Office of Inspector General | United States Postal Service

Audit Report

Peak Season Air Transportation

Report Number 20-215-R21 | February 25, 2021

Table of Contents

Highlights

Objective

Our objective was to assess the U.S. Postal Service's efforts to reduce Peak Season air transportation operational costs while maintaining service during fiscal year (FY) 2019 and FY 2020.

The Postal Service's Peak Season lasts about eight weeks, starting on or around Thanksgiving Day in November and ending on or around Martin Luther King, Jr. Day in January. Since FY 2018, the average cost of the Postal Service's air network per day during Peak Season increased from $8.7 million to $9.8 million (12.6 percent increase). The highest Peak Season average volume per day was [redacted] million pounds in FY 2019. Despite less volume during the FY 2020 Peak Season (November 28, 2019 – January 20, 2020), the cost per pound to transport mail by air continued to rise – from [redacted] in FY 2018 to [redacted] in FY 2020 (10.9 percent increase).

Peak Season air operations are centralized at Postal Service Headquarters and managed by Logistics, which includes the Air Network Modeling (modeling) and Air Transportation Operations (operations) teams. They are responsible for establishing air volume thresholds, assigning mail to air carriers, developing and maintaining air transportation models and systems, and monitoring air transportation costs and performance.

The Postal Service's air transportation during Peak Season primarily consisted of four networks: FedEx, UPS, commercial airline (CAIR) carriers, and peak charters. About six months in advance of Peak Season, the modeling team forecasts mail volume and runs an allocation model that produces the least costly allocation of mail amongst the carriers. Subsequently, the operations team requests the anticipated airlift in each market from the carriers. The modeling team identifies capacity issues by running the allocation model again with the updated capacity about a month in advance of needing the airlift. When there is more anticipated volume than available lift, the operations team contracts for charter flights.

Though the Postal Service is bound to the airlift it purchases, all planning of mail allocation up until this point is a projection. The originating and destinating air stops are created by the modeling team within two weeks of the operational day of flight and the assignment of the mail to specific carriers occurs on the operational day of flight. The operations team executes the plan, assigning the mail that materializes to the available carriers and is also responsible for mitigating any unforeseen changes, such as weather delays, to the plan.

While operations throughout the year follow a steady allocation of mail, operations during the Postal Service's Peak Season operate much differently. For example, some carriers change their pricing and volume minimums and maximums during Peak Season. Specifically, [redacted] is bound to provide an additional 20 percent increase in airlift and the Postal Service contracts for additional Peak Season-specific charters for high volume markets. Additionally, the Postal Service relaxes Priority Mail service standards by an extra day so more mail can travel on surface transportation instead of by air.

Our audit fieldwork started after the president of the U.S. issued the national emergency declaration concerning the novel coronavirus disease outbreak (COVID-19) on March 13, 2020. The results of this audit do not reflect any process and/or operational changes that may have occurred as a result of the pandemic.

Findings

The Postal Service has opportunities to reduce Peak Season air transportation operational costs and improve Peak Season planning.

We found the Postal Service did not accurately forecast Peak Season mail volume, which caused a variance between forecasted and actual mail volumes during FYs 2019 and 2020 Peak Seasons. Specifically, an average of 83 percent of the forecasted mail volumes per air lane (a pair of originating and destinating air stops), date, and mail class were inaccurate by 10 percent or more compared to the actual volume that materialized.

The forecast and subsequent allocation do not directly impact mail assignment because the operations team deploys mitigation methods to account for the actual volume materializing across the network. However, the decisions made

before mail assignment could lead to over- or under-buying necessary airlift. For example, if the modeling team under-forecasted mail volume then the operations team might need to request an impromptu charter.

When the mail volume was under the anticipated amount, the Postal Service could divert volume from CAIR to ensure the capacity minimums required under other carrier contracts were met. However, the actual impact cannot be calculated because the Postal Service does not maintain records of its reasoning for shifting volume from one carrier to another during mail assignment.

The modeling team did not accurately forecast Peak Season mail volume, in part, because it did not effectively communicate with the sales team to assess and project volume trends. The modeling team occasionally received operational information when new mailers were opening in a market, but the modeling team did not communicate with the sales team about anticipated market changes during FYs 2019 and 2020 Peak Seasons. When forecasted mail volume is inaccurate, the Postal Service is at risk of having excess or deficient airlift to support operations.

We also found that the modeling team did not adjust its planning to account for operational changes applicable to Peak Season. Specifically, the modeling team did not measure its use of the [redacted] network throughout the year to calculate the contractually obligated increase in available capacity during Peak Season. [redacted] is bound to provide 20 percent more than the Postal Service's average usage during non-peak season. In FYs 2019 and 2020 Peak Seasons, the Postal Service exceeded [redacted] Peak Season capacity on 55 percent of the days (33 of 60 days in [redacted] peak operational periods).

This puts the Postal Service at risk in two ways. First, although [redacted] agreed to provide capacity over the 20 percent increase when volumes exceeded that amount, it is not bound to provide this in the future. Thus, the Postal Service may be over-relying on [redacted] Second, the Postal Service paid for [redacted] capacity in a tiered pricing model based on volume, and the capacity over 120 percent flew in the highest tier. The highest tier was more expensive than the per-cubic-foot cost of using a [redacted] Planning for the additional [redacted] Peak Season capacity would assist the Postal Service in developing Peak Season strategies because factoring this calculation into the forecast would help identify air stops with deficient or excess capacity, the optimal capacity on [redacted] regular network, and a more cost-efficient plan for peak and [redacted].

Additionally, peak charters were not properly evaluated. Specifically, the operations team did not assess whether performance on peak charters were accurately penalized. The peak charters performance was assessed by a contractor, but the operations team did not analyze the data or compile it for historical trending. Consequently, the Postal Service is at risk of not receiving the services for which it contracted.

