

USPS-T-5

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

SIX-DAY TO FIVE-DAY CARRIER DELIVERY
AND RELATED SERVICE CHANGES, 2010

Docket No. N2010-1

**DIRECT TESTIMONY OF
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ON BEHALF OF THE
UNITED STATES POSTAL SERVICE**

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1 Autobiographical Sketch

2 My name is Luke T. Grossmann. I am the Manager of Network Analytics
3 currently on assignment to the Logistics group at United States Postal Service
4 Headquarters. My office is responsible for network design, planning and modeling.

5 I have been with the Postal Service since 2005 in various capacities including
6 Network Modeling Specialist, Transportation Specialist and now my current title.
7 Prior to joining the Postal Service, I consulted in the private sector with four years of
8 experience managing complex information systems and designing supply chain
9 solutions. I have management consulting experience in the areas of information
10 systems, supply chain management, and analytics primarily within the government
11 sector.

12 I received a Bachelor of Science degree in Business Administration with a
13 concentration in Finance from the Kogod School of Business, American University,
14 Washington, DC. I also received a Bachelor of Arts degree in Economics with a
15 minor in Statistics from the College of Arts and Sciences, American University,
16 Washington, DC. I also received a Masters in Business Administration from the
17 Robert H. Smith School of Business, University of Maryland, College Park,
18 Maryland.

1 I. Purpose of Testimony

2

3 The purpose of my testimony is to describe, from a transportation perspective,
4 how the realignment in number of delivery days as proposed by the Postal Service
5 could affect the transportation of mail. Specifically, I will describe the role of
6 transportation in the handling of mail and how the realignment of the scope of local
7 and network delivery standards will change transportation requirements. The
8 proposed realignment is described in the testimony of witnesses Pulcrano (USPS-T-
9 1) and Corbett (USPS-T-2). I will also identify how current practices can be altered
10 to increase efficiency if Saturday delivery to street addresses is eliminated and
11 associated operational and service changes are implemented. In particular, I will
12 explain how the transfer of some mail from one transportation network to another
13 can potentially reduce costs. Finally, I will explain how the planned changes in
14 service will change network requirements, leading to a net increase in efficiency for
15 surface transportation. Witness Bradley (USPS-T-6) will utilize information in my
16 testimony to calculate the transportation cost savings associated with these
17 operational and service changes.

1 II. Background

2

3 The interaction of mail processing and transportation is based on a set of
4 clearance and entry times required to achieve product service objectives for mail
5 processed at origin and destination mail processing facilities. Depending on
6 applicable service standards and commitments, mail volume, equipment, and labor
7 availability, each facility has established the clearance time by which originating mail
8 must be processed and ready for transport to destination cities in order to meet
9 customer service expectations. Likewise, each facility has established a critical
10 entry time by which destinating mail must arrive in order to be delivered within the
11 service expectations applicable in that facility's service area. Based on the interval
12 between these times and on the relevant service standards the Postal Service
13 determines the optimum transportation mode for each origin-destination facility pair.

14

15 III. Current Transportation Networks

16 Transportation networks have been designed to support the service required for
17 each mail product. Standard Mail and Periodicals are surface products within the
18 continental United States; mail is transported between non-contiguous United States
19 destinations by boat. First Class Mail, Priority Mail, and Express Mail travel by air or
20 surface depending on the service standard and distance that they must travel; the
21 Postal Service provides air transportation for these products between all non-
22 contiguous United States destinations.

23

1 A. Role of Air Transportation

2 The use of air transportation is based on product service requirements for a
3 given product on a given lane. The Postal Service contracts with service providers
4 such as Federal Express (FedEx), United Parcel Service (UPS), and some of the
5 commercial passenger airlines. The selection of the optimal service provider is
6 dependent on such factors as product service requirements, Transportation Security
7 Administration (TSA) security regulations, transportation contract specifications,
8 provider rates, and the capacity of the respective carriers servicing that lane. The
9 Postal Service typically pays air carriers based on the mail volume transported. The
10 methods of payment include a cost per pound transported or a cost per cubic foot
11 transported. This volume transported by air service providers is documented
12 through some combination of acceptance, load, transfer, and delivery scan activity.

