

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

MAIL PROCESSING NETWORK RATIONALIZATION
SERVICE CHANGES, 2011

Docket No. N2012-1

**RESPONSES OF UNITED STATES POSTAL SERVICE
WITNESS EMILY ROSENBERG
TO NATIONAL POSTAL MAIL HANDLERS UNION INTERROGATORIES
NPMHU/USPS-T3-1 THROUGH 36**

The United States Postal Service hereby files the responses of witness Emily Rosenberg to the above-listed interrogatories of the National Postal Mail Handlers Union dated February 10, 2012. Each interrogatory is stated verbatim and followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
TO NATIONAL POSTAL MAIL HANDLERS UNION INTERROGATORY**

NPMHU/USPS-T3-1 Confirm that the Scoring Tool referenced in your testimony:

- (a) provided results based on geometric functions or simple feasibility calculations;
- (b) did not provide optimized results;
- (c) the Scoring Tool provided upwards of three million results as to feasible operating windows; and
- (d) you reduced the initial list provided by the Scoring Tool to a list of twenty-five potential operating windows for consideration.

If not confirmed in all parts, please explain how this statement is incorrect.

RESPONSE

- A. Confirmed. The cells (N8, N12, L18, L19, L22, L23, M20, N20, M21, and N21) shaded in gray on the *Calculations* tab use geometric functions.
- B. Confirmed.
- C. Not confirmed. Over 3 million iterations were run. Not all results were feasible.
- D. Not confirmed. I did not reduce the initial list.

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NPMHU/USPS-T3-2 Describe in detail the process by which the initial results from the Scoring Tool were pared down and ranked, and how the final operating window was selected; in particular, identify: (1) the names, titles, and areas of expertise for all individuals involved in the paring down/ranking/selection process; (2) which operational parameters were considered in the paring down/ranking/selection process; and (3) the stages at which cost was considered in the paring down/ranking/selection process and how cost was considered at that stage to rank/pare down/select from the results.

RESPONSE

The model was run. The modeler reviewed the results and modified the input assumptions to narrow the scope of solutions. Many results returned a longer DPS window than today. The DPS window was locked down to reduce the number of iterations the model produced. Costs were not considered. This tool was a starting point for discussion. My testimony does not measure or analyze potential or relative cost savings. I have not performed any analysis of potential or relative cost savings. Accordingly, I have no basis for offering an opinion in response to this question. The modeling team has collectively over 20 years of modeling experience.

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NPMHU/USPS-T3-3 Describe in detail how you arrived at the top 25 operating window proposals in the scoring tool when the DPS “operating window was set at sixteen hours,” what factors were considered in paring the list to 25, and how you selected the final operating window from the “top 25.” (USPS-T-3, at 12.)

RESPONSE

I did not arrive at the top 25 results. As stated in my testimony on page 12 lines 1-12, “All other operating window start times, but not the run-time, were then adjusted to align with the change in cancellation. So the final operating windows cannot be found within the tool.

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NPMHU/USPS-T3-4 In Response to PR/USPS-T3-1(d) you state that the proposed utilization rate by tour “uses the same operational time as in the response to question [PR/USPS-T3-1]c and spreads that operational time over the reduced equipment set and reassigns the processing to the respective tour based on the Network Rationalization concept.” Please: (a) explain how you derived the numbers for the “reduced equipment set”; (b) explain what you mean by “reassigns the processing to the respective tour based on the Network Rationalization concept,” including in your answer what the “respective tour” is and how this affects your calculation; and (c) provide the calculations supporting this chart.

RESPONSE

The Public Representative's question was about a future network that is not yet implemented. To generate the requested information about a future state, assumptions needed to be made. The basis for the equipment set used is provided in USPS Library Reference 37 and my testimony (USPS-T-3) details how this is created. Mail processing operations are organized to be conducted on specific shifts or tours.

