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ODIS: Origin-Destination Information System

Publication 195

February 1992

**U.S. Postal Service
Washington, DC 20260-5317**

**Publication 195
ODIS: Origin-Destination Information System**

February 1992

A. Filing Instructions

This issue of Publication 195 replaces the April 1991 edition, which should be discarded.

B. Explanation

This publication provides updated information about ODIS since the advent of the Computerized On-Site Data Entry System (CODES) in 1986.

C. Distribution

Headquarters and field installations may order copies from the material distribution centers on Form 7380, *MDC Supply Requisition*.

D. Comments and Questions

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US POSTAL SERVICE
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2. **Clarity.** Send any suggestions regarding this directive's organization or language to:

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E. Effective Date

This material is effective upon receipt.



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Chapter 1 Introduction

110 Definition of ODIS

The *Origin-Destination Information System* (ODIS) is a system that collects and develops data on mail volume, achievement of service standards, service analysis, and other characteristics of mail. This information is presented in a variety of reports. All levels of postal management use these reports.

120 Scope of ODIS

ODIS collects these data for all classes of mail except Express Mail, second-class, Mailgram, and INTELPOST. Information is also recorded for five physical shapes of mail. Volumes and service times are measured within and between sectional center facilities (SCFs), multi-ZIP Coded cities, independent cities, and area distribution centers (ADCs). These are collectively known as ODIS areas.

130 Purpose of ODIS

The basic system provides postal managers with necessary data to:

- a. Design and develop mail processing facilities and equipment.
- b. Forecast mail volumes to plan for transportation and mail processing operations.
- c. Measure service performance.
- d. Monitor service problems and take corrective action.
- e. Negotiate equitable transportation rates.
- f. Budget for staffing, equipment, and other operational needs.
- g. Measure a variety of mailpiece attributes such as indicia, shape, and presence of a postnet barcode.

Chapter 2 Operation

210 ODIS areas

211 Geographic coverage

The approximately 724 designated ODIS areas encompass all post offices in the nation. Post offices with the same ZIP Code prefix (first 3 digits) are in the same ODIS area. However, an ODIS area sometimes includes post offices associated with more than one ZIP Code prefix.

212 ODIS assignment

Each ODIS area is assigned a 3-digit code that represents one of the 3-digit ZIP Code prefixes of the post offices in the ODIS area. Generally, the assigned ODIS area code is the lowest ZIP Code prefix for the area or the lowest one within the state where the ODIS area is located. Exhibit 212 illustrates this assignment of area codes.

| ODIS Area Code | ODIS Area Name | ODIS Area Type | ZIP Prefix |
|----------------|----------------|----------------|---------------|
| 300 | Atlanta GA | ASOC PO | 300, 301, 302 |
| 303 | Atlanta GA | ID CITY | 303, 311, 399 |
| 304 | Swainsboro GA | SEC CTR | 304 |
| 305 | Gainesville GA | SEC CTR | 305 |
| 306 | Athens GA | SEC CTR | 306 |

Exhibit 212, Part of page from numeric list of ODIS areas

Note: An ODIS area does not always correspond to an SCF area. For example, the Atlanta SCF includes ODIS areas 300 and 303. Data reported from an ODIS area are based on the assignment of the area, such as the above examples.

220 Sample design

221 Sampling techniques

ODIS uses probability sampling techniques according to principles of mathematical statistics. These techniques make it possible to measure the characteristics of the total mail volume by examining a small fraction of that volume.

222 Known chance

For a sampling system to be successful, each piece of mail must have a known chance of being selected for examination. In planning ODIS, postal officials identified all the places or points in any post office in the nation from which a piece of mail could be delivered to a customer. These output points are called ODIS delivery units. They include box sections, city delivery routes, firms, special delivery sections, and registry sections. CAG K and L post offices are considered delivery units of their respective SCF post offices.

230 Sample groups

231 Number and ranking

In all, there are more than a half million delivery units in approximately 15,800 CAG A-J post offices. These delivery units are ranked by type and size into 22 sample groups.

232 Division of groups

232.1 Determination of groups. Sample groups are determined by:

- a. kind of delivery unit (business route, residential route, firm holdout, etc.); and
- b. size of delivery unit (large firms are distinguished from small firms, large box sections from small box sections).

232.2 Homogenous grouping. This arrangement gives a homogeneous grouping in terms of mail mix and volume. Grouping of sampling units in strata, based on mail mix and volume, reduces sampling variance.

240 Stage 1 of sampling

241 Separate mailing frame

Each ODIS area is treated as a separate sampling frame with all the area's delivery units placed in respective sample groups (see Exhibit 241). Some delivery units in each sample group in each ODIS area are then randomly selected for testing. This selection is the first stage of sampling.

242 Selection of delivery units and test data

242.1 Delivery units. The number of units selected by sample group in each ODIS area is determined by a technique called the "Neyman Allocation Method." The optimal number of tests scheduled is the maximum number derived from the sample allocation method required to achieve the target levels of precision for First-Class or fourth-class mail. If the number is a fraction of one, the fraction is rounded to one. This ensures that at least one ODIS test is scheduled in every sample group code for every ODIS area each accounting period.

242.2 Test date. Once the delivery units have been selected, the test date for each unit is also randomly selected. Since the volume and mix of mail are not constant over all days, the testing of delivery units must be performed over all working days to avoid biased results. Generally, sampling takes place six days a week (each

delivery day). Special delivery units may be tested every day. The largest post offices have so many delivery units and so much mail that several of their delivery units are selected for testing each delivery day. Smaller offices are sampled less frequently. Approximately 1,000 units are scheduled for testing each delivery day throughout the nation.

