A Study of Visitors to the Systems at Work Exhibition at the National Postal Museum Summer 2012



December 2012 Office of Policy and Analysis Smithsonian Institution

ABSTRACT

This study of the *Systems at Work* exhibition, conducted by the Office of Policy and Analysis (OP&A), is one of two exhibition studies initiated by the National Postal Museum (NPM) in the summer of 2012. The results reported here are based on exit surveys of visitors to the exhibition. From a random sample of 195 intercepted visitors, 165 completed surveys were collected (85% response rate).

The reported response of survey respondents to the various activities within the *Systems at Work* exhibition varied by gender or whether they were visiting alone or with others. Men were more likely to observe the postcard stamping activity (13%), the zip code keying activity (12%), and the sticky note comments activity (11%), compared to women. No more than 4% of women indicated watching these activities. More than twice as many man "saw and tried" the handheld scanner activity (29%) compared to women (13%). Close to a quarter of solo visitors claimed to "try and never get" the handheld scanner activity (24%), while less than a tenth of those respondents visiting with others indicated "trying and never getting" the handheld scanner activity (8%).

Visitor satisfaction with the *Systems at Work* exhibition was broadly in line with overall satisfaction figures from the previous series of surveys for the entire museum. Close to threequarters of visitors gave the exhibition a rating of Excellent (58%) or Superior (15%).

Cover: Systems at Work exhibition at the National Postal Museum. Photo courtesy of Smithsonian Institution

Summary

In the summer of 2012 OP&A conducted two surveys of two specific exhibitions on display at the National Postal Museum (NPM). This report considers one of these, the *Systems at Work* exhibition.

The Survey: A sample of visitors exiting the *Systems at Work* exhibition was surveyed. The overall response rate was 85 percent.

Visitors: A majority of NPM visitors were making their first visit to the Museum (86%). More than four-fifths of respondents stated they were coming for a general visit to the museum (83%); less than one percent of surveyed visitors identified seeing the *Systems at Work* exhibition as their purpose for visiting the museum. Almost half of visitors who came with others were with other adults (46%) and about one fifth of visitors had groups composed of adults and children under 12 (21%). Less than one in ten visitors worked for the US Postal Service (USPS) (6%) and about double had a family member who worked for USPS (13%).

Activities within the Systems at Work Exhibition: More than half of exhibition visitors watched some portion of the video (52%). Three exhibition activities were missed by roughly one fifth of respondents, postcard stamping (21%), zip code keying (18%), and sticky note comments (18%). The most popular and pleasing activities were postcard stamping and package sorting with about a third of respondents stating they had tried the activity and it was fun and easy, 30% and 33% respectively.

Observations: The reported response of respondents to the various activities within the *Systems at Work* exhibition varied by gender or whether they were alone or with others.

- Men were more likely to observe the postcard stamping activity (13%), the zip code keying activity (12%), and the sticky note comments activity (11%), than women. No more than 4% of women indicated observing these activities.
- Solution More than twice as many man "saw and tried" the handheld scanner activity (29%) compared to women (13%).
- Close to a quarter of solo visitors claimed to "try and never get" the handheld scanner activity (24%), while less than a tenth of those respondents visiting with others indicated the same difficulty (the same challenge, the same situation)(8%).

Rating: The ratings that visitors gave the exhibition (0% Poor, 2% Fair, 25% Good, 58% Excellent, and 15% Superior) were in line with overall Smithsonian museum ratings averages, and generally higher in the top two categories, Excellent and Superior, compared to previously studied NPM exhibitions. Also, survey respondents that said they would <u>definitely</u> visit the *Systems at Work* exhibition again were more likely to rate *Systems at Work* as Superior (33%), while only 8% of those who <u>might</u> come back rated the exhibition "Superior".

Table of Contents

Abstract	2
Summary	3
Table of Contents	4
Preface	5
Introduction	6
The Survey	6
Findings	6
Observations	11
Appendix A: Systems at Work Exhibition Survey Form	13
Appendix B: Frequencies of Systems at Work Exhibition Survey Responses	14

Preface

In the summer of 2012 the Office of Policy and Analysis (OP&A) conducted this study for the National Postal Museum (NPM). The study's goal is to understand the experiences of visitors within the *Systems at Work* exhibition. Data for the study were collected by means of a survey. This report presents the results from the survey, conducted with visitors exiting the *Systems at Work* exhibition in July and August 2012. We appreciate visitors' willingness to participate in this study.

