------------|----------------|------------------|------------------|
| 1973                | FEDERAL GOVERNMENT | 19,339         | 23%            | \$ 44,664        | 31%              |
|                     | STATE/LOCAL GOV'T. | 33,563         | 40%            | 33,988           | 24%              |
|                     | ACADEMIA           | 8,139          | 10%            | 16,471           | 11%              |
|                     | INDUSTRY           | 14,086         | 17%            | 28,883           | 20%              |
|                     | INDIVIDUAL         | 6,215          | 7%             | 15,158           | 10%              |
|                     | NON-U.S.           | 2,590          | 3%             | 5,465            | 4%               |
|                     | UNCATEGORIZED      | 10             | 0%             | 47               | 0%               |
|                     | <b>TOTAL</b>       |                | <b>83,942</b>  | <b>100%</b>      | <b>\$144,676</b> |
| 1974                | FEDERAL GOVERNMENT | 16,544         | 15%            | \$ 47,848        | 20%              |
|                     | STATE/LOCAL GOV'T. | 3,618          | 3%             | 10,592           | 5%               |
|                     | ACADEMIA           | 14,168         | 13%            | 38,617           | 16%              |
|                     | INDUSTRY           | 63,953         | 58%            | 108,803          | 46%              |
|                     | INDIVIDUAL         | 7,817          | 7%             | 24,702           | 10%              |
|                     | NON-U.S.           | 1,759          | 2%             | 3,550            | 2%               |
|                     | UNCATEGORIZED      | 1,631          | 2%             | 3,220            | 1%               |
|                     | <b>TOTAL</b>       |                | <b>109,490</b> | <b>100%</b>      | <b>\$237,332</b> |
| 1975                | FEDERAL GOVERNMENT | 75,992         | 39%            | \$229,876        | 40%              |
|                     | STATE/LOCAL GOV'T. | 4,821          | 2%             | 18,726           | 3%               |
|                     | ACADEMIA           | 28,447         | 15%            | 90,031           | 15%              |
|                     | INDUSTRY           | 72,477         | 37%            | 185,871          | 32%              |
|                     | INDIVIDUAL         | 9,914          | 5%             | 45,595           | 8%               |
|                     | NON-U.S.           | 2,287          | 1%             | 4,917            | 1%               |
|                     | UNCATEGORIZED      | 1,054          | 1%             | 3,621            | 1%               |
|                     | <b>TOTAL</b>       |                | <b>194,922</b> | <b>100%</b>      | <b>\$578,637</b> |
| 1976<br>(15 MONTHS) | FEDERAL GOVERNMENT | 89,625         | 45%            | \$364,524        | 38%              |
|                     | NASA INVESTIGATORS | 11,551         | 6%             | 69,892           | 7%               |
|                     | STATE/LOCAL GOV'T. | 13,633         | 7%             | 59,556           | 6%               |
|                     | ACADEMIA           | 16,521         | 8%             | 84,460           | 9%               |
|                     | INDUSTRY           | 45,400         | 23%            | 231,120          | 24%              |
|                     | INDIVIDUAL         | 19,945         | 10%            | 132,882          | 14%              |
|                     | NON-U.S.           | 2,003          | 1%             | 8,360            | 1%               |
|                     | UNCATEGORIZED      | 1,510          | 0%             | 5,396            | 1%               |
| <b>TOTAL</b>        |                    | <b>200,188</b> | <b>100%</b>    | <b>\$956,190</b> | <b>100%</b>      |

## Section iii

---

### **EROS Data Center Archives And Data Bases**

This section describes those data archives, both digital and photographic, that are maintained by EDC to preserve and reference remotely sensed, cartographic, and earth science data. In addition, several data bases reference data held elsewhere that are of interest to EDC customers.

As of the end of fiscal year 1991, the Data Center archived nearly 6.9 million frames of USGS photographic data and over 30,000 tapes containing USGS digital data. In addition, EDC archived nearly 2.8 million frames of Landsat photographic data and 110,000 Landsat data tapes. The International Landsat Data Base maintained by EDC referenced nearly 2.2 million scenes of Landsat data held by foreign ground stations.

# Data Archive Report As Of September 12, 1991

## USGS PHOTOGRAPHIC DATA ARCHIVED AT EDC

| AERIAL PHOTOGRAPHY              |               |                  |
|---------------------------------|---------------|------------------|
| SOURCE                          | ROLLS         | FRAMES           |
| US Geological Survey            | 17,246        | 2,568,782        |
| NAPP                            | 6,598         | 1,021,001        |
| Bur. of Land Management         | 625           | 124,992          |
| Bur. of Reclamation             | 301           | 60,181           |
| National Park Service           | 80            | 13,411           |
| Bur. of Indian Affairs          | 49            | 9,913            |
| <b>TOTAL DEPT. OF INTERIOR</b>  | <b>24,899</b> | <b>3,798,280</b> |
| Army Map Service                | 1,680         | 213,873          |
| US Air Force                    | 3,377         | 330,211          |
| US Navy                         | 6,321         | 431,170          |
| Corps of Engineers              | 82            | 22,924           |
| <b>TOTAL DEPT. OF DEFENSE</b>   | <b>11,460</b> | <b>998,178</b>   |
| Ames Research Center            | 3,934         | 510,768          |
| Johnson Space Center            | 7,622         | 1,009,763        |
| Other                           | 1,413         | 125,427          |
| <b>TOTAL NASA</b>               | <b>12,969</b> | <b>1,645,958</b> |
| <b>OTHER SOURCE AGENCIES</b>    | <b>1,995</b>  | <b>341,171</b>   |
| <b>TOTAL AERIAL PHOTOGRAPHY</b> | <b>51,323</b> | <b>6,783,587</b> |

| SATELLITE PHOTOGRAPHY              |              |                |
|------------------------------------|--------------|----------------|
| SOURCE                             | ROLLS        | FRAMES         |
| SKYLAB                             | 634          | 44,845         |
| APOLLO/GEMINI/APOLLO-SOJUZ         | 127          | 18,372         |
| SHUTTLE (LFC 8 ROLLS)              | 864          | 80,685         |
| <b>TOTAL SATELLITE PHOTOGRAPHY</b> | <b>1,625</b> | <b>143,902</b> |

# Data Archive Report As Of September 12, 1991

## USGS Digital Data Archived at EDC

| SOURCE                                     | MAGNETIC TAPES |
|--|----------------|
| <b>AERIAL IMAGE DATA</b>                   |                |
| NASA Data                                  |                |
| TMS 8-Channel Data                         | 653            |
| TMS 12-Channel Data                        | 501            |
| TIMS 6-Channel Data                        | 202            |
| M2S 11-Channel Data                        | 77             |
| AOCI 10-Channel Data                       | 16             |
| National Park Service                      | 93             |
| Side-Looking Airborne Radar (SLAR)         | <u>1,368</u>   |
| <b>TOTAL</b>                               | <b>2,910</b>   |
| <b>SATELLITE IMAGE DATA</b>                |                |
| AVHRR                                      |                |
| EDC-HRPT Data                              | 9,192          |
| LAC Data Received via DOMSAT               | 10,351         |
| LAC Data Received From Other Sources       | 3,108          |
| Federally-Owned Landsat Data (FOLD)        | 3,246          |
| SPOT Data                                  | 278            |
| Department of Defense MSI Data             | <u>587</u>     |
| <b>TOTAL</b>                               | <b>26,762</b>  |
| <b>NDCDB DATA</b>                          |                |
| Digital Elevation Model (DEM)              | 76             |
| 1:2 Million Digital Line Graph (DLG)       | <u>4</u>       |
| <b>TOTAL</b>                               | <b>80</b>      |
| <b>EARTH SCIENCE DATA</b>                  |                |
| National Uranium Resource Evaluation(NURE) | 958            |
| Geophysical Research Program               | <u>14</u>      |
| <b>TOTAL</b>                               | <b>972</b>     |
| <b>TOTAL DIGITAL HOLDINGS</b>              | <b>30,724</b>  |

