

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268-0001

EVOLUTIONARY NETWORK DEVELOPMENT
SERVICE CHANGES, 2006

Docket No. N2006-1

RESPONSES OF THE UNITED STATES POSTAL SERVICE TO
PRESIDING OFFICER'S INFORMATION REQUEST NO. 2
(QUESTIONS 1-5, 7-13, 15)

The United States Postal Service hereby provides responses to the above –
listed Questions in Presiding Officer's Information Request No. 2, issued on April 27,
2006: Each question is stated verbatim and is followed by the response.

Responses to Questions 6 and 14 are forthcoming.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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**RESPONSE OF THE UNITED STATES POSTAL SERVICE
TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 2**

1. At USPS-T-1, page 6, witness Shah States, "the Postal Service must continue to change its mail processing network in ways that better recognize such factors as the economies inherent in shape-based processing" He also says, "There are economies to be realized by disintegrating some of the mail class-based distinctions among current postal processing facilities." See lines 21-23.

- a. Are the economies referred to economies of scale or economies of scope?
- b. Please explain in detail how mail class-based distinctions will be disintegrated.
- c. Please describe in detail the economies that will be realized through this process.

RESPONSE:

- a. The economies referred to are those of scale.
- b. Mail class-based distinctions will be disintegrated through the elimination of class-based networks. For example, processing a Standard parcel in a BMC, a Priority Mail parcel in an L&DC and a First-Class Mail parcel in a P&DC will be replaced in the future by an RDC which will process all classes of parcels.
- c. As described in response to subpart (b), when all parcels are consolidated into one building, equipment utilization is expected to increase and redundant cost is expected to decrease.

RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 2

2. How are vacant positions related to operations that are being consolidated under the AMP process handled? For example, if a consolidated facility has positions related to the consolidating operations that are vacant at the time of the consolidation, are the hours for those positions considered workhour savings in the AMP worksheets? Please identify, and provide applicable workhours for, relevant positions that were vacant at the time of consolidation for the 10 AMPs included in USPS-LR-N2006-1/5.

RESPONSE:

For each of the AMP in USPS-LR-N2006-1/5, the workhour savings are calculated using data on AMP worksheets 4 and 4a. Worksheet 4 provides workhour and volume data for both the consolidated site and the AMPC (gaining site) before the operations consolidation occurs. Worksheet 4a represents the data for the two facilities after AMP implementation.

The savings estimates are based on workhours, not positions. Thus, the existence of a vacant position at a consolidated facility is not a factor, except insofar as the existence of that vacancy has contributed to the use of overtime, or casual and part-time flexible workhours to perform tasks that would be performed by an employee filling the vacancy. In that case, those workhours would show up as part of the total workhours. In a case where the existence of a vacancy does not lead to the use of overtime, or casual and part-time flexible workhours, that also would be reflected in total workhours. In either case, the existence of a vacant position, by itself, is not a factor in calculating workhour totals or savings. A consolidation that eliminates workhours may lead to a decision to eliminate a vacant position.

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

3. Please refer to witness Shah's response to APWU/USPS-T1-3(e). Witness Shah testifies that "[i]mplementation of AMP decisions can lead to network changes that can later be factored into the model." Please provide a specific example of an AMP decision that was factored into the END model and explain in detail how the AMP decision altered the END model output.

RESPONSE:

An approved AMP will result in adjustments to the model inputs. As each AMP decision is implemented, the changes in facility capacities and equipment are reflected in the model. For instance, when the Marina P&DC was consolidated and all mail processing operations shifted to other locations, the END optimization and simulation models were changed to reflect the shift of its operations to the gaining facilities.

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

4. Please refer to the response of witness Williams to APWU/USPS-T2-11. In that response witness Williams states, "The END model validated the new facilities role in the future network."
- a. Please describe specifically the future network contemplated in the above-referenced response, and the role of the new facility within that future network.
 - b. Please describe in detail how the END model validated the role of the new facility.
 - c. Please list specifically what data were used to validate the role of the new facility.

RESPONSE:

- a. The future network referred to is a Regional Distribution Center cluster, as depicted in Figure 3 at page 12 of USPS-T-1. The role of the facility referenced in response to APWU/USPS-T2-11 is that of a Local Processing Center.
- b. The model validated that the facility could assume the role of an LPC for the proposed ZIP Codes.
- c. The validation would come from a simulation that incorporated data of the type listed in response to POIR 2 Question 15.

