

BEFORE THE  
POSTAL REGULATORY COMMISSION

---

REPORT ON USPS FIVE DAY PROPOSAL  
Docket No. N2010-1

---

COMMENTS OF CAMERON BELLAMY  
PRESIDENT  
GRAYHAIR SOFTWARE, INC.

JUNE 21, 2010

## **COMMENTS FROM GRAYHAIR SOFTWARE, INC. ON REDUCING POSTAL DELIVERY FROM SIX DAYS TO FIVE**

Good afternoon, Madam Chairman, Commissioners. I thank you for the opportunity to discuss the proposed USPS delivery frequency reduction.

### **I. A NEGATIVE FOR CUSTOMERS WITHOUT AN OFFSETTING POSITIVE**

The USPS proposes to take away from its customers their sixth day of service, by making Saturday just like Sunday. No mail other than Express is delivered, collection boxes are not picked up, and though some processing and transportation can be done, the day does not count against service performance standards. Because Saturday will no longer count they can largely maintain the existing service performance standards, so that one-day, two-day and three-day areas for First Class should not change much.

However, it's a reduction in service, plain and simple. Today a postal customer mails a letter on Friday to a one day delivery area and it arrives on Saturday. In the new scenario, the same letter mailed on Friday also delivers in one "postal" day which is now Monday or possibly Tuesday in the case of a holiday. The days that don't count for the Postal Service are still elapsed time on the clock for the customer, whether sender or receiver of mail. Five day service has less value to the customer in terms of days to delivery and consistency of delivery. This is a fact the service performance models cannot capture and indeed are not designed to take into account. But we think that the reduction in the value of service can be estimated through customer service models which operate in terms of elapsed time. Five day service is less valuable both to sender and receiver, to the mailer as well as the ultimate recipient. Reducing the value of the mail is exactly the wrong message for the USPS to put forth to its customer base.

We recognize that on one common way of thinking the proposed move from six-day to five-day service is a textbook example of economic rationality, and an easy call for postal management to make. Volume of the mail is declining sharply, for both cyclical economic reasons and structural shifts in communication technology. The main postal expense is labor. The six-to-five day proposal means that one-sixth of the labor, at least in the delivery function, can be eliminated. It must seem to postal executives as though many factors converge to recommend a cutback as the rational as well as the prudent course.

Even those who favor the five day plan may still not agree about what day should be the one that is dropped. The USPS has studied the matter, but not attempted to estimate the impact on the customer with an approach that models the situation from a customer perspective. The reasons given by the Postal Service for eliminating Saturday are often based on efficiency considerations. However, it can be shown that these are not decisive.

GrayHair respectfully submits that this matter needs to be carefully thought through and that the prudent course of action is to delay making so abrupt a change in the nature of the service provided until either Congress corrects what is widely recognized as an overfunding of certain retirement obligations, or at least until some compensatory measures can be planned and put in place that could have the effect of counterbalancing the reduction in service.

We also think a larger political discussion needs to be held as the role of the USPS as an institution of government with public responsibilities including a universal service obligation. Reducing service as is proposed affects different people in different ways. Some mailers can simply time their activity to make the best use of the remaining delivery window. Newspaper publishers might have to seek solutions in alternate delivery services. Distributors of pharmaceuticals and their customers, who may skew to the elderly and the rural side, might have to make do with the remaining level of services. The simple observation is that you can't shift the day of delivery for 13% to 17% of mail volume<sup>1</sup> without making an impact.

As for the ultimate recipients of mail, they live and work in a variety of situations and circumstances. At times they seek to make payments and if they do, they want to make sure they don't miss deadlines or incur late fees. Or they may just be waiting anxiously for some funds to arrive. People can normally plan ahead and generally adjust to limitations, but exceptions do occur. For example, they might not plan ahead to have a supply of needed medications. And there are other problematic situations in which the mail carrier performs a useful public function, whether by noticing a lack of activity at a dwelling or by collecting food. The use of mail carriers during epidemics, such as to distribute antidotes, has apparently been considered seriously if not widely discussed. In a more mundane example, other countries use the postal service as a way to provide banking services, particularly to the poor. Presumably the postal service could serve as a local point of contact for all kinds of government services such as already occurs with passports. All of these roles may have some public value that would be reduced with a reduction in service, but this is beyond the scope of the current inquiry, and we do not seek to rely on this sort of repurposing in making a case against this uncompensated service reduction.

What is relevant to our case is that Saturday delivery is an important advantage that the USPS has over some of its competitors. It seems to us that the advantage is being too easily surrendered. We can show that eliminating Saturday delivery reduces the value of service more than any other alternative day other than Monday from a customer perspective. GrayHair wonders what explains the apparent conviction of USPS management that service reduction is the way to go, to the point of suggesting it will still be needed in five years even if Congress returns to the USPS in one form or another the financial overpayment

---

<sup>1</sup> GHS USPS Delivery by Day of Week as presented in Section III of these Comments.

that the Postal Regulatory Commission agrees has occurred with respect to retirement obligations.