Finally, the volume of First-Class Packages – a subset of First-Class Mail – has increased. These packages are larger and lighter, by piece, than traditional letter mail trays, which decreases the density of First-Class Mail. The Postal Service uses assumptions about mail density to predict its mail allocation and changes to the mail mix affect the allocation's accuracy. Additionally, transporting these First-Class Packages puts additional pressure on the air network because they take up more space in air containers than letters. To alleviate additional pressure, the Postal Service would benefit from filing a proposal with the Postal Regulatory Commission temporarily reducing all First-Class Mail service standards during Peak Season, like it does for Priority Mail. In addition, during our exit conference, the Postal Service mentioned as a result of COVID-19, it extended service standards for First-Class Package services during the FY 2021 Peak Season. If First-Class Mail service standards were given an extra day, then 68.3 million pounds of mail could have been diverted from the air network to the surface network. We estimated the Postal Service incurred questioned costs and funds put to better use of about $2.1 million annually.

Recommendations

We recommended management:

- Develop and implement a joint strategy to assess and project market trends to forecast Peak Season volume by lane more accurately.
- Calculate and apply the 20 percent capacity clause in air network modeling.

- Develop standard work instructions to properly evaluate peak charter penalties and analyze performance data for historical trending.
- Determine the feasibility of reducing all First-Class Mail service standards during Peak Season and if warranted, file a proposal with the Postal Regulatory Commission.

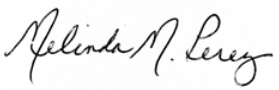
Transmittal Letter

OFFICE OF INSPECTOR GENERAL
UNITED STATES POSTAL SERVICE

February 25, 2021

MEMORANDUM FOR: ROBERT CINTRON
VICE PRESIDENT, LOGISTICS

CHRISTINE BAILEY
ACTING VICE PRESIDENT, SALES



FROM: Melinda Perez
Deputy Assistant Inspector General
for Mission Operations

SUBJECT: Audit Report – Peak Season Air Transportation
(Report Number 20-215-R21)

This report presents the results of our audit of the Peak Season Air Transportation.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Carmen Cook, Director, Transportation, or me at 703-248-2100.

Attachment

cc: Postmaster General
Corporate Audit Response Management

Results

Introduction/Objective

This report presents the results of our self-initiated audit of Peak Season Air Transportation (Project Number 20-215). Our objective was to assess the U.S. Postal Service's efforts to reduce Peak Season air transportation operational costs while maintaining service during fiscal years (FY) 2019 and 2020. See Appendix A for additional information about this audit.

Our audit fieldwork started after the President of the United States issued the national emergency declaration concerning the novel coronavirus disease outbreak (COVID-19) on March 13, 2020. The results of this audit do not reflect any process and/or operational changes that may have occurred as a result of the pandemic.

Background

The Postal Service's Peak Season lasts about eight weeks, starting on or around Thanksgiving Day in November and ending on or around Martin Luther King, Jr. Day in January. The Postal Service operates during Peak Season differently than it does during the rest of the year. During Peak Season, the Postal Service must plan to handle significant additional mail and package volumes. To get mail and packages to their destinations on time, the Postal Service relies heavily on its air transportation network.

Since FY 2018, the average cost of the Postal Service's air network per day during Peak Season increased from $8.7 million to $9.8 million (a 12.6 percent increase). The highest Peak Season average volume per day was [redacted] million pounds in FY 2019 (see Table 1). Despite less volume in FY 2020, the cost per pound to transport mail by air during Peak Season continued to rise – from [redacted] in FY 2018 to [redacted] in FY 2020 (a 10.9 percent increase).

Table 1. FYs 2018 - 2020 Peak Air Networks

Fiscal Year	Average Cost Per Day	Average Volume (in Pounds) Per Day	Average Cost Per Pound
2018	$8,740,676	[redacted]	[redacted]
2019	$9,466,921	[redacted]	[redacted]
2020	$9,841,909	[redacted]	[redacted]

Source: U.S. Postal Service Office of Inspector General (OIG) data analysis of Enterprise Data Warehouse (EDW) and the Financial Performance Report.

> *"Since FY 2018, the average cost of the Postal Service's air network per day during Peak Season increased from $8.7 million to $9.8 million (a 12.6 percent increase)."*

Peak Season air network operations are centralized at Postal Service Headquarters and managed by Logistics, which includes the Air Network Modeling (modeling) and Air Transportation Operations (operations) teams. They are responsible for establishing air volume thresholds, assigning mail to air carriers, developing and maintaining air transportation models and systems, and monitoring air transportation costs and performance. The Postal Service's air transportation during Peak Season primarily consisted of four networks:

- [redacted] – moves the majority of the mail that flies during Peak Season. The Postal Service negotiates with the carrier for lift in a multi-step process. During the Peak Season operating period, the amount of available airlift that [redacted] offers is higher.[1] The Postal Service and [redacted] agree to Peak Season capacity about six months in advance. The

1 [redacted] is bound to provide an additional 20 percent capacity of the average planned capacity of the non-peak operating periods during Peak Season.

Postal Service also hires [redacted] flights, wherein it rents the entire plane when it needs additional airlift in a specific air lane.[2] [redacted] complete point-to-point mail transport. These [redacted] can be either planned[3] – when the Postal Service knows it will have more volume than the agreed upon capacity in an air lane – or impromptu[4] – when more mail materializes than expected. The Postal Service used 13 [redacted] in the FY 2019 Peak Season and 105 in the FY 2020 Peak Season (a 708 percent difference).

- [redacted] restricts the Postal Service's use of its air network during Peak Season because it uses most of its network to carry its own product. The Postal Service does not negotiate with [redacted] for airlift; instead, it accepts all of the capacity provided. Specifically, [redacted] carries only [redacted] percent of mail volume during Peak Season and [redacted] percent during Non-Peak Season. Additionally, [redacted] raises their price-per-pound from a non-Peak Season range of [redacted], to a Peak Season range of [redacted]
- Commercial airline (CAIR) carriers use available space on existing commercial passenger flights for six airlines and are generally the least expensive air transport option. CAIR provides airlift as available in each air lane, and the Postal Service chooses which air lanes to use. However, there are federal restrictions on shipping packages over 16 ounces on CAIR. In addition, CAIR availability may decrease during Peak Season, as mail is loaded only after people and luggage.
- Peak charter companies rent all or part of a private plane for mail delivery in high-volume markets.[5] The Postal Service uses charter flights in two ways during Peak Season: as regularly planned charters that fly on a normal schedule throughout the year to transport mail and as Peak Season-specific charters. Regularly planned charters fly on regularly scheduled routes, while Peak Season-specific charters run round trips for a specific air lane on a specific day. The Postal Service contracts with [redacted] for peak charters air transportation in specific air lanes. [redacted] only flies Postal Service volume during Peak Season, while [redacted] are used throughout the year. During FYs 2019 and 2020, the Postal Service used 119 and 91 Peak Season-specific charters, respectively.