13 The various carriers utilize different techniques to transport Postal Service mail
14 via air. One such method is a hub-and-spoke network whereby the carrier flies mail
15 to centralized hubs in the country where it is transloaded to flights to its ultimate
16 destination. Another technique is a point-to-point system whereby carriers utilize
17 non-stop direct flights from origins to destinations. Through an extension of the
18 point-to-point network, road feeder service, a carrier transports the volume by truck
19 from a Postal Service facility to a larger air hub where there is more commercial
20 airline capacity than at some of the local airports. These hubs have more likelihood
21 of direct/non-stop air transportation.

22
23 B. Role of Surface Transportation

24 Surface transportation consists of two components: vehicle service drivers (VSD)
25 provided by Postal Service employees and generally consisting of short-haul trips of

1 less than 300 miles, and highway contract route service (HCR) provided by surface
2 transportation contractors. The surface transportation network uses both direct trips
3 between an origin and destination, where volume warrants, and indirect trips
4 whereby mail is consolidated at surface transfer centers (STC) to build fuller truck
5 loads to destination. In general, a truck with less than 60 percent load will be routed
6 to an STC for consolidation. In some instances, the service standard between two
7 points necessitates the use of direct surface transportation due to the cost difference
8 between air and surface, even if the volume cannot fill a truck.

9

10 1. Vehicle Service Drivers

11 Vehicle service driver transportation is operated by Postal Service employees.
12 The Postal Service typically selects this type of transportation for short distances
13 and within metropolitan areas, including some plant-to-plant and Post Office-to-plant
14 routes.

15

16 2. Highway Contract Routes

17 The Postal Service utilizes Highway Contract Routes throughout the network and
18 as the only method for long-haul surface transportation. HCR transportation is
19 grouped into seven categories:

- 20 • Inter-Area – Routes that move mail between two areas. The Postal Service
21 typically uses this type of long-haul transportation for 2- and 3-day
22 destinations.
- 23 • Inter-Cluster – Routes that move mail between two clusters within the same
24 area, particularly for overnight and 2-day inter-cluster destinations.

- 1 • Inter-P&DC – Routes that move mail between two different Processing and
2 Distribution Centers (P&DCs) within the same area and cluster, particularly
3 for overnight and 2-day intra-cluster destinations.
- 4 • Inter-BMC – Long-haul routes that move mail between two different Network
5 Distribution Centers (NDCs).
- 6 • Intra-BMC – Routes that move mail from plants to their associated NDCs.
- 7 • Intra-CSD – Routes that move mail for delivery to roadside mailboxes within a
8 Customer Service District (CSD).
- 9 • Intra-P&DC – Routes that move mail between plants and their associated
10 Post Offices for delivery.

11

12 IV. Proposed Transportation Networks

13

14 The Postal Service would realign transportation networks to support the
15 proposed five-day delivery mail processing and delivery operating environment.
16 That operating environment has been described in the delivery network testimony of
17 Postal Service witness Dean Granholm (USPS-T-3) and the mail processing
18 testimony of Postal Service witness Frank Neri (USPS-T-4). These realigned
19 networks will generate efficiency gains for the Postal Service. The planned
20 elimination of outgoing mail processing on Saturday will likewise eliminate the need
21 for network transportation Saturday evening into Sunday morning, among other
22 effects on surface and air transportation networks.

23

1 A. Air Networks

2 The movement of outgoing processing from Saturday to Monday will mean that
3 air volume that would have been moved Sunday will be moved Tuesday. The
4 FedEx network does not transport Postal Service volume on Monday since outgoing
5 processing does not occur on Sunday. This is not expected to change under the
6 proposed delivery parameters. It is expected that the same amount of volume from
7 outgoing processing that would have had to move on Sunday will still be required to
8 move on Tuesday. I have taken the existing Sunday volume, estimated
9 distributions of this volume among the carriers on Tuesday, and provided those
10 volume estimates to Professor Bradley for his use in non-public library
11 reference USPS-LR-N2010-1/NP1.

12

13 B. Surface Networks

14 The planned mail processing and delivery changes will create the need for less
15 surface transportation than under the current six-day delivery operating model. The
16 elimination of collection and delivery of mail on Saturday will have effects throughout
17 the highway transportation network. For example, Intra-P&DC transportation
18 includes runs from plants to delivery units and will be reduced. Other parts of the
19 network would be affected by the lack of outgoing processing on Saturday due to
20 elimination of Saturday collection.

21 The nature and size of impact on each surface transportation mode will differ
22 according to that mode's role in the Postal Service network. Because trips are run at
23 different times of day for different reasons, one can link the timing of trips to their
24 support of Saturday collection and/or delivery. In other words, only certain trips
25 would be eliminated or reduced by elimination of Saturday delivery.