It appears that USPS management is reconciled to, and even considers unavoidable, the further decline in volume for most categories of mail, though not necessarily so for Standard Mail. They may be aware of the many ideas concerning additional or alternate functions that the government agency most trusted by the public could perform, but perhaps they are convinced that any substantial new role for USPS with expanded public services is politically unachievable. They may be influenced by the results of their own polling that shows that a majority of customers are willing to put up with service reductions and some do not really mind because their postal needs are already limited.

How were the key questions posed in the USPS market research? The customers were not asked whether they would prefer six day service or five day service, a question which might well have led to a preference for six day service. Instead they were asked whether they would rather lose a day of service than get a ten per cent rate increase. No wonder the polls show what they show. Perhaps the question should have been, would you prefer a ten percent rate increase or potential late fees from your credit card company? But the real truth is that it is not a matter of the USPS proposing **either** a cut in service **or** a rate increase. The USPS is now known to be proposing **both** a cut in service **and** a rate increase. Under these conditions the value of the USPS market research can only be diminished.

The apparent management strategy to accept the decline as unavoidable and to undertake to manage the glide path is not so prudent as it may seem if it is actually counterproductive and dangerous. The danger is that reducing the intrinsic value of service in the name of cost cutting may accelerate the same spiral of decline the Postal Service has already experienced. It is hard to see how reducing the value of service could help businesses when prices are going up anyway. It is impossible to see how this helps cash flow for all the businesses that rely on the mail, as well as millions of people who don't use electronic bill payment and do send checks or money orders in the mail. It's quite clear what signal that sends to the mailers, who will read the situation and draw their own conclusions. Many mailers will increasingly seek a way out of the system as a last resort.

## II. SERVICE PERFORMANCE MEASUREMENT TIME VS. ELAPSED TIME

For USPS, even though delivery and collection from boxes would not occur on Saturday under the proposal, service performance standards can largely be kept intact. Tom Day of USPS explains this point in his testimony as follows:

The service provided to a mail piece can then generally be viewed as the difference between the "start-the-clock" and "stop-the-clock" dates,

excluding non-delivery days. The resulting number of days is then compared to the established service standard for the mail category to assess service performance.

In other words, for service performance measurement purposes, days on which there is no delivery or collection disappear from the calculations. Just as Sunday is not counted now, Saturday becomes irrelevant for purposes of service performance measurement. Now it is true that mail can be transported and some mail can be processed on Saturday, and if that happens, it helps the Postal Service to meet its standards. But in order to reduce costs, any such activities would need to be limited. Even so, it is worth observing that if more days were removed from the schedule, it would be even easier to meet standards by doing some transportation and some processing on the off days.

However, for the customer Saturday and Sunday are still elapsed time. So there are two different perspectives here, the Postal Service seems to have never taken this into consideration. The USPS views the delivery network as the agency in charge of the operation. What they can control is the work that they do on the days when work is actually done. What the customer experiences is the total elapsed time between providing the mail to the Postal Service and when it is finally delivered, including any off days that may occur in the interim.

Under the USPS proposal, mail that would have been delivered on Saturday will surely be delayed until Monday, and since there are often holidays observed on Monday, in some cases it will not be delivered until Tuesday. Just as unreliable and less predictable delivery has increased the demand for mail tracking services such as GrayHair provides, here too the USPS may paradoxically find a business opportunity in its own variability. For example, an incentive to be inconsistent with core services and thereby promote premium services may constitute an avoidable overcharge to the customer. This would be a good example of moral hazard, which a regulator may legitimately discourage.

As part of the proposal, it is emphasized that Express Mail can still be used for Saturday delivery, or even Sunday delivery. About the more affordable Priority Mail, no such commitments are offered, and so as the matter stands, a reduction in the value of Priority Mail service is in the offing. But the documents filed by the USPS hint at possible new product offerings to fill the gaps that would be opened, though with no assurance that this would take place. The net effect of this is that the USPS seeks to impose on its customers huge pricing multiples just to restore "lost" attributes of its core product lines, such as consistency and reliability in this respect unwillingness of USPS to still deliver Priority Mail on Saturday takes on greater significance. Although it may be an unintentional side effect, it is nonetheless the case that the USPS is in a position to adopt policies which increase variability of its service and then indirectly profit from that variability. This is certainly part of the reason why a Postal Regulatory

Commission is needed, in order to consider whether this represents a conflict of interest.