242.3 Description of test. About a month before the beginning of each postal quarter, the sample selection is electronically transmitted to a microcomputer at the management sectional center (MSC) level. Only the statistical program administrator or designee at each MSC can access this electronic file, which identifies each delivery unit to be tested and the date of the test. Each test consists of two parts--a heavy sample and a regular sample. The heavy sample includes domestic Priority Mail and fourth-class mail. The regular sample includes First-Class, third-class, and all foreign mail. These two samples are set up to facilitate the sampling of all Priority Mail and fourth-class mail. This improves the statistical reliability of the estimates of these lower volume classes of mail.

| Sample Group | | Total Tests | Total Units | Weight of Delivery Unit (WDU) |
|--------------|--------------------------------------|-------------|-------------|-------------------------------|
| Code | Description | | | |
| 011 | Firm Holdout (Small)..... | 48 | 1,792 | 37.333 |
| 012 | Firm Holdout (Medium)..... | 3 | 2 | .667 |
| 013 | Firm Holdout (Large)..... | 3 | 3 | 1.000 |
| 014 | Box Section (Small)..... | 5 | 99 | 19.800 |
| 015 | Box Section (Medium)..... | 9 | 42 | 4.667 |
| 016 | Box Section (Large)..... | 3 | 1 | .333 |
| 017 | Business and Mixed Routes..... | 6 | 156 | 26.000 |
| 021 | Residential and Mixed Foot Routes .. | 3 | 24 | 8.000 |
| 022 | Residential Type Delivery Units..... | 3 | 141 | 47.000 |
| 023 | Residential Motorized Routes..... | 17 | 898 | 52.824 |
| 051 | Parcel Post Routes/Customers..... | 3 | 9 | 3.000 |
| 081 | Rural Delivery Routes..... | 18 | 691 | 38.389 |
| 091 | CAG K and L Post Offices..... | 3 | 33 | 11.000 |
| 111 | Special Delivery (Small/Medium)..... | 2 | 142 | 71.000 |
| 124 | Registered and Certified Mail..... | 3 | 274 | 91.333 |

Exhibit 241, Example of ODIS area sampling frame (PQ III, FY 1990), ODIS area 300, Atlanta GA (ASOC PO) for ZIP Code prefixes 300, 301, 302

250 Test preparation

251 Data collector

The data collector is given a test identification number, test date, name of the unit to be tested, CODES (Computerized On-Site Data Entry System) laptop computer, several program/data diskettes, Handbook M-61, and CODES ODIS Data Entry User Guide. The data collector must report to the postal facility where the delivery

unit is located early enough so that the ODIS test may be completed without delaying the delivery of the mail.

252 Throwback and curtailed third-class mail

All throwback and third-class curtailed mail for the unit must be isolated and marked so it is not included in the test. Isolating throwback and third-class curtailed mail is the first step of an ODIS test. Each participating office is to establish work areas for the data collector.

260 Stage 2 of sampling

261 Selection of test pieces

Selecting the pieces to be tested is the second stage of sampling. The data collector determines the starting number and skip interval for the regular sample and the heavy sample/mailpieces on the basis of the delivery unit's average daily volume. (See Handbook M-61.) Normally, not every piece of mail in the delivery unit is sampled.

262 Skip interval

The starting number identifies the first piece to be examined and the skip interval designates how many pieces are skipped over each time before the next piece is selected. For example, if the skip interval is 5, and the starting number 3, the third piece of mail would be set aside to be recorded, then every fifth piece thereafter, i.e., 3rd, 8th, 13th, 18th, 23rd, and so on until the test is completed. If the skip interval is 1, which is often the case for the heavy sample, every piece is sampled.

263 Arrangement of mail

The data collector arranges the mail so the selection of pieces is convenient. The starting number and skip interval previously determined by using the unit's estimated daily volume shown on the ODIS RPW Frame Entity Operations System is used to select the sample pieces. Mailpieces to be recorded are selected and set aside. Mailpieces not selected for sampling are immediately returned to the unit for final processing.

270 Mailpiece data

271 Recording data

After selecting the sample pieces, the data collector records data directly using the laptop computer. The detailed data entry screens and procedures are contained in Handbook M-61.

272 Major data elements

272.1 Overview. The major data entry items for all ODIS sample pieces include:

a. Postmark date. The date of the postmark is the first item entered if present and legible. If the date is missing or illegible, "cannot be read" (CBR) is entered.

b. Postmark time (AM, PM, -PM). If the postmark time is missing or illegible, "cannot be read" (CBR) is entered.

c. Postmark of origin. If the postmark of origin is the same as that of the destinating facility, "local," is entered; otherwise, the ZIP Code prefix of the postmark of origin is entered. If the ZIP Code prefix is missing, the city and state of origin as shown in the postmark, meter strip, or permit imprint are entered.

d. Class of mail; type (shape) of mail; type of indicia used; and, presence or absence of a correct or incorrect ZIP Code in mailing address. These data elements are also entered.

272.2 Separate data entry screens. A separate data entry screen appears for each of these items and the data collector must select one of the options before the program continues.

272.3 Other screen prompts

272.31 Bulk Business Mail/Service Performance Measurement System (BBM/SPMS) mailer identification code. The microcomputer screen also prompts the data collector to enter additional data in the following special cases: third-class permit mail, which does not have a postmark, is sampled for performance measurement using the BBM/SPMS ID code. Some third-class mailers are participating in the Postal Service's BBM/SPMS. These mailers place a 12-position identification code, left justified, on the optional endorsement line of each address label. When the data collector enters "third-class" into the microcomputer, the data collector is prompted to add this 12-position code if one is present. The code is set off by a backslash character followed by seven letters, another backslash, then four numbers and a final character, either a number or a letter. Example:

(CI=N)

\DDDDDDMD\2345C

272.32 First-Class and third-class letters and cards. The data collector is asked whether the sample mailpiece has a postnet barcode and a facing identification mark (FIM) and, if so, whether the barcode is 5-digit or 9-digit.