I would also like to thank National Postal Museum staff for their assistance and guidance in the course of this study. K. Allison Wickens, Director of Education, initiated the study. It is always a pleasure to work with her. She and Rebekah "Becky" Daniel helped with logistics and pretesting questionnaires, in addition to spearheading data collection efforts directly using only NPM staff. It was a true team effort.

Within OP&A, Zahava D. Doering guided the overall survey design, analysis, and report preparation. Kelly Richmond, an OP&A volunteer, took on the survey development, questionnaire design, preparation of materials, discussion of data collection protocols for NPM staff (with assistance from Andy Pekarik), data processing and analysis (with direction by Lance Costello), and the writing the first draft of this report. Hyemin Kim, an OP&A intern, helped greatly with the data analysis as well.

I thank all of them for their hard work.

Carole M. P. Neves Director, Office of Policy and Analysis

Introduction

In the summer of 2012 OP&A conducted this study of the *Systems at Work* exhibition on display at the National Postal Museum (NPM). The *Systems at Work* exhibition opened in December 2011 and will remain as a permanent exhibition. According to the National Postal Museum's website, the *Systems at Work* exhibition answers the question –"How does mail get there?"–by tracing "the paths of letters, magazines, parcels, and other mail as they travel from sender to recipient over the last 200 years."

The exhibition is a series of connected spaces that follows a looped circuit in chronological order. In the center of the exhibition space is a curved video screen with bench seating which shows a video (approximately 9.5 minutes long) outlining the current 'behind the scenes' processes that take place to move U.S. mail to its many destinations every day. The video also looks at the complex machinery that support these processes. The exhibition covers about 2500 square feet. As discussed on the NPM website the exhibition seeks to explain and highlight for visitors the "astonishing network of people and technology that collects, transports, processes, and delivers the mail" and track the historical evolution of these systems.

To engage visitors and allow them to better understand these *hidden* mail systems the exhibit uses a multi-pronged approach of objects, graphics, multimedia, and interactive activities. The NPM hopes that after visiting one will "see the connections between the mail, technology, engineering, the Internet, and your own life in a new light".

The Survey

Data for the study were collected by means of a sample survey. The survey was administered to a scientifically selected sample of visitors as they exited the *Mail Call* exhibition. Exiting visitors were intercepted during nine two-hour survey sessions and asked to complete a one-page, self-administered questionnaire about themselves and their visit. Of 195 intercepted visitors eligible to participate, 165 completed the questionnaire, for a cooperation rate of 85 percent.¹

The questionnaire used for the study is in Appendix A. Frequency distributions of survey responses are in Appendix B.

Findings

Systems at Work Exhibition Visitors

Solution Work exhibition were making their first visit to the museum (86%). Less than one percent of surveyed visitors

¹ Smithsonian staff, contractors or other people at NPM for business or meetings, and young people under the age of 18 or in school groups were not eligible to participate. In this study, eight of 195 intercepted visitors were not eligible.

identified seeing the *Systems at Work* exhibition as their purpose for visiting the museum.

- A strong majority of respondents were visiting the museum with others people (85%), the rest were visiting on their own (15%).
- Close to half were visiting only with other adults (46%). The next most frequent type of group was made up of those with other adults and children under 12 (21%). The other group compositions were as follows: with children under 12 only (5%), with children 12-17 (1%), with children of any age (1%), with adults and children 12-17 (5%), and with adults and children of any age (5%).
- One third of visitors (37%) were with a child of any age.
- About half of exhibition visitors were in their 20s (25%) or 40s (27%) and thirty-year olds (30-39) accounted for the smallest percentage of visitors (14%). Both the average and median visitor age was in the mid-40s (43 average, 45 median).
- Men and women were equality represented among visitors (51% men, 49% women).



Mail Pouch lock from the 1870s. Photo courtesy of Smithsonian Institution

A small percentage of visitors identified themselves as working for the US Postal Service (USPS) (6%) and another 13% of respondents had family members who worked for the USPS.