### III. ACTUAL DELIVERY PATTERNS AS MEASURED BY GRAYHAIR

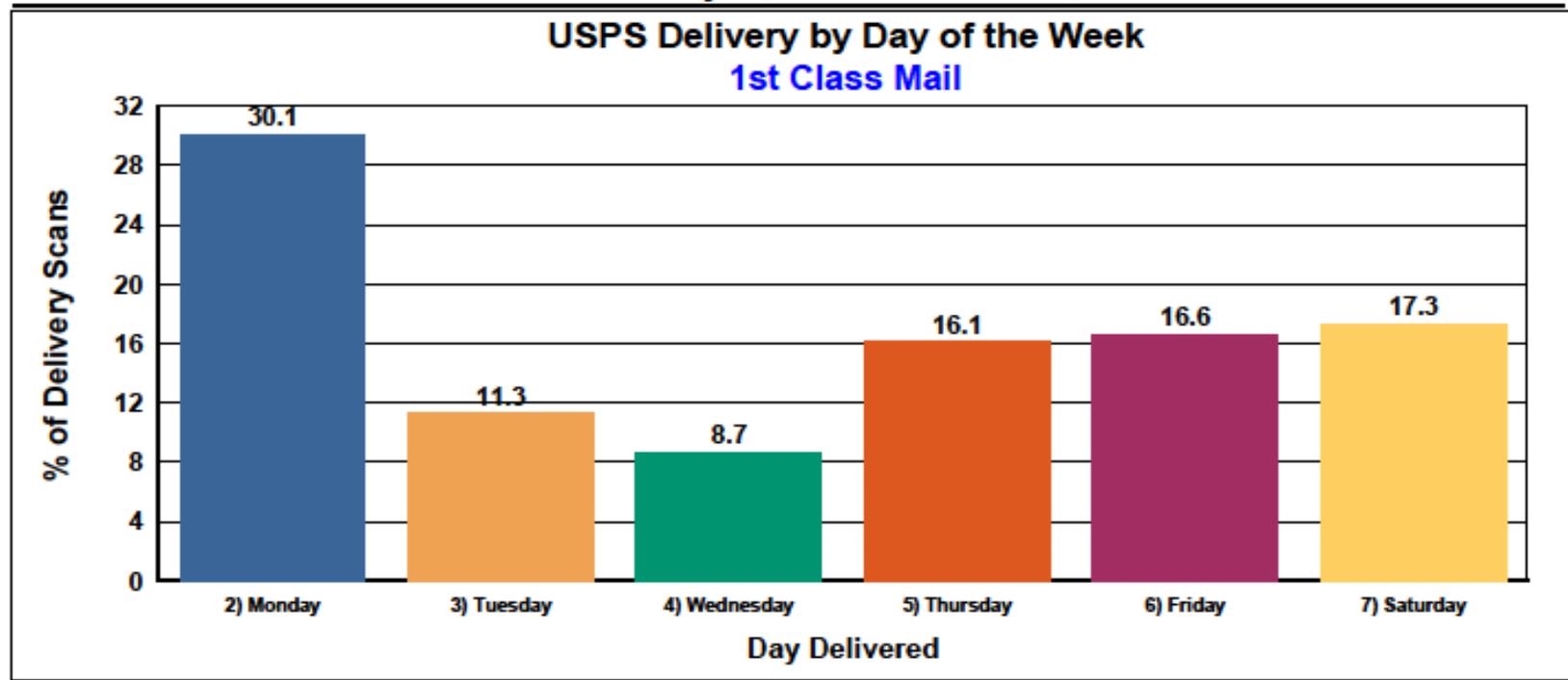
GrayHair wishes to present data that it has collected in 2009 and 2010 relating to First Class and Standard Mail delivery, both in terms of days to delivery and with respect to the day on which delivery to the final recipient occurs. These are actual USPS observations of mail as it is processed coupled with USPS business rules that allow for the actual day of delivery to be inferred.

This data represents significant volume of both First Class and Standard Mail from our clients, nearly all of which are major mailers including the largest mailers in the world.

It will turn out that this data can be compared to USPS data on actual delivery dates, which was presented not as part of the original filing but as a result of the Chairman's Information Request No. 1 to which the Postal Service replied.