Accordingly, the model used the following -- (Tour 1: 12:00 AM to 08:00 AM, Tour 2: 08:00 AM – 04:00 PM, Tour 3: 04:00 PM – 12:00 AM). The run-time hours required to process the volume need to be assigned to the future processing window.

This was calculated using the End of Run total time for Fiscal Year 2010. This total time was divided by the number of operating days to get the average run-time by day. The End of Run tour flag was used to tie the run time to a tour. Tomorrow, the planned cancellation operating window will run entirely during Tour 3. So all future run-time was reassigned to Tour 3 and the run-time was divided by the equipment set projected.

CIOSS, DIOSS, AFSM100, APPS, FSS, SPBS/APBS there was no change to operating plan and thus, the run-time was assigned to the same tour and divided by the future proposed equipment set.

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NPMHU/USPS-T3-5 In Response to PR/USPS-T3-1(c) you provide a chart entitled “Utilization By Tour and Equipment Type” which states that it is sourced from EOR FY2010 data. Please explain the relationship of these calculations to the utilization percentages calculated by Witness Frank Neri in Response to PR/USPS-T4-1(b) in USPS-LR-44, Copy of LR-44(Neri).xls, Worksheet: “Summary,” including in your answer whether you calculated utilization percentage in the same way as witness Neri by dividing the “Operating Time” by the “Window,” where Operating Time is defined as the sum of the Idle Time, the the Run Time and the Down Time and, if not, why you used a different method of calculating utilization percentages.

RESPONSE

Given the question the information by tour, a different approach was taken to address the question. Since this is all based off of tours (Tour 1: 12:00 AM to 08:00 AM, Tour 2: 08:00 AM – 04:00 PM, Tour 3: 04:00 PM – 12:00 AM). As stated in the response to PR/USPS-T3-1(c), “The Utilization rate is calculated per tour by summing the difference between the end-time and start time of each machine and dividing the sum by the product of the total number of machines and 8 hours”. Also, see the response to NPMHU/USPS-T3-4.

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NPMHU/USPS-T3-6 Please provide the names, titles, and areas of expertise of all individuals who customized the LogicNet software in order to calculate Step Two's optimization model. In addition, provide all settings that were altered from their default state and how the decision was made to alter or not to alter that default setting.

RESPONSE

See the response to GCA/USPS-T3-7(a).

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
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NPMHU/USPS-T3-7 Please refer to USPS-LR-15, 15_LogicNet Model.xls, Worksheet: "OptimizationParameters."

- a. Please confirm that "Feasibility" defaults to a setting of "Low." If not confirmed, please explain and identify the individual who changed the setting to "Low."
- b. Please explain what "Feasibility" means within the context of this model and explain the impact, that a "Feasibility" setting of "Low" had on calculation of the LogicNet optimization model.

RESPONSE

- A. Not confirmed. "Moderate" is the default setting. The feasibility setting was changed to "Low" so that the solver would quickly determine whether the problem violated basic feasibility rules.

- B. According to Logic Net 7.1 online help, Feasibility Analysis set at "Low" means the Solver will determine quickly whether the problem has violated basic feasibility rules and report back to the user if such rules have been violated. Other feasibility settings go through additional feasibility checks, provide the user feedback if feasibility errors exist, and derive partial solutions where no full solution exists. Though I do not have specific knowledge of the heuristics used in the Logic Net Optimizer, I do not think the Feasibility Analysis has an impact on feasible solutions. Instead, it is a setting used to determine how in-depth of a feasibility analysis is to be performed before the problem goes to the Optimizer.

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NPMHU/USPS-T3-8 Please refer to USPS-LR-15, 15_LogicNet Model.xls, Worksheet: "OptimizationParameters."

- a. Please confirm that "Feasibility Emphasis" defaults to a setting of "Balance between feasibility and optimality." If not confirmed, please explain and identify the individual who changed the setting to "Balance between feasibility and optimality."
- b. Please explain what "Feasibility Emphasis" means within the context of this model and explain the impact that a "Feasibility Emphasis" setting of "Balance between feasibility and optimality" had on calculation of the LogicNet optimization model.