# Data Archive Report As Of September 12, 1991

## Landsat Data Archived at EDC

| PHOTOGRAPHIC DATA             | ROLLS          | FRAMES           |
|-------------------------------|----------------|------------------|
| MSS 70 MM Film, Landsat 1,2,3 | 7,708          | 1,342,187        |
| MSS 9" B&W Film               | 9,447          | 1,280,024        |
| TM 9" B&W Film                | 2,968          | 177,118          |
| MSS Color Composites          | N/A            | 18,136           |
| TM Color Composites           | N/A            | 1,866            |
| <b>TOTAL</b>                  | <b>20,123</b>  | <b>2,819,331</b> |
| DIGITAL DATA                  | 1/2" Mag.Tapes | HDT's            |
| MSS                           | 43,546         | 31,970           |
| TM                            | 34,758         |                  |
| <b>TOTAL</b>                  | <b>78,304</b>  |                  |

## Landsat Data Referenced In EDC Landsat Data Base

| LOCATION                                     | SCENES           |
|--|------------------|
| <b>DATA HELD IN U.S. BY EOSAT AND/OR EDC</b> |                  |
| MSS/RBV                                      | 773,868          |
| TM   | 175,418          |
| <b>TOTAL</b>                                 | <b>949,286</b>   |
| <b>DATA HELD BY FOREIGN GROUND STATIONS</b>  |                  |
| Argentina                                    | 10,790           |
| Australia                                    | 210,671          |
| Brazil                                       | 85,889           |
| Canada                                       | 529,507          |
| Earthnet (Europe)                            | 587,248          |
| Italy  | 492,720          |
| Japan  | 177,860          |
| Pakistan                                     | 7,839            |
| South Africa                                 | 65,857           |
| Spain  | 26,903           |
| <b>TOTAL</b>                                 | <b>2,195,284</b> |



# Data Archive Report As Of September 12, 1991

---

---

## Summary of Data Archived at EDC

| PHOTOGRAPHIC DATA | FRAMES           |
|-------------------|------------------|
| AERIAL            | 6,783,587        |
| SATELLITE         | 143,902          |
| LANDSAT           | <u>2,819,331</u> |
| <b>TOTAL</b>      | <b>9,746,820</b> |

| DIGITAL DATA       | MAGNETIC TAPES | HDT's         |
|--------------------|----------------|---------------|
| AERIAL IMAGE DATA  | 2,910          | —             |
| SATELLITE          | 26,762         | —             |
| NDCDB              | 80             | —             |
| EARTH SCIENCE DATA | 972            | —             |
| LANDSAT            | <u>78,304</u>  | <u>31,970</u> |
| <b>TOTAL</b>       | <b>109,028</b> | <b>31,970</b> |

# Landsat International Data Base Summary As Of September 12, 1991

References Landsat data archived by U.S. and foreign ground stations. Input provided via LGSOWG data exchange tape.

| COUNTRY                                | SCENES  | LAST UPDATE  | ACQUISITION DATE RANGE        |
|--|---|--------------|-------------------------------|
| USA                                    | 773,868 MSS<br>175,418 TM                                     | DAILY        | 8/72 - 8/91<br>8/82 - 8/91    |
| BRAZIL                                 | 60,146 MSS<br>25,743 TM                                       | 5/90<br>4/90 | 5/73 - 9/87<br>3/84 - 2/90    |
| CANADA                                 | 423,543 MSS<br>105,964 TM                                     | 6/91<br>7/91 | 8/72 - 5/91<br>8/82 - 5/91    |
| EARTHNET:<br>ITALY                     | 379,293 MSS<br>113,427 TM                                     | 8/91<br>8/91 | 4/75 - 6/91<br>4/84 - 6/91    |
| SWEDEN                                 | 439,473 MSS<br>147,775 TM                                     | 8/91<br>8/91 | 5/78 - 6/91<br>4/84 - 6/91    |
| MASPALOMAS<br>(SPAIN)                  | 23,918 MSS<br>2,985 TM  | 8/91<br>8/91 | 7/84 - 12/90<br>11/87 - 12/90 |
| SOUTH AFRICA                           | 57,397 MSS<br>8,460 TM  | 8/90<br>7/91 | 6/75 - 5/90<br>1/89 - 6/91    |
| AUSTRALIA                              | 210,671 MSS   | 9/91         | 9/79 - 8/91                   |
| ARGENTINA                              | 10,790 MSS  | 5/87         | 9/80 - 8/84                   |
| JAPAN                                  | 133,031 MSS<br>44,829 TM                                      | 7/91<br>7/91 | 1/79 - 4/91<br>4/84 - 4/91    |
| PAKISTAN                               | 3,256 MSS<br>4,583 TM   | 6/90<br>6/90 | 5/89 - 12/89<br>5/89 - 12/89  |
| <b>TOTAL SCENES</b>                    | <b>2,515,386 MSS</b><br><b>629,184 TM</b><br><b>3,144,570</b> |              |                               |
| <b>LGSOWG<br/>TOTAL SCENES/NON-EDC</b> | <b>2,195,284</b>  |              |                               |

To date, EDC has not received international data base tape updates from Indonesia, Thailand, People's Republic of China, Saudi Arabia, and India.

*Note: Number of MSS scenes may include RBV data.*

## Section IV

---

---

### EOSAT Products And Services

The following summarizes the EROS Data Center's fiscal year 1991 activities in support of the USGS agreement with NOAA and EOSAT for the production and distribution of Landsat products and services. These figures do not include USGS sales of Landsat MSS data more than two years old.

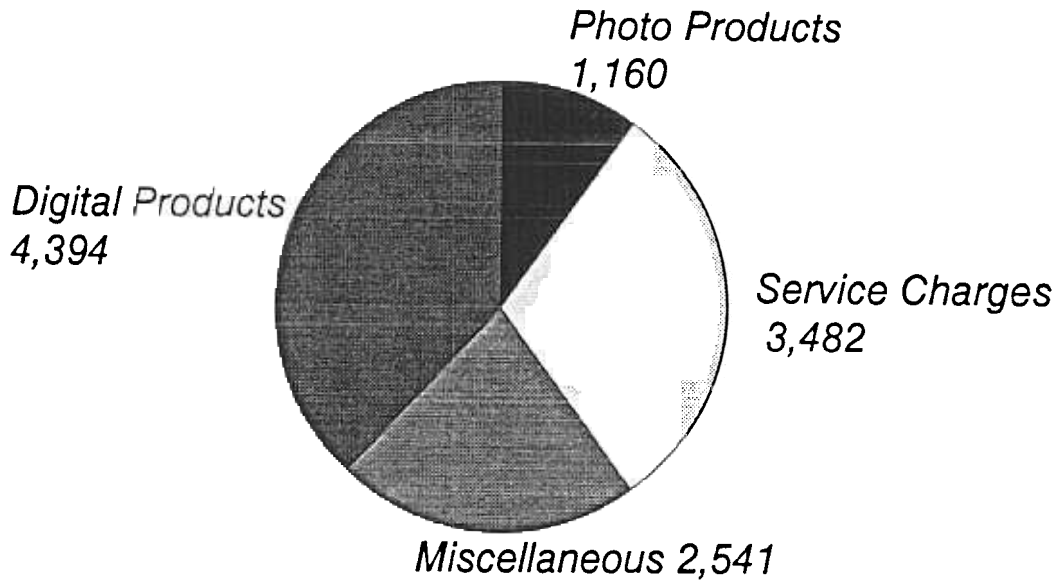
Sales reported here refer to data distributed by EDC and those distributed by EOSAT but billed through EDC. Some products produced and billed directly by EOSAT do not appear in EDC records.