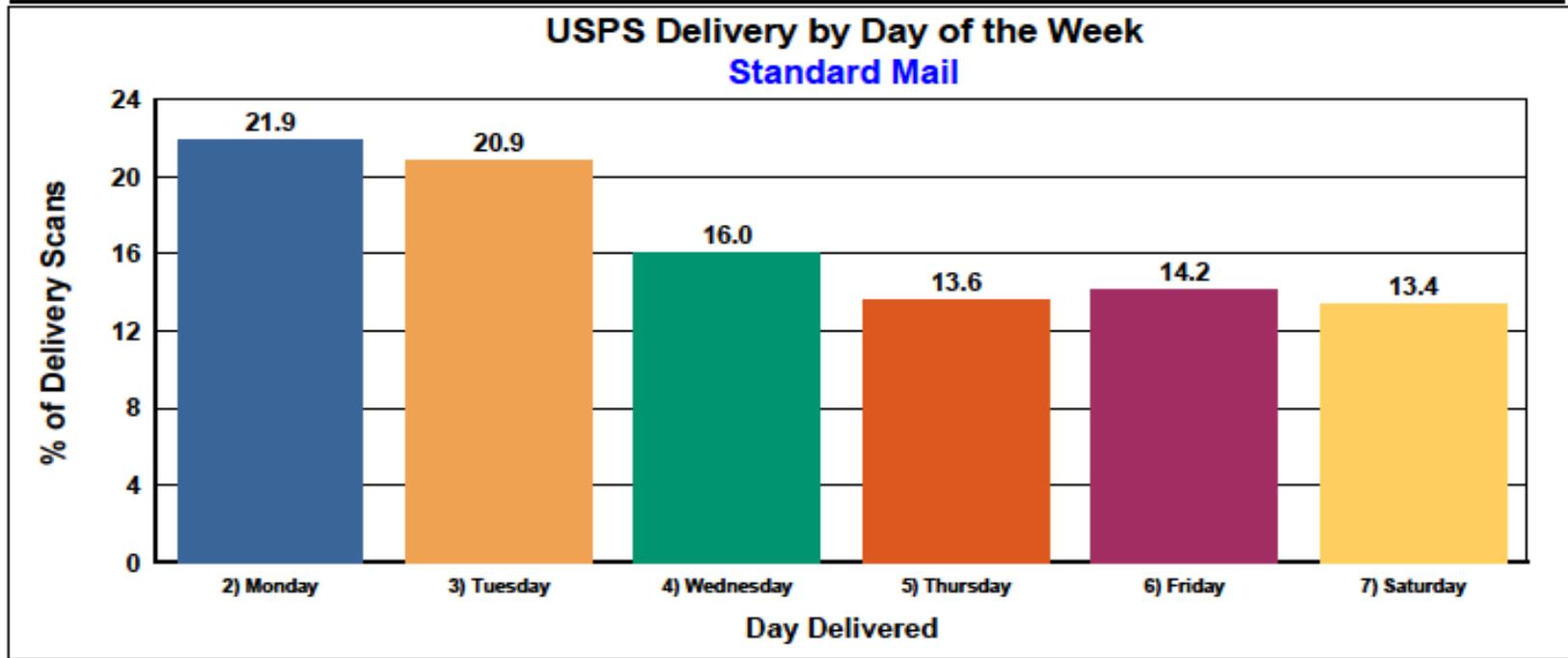
## Industry Delivery Percentages by Day of the Week

Mail Dates: January 01, 2009 - December 31, 2009



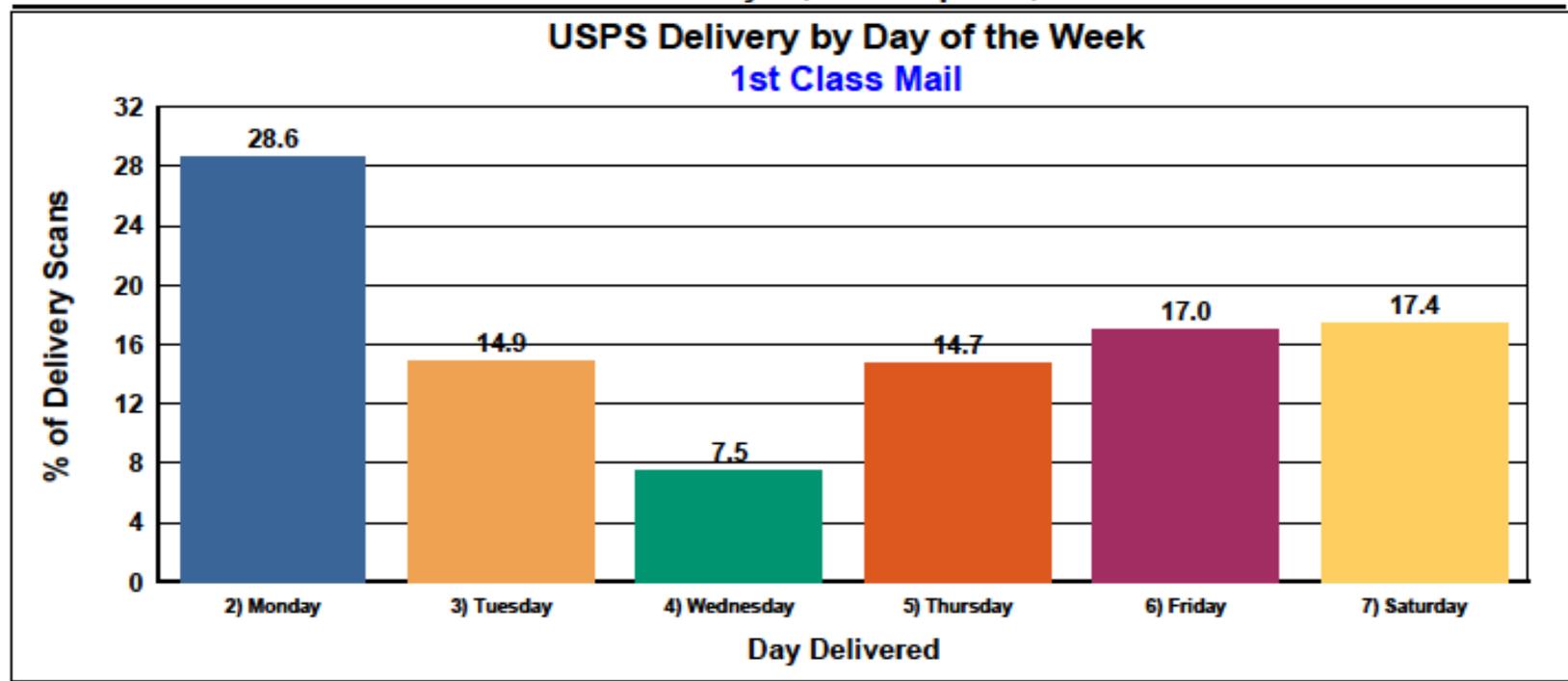
## Industry Delivery Percentages by Day of the Week