1 To estimate the reduction in overall capacity needs, I reviewed the amount of
2 each type of surface transportation by time of day. I then identified the number of
3 trips of each type and time of day that are linked to Saturday collection and/or
4 delivery. I also considered mitigating factors, such as continued transportation
5 needs for certain types of mail that will continue to be processed on Saturday. From
6 this review, I was able to determine the approximate percent reductions resulting
7 from the proposed mail processing and delivery network.

8 The absorption capability of the various networks was based on analyzing
9 current handling unit utilization levels across the network. This analysis allowed me
10 to estimate the amount of volume that could be absorbed into the subsequent
11 processing day's handling units and the utilization levels of transportation, resulting
12 in a determination as to the absorption capability of the subsequent transportation
13 day's trucks.

14

15 1. Vehicle Service Drivers (VSD)

16 The planned mail processing and delivery changes will create the need for fewer
17 vehicle service drivers than under the current six-day delivery operations model.
18 Some vehicle service drivers will be maintained on Saturday mornings to support the
19 need to move the mail for delivery to Post Office Boxes, remittance mail and to
20 collect Express Mail. Based on the Postal Service's financial reporting systems,
21 there were 14,958,864 in line 34 vehicle hours in FY 2009, 2,948,945 in line 31
22 Admin/Clerk vehicle service hours, and 3,303,585 in line 30 Supervisor vehicle
23 service hours. Based on Time and Attendance Collection System data, Saturday
24 vehicle hours accounted for approximately 14.07 percent of the total in FY 2009.
25 The annual numbers were multiplied by this percentage to estimate the work hours

1 for Saturday. There were an estimated 2,104,244 line 34 vehicle hours, 414,822 line
2 31 Admin/Clerk vehicle service hours, and 464,708 line 30 Supervisor vehicle
3 service hours on Saturdays in FY2009. The total Saturday VSD mileage in FY 2009
4 was 18,808,653 miles based on the Vehicle Management Accounting System.

5 Based on a review of the expected transportation needs in a five-day
6 environment, I estimate the Postal Service will require approximately 42 percent less
7 VSD transportation on Saturday then at present. Because I expect that this
8 reduction in transportation will translate directly into a reduction in drivers, I estimate
9 that there will be an approximate reduction of 42 percent in VSD administration.

10 Moreover, I anticipate that the reduction in VSD supervisors will not be
11 commensurate with that of drivers. The ratio of VSD supervisors to VSD drivers is
12 generally expected to remain constant at 20:1, but there will always be at least one
13 supervisor per unit regardless of the number of VSD drivers in that unit. The
14 estimated reduction in VSD supervisors is 25 percent.

15 The movement of the remaining mail volume not associated with Express Mail,
16 Post Office Box mail, and remittance mail from Sunday to Monday transportation will
17 require no additional VSD transportation. The Saturday and Monday delivery
18 volume will be processed together. This will cause an increased utilization of trays,
19 and consequently of containers. For the most part, trips to Post Offices have
20 enough excess capacity to absorb the additional volume.

22 2. Highway Contract Transportation Routes

23 The elimination of Saturday street delivery and Saturday evening outgoing mail
24 processing will reduce the amount of HCR transportation required. Each type of
25 route has a different function within the network and will be affected differently.

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a. Inter-Area Transportation

Because inter-Area transportation originates in one area and destines in a different area, this transportation typically is utilized for the long-haul surface network. If origin mail will not be processed on Saturday, there will no longer be a need for outgoing transportation to the network Saturday night into Sunday morning. The amount of network transportation that leaves prior to midnight on Saturday evening is a relatively small percentage of Saturday transportation. Moreover, the early Saturday morning transportation will remain in place for Friday's evening outgoing volumes, which currently move on Saturday morning. In total, I estimate that the planned changes in processing and delivery will permit the elimination of approximately 20 percent of inter-area HCR transportation on Saturdays and 80 percent on Sundays. The remaining 20 percent of Sunday inter-area HCR transportation will remain in place for the destinating volumes arriving from the network.

b. Inter-Cluster and Inter-P&DC Transportation

The Postal Service typically uses HCR transportation for overnight and two-day volume between clusters within the same area and between P&DCs within the same cluster. In an environment without outgoing processing for Saturday collection mail, this volume will not require transportation Saturday evening and Sunday morning. I estimate that the Postal Service can reduce Saturday transportation by approximately 30 percent and Sunday transportation by approximately 80 percent. Due to the similar volume and processing characteristics for mail traveling on inter-cluster and inter-P&DC transportation, on the one hand, and for mail traveling on

1 inter-area transportation, on the other hand, it is assumed that the transportation
2 reduction potential for the former will be similar to that for the latter. However,
3 because more inter-cluster and inter-P&DC mail processed on Saturday than inter-
4 area mail leaves before midnight on Saturday evening, the former transportation
5 types have a greater amount of mail transported on Saturday than the latter. This, in
6 turn, results in a greater reduction potential for inter-cluster and inter-P&DC mail
7 currently transported on Saturday.