272.33 Priority Mail. When the data collector enters "Priority" for class of mail, a special data screen appears on the microcomputer. The data collector must then indicate the type of Priority Mail marking on the mailpiece such as USPS Priority envelope, USPS Priority tape, or label before the microcomputer program can continue.

273 Destination ZIP Code

The destinating ZIP Code is not entered by the data collector. Instead, it is obtained by computer through comparison of the test ID number for the record with the list set up when the delivery units were selected for testing. When the test ID number matches, the ZIP Code, ODIS area code, and sample group code of the delivery unit are added to the test record.

280 Data aggregation

281 Data processing

281.1 Electronic transmission. After the on-site completion of an ODIS test, the data are immediately uploaded by telephone from the laptop computer to the Base Unit at the MSC, or by an immediate disk-transfer to the Base Unit upon the return of the data collector to the MSC. ODIS data, collected daily, are stored in the MSC Base Unit until the end of each week. At the end of each week (usually on Friday evenings), all data are uploaded from these base units to the mainframe at the National Information Systems Support Center (NISSC) in Raleigh, NC, for consolidation and processing.

281.2 Record components. The test identification number, the date of the test, and the skip interval become part of each record when ODIS test data are uploaded to the Base Unit. The date of the test and the postmark date are converted to Julian dates (e.g., January 1 is 001, February 1 is 032, etc.), and codes are assigned to other items such as postmark of origin, mail class, mail type, indicia, ZIP Code, barcode, and mailer's ID.

281.3 Number of days to delivery. The number of days to delivery is determined by subtracting the postmark date from the test date (delivery date). The result, carried as part of the record, is adjusted for nondelivery days during report processing. (Refer to service time in Appendix A - Glossary.)

281.4 Inflation process

281.41 Pre-report processing routine. The major pre-report processing routine is the inflation process. This routine determines the weight value for each piece of mail sampled and, therefore recorded. Since only a fraction of the mail is sampled, it is necessary to weight each piece sampled in terms of the amount of mail it represents.

281.42 Weighting. Weighting is based on the known probability of selection of each piece of mail in the two-stage sampling process. The weight of the delivery unit (WDU) is calculated at USPS Headquarters by dividing the total number of delivery units in a given sample group by the number of tests received for that sample group in that ODIS area. See Exhibit 281.41 for an example that illustrates the inflation process. The two stages or factors of sampling are:

- a. number of delivery units represented by the delivery unit tested (referred to as WDU); and
- b. skip interval used.

281.43 Example. In Atlanta, GA (ASOC PO), ODIS area 300, mail for a small firm has been recorded on an ODIS test. In this postal quarter, 48 small firms in the Atlanta associate offices were sampled out of a possible 1,792 such units. Thus, the WDU for one of these units which has a test is 37.333 (1792/48). If the skip interval used were 5, then one piece of mail would represent 37.333×5 or 186.665 pieces. In other words, this one piece represents five pieces of mail in the delivery unit and the delivery unit represents 37.333 delivery units in the ODIS area. Therefore, the piece recorded represents 186.665 pieces in the ODIS area. When the weights for all sample pieces in an ODIS area have been determined, they may be totaled to give the estimate of the average daily volume of mail delivered each day in that ODIS area.

282 Reports

When the inflation process has been completed and the various codes determined for each record, reports can be generated by totaling the weights of all records with certain characteristics, calculating percentages or other statistics, and presenting the information in various formats. The entire list of ODIS reports is presented in Appendix C.

Chapter 3

Quality assurance and data integrity

310 Sampling

311 Before testing

Prior to the start of each postal quarter, the ODIS sample selection (identifying delivery units to be tested and the date of the test) is downloaded from the mainframe computer to a microcomputer in each management sectional center (MSC). This computer, called a CODES (Computerized On-Site Data Entry System) Base Unit is located in the statistical programs unit at each MSC. This computer stores ODIS data collected daily, until the end of each week. Once a week, usually on Friday, all data are uploaded from all MSC Base Units to the mainframe for consolidation and processing.

312 Parts of test

A test may consist of two parts, a heavy sample and a regular sample. The heavy sample includes domestic Priority Mail (regardless of weight) and all fourth-class mail, including bound printed matter.

a. Regular sample. The regular sample includes all other mail to be sampled for ODIS, i.e., all First-Class, third-class, and foreign.

b. Heavy sample. The heavy sample was set up so a lower skip interval could be assigned for sampling these classes of mail, which have the lowest volumes. This improves the statistical reliability of estimates for parcels, which have lower volume totals than other pieces of mail.

320 Mandatory testing at final delivery unit

321 On-site testing

All ODIS tests must be taken at the final delivery unit being tested, except for CAG K or L offices and approved telephone tests (see Handbook M-60, *Origin-Destination Information System, Management Instructions*).

322 Deviations

Any deviation from this policy must have prior written authorization from the Rates and Classification Center (RCC) Manager, Statistical Programs.

330 Completion of all ODIS tests

All ODIS tests must be taken directly on the CODES/ODIS microcomputer or Base Unit (including authorized telephone tests), uploaded, and disk-transferred. Manual worksheets are never to be used. If the CODES equipment fails during a test, the partial test is uploaded, disk-transferred, and the RCC notified. If the data collector discovers that the wrong delivery unit is being tested, he or she must test, upload, disk-transfer, and notify the RCC. (See Handbook M-60, 482.)

340 Immediate uploading of ODIS data

An ODIS test data diskette must be brought to the Base Unit operator or uploaded from the CODES microcomputer to the CODES Base Unit immediately after the test is completed. ODIS tests taken at the Base Unit must be disk-transferred immediately after completion. Duplicating completed ODIS tests before a disk-transfer or the transmission of the raw ODIS test data to other than the CODES base unit is prohibited. Only Statistical Programs personnel should handle diskettes containing test data (see Handbook M-60, 483).