Each of the four networks have slightly differently defined Peak Season operating periods.[6] In addition, because the holidays defining Peak Season begin and end on different calendar dates each year, Peak Season's length fluctuates. For example, Peak Season was abnormally long, at 61 days, in FY 2019, but it lasted 54 days in FY 2018 and FY 2020.

About six months in advance of Peak Season, the modeling team forecasts mail volume and runs an allocation model that produces the least costly allocation of mail amongst the carriers. Subsequently, the operations team requests the anticipated airlift in each market from the carriers. The modeling team identifies capacity issues by running the allocation model again with the updated capacity about a month in advance of needing the airlift. When there is more anticipated volume than available lift, the operations team contracts for [redacted] or peak charter flights.

Though the Postal Service is bound to the airlift its purchases, all planning of mail allocation up until this point is a projection. The originating and destinating air stops are created by the modeling team within two weeks of the operational day of flight and the assignment of the mail to specific carriers occurs on the operational day of flight.

> *"About six months in advance of Peak Season, the modeling team forecasts mail volume and runs an allocation model that produces the least costly allocation of mail amongst the carriers."*

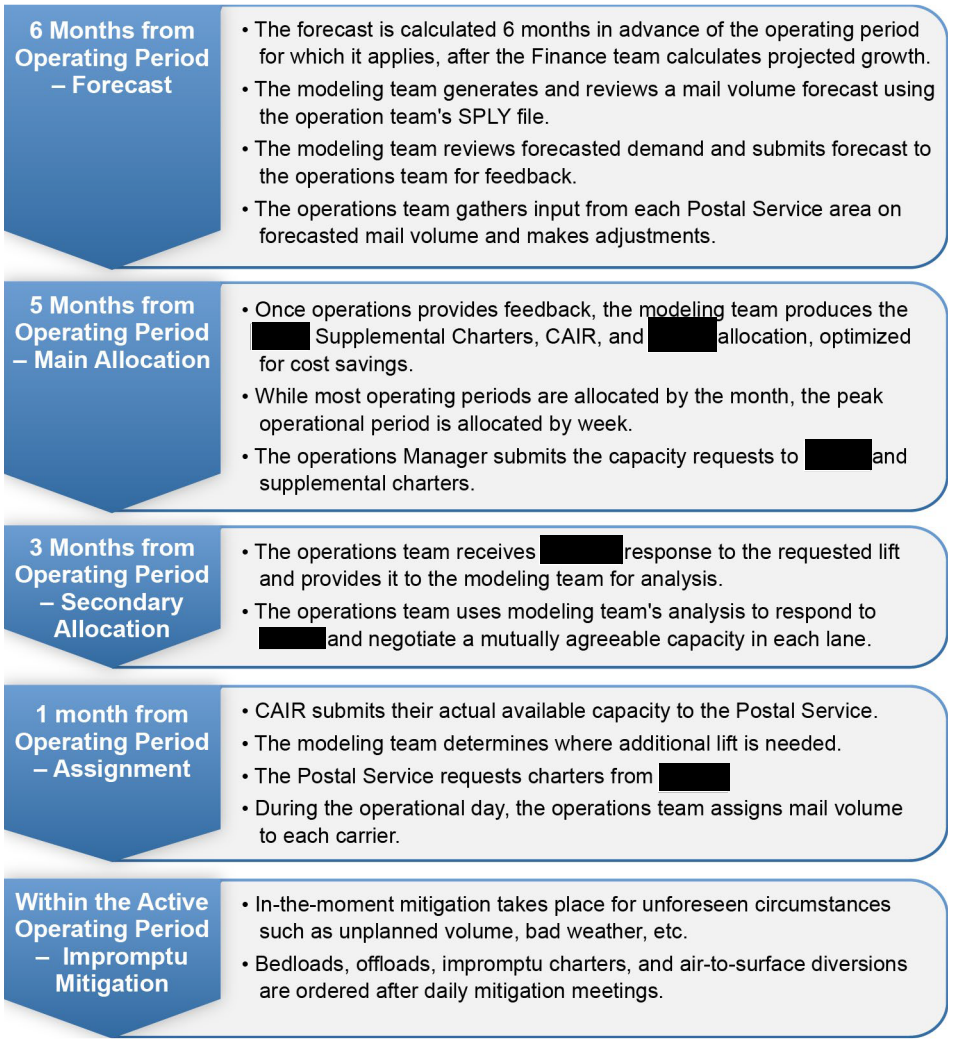
2 An air lane is the combination of an origination and destination air stop.
3 The Postal service hires these charters after it negotiates the regularly contracted airlift with [redacted], about two months before the operating period begins.
4 [redacted] impromptu charter flights are requested between one week to a day in advance as part of the mail mitigation process.
5 The Postal Service plans peak charters during their initial allocation process, about five months before the operating period begins.
6 An operating period consists of about a four-week period that roughly relates to each calendar month. The exact dates for each operating period vary for each air carrier.

The operations team executes the plan, assigning the mail that materializes to the available carriers, and is responsible for mitigating any unforeseen changes, such as weather delays, to the plan. The Postal Service relies on three primary mitigation techniques for excess air network volume: bedload trucks (moving mail by truck to a contractor hub for sortation), offloads (moving mail by truck to a region with available airlift), or impromptu charters (moving unanticipated volume by plane). See Figure 1 for a more detailed explanation of the plan-to-implementation schedule.

"The Postal Service relies on three primary mitigation techniques for excess air network volume: bedload trucks (moving mail by truck to a contractor hub for sortation), offloads (moving mail by truck to a region with available airlift), or impromptu charters (moving unanticipated volume by plane)."

The modeling team created its air allocation model to allocate mail to each of the available networks. The Postal Service plans allocations six months in advance once it calculates projected growth in mail volume in its forecast. The forecast is the input for the allocation model, which is based on same period last year (SPLY) data. The Postal Service generally uses the same model as it does the rest of the year to allocate mail volume across its network during Peak Season. The only difference is that instead of doing allocations for an entire operating period, the Postal Service uses weekly allocation plans during Peak Season because volume heavily fluctuates from week to week.