Mail Dates: January 01, 2009 - December 31, 2009



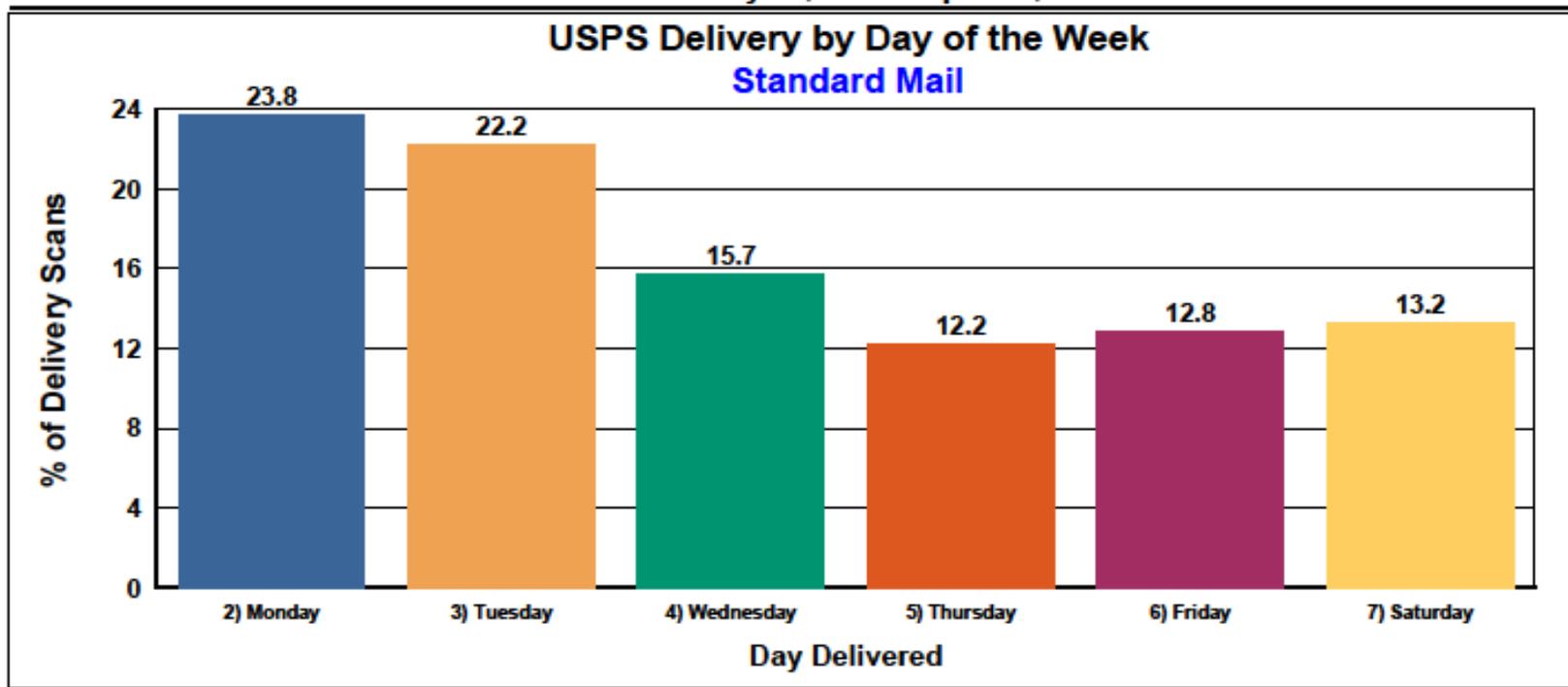
## Industry Delivery Percentages by Day of the Week

Mail Dates: January 01, 2010 - April 30, 2010



## Industry Delivery Percentages by Day of the Week

Mail Dates: January 01, 2010 - April 30, 2010



What are some of the main inferences that can be drawn from the GrayHair data? First of all, the data shows that in First Class, Saturday does more work than every other day than Monday, while Wednesday appears to be the low point of the week. Secondly, Standard Mail shows a different pattern than First-Class, with a less pronounced peak on Monday, followed by a gradual decline in deliveries all through the week.