350 Prohibitions

351 Duplication of ODIS mailpieces

Information about all pieces of mail being sampled in an ODIS test must be entered immediately into the CODES microcomputer and the mailpieces must be immediately returned to the delivery unit. There is to be no photocopying or duplicating of ODIS mailpieces. In addition, ODIS data collection employees are not permitted to set aside ODIS mailpieces or complete any type of delayed mail report (see Handbook M-60, 485).

352 Over-the-shoulder monitoring

Any over-the-shoulder monitoring of an ODIS test is prohibited, other than by those responsible for ODIS data collection, the RCC certified statistical programs monitor, systems compliance, the Postal Service's independent auditors, or the Inspection Service since these acts seriously compromise the perceived independence and integrity of ODIS (see Handbook M-60, 486).

353 Management's direct involvement

The direct participation by management, or other supervisory personnel (other than another ODIS data collector or the Statistical Programs Coordinator/Administrator) is prohibited in either the collection of mail to be ODIS tested or the selection of the actual mailpieces to be sampled since these acts seriously compromise the perceived independence and integrity of ODIS (see Handbook M-60, 487).

354 Release of ODIS data

ODIS was developed for internal use by Postal Service management. Information contained in the ODIS reports is considered proprietary and not available to the public without written authorization of the Assistant Postmaster General, Rates and Classification Department (see Handbook M-60, 481). The Postal Service does release to organizations or persons national-level service information as contained in the ODIS Quarterly Statistics Report.

360 ODIS test notification policy

Usually there is no need to give any advance notification of an ODIS test to mail processing, delivery services, or any other nondata collection employee or manager. If advance notification is necessary, only the minimal time needed to isolate the mail for the ODIS test should be given. In no case should notification be given more than 24 hours prior to the cutoff time that signals the start of an ODIS test (see Handbook M-60, 490).

370 Maintaining ODIS integrity

All ODIS data collection employees have a responsibility to maintain the integrity of ODIS. This responsibility includes educating others that over-the-shoulder monitoring, management's direct involvement in an ODIS test, duplicating failed ODIS mailpieces, and completing any type of delayed mail report are prohibited since these acts compromise the perceived independence and integrity of ODIS (see Handbook M-61, I.L.).

Chapter 4

Report interpretation and use

410 Historical perspective

411 Creation

In October 1968, senior transportation managers requested that a task force be set up to design a system to measure the amount of mail, by class and shape, moving between SCFs. Coincidentally, preliminary work was being performed for the establishment of the National Bulk Mail System (NBMS). This volume information was important for designing and planning the NBMS. Within six weeks, the task force proposed the basic design of ODIS. Following an 18-month period for development, training, and testing, the first ODIS tests were conducted in PQ IV, FY 1970 (April-June 1970).

412 Volume data and service standards

Although ODIS was originally designed to provide volume data, the task force decided the system should also measure service performance. Thus, when service standards for First-Class Mail and airmail were announced in 1971, ODIS was selected to measure the achievement of these standards. Because of the impact of these service performance figures on field managers, ODIS has become known as a service standard measurement system, even though its volume and general service data continue to serve a diversity of postal management needs.

413 Basic design unchanged

The basic design of ODIS has remained unchanged, but there have been many refinements to improve operating efficiencies, statistical reliability, and responsiveness to management needs. From FY 1971 to FY 1973 the data base grew from 2 to 3 million pieces of mail sampled each postal quarter to its present size of 9 to 10 million pieces per quarter. Changes due to growth and other refinements were made prior to Fiscal Year 1975 so that in recent years the system has achieved consistency and stability.

414 Computerized On-Site Data Entry System (CODES)

In September 1985, the Postal Service Board of Governors approved the Computerized On-Site Data Entry System (CODES), and national implementation was completed before the end of calendar year 1986. CODES is a computerized system using portable computers to record data for ODIS and other statistical systems.

415 Continued modifications

Modifications continue to be made as required by the changing postal environment. Often these modifications allow ODIS to recognize new mailpiece characteristics; for example, the existence of a 9-digit ZIP Code, a postnet barcode, or a FIM (facing identification mark) or a Mailing Identification (M.I.D.) Code.

420 Limitations of ODIS

421 Estimates and averages

421.1 Sampling. ODIS is a sampling system and its report figures are estimates. These estimates are approximations of the "true unknown figure." The "true unknown figure" is found by counting 100% of all mail, usually termed a census of the mail. Because ODIS is based on probability sampling, it is possible to compute, mathematically, an interval about the estimate that will contain the "true unknown figure" with a specific level of assurance. Such an interval, when associated with a level of assurance, or probability, is called a confidence interval. For example, let us assume that the estimate of the average daily volume for an ODIS area is 200,000 mailpieces and that a 95% confidence interval about the estimate of 200,000 mailpieces is the interval from 196,080 to 203,920 mailpieces. This particular confidence interval enables us to infer that we are 95% sure that the "true unknown figure" is contained in the interval of 196,080 to 203,920 mailpieces, or equivalently, the margin of error due to sampling at a 95% probability level is 3,920 pieces or 1.96% of the estimated volume. The smaller the interval about the estimate, or the smaller the margin of error at a particular probability level, the better the estimate.

421.2 Exclusion of some mail types. Volume estimates do not include estimates for Express Mail, second-class mail, Mailgram, and INTELPOST.

421.3 Averages. Volumes (piece counts) are expressed as "average daily volumes," or the average number of pieces per delivery day for the given report period. If the total volume for the report period is needed, the average daily estimate should be multiplied by the number of delivery days in the given report period. This is the total number of days minus Sundays and holidays. There are 302 delivery days in a fiscal year.