In fiscal year 1991, total revenue from EOSAT products and services processed through EDC was over \$9.3 million. Of that, nearly \$3 million was for EDC-produced digital products and \$51,000 was for EDC-produced photographic products. The "miscellaneous" category, which consists primarily of data produced and distributed by EOSAT but billed through EDC, accounted for over \$6.1 million. The remaining \$259,000 was for reference aids, postage charges, and service charges.

# EOSAT Products, Services, and Revenue Fiscal Year 1991

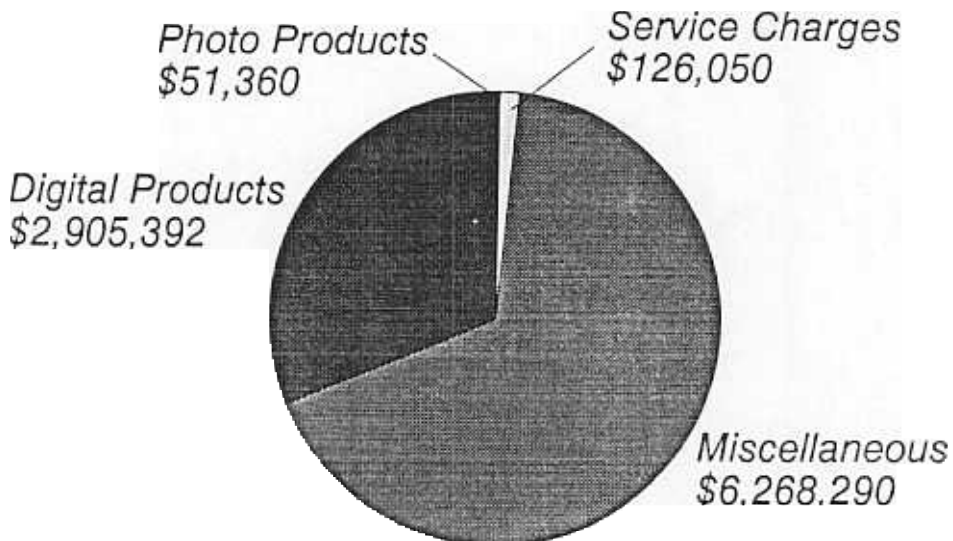
---

**Total Products/Services: 11,577**



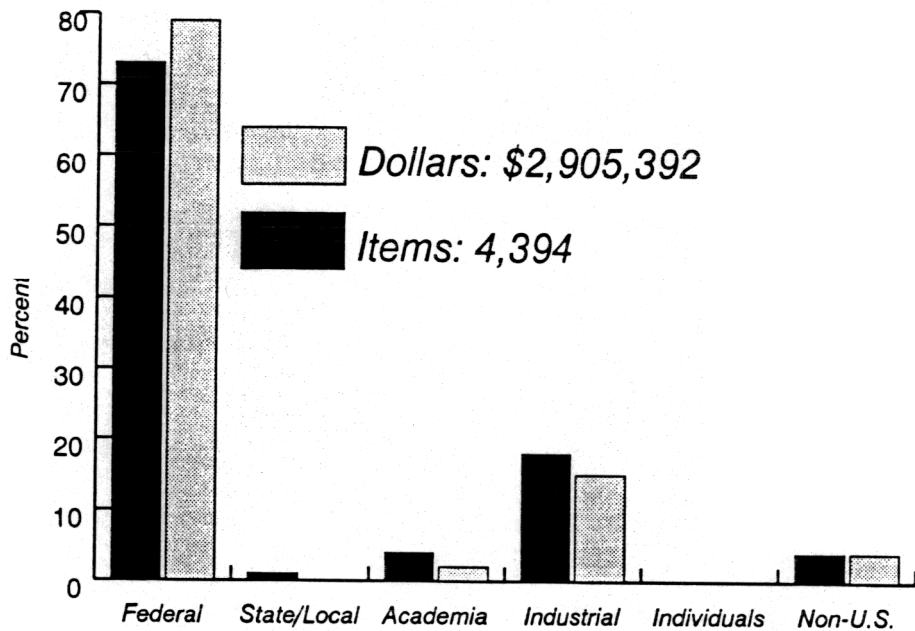
---

**Total Revenue: \$9,351,092**

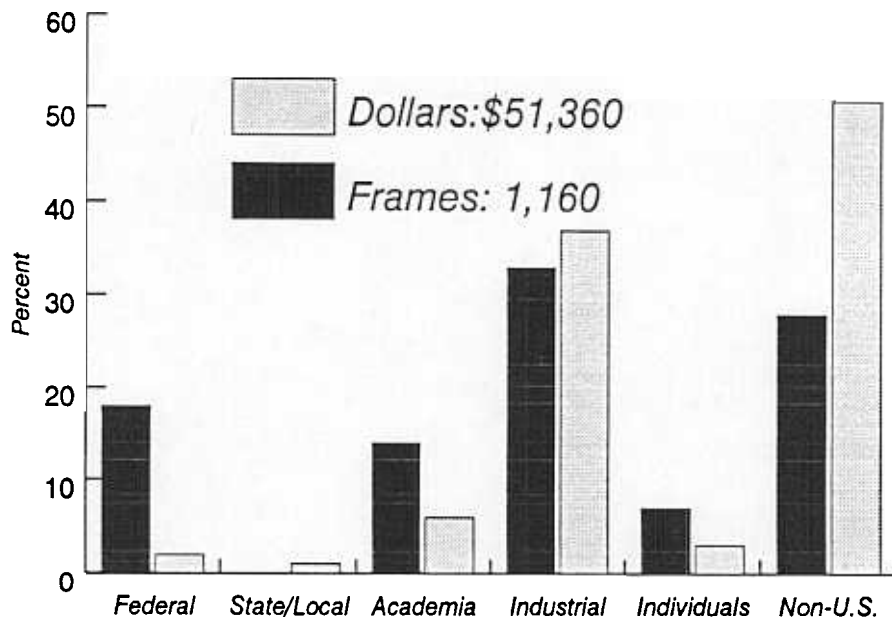


# Customer Profile: EOSAT Data Fiscal Year 1991

## Digital Products



## Photographic Products



# EOSAT Product Summary

## Fiscal Year 1991

| PRODUCTS/SERVICES/CHARGES    | ITEMS         | DOLLARS            |
|------------------------------|---------------|--------------------|
| <b>PHOTOGRAPHIC PRODUCTS</b> | <b>1,160</b>  | <b>\$ 51,360</b>   |
| MSS/RBV                      | 1,114         | 26,070             |
| TM                           | 46            | 25,290             |
| <b>DIGITAL PRODUCTS</b>      | <b>4,394</b>  | <b>2,905,392</b>   |
| MSS/RBV Scenes               | 3,768         | 2,405,270          |
| Additional MSS Copies        | 16            | 1,440              |
| TM TIPS Quads                | 466           | 441,512            |
| Additional TM TIPS Copies    | 20            | 1,800              |
| TM Floppy Disks              | 124           | 55,370             |
| <b>MISCELLANEOUS</b>         | <b>2,541</b>  | <b>6,135,613</b>   |
| <b>REFERENCE AIDS</b>        | <b>N/A</b>    | <b>23,187</b>      |
| <b>POSTAGE CHARGES</b>       | <b>N/A</b>    | <b>39,292</b>      |
| <b>SALES TAX</b>             | <b>N/A</b>    | <b>70,198</b>      |
| <b>SUBTOTAL</b>              | <b>8,095</b>  | <b>9,225,042</b>   |
| <b>SERVICE CHARGES</b>       | <b>3,482</b>  | <b>126,050</b>     |
| <b>TOTAL REVENUE</b>         | <b>11,577</b> | <b>\$9,351,092</b> |