Figure 1. Air Planning Process Timeline



Source: Interviews with Postal Service officials and documents from the modeling team.

The Postal Service aims to allocate mail to carriers in the following order: [redacted] first, as it provides limited airlift; then to peak charters, as the Postal Service is renting all or part of a private plane; next to CAIR, as it is the least expensive; and lastly to [redacted]. However, [redacted] has the most available airlift, therefore, it flies the majority of the Postal Service's mail volume. [redacted], CAIR, and peak charters supplement and provide more economical opportunities based on carrier availability in specific air lanes by product type and seasonality.

Not only do contract stipulations with carriers change during Peak Season, but mail volume does as well. In December 2019, Priority Mail volume spiked to [redacted] million pounds during the third week of the month. This volume is significantly higher than the average [redacted] million pounds per week that materialized during the rest of December. Since 2014, the Postal Service has relaxed Priority Mail service standards to give an extra day for transportation during Peak Season so more can travel on surface transportation instead of by air.

Findings Summary

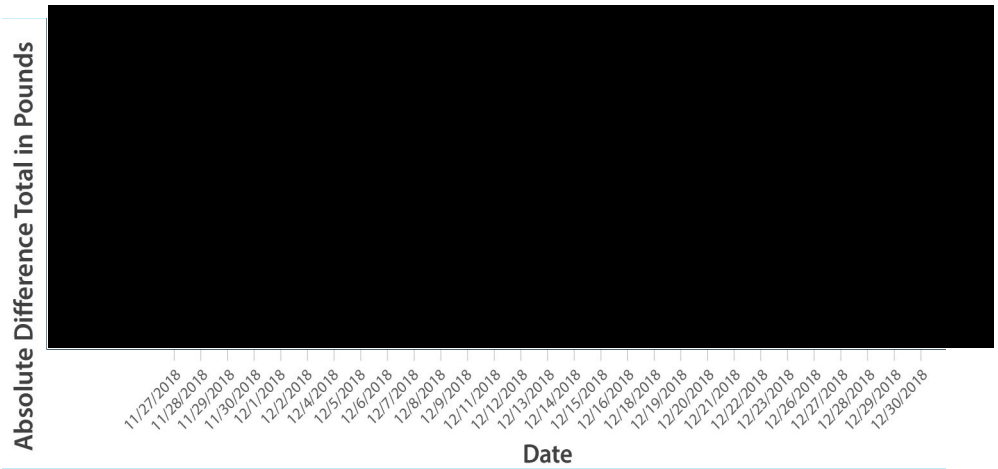
The Postal Service has opportunities to reduce Peak Season air transportation operational costs and improve Peak Season planning. Specifically, the Postal Service would benefit from increasing the accuracy of its forecasting and allocation process, developing standard work instructions for Peak Season, and determining the impact of relaxing service standards on First-Class Mail.

Finding #1: Variance Between Forecasted and Actual Mail Volume

We found the Postal Service did not accurately forecast Peak Season mail volume, which caused a variance between forecasted and actual mail volumes during the FY 2019 and 2020 Peak Seasons.

The modeling team created the Peak Season forecast six months in advance using projected growth rates and SPLY data. The forecast is used to run the allocation model and request airlift from carriers. Our audit found that an average of 83 percent of the FYs 2019 and 2020 forecasted mail volumes per air lane, date, and mail class were inaccurate by 10 percent or more compared to the actual volume that materialized (see Figure 2 and Figure 3). The forecast and subsequent allocation do not directly impact week-of mail assignment because the operations team deploys mitigation methods to account for the actual volume materializing across the network. However, decisions made before mail assignment could lead to over- or under-buying of necessary airlift. The inaccuracies in FYs 2019 and 2020 forecasted mail volumes both over- and under-predicted the mail that would materialize.

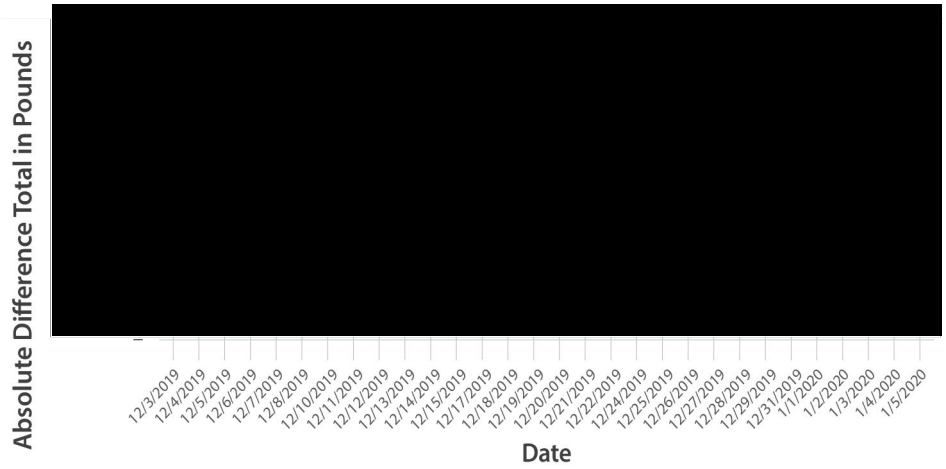
Figure 2. Absolute Difference between Forecasted and Actual Mail Volumes in Peak Season FY 2019



Note: This table shows the Peak Season [redacted] operational period in FY 2019, from November 27 to December 30, 2018.
Source: OIG analysis of data provided by the Postal Service's modeling team.

The forecast was off by a total of 77.5 million pounds in FY 2019 Peak Season and by 83.2 million pounds in FY 2020 Peak Season (a 7.4 percent increase over FY 2019). The average inaccurately forecasted number of pounds per day in FY 2019 Peak Season was 2.6 million pounds and 2.8 million pounds in FY 2020 (a 7.7 percent increase).

Figure 3. Absolute Difference Between Forecasted and Actual Mail Volumes in Peak Season FY 2020



Note: This table shows the Peak Season [redacted] operational period in FY 2020, from December 3, 2019 to January 5, 2020.
Source: OIG analysis of data provided by the Postal Service's modeling team.