421.4 Service scores. Service standard achievements are expressed as percentage scores. Mailpieces must pass certain editing procedures to be included in the score. Some examples of the editing procedures, before computing a score, are to include only mailpieces with valid destinating ZIP Codes, and mailpieces for which the service time can be calculated. After the editing procedures, the score is calculated by multiplying 100 to the ratio of two estimated volumes. The denominator of the ratio is displayed in ODIS reports as "Known Delivery Days." The numerator is the portion in "Known Delivery Days" that meets delivery time requirements.

421.5 Postmarks. Service times are determined by subtracting the date of postmark from the date of the test. Two assumptions are made concerning these dates:

a. Cancellation date. The date shown in the cancellation mark or meter strip is assumed to be the date the piece of mail was received by the Postal Service (ODIS makes no adjustments for metered mail which has "stale" or old dates in the meter strip when it is received; if the "stale" meter date has been overcanceled in the postal facility of origin, the overcancellation is used to determine date of mailing); and,

b. Test date. The test date is assumed to be the day the mail is actually delivered.

421.6 Nondelivery days. Once the service time has been determined, it is adjusted for nondelivery days, i.e., Sundays and holidays. This adjustment is done only for mail tested on a Monday or the day after a holiday, on the assumption that this mail would have been delivered on the previous day if that day had been a delivery day. No adjustment is made to service times for mail tested on other days.

421.7 Application of First-Class standards. First-Class Mail service standard achievement percentages do not necessarily apply to all mail. Service standard achievement figures are based only on correctly ZIP Coded stamped and metered First-Class letters, cards, flats, and small parcels and rolls. For the overnight or 2-day standard, the stamped mail must have a qualified postmark (bearing AM or PM in the postmark) to indicate it was received by the local cutoff time, and the mail must have been mailed within the designated service standard area.

421.8 Determination of origin. The origin is determined from the cancellation mark, meter strip, or permit imprint. Only the first 3 digits of the ZIP Code are recorded. The destination is determined from the test identification number that uniquely identifies (for a given postal quarter) the full ZIP Code of the post office of the delivery unit. Because of cancellation procedures of area mail processing centers, the origin ODIS area may or may not reflect the actual post office of origin.

421.9 Faulty data input. ODIS data are entered through a computerized system and, though some edit procedures are available, it is impossible to correct all recording errors. Also, although some tests are monitored by the Rates and Classification Centers and Division/MSC Statistical Programs staff, some tests may still be received that have not been conducted properly.

422 Lack of overall reliability measure

The statistical reliability of any ODIS estimate depends on the number of sample pieces and delivery units tested. There is no overall measure of reliability to the system. Each figure or estimate has its own level of reliability. The question "Is this statistical estimate reliable?" can be answered only in the context of how the estimate is being used, or which decision is being based upon it.

Chapter 5

Principal reports

510 General

This section describes those internal management reports which either provide basic ODIS information on volume and service or are distributed routinely to field managers. The ODIS reports, designed for specific information requirements, are listed and described in Appendix C.

520 Quarterly statistics report (QSR)

This report is generated each postal quarter and presents some basic national statistics. The QSR includes some of the tables formerly presented in the National Service Index Report, which it replaced in PQ I FY 1980. The QSR shows national service figures for selected classes and shapes of mail; First-Class Mail service standard achievement figures; indicia (stamped, metered, etc.) by mail class; and ZIP Code use by mail class. Information in this report may be released to organizations and individuals outside the Postal Service.

530 Volume summary reports (Reports 360 and 362)

These reports are generated each postal quarter and fiscal year. They show how much mail (piece count), by class and type, originates and destines in each ODIS area, division, and region, with a total for the nation.

540 Special rankings reports (Reports 807 and 815)

These annual reports are generated each fiscal year. Report 807 ranks the destinations for each ODIS area of origin by the percentage of the ODIS area's originating volume. Report 815 ranks the origins for each ODIS area of destination by the percentage of the ODIS area's destinating volume. This report shows the average daily volume, the percent of the total volume, and the cumulative percent. Both reports 807 and 815 are generated for First-Class Mail and for parcel post and other fourth-class mail. Note: The term SCF appearing in these reports should be read as ODIS area. These reports can be used by field managers to determine densities on distribution cases and anticipated mail flow.

550 First-Class service standard achievement reports (Reports 200-209)

These reports are generated each accounting period and postal quarter. They show the average daily volume and service times for correctly ZIP Coded First-Class letters, cards, flats, and SPRs between each ODIS/SCF/ADC area and its designated overnight 2- or 3-day standard ODIS/SCF/ADC area. Stamped mail going to the overnight or 2-day standard area must have a qualified postmark (AM or PM in the postmark) to indicate it was received by the local cutoff time. If it comes in after the cutoff time (-PM postmark), it is nonqualified and is subject to the 2- or 3-day standard, respectively. Metered mail is shown separately from the stamped mail without regard to the cutoff time. Area distribution center (ADC), division, re-

gional, and national levels of performance are also shown. Note: The originating reports show service times by SCF areas which number approximately 470. The destinating reports show service times by ODIS areas which number approximately 724. The following qualifiers are to be kept in mind when using information from the service standard achievement reports.

a. If the service time estimate for an SCF suddenly rises or falls several percentage points from what it has been, too much significance should not be placed on this change. Often too much emphasis is given to the figures in one accounting period. Such changes may be due to an actual service problem, or sampling variation. The sampling variation is the difference between the estimated figure and the "true unknown figure." The sampling variation increases as the time period shortens from quarterly to accounting period to weekly ODIS reporting. If proper ODIS test procedures are being followed and the service figures are low for several accounting periods, then a service problem may exist.