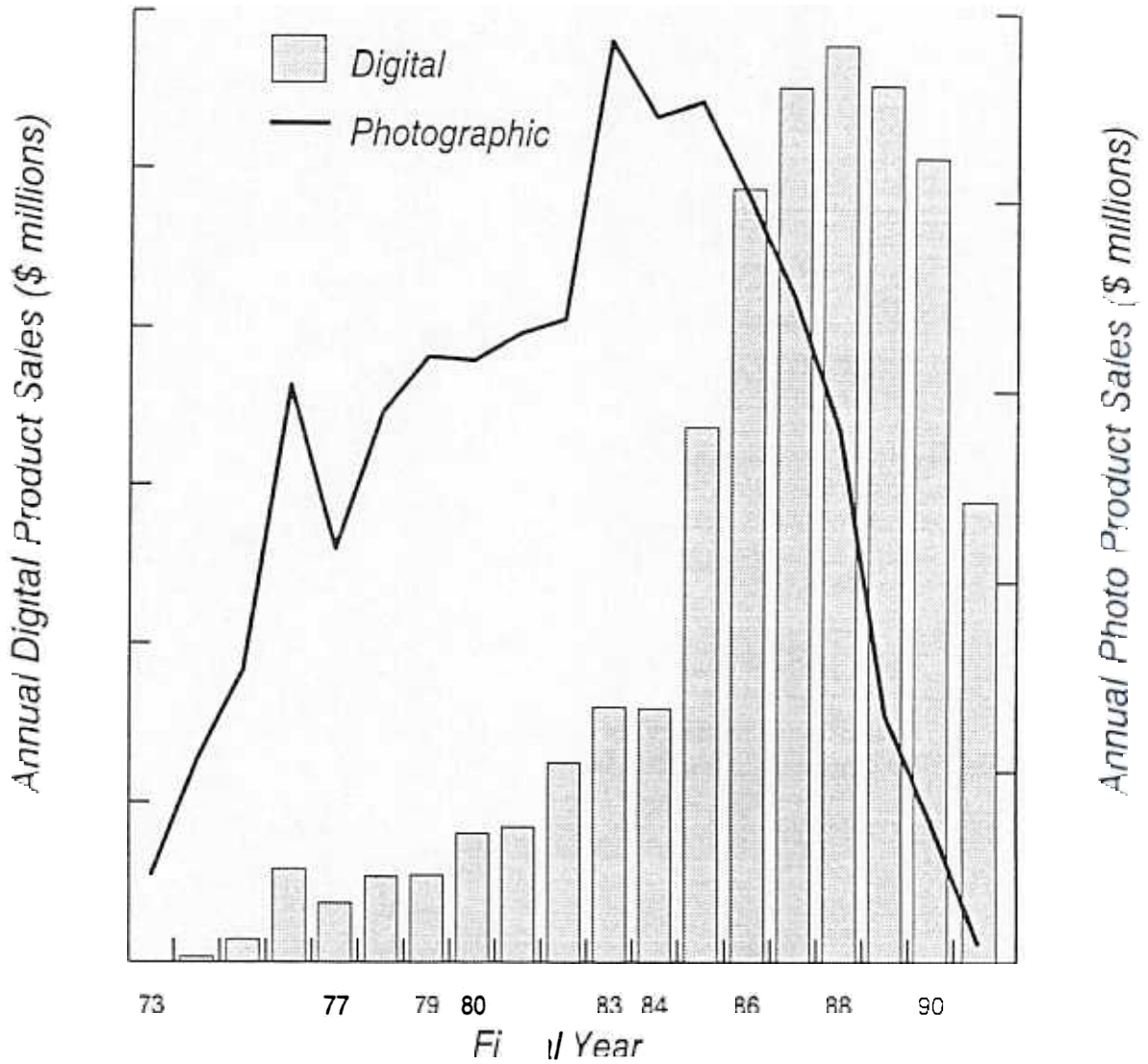
## Section V

---

### **Historical Landsat Information**

This section provides historical information on EDC-produced Landsat digital and photographic sales from fiscal year 1973 through fiscal year 1991. These data do not include products produced and distributed by EOSAT.