Comparing this to the USPS provided data, the same trends emerge, but probably because of the many smaller mailers in the USPS sample, the peaks and valleys are smoother.

#### USPS FY09

Combined data from urban and rural carriers

Percents may not add to 100% due to rounding

	First-Class	Standard Mail
Mon	20.4%	18.4%
Tue	11.5%	20.4%
Wed	13.7%	18.4%
Thu	17.2%	14.6%
Fri	19.6%	14.7%
Sat	17.6%	13.4%

These data points are generally similar to the GrayHair observations, though for First Class Tuesday rather than Wednesday is the low point, and for Standard Mail the peak is on Tuesday rather than Monday. But Saturday still holds its own in terms of the total amount of mail that is delivered, particularly for First-Class mail, which often is especially time sensitive.

Since Monday is already the day with the most delivery volume, eliminating Saturday may not be the best choice, simply because the Saturday deliveries will now have to be performed on Monday or Tuesday in the case of holidays or overload. As Standard mail is deferrable some mail may also find its way to Wednesday. An analogy could be made to a snake swallowing a rabbit, which creates a bulge while passing through the system. There will be an enlarged volume of mail at the beginning of the week, even more so than already occurs, and less volume to be delivered as the week goes on. Eliminating Saturday delivery just makes for a bigger rabbit that must somehow be digested. This could lead to even further increases in elapsed days to delivery and increased variation in outcomes.

In consideration of alternate choices of days to withhold service the USPS says that it would rather not have to start up and shut down processing twice each week. This sort of consideration presumably led to the choice of Saturday as the day to eliminate, since Monday would have been perhaps the least likely choice. But having two consecutive off days is unlikely to bode well for the customer, whether a mailer or an ultimate recipient of mail. The GrayHair data, derived as it is from the activity of major mailers, reinforces what the Postal Service data

shows, and raises questions about whether the appropriate day has been selected even if it turns out to be unavoidable that one day of delivery be eliminated.

#### IV. MODELING REDUCTION IN SERVICE FROM A CUSTOMER PERSPECTIVE

In order to quantify the customer perspective we have developed a model based on elapsed time to delivery rather than service performance measurement time to delivery.

Again, customers include mailers and ultimate recipients. The model is simplified in order to focus on a few attributes. It is not intended to simulate actual postal operations<sup>2</sup>.

The model assumes undifferentiated mail is collected and delivered on up to seven days in a week. On some days, neither collection nor delivery takes place. The model assumes that mail can be **provided** by a customer, as opposed to **collected** or **processed** by USPS, on any day of the week, for example, by placing a letter in a collection box on Sunday. For purposes of distance sensitivity, the model allows for mail to be delivered one, two or three days after being collected, or inducted, which may take place several days after it has been provided. But the model assumes mail is moving once it has actually been collected, even on days when not delivered and further assumes the mail does deliver within stated Delivery Standards. So a 1-day area will be reached in one day after collection, a 2-day area in two days, and so forth. It measures total delivery days elapsed for 1-day, 2-day and 3-day mail, and intentionally does not model any further “tail of the mail”, at least here. The model is intended to count “off days” equally with service performance measurement days, to begin with provision of the mail, and end with the delivery day.

We use the model here to compare the effects of different second days added to current Sunday closing. The value of service is measured in terms of fewest elapsed days. This includes Sunday, and also includes Saturday or whatever other day is off. This is intended to capture the difference in perspective between the USPS and its users. Besides measuring the expected number of elapsed days to delivery, the model also measures population variance in delivery outcomes to see how much the variance goes up under different scenarios.

---

<sup>2</sup> So if it is pointed out that, for example, some processes, such as the delivery to post office boxes, do occur on Saturdays, while other mail waits until Monday to be delivered, this does not mean the model must be made more complicated. Though the delivery to post office boxes is very important, it is not the typical case. Furthermore, some mail provided on Saturdays may be collected the same day, while other mail may miss a deadline and not be collected until Monday, but for the purposes of the model either all of it is collected, or none of it is collected if such service is not offered on Saturdays. It is not the point of the model to track different characteristics of different mail pieces.