RESPONSE

- A. Confirmed.
- B. According to Logic Net 7.1 online help, Feasibility Emphasis provides different ways to configure the Optimizer that may improve run times. LogicNet recommends using "Balance between feasibility and optimality." I do not have knowledge of the heuristics used by the LogicNet Optimizer and cannot provide an assessment of the impact this option had on the results.

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NPMHU/USPS-T3-9 Please refer to USPS-LR-15, 15_LogicNet Model.xls, Worksheet: "OptimizationParameters."

- a. Please confirm that "Apply Aggressive Scaling" defaults to a setting of "TRUE." If not confirmed, please explain and identify the individual who changed the setting to "TRUE."
- b. Please explain what "Apply Aggressive Scaling" means within the context of this model and explain the impact, if any, that a "Apply Aggressive Scaling" setting of "TRUE" had on calculation of the LogicNet optimization model.

RESPONSE

- A. Confirmed.
- B. According to Logic Net 7.1 online help, Apply Aggressive Scaling makes the Solver more aggressive in overcoming numerical scaling problems in a model. I do not have knowledge about the heuristics used by the LogicNet model and can not provide an assessment of the impact this option had on the results.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
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NPMHU/USPS-T3-10 Please confirm that the LogicNet optimization model mapped the distance from a 3-digit ZIP Code as originating from the geographic center of the ZIP Code, rather than the population centroid, facility location, or some other location. If not confirmed, please explain why this statement is incorrect.

RESPONSE

Confirmed.

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NPMHU/USPS-T3-11 Please describe in detail how the determination regarding what location should be used within a 3-digit ZIP code to calculate distance for the mapping of the optimization model was made, including in your answer the individual(s) that made this decision, and what factors were considered in making this determination. .

RESPONSE

Given the two methods, Geographical and Population Centroid, Geographic Centroid evenly weights the entire geography, reducing the number of outlying Post Offices for which the Postal Service must reach every day. In addition, Geographic centroid was deemed appropriate in previous analysis by subject matter experts. This decision was carried forward in this modeling effort.

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NPMHU/USPS-T3-12 On page 18 of your testimony you state that “The total workload was divided by equipment throughput and operating window.” In addition, on page 19 of your testimony you provide Figure 1: Model Equipment Throughput. Please describe in detail the statistics and calculations on which you relied in reaching these figures.

RESPONSE

The result was not the product of a statistical analysis, but was based on consultations with mail processing management subject matter experts. Based on the new operating concept, current throughputs cannot be used.

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NPMHU/USPS-T3-13 Please confirm that the throughput numbers you used in the optimization model were national averages that did not consider site-to-site variations in productivity. If not confirmed, please explain why this statement is incorrect.

RESPONSE

Not Confirmed. There was no site-to-site variation, but the throughputs used were not national averages. As stated on page 7 of my testimony, "The national throughputs were calculated using pieces sorted on a machine and the machine's run-time from End of Run (WebEOR). These data were used as a benchmark to set throughput expectations that would occur under the new operating environment where all mail volume is available prior to initiation of a sorting operation."

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NPMHU/USPS-T3-14 In Response to PR/USPS-T3-1(b) you provide a chart—
“Maximum Throughput By Tour and Equipment Type with 3 Minutes Idle Time per
Hour.” Please confirm that this chart and Figure 1 on page 19 of your testimony are
based on the same statistics, calculations, and data. If not confirmed, please explain.

RESPONSE

Not confirmed. Future throughput will differ from today's based on the adjusted
operating window. See the response to NPMHU/USPS-T3-12.

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NPMHU/USPS-T3-15 Please refer to USPS-LR-34, LR_78402.USPS.34.xls, Worksheet: "USPS Modeling Facility List."