b. A double asterisk in these reports indicates that the estimates shown were based on fewer than 15 pieces of sampled mail. Therefore, the estimates may not be reliable indicators of service time.

c. Volume estimates in these reports do not account for all First-Class Mail for the SCF. The estimates do not include incorrectly ZIP Coded mail, mail with no ZIP Code, permit or government mail, or mail not subject to service standards (military mail, foreign mail, etc.).

d. The volumes appearing under the heading, "Unknown Delivery Days" are included in the Average Daily Volumes but not in the calculation of service times.

e. Information in the origin SCF level report (Report 206) is based on all ZIP Codes for the given SCF area of origin. However, information in the destination SCF level report (Report 207) is based on all ZIP Codes in the given ODIS area of destination. For example:

(1) Report 206 -- SCF of Origin 300 Atlanta (includes ZIP Codes 300, 301, 302, 303)

(2) Report 207 -- SCF of Destination 300 Atlanta (includes ZIP Codes 300, 301, 302)

(3) Report 207 -- SCF of Destination 303 ID City Atlanta (includes ZIP Code 303)

Appendix A

Glossary

Area Distribution Center (ADC) -- A mail processing facility receiving and distributing mail under the Managed Mail Program (MMP) destined for specific ZIP Code areas. One of the points within the National MMP Distribution Network.

Associate Post Office -- A post office within the area served by a sectional center facility (SCF) receiving and dispatching mail through the SCF.

Bulk Business Mail/Service Performance Measurement System (BBM/SPMS) -- A Postal Service program for developing service estimates for third-class mail.

Cost Ascertainment Grouping (CAG) -- The grouping of post offices according to revenue units in descending alphabetical order. Categories are:

- CAG A-G -- Offices with 950 or more revenue units, formerly known as first-class offices.
- CAG H-J -- Offices with 190 to 949 revenue units, formerly known as second-class offices.
- CAG K -- Offices with 36 to 189 revenue units, formerly known as third-class offices.
- CAG L -- Offices with 35 or fewer revenue units, formerly known as fourth-class offices.

Computerized On-Site Data Entry System (CODES) -- A computerized data entry system using portable computers to record data for ODIS and other statistical systems. It also includes telecommunications of test data and automation of field administrative functions associated with the Postal Service's major statistical programs, using division or management sectional center (MSC) Base Unit computers.

Data Collection Technician (DCT) -- A person conducting ODIS tests.

Date of Test -- A date that is designated for sampling mail intended for delivery (or available for delivery) through the delivery unit designated for testing. The date covers the period (generally 24 hours) from cutoff time of the previous delivery day to cutoff time on the given date.

Field Division -- An office directed by a division manager/postmaster supervising the operation of management sectional centers and post offices within a geographic area.

Firm Holdout -- A customer with mail volume large enough to merit a separation by name on the primary or secondary distribution case.

Frame -- A sample universe or list of all delivery units which could be selected for an ODIS test.

Heavy Sample -- A sample of domestic Priority Mail regardless of weight, and domestic fourth-class mail forming part of each ODIS test. The skip interval used in testing this mail is lower than the one used for First-Class Mail and third-class mail to provide more intense sampling. (See Regular Sample.)

Independent City Post Office (ID City) -- A large city post office not classified as an SCF nor an associate office.

Mail Mix -- A variety or combination of mail classes and physical shapes usually found in any delivery unit. An example of mail mix is the combination of First-Class/third-class letters, First-Class/third-class flats, fourth-class parcels, etc., in a single delivery unit.

Management Sectional Center (MSC) -- A postal facility reporting to a field division and headed by a manager with full management (administrative) responsibility for all post offices within his other assigned ZIP Code areas.

Multi-Stage Sampling -- A sampling initially among larger segments, then from elements within the selected larger segments, and so on for the appropriate number of stages. ODIS uses two-stage sampling: first sampling among groups of delivery units within an ODIS area and second, sampling from pieces of mail at the selected delivery unit.

Multi-ZIP Coded City -- A post office having more than one 5-digit ZIP Code within its delivery area.

ODIS Area -- An SCF area, an associate office area of an SCF, a multi-ZIP Coded city, an independent city post office, or a postal concentration center. All 28,850 post offices and their subordinate facilities are grouped into approximately 724 ODIS areas.

Postal Concentration Center (PCC) -- A facility operated by the Postal Service for distribution of Army/Air Force Post Office and Fleet Post Office (APO and FPO) mail entering and exiting the domestic mail system.

Regular Sample -- A sample of First-Class Mail, third-class mail, and all foreign mail making up each ODIS test. (See also, Heavy Sample.)

Sample Selection Printout -- A list of post office delivery units selected for ODIS testing each quarter. The list contains the name of the delivery unit and the date on which each unit should be tested.

Sectional Center Facility (SCF) -- A post office assigned to serve as the principal mail processing facility for one or more post offices. Some 470 post offices serve as SCFs, receiving and dispatching mail moving between post offices within other areas, as well as receiving and dispatching mail moving into or out of other areas. Post offices within the area served by the SCF are termed associate offices. An SCF post office and its associate offices make up an SCF area. (See also, ODIS Area.)

Service Time -- The number of calendar days that elapse between the cancellation date (or meter date) on a piece of mail and the date that mail is tested (day of intended delivery). Service time is adjusted for Sundays and holidays (nondelivery days) in the following manner: If the mail is (a) tested (i.e., delivered) on a Monday or the day after a holiday, and (b) the postmark date is not a Sunday or holiday, then the service time is reduced by the number of nondelivery days since the last possible delivery day. This is generally 1 day. Thus, service time for mail postmarked Friday and delivered Monday would be 2 days to delivery. If this mail were delivered on Tuesday, however, service time would be 4 days to delivery. Service time for mail postmarked Sunday and delivered Monday would be 1 day to delivery.