Elapsed Days to Delivery and Population  
 Variance from 6-to-5 Day Alternatives Vs.  
 Current 6 Day Delivery

provision	Current Delivery Days		
	delivery +1	delivery +2	delivery +3
Mon	1	2	3
Tue	1	2	3
Wed	1	2	3
Thu	1	2	4
Fri	1	3	3
Sat	2	2	3
Sun	2	3	4
TOT	9	16	23
SCORE			48
VARP	0.2040816	0.2040816	0.2040816

To explain this further, it must be kept in mind that this represents the current scenario, where there is no Sunday collection or delivery in terms of the definitions in the model. The number in each cell following a day of the week represents the number of days to delivery starting from the day the mail is provided, taking into account that the service performance measurement clock may not start for some time after initial provision, and that delivery may not be performed on the off days. The columns such as +1, +2, and +3 represent the standard number of days needed according to the Postal Service to transport and process mail. In the delivery+2 column, the value for Sunday is 3 because mail that is provided on Sunday, an off day, will be collected Monday, and then delivered two days later on Wednesday according to standard. In the delivery+1 column, there is a value of 2 for Saturday because although the mail is both provided and collected on Saturday under the current scenario, it cannot be delivered on Sunday, and would according to standards be delivered on Monday, two days after it was provided. In other cases, when there is collection and delivery for enough consecutive days, service performance measurement days and elapsed days coincide.

The total for each column is simply the sum of the values for each of the seven days of the week. The reason Sunday is included is that it is always a factor in elapsed time from a customer point of view, even if not much is going on in terms of postal processing. Actually the Postal Service can do some transportation and processing on Sundays or other off days at its own discretion, and thereby gains some flexibility to avoid poor service outcomes, since such efforts do not count

against the attainment of service performance measurement guidelines. The score is nothing more than the sum of the three columns, where other things being equal, the lower score means fewer days to delivery considering all the possible days on which mail might be put into a collection box or otherwise provided. Only three columns are supplied because, at least for First Class mail, the service performance guidelines call for the vast majority of it to be delivered within that interval, so that adding columns for four or more days would be to put too much emphasis on less frequent outcomes. Anyone who is interested could easily enough create additional columns, but we believe the results in terms of relatively better and worse scores would not differ greatly from what is already presented. The variance is a standard measure of population variance calculated by Excel that is appropriate to use when the sample amounts to the entire population, that is to say, all days of the week are found in the population on which the variance is calculated. In terms of consistency in the number of delivery days, we can say that the less the variance, the better the results.

Next we use the same model to see what happens when a second day is removed from collection and delivery:

provision	No Sat delivery			provision	No Mon delivery		
	+1	+2	+3		+1	+2	+3
Mon	1	2	3	Mon	2	3	4
Tue	1	2	3	Tue	1	2	3
Wed	1	2	5	Wed	1	2	3
Thu	1	4	4	Thu	1	2	5
Fri	3	3	3	Fri	1	4	4
Sat	3	4	5	Sat	3	3	3
Sun	2	3	4	Sun	3	4	5
TOT SCORE	12	20	27	TOT SCORE	12	20	27
VARP	0.7755102	0.6938776	0.6938776	VARP	0.7755102	0.6938776	0.6938776

provision	No Tue delivery			provision	No Fri delivery		
	+1	+2	+3		+1	+2	+3
Mon	2	2	3	Mon	1	2	3
Tue	2	3	4	Tue	1	2	4
Wed	1	2	3	Wed	1	3	3
Thu	1	2	4	Thu	2	2	4
Fri	1	3	3	Fri	3	3	4
Sat	2	2	4	Sat	2	2	3
Sun	3	3	4	Sun	2	3	4
TOT SCORE	12	17	25	TOT SCORE	12	17	25
VARP	0.4897959	0.244898	0.244898	VARP	0.4897959	0.244898	0.244898

provision	No Wed delivery			provision	No Thu delivery		
	+1	+2	+3		+1	+2	+3
Mon	1	3	3	Mon	1	2	4
Tue	2	2	3	Tue	1	3	3
Wed	2	3	5	Wed	2	2	3
Thu	1	2	4	Thu	2	4	4
Fri	1	3	3	Fri	1	3	3
Sat	2	2	3	Sat	2	2	3
Sun	2	4	4	Sun	2	3	5
TOT SCORE	11	19	25	TOT SCORE	11	19	25
VARP	0.244898	0.4897959	0.5306122	VARP	0.244898	0.4897959	0.5306122

What can we learn from this model? It is not so much the absolute numbers that matter, but the relative differences between the alternatives. It is noteworthy that even with different numbers in the individual cells, Monday and Saturday, both being adjacent to Sunday, end up with the same scores and variances, which are considerably higher, meaning worse, than all the other choices. Tuesday and Friday leave one delivery day remaining between Sunday and the second off day, and this produces better scores and less variance. Wednesday and Thursday are not quite as good, but basically quite similar to Tuesday and Friday. All markets react poorly to uncertainty and wide variances, while they react better to certainty and narrow variances.

Of course this is just one part of the picture and cannot in itself determine a different decision or recommendation. Still the model shows us that from the user perspective Saturday is not a good choice. It also helps quantify the decline in the value of service as measured by total delivery days and variability in delivery days depending on when the mail is first provided. Though for some communications time is not of the essence, more often elapsed time is a relevant factor. Many of the mailers and some of the recipients can and will find alternative ways to communicate and to do business, but there are still large numbers of people who rely on the mail for these purposes, and they will be adversely affected by the proposed changes.