H o c a L n d S e \$  
 F c Yea 973 99

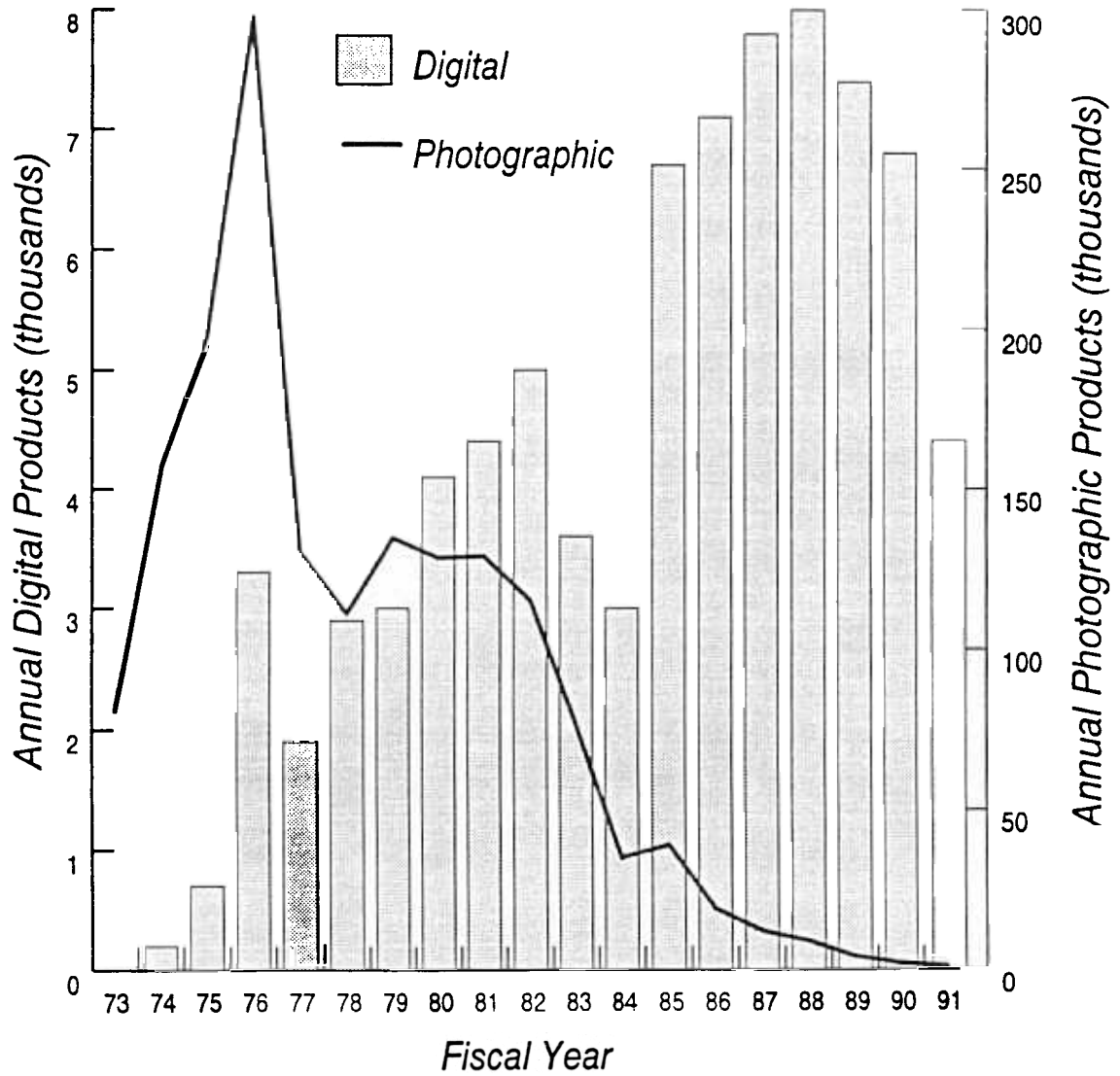




# Historical Landsat Sales (# of items) Fiscal Year 1973-1991

---

---



## Historical Customer Profile Landsat Digital Data

| FISCAL YEAR | CATEGORY           | ITEMS        | % OF TOTAL  | DOLLARS            | % OF TOTAL  |
|-------------|--------------------|--------------|-------------|--------------------|-------------|
| 1991        | FEDERAL GOVERNMENT |              |             |                    |             |
|             | USGS               | 9            | 0%          | \$ 10,060          | 0%          |
|             | OTHER FEDERAL      | 3,188        | 73%         | 2,283,646          | 79%         |
|             | STATE/LOCAL GOV'T. | 30           | 1%          | 13,046             | 0%          |
|             | ACADEMIA           | 189          | 4%          | 61,810             | 2%          |
|             | INDUSTRY           | 781          | 18%         | 423,110            | 15%         |
|             | INDIVIDUAL         | 2            | 0%          | 850                | 0%          |
|             | NON-U.S.           | 195          | 4%          | 112,870            | 4%          |
|             | <b>TOTAL</b>       | <b>4,394</b> | <b>100%</b> | <b>\$2,905,392</b> | <b>100%</b> |

## Historical Customer Profile Landsat Digital Data

| FISCAL YEAR | CATEGORY           | ITEMS        | % OF TOTAL  | DOLLARS            | % OF TOTAL  |
|-------------|--------------------|--------------|-------------|--------------------|-------------|
| 1987        | FEDERAL GOVERNMENT |              |             |                    |             |
|             | USGS               | 182          | 2%          | \$ 153,360         | 3%          |
|             | OTHER FEDERAL      | 4,216        | 54%         | 2,803,240          | 51%         |
|             | STATE/LOCAL GOV'T. | 162          | 2%          | 128,670            | 2%          |
|             | ACADEMIA           | 340          | 4%          | 243,332            | 4%          |
|             | INDUSTRY           | 1,524        | 20%         | 1,082,350          | 20%         |
|             | INDIVIDUAL         | 27           | 0%          | 24,140             | 0%          |
|             | NON-U.S.           | 1,391        | 18%         | 1,085,580          | 20%         |
|             | <b>TOTAL</b>       | <b>7,842</b> | <b>100%</b> | <b>\$5,520,672</b> | <b>100%</b> |
| 1988        | FEDERAL GOVERNMENT |              |             |                    |             |
|             | USGS               | 281          | 3%          | \$ 199,970         | 4%          |
|             | OTHER FEDERAL      | 4,632        | 58%         | 3,140,940          | 54%         |
|             | STATE/LOCAL GOV'T. | 68           | 1%          | 51,580             | 1%          |
|             | ACADEMIA           | 379          | 5%          | 276,500            | 5%          |
|             | INDUSTRY           | 1,585        | 20%         | 1,283,440          | 22%         |
|             | INDIVIDUAL         | 18           | 0%          | 17,000             | 0%          |
|             | NON-U.S.           | 1,029        | 13%         | 818,240            | 14%         |
|             | <b>TOTAL</b>       | <b>7,992</b> | <b>100%</b> | <b>\$5,787,670</b> | <b>100%</b> |
| 1989        | FEDERAL GOVERNMENT |              |             |                    |             |
|             | USGS               | 272          | 4%          | \$ 182,790         | 3%          |
|             | OTHER FEDERAL      | 3,701        | 50%         | 2,522,190          | 46%         |
|             | STATE/LOCAL GOV'T. | 96           | 1%          | 72,480             | 1%          |
|             | ACADEMIA           | 286          | 4%          | 239,640            | 5%          |
|             | INDUSTRY           | 1,814        | 25%         | 1,540,350          | 28%         |
|             | INDIVIDUAL         | 23           | 0%          | 20,610             | 0%          |
|             | NON-U.S.           | 1,182        | 16%         | 953,860            | 17%         |
|             | <b>TOTAL</b>       | <b>7,374</b> | <b>100%</b> | <b>\$5,531,920</b> | <b>100%</b> |
| 1990        | FEDERAL GOVERNMENT |              |             |                    |             |
|             | USGS               | 157          | 2%          | \$ 124,600         | 3%          |
|             | OTHER FEDERAL      | 4,134        | 62%         | 2,758,342          | 54%         |
|             | STATE/LOCAL GOV'T. | 101          | 1%          | 82,600             | 2%          |
|             | ACADEMIA           | 248          | 4%          | 216,770            | 4%          |
|             | INDUSTRY           | 1,181        | 17%         | 1,048,408          | 21%         |
|             | INDIVIDUAL         | 6            | 0%          | 4,850              | 0%          |
|             | NON-U.S.           | 925          | 14%         | 836,810            | 16%         |
|             | <b>TOTAL</b>       | <b>6,752</b> | <b>100%</b> | <b>\$5,072,380</b> | <b>100%</b> |

## Historical Customer Profile Landsat Digital Data

| FISCAL YEAR  | CATEGORY           | ITEMS        | % OF TOTAL   | DOLLARS            | % OF TOTAL         |
|--------------|--------------------|--------------|--------------|--------------------|--------------------|
| 1983         | FEDERAL GOVERNMENT | 1,091        | 30%          | \$ 480,865         | 30%                |
|              | STATE/LOCAL GOV'T. | 159          | 5%           | 65,410             | 4%                 |
|              | ACADEMIA           | 326          | 9%           | 123,820            | 8%                 |
|              | INDUSTRY           | 1,016        | 28%          | 473,860            | 30%                |
|              | INDIVIDUAL         | 11           | 0%           | 6,330              | 0%                 |
|              | NON-U.S.           | 996          | 28%          | 452,500            | 28%                |
|              | <b>TOTAL</b>       |              | <b>3,599</b> | <b>100%</b>        | <b>\$1,601,985</b> |
| 1984         | FEDERAL GOVERNMENT | 1,474        | 48%          | \$ 553,240         | 35%                |
|              | STATE/LOCAL GOV'T. | 73           | 2%           | 50,950             | 3%                 |
|              | ACADEMIA           | 291          | 10%          | 80,125             | 5%                 |
|              | INDUSTRY           | 601          | 20%          | 493,075            | 31%                |
|              | INDIVIDUAL         | 28           | 1%           | 15,180             | 1%                 |
|              | NON-U.S.           | 575          | 19%          | 398,305            | 25%                |
|              | <b>TOTAL</b>       |              | <b>3,042</b> | <b>100%</b>        | <b>\$1,590,875</b> |
| 1985         | FEDERAL GOVERNMENT | 4,135        | 62%          | \$1,300,390        | 39%                |
|              | STATE/LOCAL GOV'T. | 120          | 2%           | 105,560            | 3%                 |
|              | ACADEMIA           | 209          | 3%           | 142,085            | 4%                 |
|              | INDUSTRY           | 1,484        | 22%          | 1,227,680          | 36%                |
|              | INDIVIDUAL         | 22           | 0%           | 16,960             | 1%                 |
|              | NON-U.S.           | 734          | 11%          | 579,760            | 17%                |
|              | <b>TOTAL</b>       |              | <b>6,704</b> | <b>100%</b>        | <b>\$3,372,435</b> |
| 1986         | FEDERAL GOVERNMENT |              |              |                    |                    |
|              | USGS               | 166          | 3%           | \$ 133,110         | 3%                 |
|              | OTHER FEDERAL      | 4,069        | 57%          | 2,549,310          | 52%                |
|              | STATE/LOCAL GOV'T. | 61           | 1%           | 37,890             | 1%                 |
|              | ACADEMIA           | 216          | 3%           | 136,810            | 3%                 |
|              | INDUSTRY           | 1,416        | 20%          | 1,154,685          | 24%                |
|              | INDIVIDUAL         | 84           | 1%           | 31,030             | 0%                 |
|              | NON-U.S.           | 1,088        | 15%          | 833,465            | 17%                |
| <b>TOTAL</b> |                    | <b>7,100</b> | <b>100%</b>  | <b>\$4,876,300</b> | <b>100%</b>        |