- a. Please confirm that approximately 327 sites, as indicated in Column H, are not "MODS sites," such that the model did not have MODS data for these sites in calculating the LogicNet optimization model. If not confirmed, please explain.
- b. Please describe in detail the process by which the model incorporated these sites in the absence of 2010 MODS data and how the absence of MODS data affected the calculation of the LogicNet optimization model.
- c. Please confirm that all 327 sites indicated in Column H as missing MODS data are small sites, as defined in footnote 18 of your testimony as sites with a square footage from 0 to 210,000 square feet. If not confirmed, please explain.

RESPONSE

- A. Confirmed. Approximately, 327 sites were not included in Fiscal Year 2010 MODS sites.
- B. Some of these sites were excluded from the modeling. See footnote 15 of USPS-T-3 and my response to APWU/USPS-T3- 22 for a detailed explanation.
- C. Not confirmed. There is at least one facility over 210,000 square feet.

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NPMHU/USPS-T3-16 Please refer to USPS-LR-34, LR_78402.USPS.34.xls,
Worksheet: "USPS Modeling Facility List."

- a. Please confirm that approximately 368 sites, as indicated in Column I, are not "eMARS sites," such that the model did not have eMARS data for these sites in calculating the LogicNet optimization model. If not confirmed, please explain.
- b. Please describe in detail the process by which the model incorporated these sites in the absence of eMARS data and how the absence of these data affected the calculation of the LogicNet optimization model.
- c. Please confirm that all 368 sites indicated in Column I as missing eMARS data are small sites as defined in footnote 18 of your testimony as sites with a square footage from 0 to 210,000 square feet. If not confirmed, please explain.

RESPONSE

- A. Confirmed. Approximately 368 sites were not included in the eMARS data used for witness Bratta's testimony.
- B. The eMARS data were not used for the modeling discussed in my testimony.
- C. In general, the 368 are small facilities, but there can be exceptions for annexes.

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NPMHU/USPS-T3-17 Please refer to USPS-LR-34, LR_78402.USPS.34.xls, Worksheet: "USPS Modeling Facility List." On page 17 of your testimony you state that "The Logic Net optimization model activated 177 processing facilities—168 with flat processing operations, 163 with letter sorting operations, and 152 with package and bundle sorting operations."

- a. Please confirm that these 177 facilities correspond to the approximately 198 facilities demarcated with a "Y" in Column F "Model Opens" in USPS-LR-34.
- b. If confirmed, please explain the discrepancy between these two figures.
- c. If not confirmed, please explain.

RESPONSE:

- A. Confirmed.
- B. Library Reference 34 includes NDCs as well as other facilities that would remain active in the proposed network, but were outside the scope of this modeling effort.
- C. Not applicable.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
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NPMHU/USPS-T3-18 In the 2006 iteration of the proposal to reduce postal sites, the Postal Service utilized a simulation model to test the feasibility of its optimization model. Please:

- a. Confirm that a simulation was not used to test the feasibility of either the network model developed by the LogicNet software, or the proposed redesigned network that resulted from your process after consultation with postal management;
- b. Explain in detail whether a simulation model was considered to test feasibility of the optimization model in this instance, including by identifying the individual(s) who made the determination and the reasons for the determination; and
- c. If a simulation model was not considered, please explain why it was not.

RESPONSE

END identified opportunities for AMP consolidations, but few if any of those were entire plant shutdowns, in contrast to today.

- A. Confirmed.
- B. I am not aware of a discussion regarding this topic.
- C. The Postal Service utilizes such guidelines as are reflected in the USPS Handbook PO-408 AMP for the more detailed analysis of the proposed consolidations. Since 2006, the Postal Service has initiated and successfully implemented many AMP consolidations. Accordingly, the Postal Service plans to continue relying on such facility-specific study processes to conduct the detailed operational analysis associated with mail processing plant consolidation opportunities.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
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NPMHU/USPS-T3-19 Please explain how the LogicNet network optimization model considered any other characteristics of each plant other than square footage in calculating site-specific capacity and feasibility of projected site-specific capacity—e.g., the length of the building, number of docking ports, total square footage of dock space, the number of 53' trucks that can be docked at any one time, and the number of access roads to the facility's docking space. If other characteristics were not considered, please provide the name and title of the individual who made this determination and why they made the decision to not consider these factors in creating the optimization model. Additionally, please provide an explanation as to how exclusion of these factors could have affected the model and please detail any steps taken during the modeling process to mitigate these effects.