These forecasting inaccuracies affected air operations and required mitigation. For example, if the modeling team under-forecasted mail volume then the operations team might need to request an impromptu [redacted].

When the mail volume was under the anticipated amount, the Postal Service could divert volume from CAIR to ensure it reached the capacity minimums required under other carrier contracts.[7] However, the actual impact cannot be calculated because the Postal Service does not maintain records of its reasoning for shifting volume from one carrier to another during mail assignment. Shifts could be due to inaccurate mail volume estimations, but shifts could also occur due to mechanical problems, bad weather, or service disruptions.

While these are just two examples, this type of misallocation happened daily in markets across the country, forcing the operations team to mitigate. During FY 2019 and 2020 Peak Seasons, the modeling team incorrectly forecasted 160.7 million pounds of mail, with associated transportation costs valued at $250.7 million. To put this in perspective, the total amount of First-Class Mail (FCM) and Priority Mail weight that flew during both Peak Seasons was 420.2 million pounds. If the Postal Service continues to forecast the same way, it will be exposed to the risk of incorrectly forecasting mail volume moving forward. This is a risk – but not necessarily an actual loss – because after the modeling team's allocation process, the operations team has the opportunity to mitigate for inaccuracy before mail is assigned to the carriers.

The modeling team did not accurately forecast Peak Season mail volume, in part, because they did not work with the sales team to receive available information regarding expected mail volume changes in various markets. Having accurate and complete information from the sales team would have helped the modeling team with Peak Season forecasting and the operations team's ability to execute the air transportation plan more efficiently, which is critical to the Postal Service's success. The modeling team occasionally received operational information when new mailers were opening in a market, but the modeling team did not communicate with the sales team about anticipated market changes during FYs 2019 and 2020 Peak Seasons. Therefore, the modeling team was only relying on projected growth and SPLY data to forecast. It did not compile and analyze market data, such as anticipated changes in mailer volume or expected high volume days for specific retailers, like Amazon's Prime Day. Current market information would have given the team valuable insight to make a more accurate forecast. When forecasted mail volume is inaccurate, the Postal Service is forced to mitigate because of excess or deficient airlift throughout the country.

> ***"During FY 2019 and 2020 Peak Seasons, the modeling team incorrectly forecasted 160.7 million pounds of mail, with associated transportation costs valued at $250.7 million."***

7 The Postal Service does not maintain a record of when it diverts mail from CAIR to meet minimums on other carriers.

Recommendation #1
We recommend the **Vice President, Logistics,** in coordination with the **Vice President, Sales,** develop and implement a joint strategy to assess and project market trends to forecast Peak Season volume by lane more accurately.

Finding #2: Air Allocation Planning

We found that the modeling team did not adjust its planning to account for operational changes applicable to Peak Season. Specifically, the modeling team did not measure its use of the [redacted] network throughout the year to calculate the contractually obligated increase in available capacity during Peak Season. [redacted] is bound to provide 20 percent more than the Postal Service's average usage during non-Peak Season.

The modeling team created its air allocation model to allocate mail to the available carriers. Specifically, the modeling team's goal was to allocate available demand of each mail class, in each air stop, to available carriers in such a way that cost and/or performance is optimized. According to the Postal Service, during FYs 2019 and 2020, the allocation model was only optimized for cost. The model ran consistently throughout the year and there was no change during Peak Season except that the modeling team ran the model to project mail for each week, rather than for the whole operating period. Given the contractual and operational anomalies during Peak Season, this could hinder the Postal Service's ability to plan accurately.

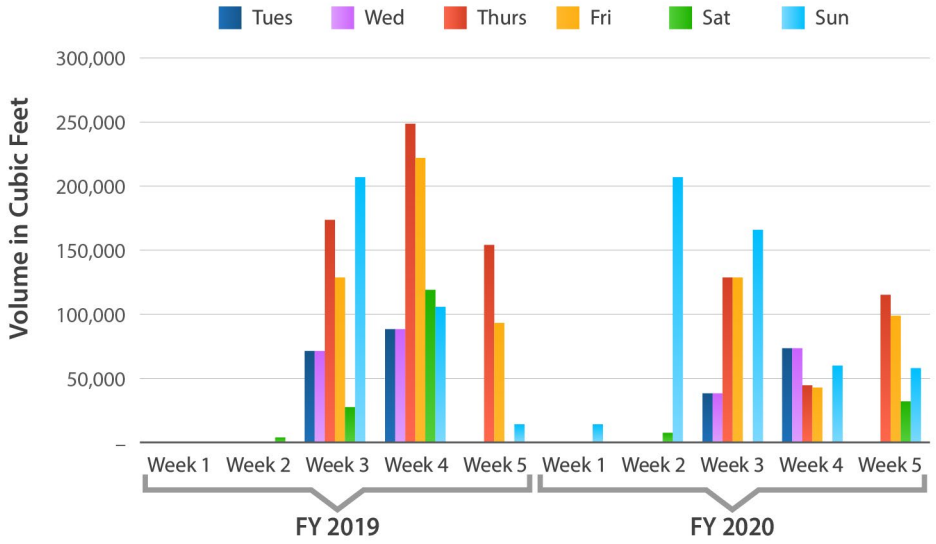
The [redacted] contract is written so that the Postal Service can plan capacity throughout the year to ensure [redacted] will provide the needed capacity during Peak Season. The contract sets the obligated airlift during the peak operating period equal to 120 percent of the average airlift used during the rest of the year. However, this is not the way the Postal Service plans its [redacted] usage. Instead, the Postal Service asks for needed capacity throughout the year, including Peak Season, and mitigates when [redacted] does not agree to the needed airlift. The modeling team did not measure its use of the [redacted] network throughout the year to calculate this 20 percent increase in [redacted] capacity during its peak operating period. This calculation could help determine where airlift is deficient or where the Postal Service has excess airlift during Peak Season.

"In FY 2019 and 2020 Peak Seasons, the Postal Service exceeded [redacted] contractually obligated capacity 55 percent of the days (33 of 60 days) in [redacted] peak operational periods."