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

5. Please refer to USPS-LR-N2006-1/5.
- a. Please provide unredacted versions of all worksheets for all 10 AMPs in USPS-LR-N2006-1/5. These worksheets may be provided under protective conditions.
 - b. On page 168, it is noted that for the Marysville consolidation the impact on Registered and Express Mail needs to be considered. Please explain what impact the consolidation will have on these two services.

RESPONSE:

- a. The unredacted copies have been filed as USPS Library Reference N2006-1/10, with the understanding that they are subject to the protective conditions appended to Presiding Officer's Ruling No. N2001-6/7.
- b. The note merely indicated that the handling process for accountability and mailflow would change for Express Mail and Registered Mail, due to the AMP and was addressed prior to implementation. For example, prior to the operation consolidation of originating mail, Registered Mail containers with outgoing mail would be opened and distributed, then dispatched nationally in Marysville. Post-AMP, Registered Mail is to be accounted for and dispatched to the gaining facility for piece distribution and dispatched nationally.

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

7. On page 34 of USPS-LR-N2006-1/7, the GAO report identifies four types of excess capacity: (1) excess workhours; (2) excess physical infrastructure; (3) excess transportation capacity; and (4) excess capacity related to machines sitting idle.

- a. Please describe in detail how the END models and AMP process weight each of these excess capacities.
- b. Please describe in detail how the Postal Service's plans for a future network address each of these excess capacities.

RESPONSE:

a&b. The objective function of the END optimization model is to minimize total network cost. This is done by maximizing the utilization of equipment and transportation, and achieving operational economies of scale through consolidation which will result in the elimination of excess capacity. END does not weight the three types of excess capacity (workhours, infrastructure, transportation) that it is designed to address. END does not eliminate physical infrastructure, it only focuses on the consolidation of operations.

The AMP decision-making process includes the evaluation of excess workhours, by utilizing a before-and-after comparison of the proposed operations consolidation on Worksheet 4 and 4a. Mail processing equipment capacities are evaluated to determine equipment requirements for processing the volume of the proposed operations consolidation. Worksheet 10a requires an assessment of mail processing equipment needs, in order to identify the need for redeployment and/or to identify any excess equipment. Transportation needs for the implementation of

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

RESPONSE to Question 7 (continued):

operational consolidations are evaluated and any affected or proposed routes are listed on Worksheet 9. AMP studies currently underway must include an analysis and plans for utilizing the space made available from the operational consolidation. The AMP process does not weight the four types of excess capacity identified in the question.

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

8. At USPS-T-1, page 8, witness Shah states, “[t]he Postal Service will analyze its current network to identify the areas of and reasons for excess capacity. The future network design will focus on minimizing the amount of excess capacity through better utilization of existing facilities” Have any of the facilities in USPS-LR-N2006-1/5 been identified as having excess capacity? If so, what types of excess capacity and what are the reasons for the excess capacity?

RESPONSE:

It was the apparent existence of excess capacity that motivated local managers to seek to employ the AMP process to pursue their respective consolidation proposals in the first place, without regard to whether postal headquarters was developing models that could ultimately be employed as part of a centralized approach to consolidation. The AMP analyses in USPS Library Reference N2006-1/5 support the conclusion that excess capacity existed and justify the pursuit of local operational consolidation proposals designed to reduce it.

For example, a typical originating AMP can reveal that First-Class Mail operations in existence at a particular location were set up for volume levels that no longer hold true. Where there has been a drop in single-piece stamped mail volume requiring cancellation, there is excess capacity on the Advanced Facer-Canceler System (AFCS). The mail volume requiring cancellation from two plants with two AFCS each can be cancelled on three AFCS at one location. In addition, older cancellation equipment can be removed from service. The combined outgoing piece distribution from both plants results in fewer partial letter trays and flat tubs, better utilizing mail transport equipment, and, therefore, vehicle capacity.

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

9. On page 60 of USPS-LR-N2006-1/7, the GAO report recommends that the Postal Service "establish a set of criteria for evaluating realignment decisions." Please list and discuss in detail the Postal Service's set of criteria used to evaluate realignment decisions related to its future network.