RESPONSE

LogicNet did not consider the other factors mentioned (length of the building, number of docking ports, total square footage of dock space, the number of 53' trucks that can be docked at any one time, and the number of access roads to the facility's docking space). The LogicNet results were used as a starting point for discussion with the Area offices. It is a model and thus, these factors would be considered outside the model. I am not aware if there was a discussion whether to include the variables listed in the question as part of the model. In any event, they all can be evaluated outside the model. Incorporation of these variables in the model might have caused different node selections. However, since the model results were just a starting point for discussion among postal mail processing and transportation subject matter expert, I cannot assess the degree to which the network proposal subjected to such facility-specific review processes as are contained in the Handbook PO-408 process as a result of those discussions would have been different had the model incorporated the additional variables listed in the question.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
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NPMHU/USPS-T3-20 Identify all factors by which the LogicNet optimization model incorporated the cost of increased risk and uncertainty into its calculations—e.g., risk of delay or disruption inevitable with greater travel distance, risk of mechanical failure based on increased productivity stress on the equipment and vehicles, etc. If the LogicNet model did not consider increased risk, please identify the individual who made this determination and explain why these risks were not considered.

RESPONSE

The LogicNet model did not consider these factors mentioned (risk of delay or disruption inevitable with greater travel distance, risk of mechanical failure based on increased productivity stress on the equipment and vehicles). It is a deterministic model, not a stochastic model. Different modeling techniques would need to be used to incorporate these factors. These factors can be evaluated outside the model and were not included. I am not aware of a discussion on whether to include them.

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NPMHU/USPS-T3-21 Describe why you choose the figure 200 miles in setting the parameters for the optimization (i.e., "each 3-digit ZIP Code workload could be transported up to 200 miles to be processed by a plant.") (USPS-T-3, at 13.)

RESPONSE

See the response to PR/USPS-T3-24.

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NPMHU/USPS-T3-22 Describe the basis for the assumption in your model that inflating the Handbook AS-504, *Space Requirements* by an additional twenty percent square footage would “ensure there was adequate staging room under this new concept when all volume is available at the start of the windows.” (USPS-T-3, at 18.) Describe in detail all statistics and calculations on which you relied in reaching the conclusion that twenty percent inflation was sufficient to provide adequate staging room.

RESPONSE

The percentage used only was an initial proxy for the staging required. As stated at USPS-T-3 at page 9, footnote 10, “Dock space and staging were not a function of determining operating windows. The staging square footage requirement is accounted for in the strategic level capacity modeling and detailed equipment modeling sections later in my testimony.”

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
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NPMHU/USPS-T3-23 Please confirm that the LogicNet optimization model calculated site capacity based simply on total square footage and did not round down capacity in order to exclude calculations of partial equipment. If not confirmed, please explain why this is incorrect. If confirmed, please describe in detail the process by which all sites that were activated based on site capacity calculation that included partial equipment were adjusted in the model. If these sites were not adjusted or only some sites were adjusted, please explain.

RESPONSE

Confirmed. No adjustments were made within LogicNet. The LogicNet 3-digit ZIP Code processing site mapping was used. This mapping allowed the 3-digit workload to be summed to the proposed processing site. The workload numbers by plant were then used to calculate equipment as detailed in my testimony.

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NPMHU/USPS-T3-24 Referring to your discussion of opening costs used in the optimization model:

- a. Please confirm that the opening costs for each facility, as described in your testimony at note 17 and defined as the rental cost for leased facilities or a calculated opportunity cost for an owned building, is the same calculation as was used by witness Smith to calculate the savings resulting from closing down facilities that were not included in your redesigned network, see USPS-T-9 at page 21.
- b. If ((a) is not confirmed, please explain the difference between the calculations and why different calculations were used;
- c. Explain whether the LogicNet least-cost optimization model accounted for the fact that the Postal Service will not be able to sell or terminate the lease for some large percentage of buildings identified for closure, as explained in the testimony of witness Smith at page 20.