The modeling and operations teams worked together to predict the needed [redacted] capacity – using a combination of the forecast from the modeling team and input gathered by the operations team from each Postal Service area – and the Postal Service requested this amount in its negotiation with [redacted] In FY 2019 and 2020 Peak Seasons, the Postal Service exceeded [redacted] contractually obligated capacity 55 percent of the days (33 of 60 days) in [redacted] peak operational periods. Specifically, the amount of volume over 120 percent varied by day, but was up to 166 percent of non-Peak Season volume. When the Postal Service used over 120 percent capacity, the amount over ranged from 2,635 cubic feet to 248,654 cubic feet.

This puts the Postal Service at risk in two ways. First, although [redacted] agreed to provide capacity over the 20 percent increase when volumes exceeded that amount, it is not bound to provide this in the future. Thus, the Postal Service runs the risk of over-relying on [redacted] Specifically, [redacted] is only allocated mail when the other carriers are full. If [redacted] opted to only exercise their contract commitment of 120 percent capacity during FY 2019 and 2020 Peak Seasons, the Postal Service would not have been able to transport an additional [redacted] cubic feet and [redacted] cubic feet by air, respectively (see Figure 4).

Figure 4. Mail Volume at Risk during Peak Operational Periods, FY 2019 and FY 2020



Source: OIG data analysis of [redacted] Resubmission Post Givebacks used in allocation model.

Second, the Postal Service paid for [redacted] capacity in a tiered pricing model based on volume, and the capacity over 120 percent flew in the highest tier. The highest tier was more expensive than the per-cubic-foot cost of using a [redacted]. Planning for the additional [redacted] Peak Season capacity would assist the Postal Service in developing Peak Season strategies because factoring this calculation into the forecast would help identify air stops with deficient or excess capacity, the optimal capacity on [redacted] regular network, and a more cost-efficient plan for peak and [redacted].

Calculating and planning for the additional 20 percent capacity would assist the Postal Service in developing Peak Season strategies. Factoring this calculation into the forecast would help identify air stops with deficient or excess capacity, the optimal capacity on [redacted] regular network, and a more cost-efficient plan for peak and [redacted] Considering [redacted] tiered pricing model and the risks associated with over-relying on a supplier, the Postal Service put $2.8 million at risk in FY 2019 and 2020 Peak Seasons.[8]

Recommendation #2
We recommend the **Vice President, Logistics,** calculate and apply the 20 percent capacity clause in air network modeling.

Finding #3: Assessing Penalties

Each air carrier has different service performance goals and incentives to meet those goals, including penalties when goals are not met. During the FY 2019 and 2020 Peak Seasons, CAIR did not meet service performance goals and the Postal Service assessed penalties of $572,048 and $792,409 (a 38.5 percent increase), respectively. [redacted] met all service performance goals in FYs 2019 and 2020 Peak Seasons. For [redacted], the performance reconciliation[9] did not occur because the Postal Service cannot penalize [redacted] for late arrivals in operating periods where it uses [redacted].[10]

Peak charters were not properly evaluated. A contractor assessed peak charter performance, but the operations team did not analyze this data or compile it for historical trending. The Postal Service used a third party to calculate any applicable penalties or payments for peak charters. The Postal Service used this information to pay the peak charter

> *"Considering [redacted] tiered pricing model and the risks associated with over-relying on a supplier, the Postal Service put $2.8 million at risk in FY 2019 and 2020 Peak Seasons."*

8 This volume was not an actual loss because [redacted] did provide the requested volume over the 120 percent in both years. However, [redacted] is able to change this practice going forward without warning.
9 The Postal Service's contract with [redacted] allows for monthly performance meetings, called reconciliation, between Supply Management, Network Operations, and [redacted] to discuss data accuracy and on-time performance.
10 The OIG completed more thorough reviews of the charter process, see *U.S. Postal Service Transportation Network Operations and Cost Optimization Practices* (Report Number 19XG002NL000-R20, issued November 7, 2019), *Management Alert – Charter Flights* (Report Number NL-MT-19-002, issued September 5, 2019), and *Air Cargo Contract Compliance* (Report Number 20-127-R20, issued September 30, 2020).

carriers. The system used to tally penalties and payments did not provide a way to easily see the reason for credits or deductions. Specifically, the system did not differentiate penalties for poor performance from other payment reductions, like fuel adjustments.[11] Additionally, the operations team did not maintain performance reports for Peak Season-specific or year-round charters to assess whether certain flights or carriers were consistently delayed. This data would help the Postal Service in determining whether to continue using the carrier or contract with the carrier for additional lift in other markets.

This occurred because there were no guidelines for how to properly evaluate peak charter penalties. Consistency in practices helps employees understand their roles and responsibilities, which would improve the quality of the Postal Service's transportation. Without standard work instructions for air transportation during Peak Season, the Postal Service is at risk of not receiving the services for which it contracted.

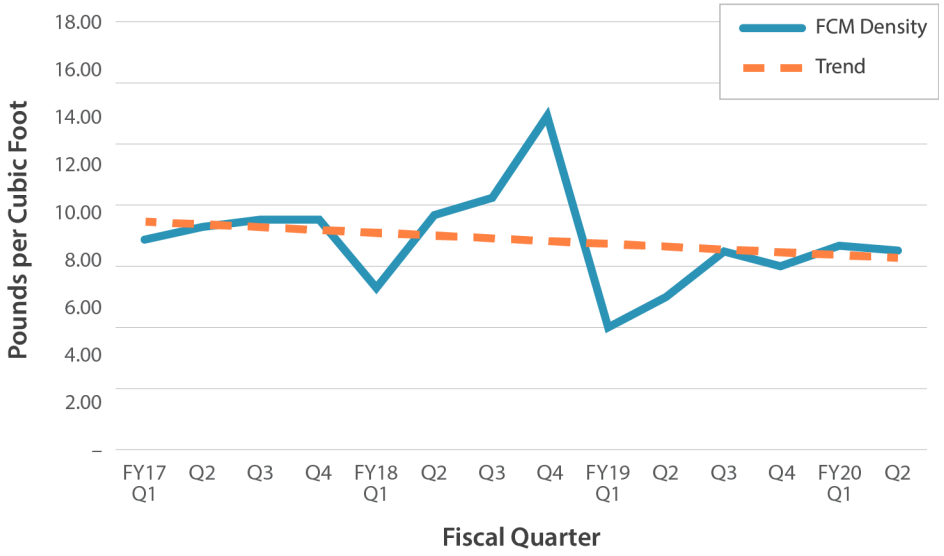
Recommendation #3

We recommend the **Vice President, Logistics,** develop standard work instructions to properly evaluate peak charter penalties and analyze performance data for historical trending.