Skip Interval -- A number (or its multiple) of the pieces of mail to be sampled after the first piece has been sampled. For example, a skip interval of 5 signifies every fifth piece is sampled; a skip interval of 1, every piece is sampled.

Starting Number -- The number of the first piece of mail to be selected and sampled.

Appendix B

ODIS report terms

Average Daily Volume -- An estimated average number of pieces of mail delivered each delivery day. The volumes shown in the reports are obtained by totaling the weighted values of the sampled pieces that meet the criteria for inclusion in the particular report.

Service Standard -- A service time established for delivery of correctly ZIP Coded mail based on mail preparation and receipt, mail processing operating plans, and transportation schedules between postal facilities. The goal is to deliver at least 95% of the mail within the given standard.

First-Class Mail Service Standard Areas --

- **Overnight Standard Area** -- An SCF area designated for overnight delivery of qualified First-Class Mail.
- **Two-Day Standard Area** -- An SCF area designated for 2-day delivery of qualified First-Class Mail.
- **Three-Day Standard Area** -- Any SCF area within the 48 contiguous states that does not fall under the overnight or 2-day standards.

Priority Mail Service Standard Areas --

- **Overnight Standard Area** -- An SCF area designated for overnight delivery of qualified marked "Priority Mail".
- **Two-day Standard Area** -- Any SCF area within 48 contiguous states that does not fall under the overnight standard area.

Fourth-Class Mail Service Standard Areas --

- **Two-Day Standard Area** -- In general, the BMC/ASF area in which the fourth-class mail originates. Some areas within a BMC/ASF may be designated as 3-day standard areas for that BMC/ASF.
- **Three-Day Through Ten-Day Standard Areas** -- BMC/ASF areas designated for 3-day, 4-day, 5-day, 6-day, 7-day, 8-day, 9-day, or 10-day delivery of fourth-class mail.

Nonstandard Areas -- Areas served by postal facilities that have no service standard commitment with other postal facilities for delivery of First-Class Mail or fourth-class mail. For example, with a few exceptions there are no service standard commitments for: (a) First-Class Mail or fourth-class mail going between an area within the 48 contiguous states and an area outside the 48 contiguous states; and (b) First-Class Mail or fourth-class mail going to or from an APO or FPO.

Nonstandard Mail -- First-Class Mail or fourth-class mail which: (1) is incorrectly ZIP Coded, (2) has no ZIP Code, or (3) is government or permit mail. This mail is not reported under any service standard but is included in nonservice standard reports.

Qualified Mail -- Stamped First-Class Mail bearing a qualified postmark.

Qualified Postmark -- A cancellation containing the time stamp AM or PM applied to First-Class Mail. This indicates it was mailed before the local cutoff time (usually includes cancellation of the 5 p.m. collection mail). This postmark may be found on stamped, metered, permit or penalty mail which has been overcanceled.

The time stamp -PM (minus PM) is not a qualified postmark. (Note: The presence of a cancellation mark on permit or penalty mail does not cause such mail to be considered as stamped or metered mail.)

Nonqualified Mail -- Stamped First-Class Mail that does not have an AM or PM in the postmark or has an illegible postmark. Mail with a -PM (minus PM) in the postmark is nonqualified mail. Nonqualified overnight area mail falls under the 2-day standard, nonqualified 2-day area mail, as well as qualified and nonqualified 3-day area mail, falls under the 3-day standard.

SCF Area of Origin -- A defined area used to identify and report the origin of service standard mail. The defined area is usually either an entire SCF area or an independent city that is not an SCF. There are approximately 470 SCF areas of origin. Service standard achievement is reported by SCF area of origin rather than by ODIS area of origin because postmarking procedures prevent accurate identification of the ODIS area of origin when an SCF serves and postmarks mail for more than one ODIS area.

SCF Area of Destination -- A defined area used to identify and report the destination of service standard mail. Generally, this defined area is an ODIS area although labeled as SCF area of destination. There are approximately 724 ODIS areas. (See ODIS Areas.)

Auxiliary Service Facility (ASF) -- A bulk mail processing facility associated with a particular BMC. Each ASF functions as a satellite to its BMC, providing turnaround service for its own service area.

Bulk Mail Center (BMC) -- A highly mechanized mail processing plant for the distribution of third-class and nonpreferential second-class mail in bulk form, and fourth-class mail in piece and bulk form.

BMC/ASF Area -- An area served by a BMC or ASF.

Statistical Minimum -- A sample volume (number of pieces recorded) sufficient to provide valid estimates for the reporting period. A double asterisk appearing next to an estimate or a series of estimates in a service standard achievement report indicates the number of sample pieces that determined the estimates is below the statistical minimum.

Unknown Delivery Days -- The number of pieces of mail for which the number of days to delivery cannot be determined because: (1) the postmark date cannot be read, (2) the recorded postmark date is later than the date of delivery, or (3) the recorded postmark date is 30 days or more prior to the date of delivery (for Service Standard Achievement Reports only).

Appendix C

ODIS reports

1. Restrictions

See 354 for restrictions on releasing reports.

2. Reports generated each accounting period

a. *First-Class Mail Service Standard Achievement (SSA) Reports (Reports 200-209)* -- Show the average daily volume and service times for correctly ZIP Coded First-Class letters, cards, flats, and SPRs between each ODIS/SCF area and its designated overnight, 2- or 3-day standard ODIS/SCF/ADC area. They are prepared on national, regional, division, ODIS/SCF area and ADC levels. (See Chapter 5.)

b. *Parcel Post/BMC SSA Reports (Reports 500-513)* -- Show the average daily volumes and service performance in the current and immediately preceding accounting periods for parcel post and other fourth-class mail within designated service standard areas. These reports are prepared on regional, division, BMC/ASF area, and SCF levels.

c. *Interregional Report* -- Shows the average daily volumes, the distribution of days to delivery, and the average days to delivery of each type of First-Class Mail, airmail, Priority (First-Class zone-rated) Mail, fourth-class parcel post, and other fourth-class mail between the five regions. Only the average daily volumes are shown for each type of third-class mail between regions, and for foreign and unknown origin delivered in each region. The report shows each region as an origin and as a destination for each class and type of mail.