As the Postmaster General has recently stated, the USPS is not just interested in eliminating Saturday delivery, but is also considering moving eventually to four day delivery, perhaps eliminating Tuesday, leaving one delivery day earlier in the week and three delivery days later in the week. This certainly seems like a planned, or at least unopposed, winding down of the system. More important for the current discussion, it shows that the need to gear up operations and then gear down twice each week is not a show stopper for the USPS. But this was one of the reasons advanced by Sam Pulcrano of USPS for choosing Saturday rather than some day in the middle of the week for the second off day.

In any event, if this is the long term plan, it is far more significant than just eliminating Saturday delivery, and it should be the occasion for a larger debate. The USPS seems to have little interest, as we have noted, in exploring other ways in which the USPS could perform services to the public and raise new revenue. GrayHair is encouraged that a few of the participants in the current discussions have pointed out that there could be a different approach which offered seven day a week delivery. Using the model we have developed, this would have the best score and the least variance of any proposal:

provision	Seven Day Delivery		
	delivery +1	delivery +2	delivery +3
Mon	1	2	3
Tue	1	2	3
Wed	1	2	3
Thu	1	2	3
Fri	1	2	3
Sat	1	2	3
Sun	1	2	3
TOT	7	14	21
SCORE			42
VARP	0	0	0

If there were seven day delivery, it would offer the optimum value to the customer in terms of consistency and reliability. Indeed the delivery on a next day basis (delivery + 1) column of this model is essentially what is offered with Express Mail. The problem is that the price for Express Mail is far too high for use in typical situations by mailers, certainly bulk mailers, and by recipients, who would likely refrain if somehow they had a chance to pay on demand for the service. Except for special situations which involve individual handling and delivery, for which seven day delivery will still persist if the USPS gets what it wants, five day delivery with longer elapsed time to delivery and much increased variability in delivery will be the new norm, with further reductions on the horizon.

## V. THE WAY FORWARD

We have noted that USPS may think itself as just doing its job in response to adverse circumstances and a difficult outlook for the period ahead, by rationally pruning the network to try to match the pace of decline in volume. What any stakeholder might wonder is how methodically reducing service from six days to five and then from five to four is consistent with the USPS having been granted a monopoly on the use of the mailbox and a limited monopoly in some types of mail itself. If an agency is granted such a privilege and in effect has an exemption from competition in providing services, and then elects not to provide services, that puts into question whether it should retain the privilege. The USPS undoubtedly has serious problems to solve, but the way it is going about doing that runs the risk of undermining its very reason for existence. Surely GrayHair is not alone in thinking that a question that has been insufficiently explored, and urgently needs to be considered, is how an agency with a universal service obligation can strive to maintain and improve service levels even in adverse conditions and even if cutting costs is unavoidable.

What the mailing industry wants from the Postal Service is what it has always wanted: consistent, reliable delivery and stable prices. GrayHair is in full agreement with the Postal Regulatory Commission and major industry associations that the issue of refunding or otherwise offsetting USPS overpayments of its retirement obligations needs to be resolved. GrayHair thinks it should be resolved before substantial reductions in service such as are entailed by the current proposal are recommended. In our view, USPS management should participate within applicable legal boundaries in securing the reimbursement of overpayments. Once that is resolved, it should expand its horizons and focus more on improving the service provided and not solely on reducing services.

Although this is not the place to go into details, it is important to understand what could be done to improve service even if some long term practices must be modified. The main point is to provide means of collection and delivery that make better use of available information and offer new alternatives in addition to conventional methods. One example of this would be to use automatic identification techniques such as bar codes and RFID technology as well as sensing devices to optimize collection and delivery. An intelligent collection box could be designed that would know how much mail was inside it and the Postal Service could dynamically alter collection routes to get the most out of the fewest resources. If such a system was transparent to users, it would be possible to go online and determine whether a nearby box was about to be collected.

On the delivery side, a further outgrowth of intelligent mail would allow recipients to know not only how much mail was coming their direction but who the senders were. The recipient could then have an option to request delivery and pay a reasonable fee to purchase delivery out of routine schedules or make a trip to the post office knowing what mail was available. In effect, those without an actual post office box would be able to access their identifiable mail on demand. But customers lack any systematic way to request and obtain such innovative services. It can be safely stated that the USPS has not excelled in leveraging private industry to support and promote growth and product development in the intelligent mail arena.

There are many variations of intelligent collection and delivery, but the common thread is to maintain the service levels while increasing the options available to the customers, whether mailers or the final recipients of mail. In the meantime, the existing service levels should be kept in place to preserve the value of mail as a means of communication. If the only recipe the USPS can offer is reduced service accompanied by a rate increase based on exigent circumstances, than there should be no surprise that customers will question both sides of this equation.

Thank you for this opportunity and your attention. I will be pleased to answer any questions you may have.