RESPONSE

- A. Not confirmed.
- B. The modeling used high-level strategic assumptions. For the savings estimates for the case, a refined analysis was required.
- C. It did not. The inability to divest of a building or terminate a lease early was not included in the LogicNet model.

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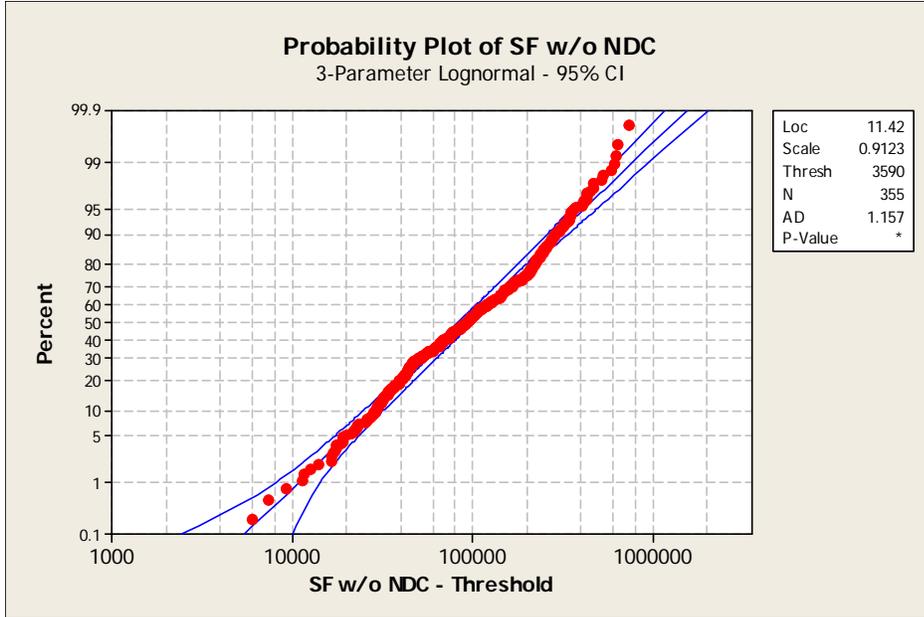
NPMHU/USPS-T3-25 In footnote 18 of your testimony you state that “[t]hree groups were formed: (1) Buildings with square feet from 0 to 210,000, (2) Buildings with square feet from 210k to 450k, and (3) Buildings with square feet from 450K to 750K.” The model then considered the slope of the polynomial function separately for each group to calculate cost per piece based on actual workload processed at each facility. Please describe in detail: (a) why three different groups were considered in the calculation of cost per piece; (b) identify the individual who made the determination that square footage was the ideal basis on which to differentiate these three groups and calculate cost per piece accurately; and (c) describe in detail all statistics and assumptions on which you relied in determining that group one should encompass buildings with a square footage of 0 to 210,000, group two should encompass buildings with a square footage of 210K to 450K, and group three should encompass buildings with a square footage of 450K to 750K.

RESPONSE

- (a) Due to economies of scale, the model divided the building size into categories. The total of three groups was deemed reasonable by the modeling team. In previous modeling efforts, like END, facility size was shown to be related to processing cost, with larger facilities showing greater economies of scale. For this effort we mimicked the same methodology, creating three groups of facilities based on square footage.
- (b) Contrary to the implication in the question, there was no determination that square footage was "the ideal basis on which to . . . calculate cost per piece accurately." It was deemed a reasonable basis, given the limited role that modeling would play in determining the future network.
- (c) Limited documentation was preserved for this step and is reflected in the attached table.