Finding #4: Relaxing First-Class Mail Service Standards During Peak Season

Opportunities exist for the Postal Service to reduce Peak Season air transportation operational costs while maintaining service. The volume of First-Class Packages – a subset of FCM – has increased. These packages are larger and lighter, by piece, than traditional letter mail trays, which decreases the density of FCM (see Figure 5). The density of mail was generally at the lowest throughout the year during Peak Season, which falls primarily in Quarter (Q) 1 of each fiscal year. Overall, the density trend decreased from Q1, FY 2017, to Q2, FY 2020.

Figure 5. Trend Analysis of FCM Density from Q1, FY 2017 to Q2, FY 2020



Source: Transportation Cost Systems (TRACS).

The Postal Service uses assumptions about the density of FCM and Priority Mail to predict efficient mail allocation to carriers across the air network.[12] Consequently, an increase in First-Class Packages decreases the density of FCM. Additionally, transporting these First-Class Packages puts additional pressure on the air network because they take up more space in air containers than traditional letters.

The Postal Service has not done research to determine the transportation impact of reducing FCM service standards during Peak Season. While existing service standards for FCM is three to five days, we completed a nationally representative survey in 2019[13] that demonstrated 71 percent of respondents expected their sent mail to arrive in seven days.

11 Future audit work may be completed in this area.
12 On a national scale, FCM is expected to have an average density of 10.5 pounds per cubic feet (Lb/Ft3). For Priority Mail 5.8 Lb/Ft3 is the average density assumption.
13 The OIG conducted market research (RISC-WP-19-009) in 2019. The survey participants were about equal parts rural and non-rural. The rural areas are defined using Rural Urban Commuting Area (RUCA) codes developed by the U.S. Department of Agriculture. RUCA codes classify U.S. Census tracts using measures of population density, urbanization, and daily commuting.

Furthermore, during the FY 2019 and 2020 Peak Seasons, the Postal Service missed most of its service performance targets for mail products transported by air. Specifically, the Postal Service did not meet service performance targets for the FCM and First-Class Package 3-5 Day service standards. For Priority Mail flown, the Postal Service did not meet the target in FY 2019 and met the target four of nine Peak Season weeks (weeks 3, 4, 5, and 7) in FY 2020. The Postal Service attributes its improved performance for Priority Mail to increased available airlift over the previous year. Specifically, the use of additional [redacted] during Peak Season increased from 13 [redacted] in FY 2019 to 105 in FY 2020 (708 percent difference).

"If all FCM's service standards were given an extra day, then 68.3 million pounds of mail could have been diverted from the air network to the surface network during the FY 2019 and 2020 Peak Seasons."

The Postal Service may benefit from filing a proposal with the Postal Regulatory Commission temporarily reducing FCM service standards during Peak Season, like it does for Priority Mail.[14] In addition, during our exit conference, the Postal Service mentioned as a result of COVID-19, it extended service standards for First-Class Package services during the FY 2021 Peak Season. If all FCM's service standards were given an extra day, then 68.3 million pounds of mail could have been diverted from the air network to the surface network during the FY 2019 and 2020 Peak Seasons. We estimated the Postal Service would have saved about $4.4 million in FYs 2019 and 2020, and could save $3.8 million in FYs 2021 and 2022, with reduced service standards.

Recommendation #4

We recommend the **Vice President, Logistics,** determine the feasibility of reducing all First-Class Mail service standards during Peak Season and, if warranted, file a proposal with the Postal Regulatory Commission.

Management's Comments

Management agreed with recommendations 2 and 4 and disagreed with recommendations 1 and 3; however, they provided an alternative plan of action to address recommendation 3. They also expressed that they do not agree with all of the report's findings of fact and, in subsequent correspondence, disagreed with the monetary impact but did not provide formal justification. See Appendix B for management's official comments in their entirety.

Regarding recommendation 1, management disagreed and stated that the data are not available. Specifically, the sales team does not have accurate customer and market forecasts by lane, product, or day six months in advance.

Regarding recommendation 2, management agreed and stated that they recognize the value in evaluating all markets to gain additional insight and identify potential mitigation needs. They further stated that they will evaluate the forecasted Peak Season demand against the prior eleven months of operating plans to determine if any particular market is at risk, with the goal of impacting FY 2022 Peak Season operations. The target implementation date is June 1, 2021.

Regarding recommendation 3, management disagreed but provided an alternative plan of action. They stated that although the performance monitoring process is not documented as standard work instructions specifically for Peak Season, the application of the performance measurement monitoring does occur continuously throughout the year. They further stated that they will document the current process as standard work instructions. The target implementation date is April 1, 2021.

14 Priority Mail service standards are increased by 35 hours during the peak operational period to account for the mail volume increase. Thirty-five hours is considered one day in service standards according to the Peak Mode Matrix.

Regarding recommendation 4, management agreed and stated that they already implemented this strategy by reducing the service standard of First-Class Package Services during Peak Season FY 2021. However, in subsequent correspondence, management stated that they needed to review all aspects of this recommendation to fully understand its intent and provided a target implementation date of March 1, 2021.

Evaluation of Management's Comments

We consider management's comments to be responsive to recommendations 2 and 3 and the corrective actions should resolve the issues identified in the report. We consider management's comments nonresponsive to recommendations 1 and 4.

Regarding recommendation 1, while we agree that obtaining accurate data six months in advance may be challenging, we believe increased communications during the forecasting process could be beneficial. Without improving communication or taking an alternative action, the Postal Service will be unable to improve the accuracy of the forecast and will continue deploying mitigation methods to account for the actual volume materializing across the network. Therefore, it is important for the Postal Service to have an accurate forecast to prevent the over- or under- buying of airlift. We view the disagreement on recommendation 1 as unresolved and will work with management through the audit resolution process.

Regarding recommendation 4, while management reduced the service standard of First-Class Package Services during Peak Season FY 2021, we continue to believe a feasibility study to determine the cost savings opportunity of reducing all First-Class Mail service standards during Peak Season would provide useful information. We consider management's comments unresponsive to recommendation 4 and will work with management through the audit resolution process.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. Recommendations should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendations can be closed.