8
9 c. Inter-BMC Transportation

10 Inter-BMC transportation carries mail between NDCs. It is expected the NDC
11 network will require transportation to support its network function as it does today.
12 Inter-BMC transportation will remain in place without change in order to support this
13 processing network.

14
15 d. Intra-BMC Transportation

16 Intra-BMC transportation travels between a plant and its corresponding NDC.
17 This transportation will be reduced under the Postal Service's plan. Such
18 transportation will no longer be required to bring collection mail to the NDCs on
19 Saturday and Sunday. Some transportation will still remain in place in order to bring
20 volume from the NDCs to the plants for transport on Monday. Based on a review of
21 the expected transportation needs in a five-day environment, I estimate that the
22 Postal Service can eliminate approximately 40 percent of intra-BMC transportation
23 on Saturday and 50 percent on Sunday.

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1 e. Intra-CSD Transportation

2 Intra-CSD transportation is provided by Highway Contract Route drivers who
3 provide delivery to addresses along a particular route in a manner similar to postal
4 rural delivery carriers. Included within Intra-CSD contracts are pure box routes,
5 which only include delivery to addresses along a designated route. There also are
6 combination routes, which provide transportation between plants and Post Offices as
7 well as delivery service.

8 Under the Postal Service's plan, intra-CSD transportation for route delivery will
9 no longer be required on Saturdays; I estimate that 100 percent of intra-CSD box
10 route delivery on Saturday will be eliminated. Some of the transportation for
11 combination routes will remain in place to bring mail to Post Offices for Saturday
12 Post Office Box delivery and to collect Express Mail and available flat and Priority
13 Mail volume from Post Offices. Based on a review of the expected transportation
14 needs in a five-day environment, I estimate that of the combination route portion of
15 intra-CSD HCR transportation approximately 60 percent will be eliminated on
16 Saturday and 80 percent of that on Sunday.

17

18 f. Intra-P&DC Transportation

19 Intra-P&DC transportation, which travels between plants and their associated
20 Post Offices and other subordinate units, will be reduced as a result of the proposed
21 delivery and mail processing standards. Saturday intra-P&DC trips bring mail to
22 Post Offices for delivery and bring collection mail from the Post Offices back to the
23 plant for processing. Sunday transportation is in place to advance mail volume for
24 delivery on Monday, mainly from Saturday collections. Some Saturday
25 transportation will remain in place to bring mail to Post Offices for Saturday Post

1 Office Box delivery and to collect Express Mail and available flat and Priority Mail
2 volume from Post Offices. With the elimination of Saturday outgoing processing,
3 Sunday transportation will also be reduced. Based on a review of the expected
4 transportation needs in a five-day environment, I estimate that approximately 60
5 percent of intra-P&DC transportation on Saturday and approximately 80 percent of
6 intra-P&DC transportation on Sunday can be eliminated.

7 Overall the reduction in transportation will mean that mail previously transported
8 on Saturday and Sunday will move to Monday and Tuesday transportation. It is
9 expected that the economies achieved through combined processing of Saturday
10 and Monday delivery mail will lead to fuller trays, fuller containers, and increased
11 use of existing available space. The optimization of existing transportation will be
12 sufficient to forestall a need for additional transportation on Monday or Tuesday.

1 V. Conclusion

2 As mail volumes, mail processing capabilities, and transportation alternatives
3 have changed from time to time, the Postal Service has responded by scaling its
4 transportation structure accordingly. The proposed elimination of street delivery on
5 Saturday and associated mail processing changes fits this model as a scalar
6 response to the recent and continuing decline in mail volume. The proposed
7 operating environment will require changes to the transportation networks as
8 described in this testimony. These proposed changes will support a sustainable
9 model for growth in a lower-volume environment, which will benefit the Postal
10 Service over the long term.