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Attachment to response to NPMHU/USPS-T3-25



**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
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NPMHU/USPS-T3-26 Please confirm that the “cost per piece based on workload processed at the facility” calculation on pages 14-15 of your testimony, and described in depth in footnote 18, draws from the same cost data set as that utilized to determine “institutional cost” and “volume variable cost” by Witness Bradley (USPS-T-10) in his testimony on pages 1-10. If not confirmed, please explain why each witness found it necessary to draw on a separate data set to calculate costs per site.

RESPONSE

Not confirmed. The modeling used high-level strategic assumptions. For the savings estimates for the case, a refined analysis was required.

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NPMHU/USPS-T3-27 Describe in detail all changes made to the network design arrived at by the LogicNet least-cost optimization model during the local input and model revision step of your process, including information for each facility added or removed from the consolidation list at this stage, what that facility was added or removed.

RESPONSE

I was an observer at some of the discussions. My recollection is that Headquarters and Area subject matter experts took the model results and made modifications based on such considerations as the following:

Plant characteristics: efficiency, age, layout (number of floors, docks, staging space), size, location function (current processing capabilities).

ZIP Code mapping: logistics to the plant are too challenging (over a bridge or mountains, congested traffic, closer to another plant; too much volume; mapped to different facility but current facility remains

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NPMHU/USPS-T3-28 Identify all individuals and their areas of expertise who were consulted with during Step Three "Local Input," and explain the selection process by which individuals were selected to provide local input.

RESPONSE

I was an observer at some of the meetings. I was not involved in the participant selection process. My understanding is that, in general, from headquarters the Vice President of Network Operation and his direct reports participated directly. The field participants who were directly involved varied by Area office. In some cases, Area mail processing and transportation managers participated directly along with their senior management. For other Areas, only senior management participated directly, but consulted with subordinate processing and transportation managers.

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NPMHU/USPS-T3-29 Confirm that none of the constraints considered by the LogicNet optimization model were used to constrain modifications to the model in Step Three “Local Input.” If not confirmed, explain why this is wrong.

RESPONSE

Not confirmed. One such example is the distance rule was not always followed. There were some cases where the areas wanted to evaluate the impact of processing 3-digit ZIP Code areas beyond what was allowed in LogicNet.

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NPMHU/USPS-T3-30 Identify any efforts made in Step Three “Local Input” in order to compensate for effects that changes to the portions of the model based on local input might have on related aspects of the optimized model—e.g., mitigate the impact that deactivating a site that the model had activated would have on nearby site or 3-digit ZIP Codes that previously relied on the activated site.

RESPONSE

If nodes were deactivated, the 3-digit ZIP Code was reassigned to another node. The volume associated with that 3-digit ZIP Code was also remapped and the equipment recast to ensure the new node had the processing capacity required based on the assumptions we modeled.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
TO NATIONAL POSTAL MAIL HANDLERS UNION INTERROGATORY**

NPMHU/USPS-T3-31 Please confirm that no sites were added or removed from the model during Step Four as compared with the network developed during Step 3 of your process. If not confirmed, please describe all changes that were made to the model, identify the individual who made that change, and describe in detail how the determination to alter the model was made.

RESPONSE

Not confirmed. It is possible, based on the refined equipment sets that processing nodes were adjusted. There is no documented record of these modifications. Again, these findings are just the basis for discussion. The PO-408 and other facility review processes are designed to vet the potential consolidations, as required.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
TO NATIONAL POSTAL MAIL HANDLERS UNION INTERROGATORY**

NPMHU/USPS-T3-32 On page 21 of your testimony, in regard to the “Equipment Determination” calculation in Stage Four, you state that “[a]fter the expert feedback was incorporated, the resulting 3-digit ZIP Code assignments were used to conduct site-specific analyses that included origin mail arrival profiles, as well as lunch and break factors, to generate actionable equipment sets as a starting point for discussion.” Please confirm that a site-specific analysis was completed for all 3-digit Zip Code assignments considered by the LogicNet optimization model. If not confirmed, please explain. In addition, please provide a Library Reference of all sites at which a site-specific analysis was conducted and the results of that site-specific analysis.