Satisfaction with Systems at Work Exhibition Visit

- Visitor satisfaction with the *Systems at Work* exhibition was broadly in line with overall satisfaction figures from the previous series of surveys for the National Postal Museum. A majority of visitors gave the exhibition a rating of Excellent (58%) or Superior (15%).
- The Superior rating percentage for *Systems at Work* was comparable to that of *Rarity Revealed* (2008) and *Trailblazers and Trendsetters* (2007).

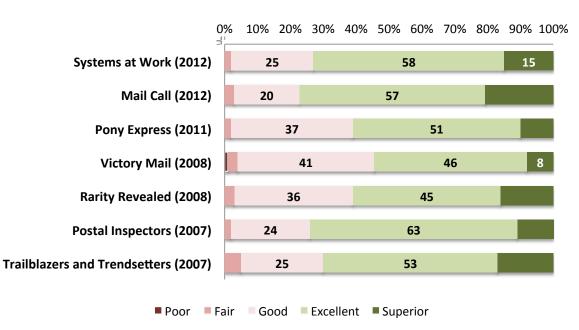
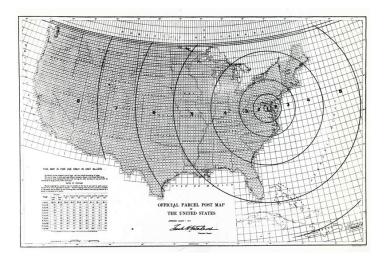


Figure 1. Rating of Experience in the Systems at Work and in other NPM exhibits (Percent)

- About a third of visitors marked that they would <u>definitely</u> return to see the *Systems at Work* exhibition if they were in Washington in the next year (31%); almost two thirds of visitors stated they <u>might</u> visit again (60%). Just under a tenth of surveyed visitors stated they <u>would not</u> visit the *Systems at Work* exhibition again (9%).
- When only local residents were considered their plans to visit the exhibition again, , about one third said they would <u>definitely</u> see the *Systems at Work* exhibit again (37%) and slightly less than two thirds said they <u>might</u> visit *Systems at Work* again (63%).²



Parcel Post zone rate map. Image courtesy of Smithsonian Institution

² The number of visitors identified as local, based on zip code identification, was only 12% of the entire sample.

Activities During the Systems at Work Exhibition Visit

More than half of exhibition visitors watched some portion of the video (52%) (Figure 2).

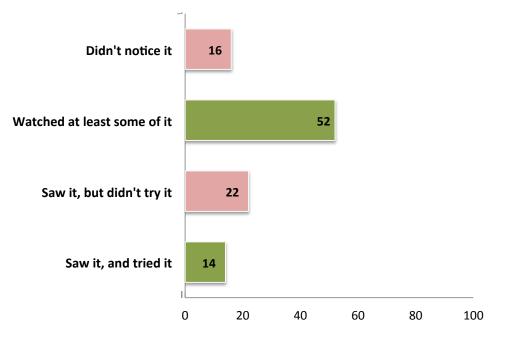


Figure 2. Self-reports of video participation during Systems at Work visit (Percent):

- E About one fifth of exhibition visitors did not notice three of the exhibition activities: postcard stamping (21%), zip code keying (18%), and sticky note comments (18%). The activity that was most often noticed by respondents was the package sorting activity which only 8% of visitors failed to notice.
- The activity that drew the lowest participation from visitors was the sticky note comments. When respondents noticed this activity, a bit under half did not choose to participate (43%).
- The activity that promoted the strongest positive engagement was the postcard stamping activity. More than a quarter of surveyed visitors said they "saw and tried" the postcard stamping (30%). About the same percentage of visitors found the activity "fun and easy" (28%) (Figure 3). The package sorting activity was "seen and tried" by a fifth of visitors (20%), and a third of respondents who engaged in the activity stated it was "fun and easy" (33%) (Figure 4).