RESPONSE:

The goals of network realignment are described in the testimony of witness Shah at pages 6 (lines 9-23) and 9 (lines 1-11). The principal criteria considered in the pursuit of those goals – impact on capacity, cost, and service -- are discussed at pages 8-9. Each realignment decision is expected to contribute to achievement to the goal of improving overall network efficiency.

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

10. Will the conversion of Bulk Mail Centers (BMC) to Regional Distribution Centers (RDC) be implemented through the use of AMP studies? If not, explain in detail:

- a. how the Postal Service will analyze the impact of the conversions;
- b. how the Postal Service will notify stakeholders of changes;
- c. how stakeholder input will be considered; and
- d. how results will be monitored.

RESPONSE:

As a rule, the conversion of Bulk Mail Centers (and other facilities) to Regional Distribution Centers will not be implemented in a manner that involves the AMP consolidation study process. That process would come into play only when an entire 3- Digit ZIP Code service area is reassigned.

- a. END modeling helps to inform management's judgment about which metro areas would be best suited for locating the approximately 70 RDCs that will form the backbone of the future mail processing network.
- b. Over the next five to seven years, RDC conversions are expected to relocate mail processing operations among various facilities and require some changes in the location of bulk mail entry. The Postal Service will employ a variety of communications channels to inform stakeholders, including but not limited to: notices in the *Postal Bulletin*, *Memo to Mailers* and *Mailers Companion*, website updates, DMM/IMM Advisory, the online Rapid Information Bulletin Board system, the Business Support Network, BMEU mailer notification and software vendor notification.

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

RESPONSE to Question 10 (continued):

- c. The Postal Service has no plans to formally solicit public input when no AMP consolidation is involved. Any unsolicited stakeholder comments received will be reviewed and accorded appropriate attention.
- d. The conversions will be monitored by reference to operating plans that are developed in each case.

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

11. Will the conversion of HASPs to STCs be implemented through the use of AMP studies? If not, explain in detail:

- a. how the Postal Service will analyze the impact of the conversions;
- b. how the Postal Service will notify stakeholders of changes;
- c. how stakeholder input will be considered; and how results will be monitored.

RESPONSE:

No. It is expected that all current Hub-and-Spoke facilities will be converted to Surface Transportation Center and that some additional interim STC operations will be established. The long-term plan is for the HASP/STC function to be absorbed by the Regional Distribution Center. Bear in mind that Figure 3 on page 12 of USPS-T-1 should be viewed as representing mail processing *functions*, some of which will be co-located.

- a. The conversion of HASPs into STCs is more a matter of nomenclature.
- b. Any mailers who enter mail at an existing HASP will be informed and instructed regarding changes in mail entry location or procedures. As deemed necessary, some of the communications channels identified in response to POIR 2 Question 10(b) may also be employed.
- c. The Postal Service has no plans to formally solicit general public input regarding the redefinition of HASPs into STCs or whether the ultimate absorption of STC operations into a co-located or nearby RDC. Any unsolicited stakeholder comments received will

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

RESPONSE to Question 11 (continued):

be reviewed and accorded appropriate attention. Whether a HASP
or an STC, such operations will be evaluated against applicable
operating plans.

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

12. This question refers to the Postal Service's response to OCA/USPS-8, which indicates that a downgrade from a certain overnight standard to a 2 day standard was anticipated as part of an AMP, but was later "negated by the procurement of additional transportation to maintain the overnight standard." Please explain fully:

- a. how the procurement of additional transportation negated the anticipated downgrade;
- b. whether the additional transportation referred to is surface transportation; and
- c. whether negation was attributable only to the procurement of additional transportation, or whether any other factors, such as a change in dispatch time, also played a role.

RESPONSE:

- a) The additional transportation is reflected on worksheet 9. It was proposed that Route number 15021 be transferred from the consolidated site to the AMPC (gaining site) to, among other requirements, ensure overnight service is maintained.
- b) Yes.
- c) There were no related changes to dispatch times.

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

- 13.** The response to VP/USPS-T1-1, part b, states, "Service standards are used as constraints within the model." Are the constraints referred to existing service standards or new service standards that the Postal Service deems acceptable?
- a. If they are existing service standards, please explain how the new network configuration based on these models will affect service standards.
 - b. If they are new service standards, please identify them.