RESPONSE

Not confirmed. The results of the site-specific analyses can be found in USPS Library Reference 37. The site-specific analyses was conducted on the proposed processing nodes that resulted from the previous steps including the local insight.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
TO NATIONAL POSTAL MAIL HANDLERS UNION INTERROGATORY**

NPMHU/USPS-T3-33 On page 23 of your testimony, in regard to the “Equipment Determination” calculation in Stage Four, you state that “[t]he throughput used for the AFCS is 22,500 pieces per hour which factors in lunch and breaks” and that “[t]he throughput used for the outgoing primary on the DBCS is 23,200 pieces per hour which included lunch and break factor.” In addition, on page 25 of your testimony, you state that “[t]he DPS first pass throughput was 27,500 pieces per hour and the DPS second pass throughput was 30,000 pieces per hour.” Please describe the calculations on which you relied in reaching the AFCS, DBCS, and DPS throughput assumptions. In addition, please explain any difference in throughput assumptions between the Stage 4 assumptions as described above and the throughput assumption used for that particular piece of equipment by the LogicNet model as described in Figure 1 on page 19 of your testimony.

RESPONSE

These throughputs were based on consultations with Headquarters mail processing experts and not on a specific calculation. The throughputs were refined in “stage 4” after receiving feedback from the field. The assumptions became more conservative. Lowering the throughput increases the required run-time to process the mail volume, thus with a fixed window, additional equipment would be required to sort the mail by the clearance time.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
TO NATIONAL POSTAL MAIL HANDLERS UNION INTERROGATORY**

NPMHU/USPS-T3-34 On page 30 of your testimony, in regard to the “Equipment Determination” calculation in Stage Four, you state that “[o]utgoing VAP was based on a hub collection concept.” Please confirm that this is the same hub concept as was described on page 8 of your testimony in regard to the Scoring Tool. If not confirmed, please explain and describe in detail any assumptions or calculations on which the “hub collection concept” was based.

RESPONSE

Not confirmed. In the scoring tool, not specific nodes were defined. By this stage, the nodes were selected and driving times could be better estimated on a site-specific basis.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
TO NATIONAL POSTAL MAIL HANDLERS UNION INTERROGATORY**

NPMHU/USPS-T3-35 On page 14 of your testimony, you state that “[n]o capital investments were allowed in the model in light of the Postal Service’s current cash flow situation.” (USPS-T-3, at 14.) Confirm that this statement applies to all stages of modeling and is not specific to the Step Two LogicNet network optimization model. If not confirmed, please explain how this is incorrect.

RESPONSE

Not confirmed. If sites were deemed over capacity based on the ZIP Code processing node assignment, those issues were raised and analysis on how to proceed would be completed through site-specific facility review processes, such as are outlined in the Handbook PO-408.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS ROSENBERG
TO NATIONAL POSTAL MAIL HANDLERS UNION INTERROGATORY**

NPMHU/USPS-T3-36 On page 34 of your testimony you state that “[f]or the proposed activated nodes, the network will require the following equipment: 617 AFCS; 2,995 DBCS (including DIOSS); 522 AFSM100; 100 FSS (9 currently at NDC); 205 SPBS/APBS (22 at NDC/ISC); and 74 APPS (12 at the NDCs). Please provide a Library Reference to support this statement, including all equipment required for the proposed activated nodes; of that equipment, which equipment will need to be moved from its current facility; the facility to which the equipment will need to be moved; the distance between point of origin and destination facility; and a list of all equipment that will need to be disposed of in order to implement the final proposed model.

RESPONSE

USPS Library Reference 37 has the equipment list above. Given that each site-specific consolidation needs to be studied through a facility review process, such as is outlined in the Handbook PO-408 process, a detailed plan of what equipment needs to move has not been generated at this time. Site-specific equipment redeployment and disposal determinations are not included in the modeling exercise and are made as consolidations are determined through the applicable facility review processes and implemented.