## Historical Customer Profile Landsat Digital Data

| FISCAL YEAR | CATEGORY           | ITEMS | % OF TOTAL   | DOLLARS     | % OF TOTAL         |
|-------------|--------------------|-------|--------------|-------------|--------------------|
| 1979        | FEDERAL GOVERNMENT | 719   | 24%          | \$ 117,250  | 21%                |
|             | STATE/LOCAL GOV'T. | 25    | 1%           | 3,900       | 1%                 |
|             | ACADEMIA           | 406   | 14%          | 75,800      | 14%                |
|             | INDUSTRY           | 752   | 25%          | 142,600     | 26%                |
|             | INDIVIDUAL         | 49    | 2%           | 9,200       | 2%                 |
|             | NON-U.S.           | 1,031 | 34%          | 194,950     | 36%                |
|             | <b>TOTAL</b>       |       | <b>2,982</b> | <b>100%</b> | <b>\$ 543,700</b>  |
| 1980        | FEDERAL GOVERNMENT | 622   | 15%          | \$ 114,960  | 14%                |
|             | STATE/LOCAL GOV'T. | 91    | 2%           | 18,450      | 2%                 |
|             | ACADEMIA           | 275   | 7%           | 52,900      | 6%                 |
|             | INDUSTRY           | 1,256 | 30%          | 249,170     | 31%                |
|             | INDIVIDUAL         | 26    | 1%           | 5,050       | 1%                 |
|             | NON-U.S.           | 1,869 | 45%          | 368,700     | 46%                |
|             | <b>TOTAL</b>       |       | <b>4,139</b> | <b>100%</b> | <b>\$ 809,230</b>  |
| 1981        | FEDERAL GOVERNMENT | 822   | 19%          | \$ 146,700  | 17%                |
|             | STATE/LOCAL GOV'T. | 293   | 7%           | 58,600      | 7%                 |
|             | ACADEMIA           | 278   | 6%           | 54,250      | 6%                 |
|             | INDUSTRY           | 1,602 | 37%          | 318,700     | 38%                |
|             | INDIVIDUAL         | 19    | 0%           | 3,800       | 1%                 |
|             | NON-U.S.           | 1,337 | 31%          | 264,050     | 31%                |
|             | <b>TOTAL</b>       |       | <b>4,351</b> | <b>100%</b> | <b>\$ 846,100</b>  |
| 1982        | FEDERAL GOVERNMENT | 1,259 | 25%          | \$ 294,510  | 24%                |
|             | STATE/LOCAL GOV'T. | 328   | 7%           | 71,600      | 6%                 |
|             | ACADEMIA           | 293   | 6%           | 76,750      | 6%                 |
|             | INDUSTRY           | 1,770 | 36%          | 451,700     | 36%                |
|             | INDIVIDUAL         | 53    | 1%           | 14,800      | 1%                 |
|             | NON-U.S.           | 1,271 | 25%          | 340,800     | 27%                |
|             | <b>TOTAL</b>       |       | <b>4,974</b> | <b>100%</b> | <b>\$1,250,160</b> |

## Historical Customer Profile Landsat Digital Data

| FISCAL YEAR         | CATEGORY           | ITEMS        | % OF TOTAL   | DOLLARS          | % OF TOTAL       |
|---------------------|--------------------|--------------|--------------|------------------|------------------|
| 1975                | FEDERAL GOVERNMENT | 162          | 22%          | \$ 32,400        | 22%              |
|                     | NASA INVESTIGATORS | 19           | 3%           | 3,800            | 3%               |
|                     | STATE/LOCAL GOV'T. | 48           | 7%           | 9,600            | 7%               |
|                     | ACADEMIA           | 182          | 25%          | 35,680           | 25%              |
|                     | INDUSTRY           | 195          | 27%          | 38,880           | 27%              |
|                     | INDIVIDUAL         | 11           | 1%           | 2,200            | 1%               |
|                     | NON-U.S.           | 108          | 15%          | 20,760           | 14%              |
|                     | UNCATEGORIZED      | 4            | 0%           | 800              | 1%               |
|                     | <b>TOTAL</b>       | <b>729</b>   | <b>100%</b>  | <b>\$144,120</b> | <b>100%</b>      |
| 1976<br>(15 MONTHS) | FEDERAL GOVERNMENT | 777          | 24%          | \$ 77,173        | 13%              |
|                     | NASA INVESTIGATORS | 611          | 19%          | 122,200          | 21%              |
|                     | STATE/LOCAL GOV'T. | 4            | 0%           | 800              | 0%               |
|                     | ACADEMIA           | 331          | 10%          | 66,200           | 12%              |
|                     | INDUSTRY           | 757          | 23%          | 151,400          | 26%              |
|                     | INDIVIDUAL         | 47           | 1%           | 9,400            | 2%               |
|                     | NON-U.S.           | 766          | 23%          | 153,200          | 26%              |
|                     | UNCATEGORIZED      | 6            | 0%           | 1,200            | 0%               |
|                     | <b>TOTAL</b>       | <b>3,299</b> | <b>100%</b>  | <b>\$581,573</b> | <b>100%</b>      |
| 1977                | FEDERAL GOVERNMENT | 383          | 20%          | \$ 70,609        | 19%              |
|                     | NASA INVESTIGATORS | 177          | 9%           | 35,400           | 9%               |
|                     | STATE/LOCAL GOV'T. | 29           | 2%           | 5,800            | 2%               |
|                     | ACADEMIA           | 182          | 10%          | 36,400           | 10%              |
|                     | INDUSTRY           | 611          | 32%          | 122,200          | 33%              |
|                     | INDIVIDUAL         | 16           | 1%           | 3,200            | 1%               |
|                     | NON-U.S.           | 489          | 26%          | 97,800           | 26%              |
|                     |                    | <b>TOTAL</b> | <b>1,887</b> | <b>100%</b>      | <b>\$371,409</b> |
| 1978                | FEDERAL GOVERNMENT | 1,025        | 36%          | \$169,000        | 32%              |
|                     | NASA INVESTIGATORS | 40           | 1%           | 8,000            | 1%               |
|                     | STATE/LOCAL GOV'T. | 50           | 2%           | 10,000           | 2%               |
|                     | ACADEMIA           | 256          | 9%           | 51,200           | 10%              |
|                     | INDUSTRY           | 826          | 29%          | 165,300          | 31%              |
|                     | INDIVIDUAL         | 13           | 0%           | 2,600            | 0%               |
|                     | NON-U.S.           | 643          | 23%          | 128,600          | 24%              |
|                     |                    | <b>TOTAL</b> | <b>2,853</b> | <b>100%</b>      | <b>\$534,700</b> |