RESPONSE:

The simulation model can use any set of service standards, existing or a proposed future set. The model uses service standards only to evaluate a given network's ability to meet those standards. No decision as to whether a given set of service standards are acceptable is made by the model.

- a. The goal of the new network configuration is to maintain existing service standards to a large extent. However, some origin-destination pairs could experience downgrades and some could experience upgrades, within current service standard definitions.
- b. Any set of service standards could be modeled. To-date, the service standards used for purposes of the Evolutionary Network Development project do not involve changes in the range of days applicable to any mail class, but only changes within the existing ranges.

RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 2

15. In response to Presiding Officer's Information Request 1, question 4(b), a list of data inputs for the optimization model was provided. Please provide a similar list for the simulation model.

RESPONSE:

Overview of Data Requirements - Simulation

The data requirements are driven by inputs required by the simulation model.

The simulation model requires the following inputs:

1.1 Network Design

We need the following information regarding the network design to be simulated:

- 3-digit ZIP Code to Origin and Destination Facility assignments
- Facility Roles
- Origin and destination facility to Regional Distribution Center assignments

1.2 Facilities

We need the following information for each of the facilities in the network:

- Facility name
- ZIP Code where the facility is located
- Facility role

1.3 Distances

We need the following information for all facilities and ZIPs:

- Distance between all facility pairs
- Distance between facility and associated 3-digits

1.4 ZIP Codes

We need the following information for each 3 digit ZIP Code

- Time Zone
- Metro Location

RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 2

RESPONSE to Question 15 (continued):

1.5 Equipment

We need the following information for each piece of equipment to be utilized within the simulation model:

- Equipment Types
- Type of Resource operating equipment
- Number of each equipment type per facility
- Transport time to next equipment
- Equipment specific / facility specific / operation specific throughput
- Equipment specific / facility specific / operation specific reject rate

1.6 Products

We need the following information for each product to be simulated:

- Conversion rates - pieces to container
- Mail Class
- Mail Attribute

1.7 Origin entry volume

We need the following information for each of the ZIP Codes in the network:

- Product
- Number of Mail Pieces

1.8 Time origin entry volume departs origin 3-Digit ZIP Code

We need the following information for each of the 3-Digit ZIP Codes:

- Departure Time
- Product

1.9 Dropship Mail volume

We need the following information corresponding to each facility to be simulated within simulation:

- Product
- Number of Mail Pieces
- First operation required for mail processing

1.10 Destination Entry Arrival Profiles

We need the following information for each of the facilities in the network:

- Arrival Time and distribution of dropship volume by product by facility

RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 2

RESPONSE to Question 15 (continued):

1.11 Origin to Destination Volume distribution

We need the following information for every origin/destination 3-digit ZIP Code pair:

- Origin ZIP
- Destination ZIP
- Percentage Split
- Product
- Service Days

1.12 Mail Flow

We need the following information for every sort scheme to be utilized in simulation:

- Sort Scheme Name
- Origin Facility
- Destination Facility
- Next Process Step
- Percent to Next Process Step

1.13 Operating Plans

We need the following information corresponding to each facility to be simulated within simulation:

- Product
- Operation
- Equipment
- Operating Window (Start time / Clearance Time)
- Sort Scheme
- Reject Rate (by Facility/Equipment/operation)
- Equipment Throughput (by Facility/Equipment/operation)
- Destination AO CET for DPS and Non-DPS volume by ZIP Code

1.14 Handling Requirements

We need the following information for each facility to be simulated:

- Handling type
- Number of minutes of handling required

**RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING
OFFICER'S INFORMATION REQUEST NO. 2**

RESPONSE to Question 15 (continued):

1.15 Transport Modes

We need the following information for each mode of transportation to be simulated:

- Mode type
- Capacity
- Utilization
- Standard travel velocity
- Load Time
- Unload Time

1.16 Traffic congestion – velocity reduction

We need the following information for a set of metro types:

- Metro Type (Non – Metro, Metro, Mega Metro) – each 3-digit ZIP is assigned a Metro type
- Metro Area Radius – the radius (in miles) of the metro area
- Associated Traffic Delay per metro type
 - Time of day
 - Velocity reduction from standard speed

1.17 Transportation Routings

We need the following routings by product by origin / destination pair.

- Direct transportation routings
- Surface Transfer Center routings
- Air routings