3. Reports Generated Each Quarter

a. *First-Class Mail Service Standard Achievement Reports (Reports 200-209)* -- Contain quarterly data in the same format as accounting period reports.

b. *Parcel Post/BMC SSA Reports (Reports 500-513)* -- Contain quarterly data in the same format as accounting period reports.

c. *Interregional Report* -- Contains quarterly data in the same format as accounting period reports.

d. *Quarterly Statistics Report* -- Shows national service figures for selected classes and types (shapes) of mail; First-Class Mail service standard achievement; indicia (stamped, metered, etc.) by mail class; and ZIP Code use by mail class. (See Chapter 5.)

e. *ODIS Area to States Report* -- Shows the average daily volumes, the distribution of days to delivery, and the average days to delivery for First-Class letters, First-Class flats, Priority (First-Class zone-rated) parcels, parcel post parcels, and other fourth-class parcels from each ODIS area of origin to destination states. The report is sequenced by region, division within each region, and ODIS area within each division.

f. *Average Daily Volume of Mail Received at ODIS Area of Destination Report (Tab C)* -- Shows for each ODIS area of destination and the nation, the average daily volume of mail for each class and each type by sample group code (type of delivery unit).

g. *Volume Summary Reports (Reports 360 and 362)* -- Show how much mail (piece count), by class and type, originates and destines in each ODIS area, division, region, and the nation. (See Chapter 5.)

h. *Mail Characteristics Report* -- Shows, at national level, volumes and percent distribution of all variables (except service times) collected by ODIS (class, type, indicia, ZIP Code, etc.), based on domestic mail with known origin.

i. *Major ODIS Areas of Origin Report (Origin Rankings Report)* -- Shows in descending order, each ODIS area's percent contribution to the total originating average daily volumes of First-Class Mail.

j. *Major ODIS Areas of Destination Report (Destination Rankings Report)* -- Shows in descending order, each ODIS area's percent contribution to the total destinating average daily volumes of First-Class Mail.

k. *ZIP Code Usage Reports - Origin (Reports 30-33)* -- Show percentages of local and nonlocal First-Class letters bearing ZIP Codes. These reports are prepared by region, division, and ODIS area of origin.

l. *ZIP Code Usage Reports - Destination (Reports 40-43)* -- Show percentages of local and nonlocal First-Class letters bearing ZIP Codes. These reports are prepared by region, division, and ODIS area of destination.

m. *ZIP Code Characteristics and Percent Usage Reports - Origin (Tables I-II)* -- Show the average daily volumes and percentages of mail with correct, incorrect, or no ZIP Code for selected classes, types, and indicia. The report is prepared by ODIS area of origin for various types and indicia of First-Class Mail (stamped letters, metered letters, all letters, and all flats), for Priority (First-Class zone-rated) parcels, for parcel post parcels, and for third-class letters, flats, and SPRs. The report is prepared by regions and divisions of origin for all First-Class Mail.

n. *ZIP Code Characteristics and Percent Usage Reports - Destination (Tables III-IV)* -- Show the average daily volumes and percentages of mail with correct, incorrect, or no ZIP Code for selected classes, types, and indicia. The report is prepared by ODIS area of destination for various types and indicia of First-Class Mail (stamped letters, metered letters, all letters, and all flats), for Priority (First-Class zone-rated) parcels, for parcel post parcels, and for third-class letters, flats, and SPRs. The report is prepared by regions and divisions of destination for all First-Class letters.

o. *Format A (Report 917-04)* -- Shows the average daily volumes, the distribution of days to delivery, and the average days to delivery for each ODIS area of destination from each ODIS area of origin. Information for this report is stored on magnetic tape, with hard-copy printouts of specific ODIS areas generated only on request. Both Formats A and B are automatically produced for each request. The reports can be prepared at the following four levels: (1) all classes of mail, all types of indicia; (2) each class of mail, all types, all indicia (e.g., First-Class, all types, all indicia); (3) each class of mail, each type, all indicia (e.g., First-Class letters, all indicia); (4) each class of mail, each type, each indicia (e.g., First-Class, letters, stamped).

p. *Format B (Report 917-03)* -- Shows the average daily volumes, the distribution of days to delivery, and the average days to delivery for each ODIS area of origin to each ODIS area of destination.

4. Reports Generated Annually

a. *Interregional Report* -- Contains annual data in the same format as the quarterly period report.

b. Volume Summary Report -- Contains annual data in the same format as the quarterly report. (See Chapter 5.)

c. Ranking of Origin-Destination Pairs by Average Daily Volume from SCF Areas of Origin to SCFs/States of Destination (Report 807) -- Shows, in descending order, the average daily volume and percent of mail to destination SCFs and states from each SCF of origin. It also shows the percent each origin SCF contributes to the national total originating average daily volume. The report is prepared for First-Class Mail, parcel post, and other fourth-class mail.

d. Ranking of Origin-Destination Pairs by Average Daily Volume from SCF Areas of Destination to SCFs/States of Origin (Report 815) -- Shows, in descending order, the average daily volume and percent of mail from origin SCFs and from origin states to each SCF of destination. It also shows the percent each destination SCF contributes to the total destinating average daily volume. The report is prepared for First-Class Mail, parcel post, and other fourth-class mail.