# Historical Customer Profile Landsat Photographic Data

| FISCAL YEAR | CATEGORY           | FRAMES       | % OF TOTAL  | DOLLARS           | % OF TOTAL  |
|-------------|--------------------|--------------|-------------|-------------------|-------------|
| 1989        | FEDERAL GOVERNMENT |              |             |                   |             |
|             | USGS               | 87           | 2%          | \$ 17,550         | 3%          |
|             | OTHER FEDERAL      | 1,608        | 38%         | 174,180           | 27%         |
|             | STATE/LOCAL GOV'T. | 51           | 1%          | 13,280            | 2%          |
|             | ACADEMIA           | 288          | 7%          | 47,336            | 7%          |
|             | INDUSTRY           | 1,176        | 28%         | 238,078           | 37%         |
|             | INDIVIDUAL         | 107          | 3%          | 17,326            | 3%          |
|             | NON-U.S.           | 889          | 21%         | 139,270           | 21%         |
|             | <b>TOTAL</b>       | <b>4,206</b> | <b>100%</b> | <b>\$ 647,020</b> | <b>100%</b> |
| 1990        | FEDERAL GOVERNMENT |              |             |                   |             |
|             | USGS               | 12           | 1%          | \$ 3,555          | 1%          |
|             | OTHER FEDERAL      | 566          | 27%         | 43,240            | 12%         |
|             | STATE/LOCAL GOV'T. | 25           | 1%          | 3,785             | 1%          |
|             | ACADEMIA           | 171          | 8%          | 34,650            | 9%          |
|             | INDUSTRY           | 634          | 30%         | 142,013           | 39%         |
|             | INDIVIDUAL         | 42           | 2%          | 7,523             | 2%          |
|             | NON-U.S.           | 637          | 31%         | 132,229           | 36%         |
|             | <b>TOTAL</b>       | <b>2,087</b> | <b>100%</b> | <b>\$ 366,995</b> | <b>100%</b> |
| 1991        | FEDERAL GOVERNMENT |              |             |                   |             |
|             | USGS               | 0            | 0%          | \$ 0              | 0%          |
|             | OTHER FEDERAL      | 206          | 18%         | 911               | 2%          |
|             | STATE/LOCAL GOV'T. | 5            | 0%          | 404               | 1%          |
|             | ACADEMIA           | 166          | 14%         | 3,197             | 6%          |
|             | INDUSTRY           | 382          | 33%         | 19,198            | 37%         |
|             | INDIVIDUAL         | 82           | 7%          | 1,488             | 3%          |
|             | NON-U.S.           | 319          | 28%         | 26,162            | 51%         |
|             | <b>TOTAL</b>       | <b>1,160</b> | <b>100%</b> | <b>\$ 51,360</b>  | <b>100%</b> |

# Historical Customer Profile Landsat Photographic Data

| FISCAL YEAR  | CATEGORY           | FRAMES        | % OF TOTAL    | DOLLARS            | % OF TOTAL         |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|
| 1985         | FEDERAL GOVERNMENT | 20,844        | 53%           | \$1,185,757        | 53%                |
|              | STATE/LOCAL GOV'T. | 1,105         | 3%            | 104,312            | 5%                 |
|              | ACADEMIA           | 2,336         | 6%            | 112,252            | 5%                 |
|              | INDUSTRY           | 6,924         | 18%           | 478,393            | 21%                |
|              | INDIVIDUAL         | 1,200         | 3%            | 53,032             | 2%                 |
|              | NON-U.S.           | 6,670         | 17%           | 326,979            | 14%                |
|              | <b>TOTAL</b>       |               | <b>39,079</b> | <b>100%</b>        | <b>\$2,260,725</b> |
| 1986         | FEDERAL GOVERNMENT |               |               |                    |                    |
|              | USGS               | 348           | 2%            | \$ 49,889          | 2%                 |
|              | OTHER FEDERAL      | 7,229         | 38%           | 773,963            | 38%                |
|              | STATE/LOCAL GOV'T. | 397           | 2%            | 28,730             | 1%                 |
|              | ACADEMIA           | 568           | 3%            | 72,568             | 4%                 |
|              | INDUSTRY           | 4,232         | 22%           | 456,607            | 23%                |
|              | INDIVIDUAL         | 333           | 2%            | 34,441             | 2%                 |
|              | NON-U.S.           | 5,954         | 31%           | 599,590            | 30%                |
| <b>TOTAL</b> |                    | <b>19,061</b> | <b>100%</b>   | <b>\$2,015,788</b> | <b>100%</b>        |
| 1987         | FEDERAL GOVERNMENT |               |               |                    |                    |
|              | USGS               | 386           | 3%            | \$ 34,800          | 2%                 |
|              | OTHER FEDERAL      | 6,829         | 55%           | 964,070            | 55%                |
|              | STATE/LOCAL GOV'T. | 389           | 3%            | 55,250             | 3%                 |
|              | ACADEMIA           | 507           | 4%            | 67,750             | 4%                 |
|              | INDUSTRY           | 1,757         | 14%           | 252,060            | 15%                |
|              | INDIVIDUAL         | 216           | 2%            | 35,560             | 2%                 |
|              | NON-U.S.           | 2,304         | 19%           | 340,630            | 19%                |
| <b>TOTAL</b> |                    | <b>12,388</b> | <b>100%</b>   | <b>\$1,750,120</b> | <b>100%</b>        |
| 1988         | FEDERAL GOVERNMENT |               |               |                    |                    |
|              | USGS               | 281           | 3%            | \$ 40,020          | 3%                 |
|              | OTHER FEDERAL      | 2,961         | 33%           | 455,510            | 33%                |
|              | STATE/LOCAL GOV'T. | 25            | 0%            | 5,390              | 0%                 |
|              | ACADEMIA           | 408           | 5%            | 55,428             | 4%                 |
|              | INDUSTRY           | 2,378         | 26%           | 377,490            | 27%                |
|              | INDIVIDUAL         | 213           | 2%            | 35,040             | 2%                 |
|              | NON-U.S.           | 2,822         | 31%           | 428,134            | 31%                |
| <b>TOTAL</b> |                    | <b>9,088</b>  | <b>100%</b>   | <b>\$1,397,012</b> | <b>100%</b>        |



# Historical Customer Profile Landsat Photographic Data

| FISCAL YEAR | CATEGORY           | FRAMES         | % OF TOTAL  | DOLLARS            | % OF TOTAL  |
|-------------|--------------------|----------------|-------------|--------------------|-------------|
| 1981        | FEDERAL GOVERNMENT | 28,355         | 22%         | \$ 334,367         | 20%         |
|             | STATE/LOCAL GOV'T. | 3,177          | 2%          | 49,067             | 3%          |
|             | ACADEMIA           | 11,123         | 9%          | 144,361            | 9%          |
|             | INDUSTRY           | 28,219         | 22%         | 439,545            | 27%         |
|             | INDIVIDUAL         | 9,273          | 7%          | 113,842            | 7%          |
|             | NON-U.S.           | 48,628         | 38%         | 567,986            | 34%         |
|             | <b>TOTAL</b>       | <b>128,775</b> | <b>100%</b> | <b>\$1,649,168</b> | <b>100%</b> |
| 1982        | FEDERAL GOVERNMENT | 22,741         | 20%         | \$ 277,297         | 17%         |
|             | STATE/LOCAL GOV'T. | 4,923          | 4%          | 75,297             | 4%          |
|             | ACADEMIA           | 7,460          | 6%          | 124,827            | 7%          |
|             | INDUSTRY           | 21,308         | 19%         | 472,840            | 28%         |
|             | INDIVIDUAL         | 5,900          | 5%          | 111,765            | 7%          |
|             | NON-U.S.           | 52,693         | 46%         | 629,093            | 37%         |
|             | <b>TOTAL</b>       | <b>115,025</b> | <b>100%</b> | <b>\$1,691,119</b> | <b>100%</b> |
| 1983        | FEDERAL GOVERNMENT | 20,079         | 26%         | \$ 979,365         | 40%         |
|             | STATE/LOCAL GOV'T. | 3,452          | 5%          | 96,332             | 4%          |
|             | ACADEMIA           | 5,362          | 7%          | 138,698            | 6%          |
|             | INDUSTRY           | 15,645         | 20%         | 557,985            | 23%         |
|             | INDIVIDUAL         | 3,821          | 5%          | 105,993            | 4%          |
|             | NON-U.S.           | 28,262         | 37%         | 544,510            | 23%         |
|             | <b>TOTAL</b>       | <b>76,621</b>  | <b>100%</b> | <b>\$2,422,883</b> | <b>100%</b> |
| 1984        | FEDERAL GOVERNMENT | 14,543         | 42%         | \$1,143,470        | 52%         |
|             | STATE/LOCAL GOV'T. | 1,149          | 3%          | 71,213             | 3%          |
|             | ACADEMIA           | 2,287          | 6%          | 101,308            | 5%          |
|             | INDUSTRY           | 7,612          | 22%         | 492,287            | 22%         |
|             | INDIVIDUAL         | 1,820          | 5%          | 69,318             | 3%          |
|             | NON-U.S.           | 7,553          | 22%         | 343,657            | 15%         |
|             | <b>TOTAL</b>       | <b>34,964</b>  | <b>100%</b> | <b>\$2,221,253</b> | <b>100%</b> |