Appendices

Click on the appendix title below to navigate to the section content.

Appendix A: Additional Information

Scope and Methodology

The scope of this audit was Peak Season, air network management, service performance, costs, and volume for the FedEx, UPS, CAIR, and peak charters in FYs 2019 and 2020.

To accomplish our objective, we examined the Postal Service's decision-making tools that determine which carrier will provide airlift for Peak Season and assessed how the Postal Service incentivizes carrier performance. We also evaluated whether mail transported by air could be transported by surface transportation and still meet service standards.

To accomplish our objective, we:

- Reviewed Postal Service Peak Season air transportation planning, strategies, policies, procedures, and responsibilities.
- Reviewed Postal Service operations that impacted the air network during Peak Season, including the use of surface transportation diversions.
- Interviewed Postal Service officials on Peak Season air planning, strategies, challenges, and results.
- Reviewed and analyzed prior OIG reports.
- Collected and analyzed Postal Service Peak Season air data for FYs 2019 and 2020.
- Reviewed all air contracts for the four primary networks responsible for transporting Peak Season mail by air for price per pound, contractual minimums and maximums, and service performance.
- Determined the logic used for mail allocation among the four carrier networks.
- Analyzed data from the Informed Visibility, EDW, and Contract Authoring and Management System (CAMS).

We conducted this performance audit from April 2020 through February 2021 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. Those standards require that we plan and perform the audit to obtain enough, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We discussed our observations and conclusions with management on January 7, 2021 and included their comments where appropriate.

We assessed the data reliability of the Postal Service's Informed Visibility, EDW, and CAMS data by interviewing knowledgeable agency officials, reviewing related documentation, and testing for completeness by recalculating the data and comparing it to other related data. We determined that the data were sufficiently reliable for the purposes of this report.

Prior Audit Coverage

Report Title	Objective	Report Number	Final Report Date	Monetary Impact (in millions)
Air Cargo Contract Compliance	Assess contractual compliance and oversight of the Postal Service's air transportation agreement with (aviation supplier or supplier). We did not review operational aspects of these provisions, such as mail transportation efficiency.	20-127-R20	9/30/2020	None
Transportation Network Optimization and Service Performance	Assess opportunities to optimize the Postal Service transportation network and meet service performance goals.	20-144-R20	6/5/2020	$199.6
U.S. Postal Service Transportation Network Operations and Cost Optimization Practices	Analyze practices and cost trends and identify risk areas in the Postal Service transportation network.	19XG002NL000-R20	11/7/2019	$31
Management Alert – Charter Flights	Provide Postal Service officials immediate notification of the issues identified during our ongoing audit.	NL-MT-19-002	9/5/2019	None
Management Alert - Commercial Air Contractor Scanning	Determine if commercial air contractors are properly scanning mail arriving at airports and making mail available to the Postal Service timely.	NL-MT-19-001	7/19/2019	None

Appendix B: Management's Comments

UNITED STATES POSTAL SERVICE

February 16, 2021

JOE WOLSKI
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Peak Season Air Transportation
(Project Number 20-215 Draft)

Thank you for providing the Postal Service with an opportunity to review and comment on the recommendation contained in the draft audit report, Peak Season Air Transportation.

Management does not agree with several of the recommendations contained in the report or all of the report's findings of fact. Management will work to address the issues raised in the audit and agreed to below.

OIG Recommendation #1:
The Vice President, Logistics, in coordination with the Vice President, Sales, develop and implement a joint strategy to assess and project market trends to forecast Peak Season volume by lane more accurately.

Management Response/Action Plan:
Management does not agree with this recommendation. The audit indicates that volumes were not forecasted accurately, in part, due to not working with the sales team to receive available information regarding expected mail volume changes in various markets. The sales team does not have accurate customer and market forecasts by lane, by product, by day, particularly 6-months in advance. The data is not available to meet this recommendation.

Target Implementation Date:
Not implemented

Responsible Officials:
Director, Logistics Modeling and Analytics

OIG Recommendation #2:
The Vice President, Logistics, calculate and apply the 20 percent capacity clause in air network modeling.

Management Response/Action Plan:
Management agrees with this recommendation. Air Network Modeling will evaluate the forecasted Peak demand against the prior eleven months of operating plans to determine if any particular market is at risk. This process is currently being performed for the largest markets but we recognize the value in evaluating all markets to gain additional insight and potential mitigation needs. The implementation will occur in the FY21 planning process (June 2021) for FY22 Peak operations.

Target Implementation Date:
June 1, 2021

Responsible Officials:
Director, Logistics Modeling and Analytics

OIG Recommendation #3:
We recommend the Vice President, Logistics, develop standard work instructions to properly evaluate peak charter penalties and analyze performance data for historical trending.

Management Response/Action Plan:
Management disagrees with this recommendation. Although the performance monitoring process is not documented as standard work specifically for Peak, the application of the performance measurement monitoring does occur continuously throughout the year. Current contract requirements are in place and require all mail to be delivered on or before the required delivery time. Daily tracking of on time flight arrival is monitored and performance is documented for historical trending. We will document the current process as Standard Work Instructions by the date listed below.

Target Implementation Date:
April 1, 2021

Responsible Official:
Manager, Air Transportation Operations

OIG Recommendation #4:
Determine the feasibility of reducing all First-Class Mail service standards during Peak Season and if warranted, file a proposal with the Postal Regulatory Commission.

Management Response/Action Plan:
Management agrees with the recommendation. The Postal Service has already implemented this strategy and reduced the service standard of First-Class Package Services during FY21 Peak.

Target Implementation Date:
Completed

Responsible Official:
Director, Logistics Modeling and Analytics

Robert Cintron
Vice President
Logistics

Christine Bailey
Acting Vice President
Sales

cc: Manager, Corporate Audit Response Management

OFFICE OF
INSPECTOR GENERAL
UNITED STATES POSTAL SERVICE

Contact us via our Hotline and FOIA forms.
Follow us on social networks.
Stay informed.

1735 North Lynn Street
Arlington, VA 22209-2020
(703) 248-2100

For media inquiries, contact Agapi Doulaveris
Telephone: 703-248-2286
adoulaveris@uspsoig.gov