## Historical Customer Profile Landsat Photographic Data

| FISCAL YEAR | CATEGORY           | FRAMES         | % OF TOTAL     | DOLLARS            | % OF TOTAL         |
|-------------|--------------------|----------------|----------------|--------------------|--------------------|
| 1977        | FEDERAL GOVERNMENT | 20,691         | 16%            | \$ 199,216         | 18%                |
|             | NASA INVESTIGATORS | 9,650          | 7%             | 60,632             | 6%                 |
|             | STATE/LOCAL GOV'T. | 1,331          | 1%             | 14,368             | 1%                 |
|             | ACADEMIA           | 13,881         | 11%            | 104,677            | 10%                |
|             | INDUSTRY           | 36,368         | 28%            | 289,983            | 27%                |
|             | INDIVIDUAL         | 7,987          | 6%             | 68,929             | 6%                 |
|             | NON-U.S.           | 40,143         | 31%            | 344,279            | 32%                |
|             | UNCATEGORIZED      | 49             | 0%             | 344                | 0%                 |
|             | <b>TOTAL</b>       | <b>130,100</b> | <b>100%</b>    | <b>\$1,082,428</b> | <b>100%</b>        |
| 1978        | FEDERAL GOVERNMENT | 26,995         | 24%            | \$ 428,269         | 30%                |
|             | NASA INVESTIGATORS | 512            | 1%             | 5,431              | 0%                 |
|             | STATE/LOCAL GOV'T. | 1,465          | 1%             | 21,557             | 1%                 |
|             | ACADEMIA           | 9,966          | 9%             | 108,179            | 8%                 |
|             | INDUSTRY           | 20,495         | 19%            | 304,624            | 21%                |
|             | INDIVIDUAL         | 5,524          | 5%             | 71,208             | 5%                 |
|             | NON-U.S.           | 45,766         | 41%            | 502,100            | 35%                |
|             |                    | <b>TOTAL</b>   | <b>110,723</b> | <b>100%</b>        | <b>\$1,441,368</b> |
| 1979        | FEDERAL GOVERNMENT | 31,973         | 24%            | \$ 383,964         | 24%                |
|             | STATE/LOCAL GOV'T. | 943            | 1%             | 15,381             | 1%                 |
|             | ACADEMIA           | 14,336         | 10%            | 159,431            | 10%                |
|             | INDUSTRY           | 25,151         | 19%            | 366,192            | 23%                |
|             | INDIVIDUAL         | 9,198          | 7%             | 93,654             | 6%                 |
|             | NON-U.S.           | 52,881         | 39%            | 569,491            | 26%                |
|             |                    | <b>TOTAL</b>   | <b>134,482</b> | <b>100%</b>        | <b>\$1,588,113</b> |
| 1980        | FEDERAL GOVERNMENT | 25,297         | 20%            | \$ 277,631         | 18%                |
|             | STATE/LOCAL GOV'T. | 4,134          | 3%             | 59,877             | 4%                 |
|             | ACADEMIA           | 12,702         | 10%            | 149,501            | 9%                 |
|             | INDUSTRY           | 23,467         | 18%            | 365,230            | 23%                |
|             | INDIVIDUAL         | 8,121          | 6%             | 91,932             | 6%                 |
|             | NON-U.S.           | 54,712         | 43%            | 635,166            | 40%                |
|             |                    | <b>TOTAL</b>   | <b>128,433</b> | <b>100%</b>        | <b>\$1,579,337</b> |

# Historical Customer Profile Landsat Photographic Data

| FISCAL YEAR         | CATEGORY           | FRAMES         | % OF TOTAL     | DOLLARS            | % OF TOTAL        |
|---------------------|--------------------|----------------|----------------|--------------------|-------------------|
| 1973                | FEDERAL GOVERNMENT | 21,780         | 27%            | \$ 62,756          | 27%               |
|                     | STATE/LOCAL GOV'T. | 2,995          | 4%             | 10,639             | 5%                |
|                     | ACADEMIA           | 13,071         | 16%            | 28,679             | 13%               |
|                     | INDUSTRY           | 24,430         | 30%            | 67,360             | 30%               |
|                     | INDIVIDUAL         | 5,109          | 6%             | 17,143             | 7%                |
|                     | NON-U.S.           | 8,497          | 11%            | 28,154             | 12%               |
|                     | UNCATEGORIZED      | 5,189          | 6%             | 13,311             | 6%                |
|                     | <b>TOTAL</b>       |                | <b>81,071</b>  | <b>100%</b>        | <b>\$ 228,042</b> |
| 1974                | FEDERAL GOVERNMENT | 28,493         | 18%            | \$ 87,156          | 16%               |
|                     | STATE/LOCAL GOV'T. | 2,534          | 2%             | 10,920             | 2%                |
|                     | ACADEMIA           | 18,611         | 12%            | 63,964             | 12%               |
|                     | INDUSTRY           | 35,890         | 23%            | 114,140            | 22%               |
|                     | INDIVIDUAL         | 17,266         | 11%            | 67,127             | 13%               |
|                     | NON-U.S.           | 37,038         | 23%            | 120,499            | 23%               |
|                     | UNCATEGORIZED      | 17,346         | 11%            | 64,708             | 12%               |
|                     | <b>TOTAL</b>       |                | <b>157,178</b> | <b>100%</b>        | <b>\$ 528,514</b> |
| 1975                | FEDERAL GOVERNMENT | 34,184         | 17%            | \$ 136,883         | 18%               |
|                     | NASA INVESTIGATORS | 5,437          | 3%             | 12,192             | 1%                |
|                     | STATE/LOCAL GOV'T. | 1,921          | 1%             | 7,388              | 1%                |
|                     | ACADEMIA           | 27,545         | 14%            | 106,374            | 14%               |
|                     | INDUSTRY           | 45,476         | 23%            | 180,824            | 24%               |
|                     | INDIVIDUAL         | 18,632         | 9%             | 98,753             | 13%               |
|                     | NON-U.S.           | 47,066         | 24%            | 153,899            | 20%               |
|                     | UNCATEGORIZED      | 17,393         | 9%             | 68,576             | 9%                |
| <b>TOTAL</b>        |                    | <b>197,654</b> | <b>100%</b>    | <b>\$ 764,889</b>  | <b>100%</b>       |
| 1976<br>(15 MONTHS) | FEDERAL GOVERNMENT | 38,639         | 13%            | \$ 249,429         | 16%               |
|                     | NASA INVESTIGATORS | 68,448         | 23%            | 266,967            | 18%               |
|                     | STATE/LOCAL GOV'T. | 1,359          | 1%             | 8,559              | 1%                |
|                     | ACADEMIA           | 34,235         | 12%            | 152,089            | 10%               |
|                     | INDUSTRY           | 54,198         | 18%            | 292,324            | 19%               |
|                     | INDIVIDUAL         | 21,760         | 7%             | 160,839            | 11%               |
|                     | NON-U.S.           | 78,036         | 26%            | 377,105            | 25%               |
|                     | UNCATEGORIZED      | 578            | 0%             | 4,779              | 0%                |
| <b>TOTAL</b>        |                    | <b>297,253</b> | <b>100%</b>    | <b>\$1,512,091</b> | <b>100%</b>       |