Figure 3. Survey Responses to postcard stamping activity during *Systems at Work* visit (Percent):

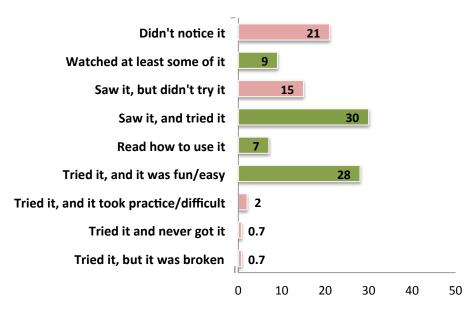
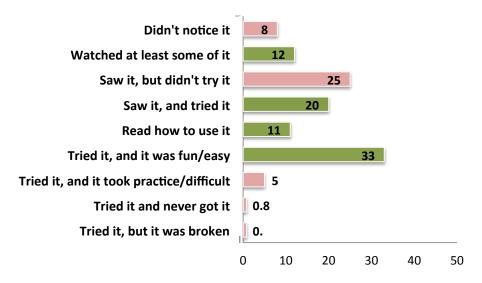


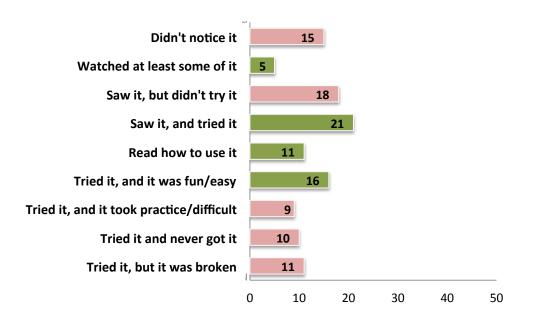
Figure 4. Survey Responses to package sorting activity during Systems at Work visit (Percent):



The most challenging activity for visitors was the handheld scanner activity. More than a quarter of visitors had a less than positive interaction with this activity, about one tenth tried the activity and "found it difficult" (9%), another tenth tried the activity and "never got it" (10%), and roughly another tenth tried the activity and "determined it was broken"³ (11%) (Figure 5).

³ Prior to each survey session all activities in the exhibition were checked to determine that they were fully functioning. On two occasions the stamping activity was low on ink, one time the sticky note activity was low on sticky notes, and once the handheld scanner activity was missing one of the two scanners.

Figure 5. Survey Responses to handheld scanner activity during *Systems at Work* visit (Percent):



Con average one out of ten visitors read how to use an activity. The activities for which visitors were most inclined to read directions were package sorting (11%), zip code keying (12%), and handheld scanner (11%).

Observations

- Response of respondents to the various activities within the *Systems at Work* exhibition varied by gender or whether they were alone or with others.
 - Men were more likely to observe certain activities compared to women.



 More than one in ten men reported

observing the <u>postcard stamping activity</u> (13%), while less than one in twenty women did so (4%).

- Also, the <u>zip code keying activity</u> was observed more frequently by men than women (12% compared to 3%).
- Lastly, the <u>sticky note comments activity</u> was something observed by men, but few women observed it. The percentage of men who observed

this activity was five times greater than the percentage of women at 11% and 2%, respectively.

- A greater percentage of women indicated that they "saw it, and tried" the <u>postcard stamping activity</u> (37%) compared to just under a quarter of men (23%).
- The <u>handheld scanner activity</u> was something that about a quarter of women "saw, but didn't try"(24%), while half as many men didn't try it (12%). This outcome was reinforced by the response about the handheld scanner activity and whether one "Saw it, and tried it"; more than a quarter of men "saw and tried" (29%), but less than half as many women did so (13%). Also, of those who tried the handheld scanner more women selected "Tried it, but it was broken" (19%), compared to only 3% of men.
- Around two fifths of all visitors who came to the *Systems at Work* exhibition alone indicated they "tried the <u>zip code keying activity</u>, and it was fun/easy" (41%), while less than a fifth of visitors in groups found this activity to be so (19%).
- Close to a quarter of those visitors not in a group also claimed to "try the <u>handheld scanner activity</u> and never get it" (24%), while less than a tenth of those respondents visiting with others indicated that they were unsuccessful (8%).
- Overall it did not appear that participation in certain activities within the exhibition caused respondents to rate the exhibition more highly compared to those that did not participate.

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- The one activity that visitors indicated as "tried it, and it was fun/easy" which appeared to impact visitors' ratings was the <u>sticky note comments</u>. Respondents who marked for sticky note comments "tried it, and it was fun/easy" were more likely to give *Systems at Work* a Superior rating (37%), while for those who didn't indicate this about the sticky note activity, just over a tenth provided a Superior rating (12%).
- U.S. residents were more likely to rate *Systems at Work* "Superior" compared to residents of another country, 19% compared to 3%.
- Also, survey respondents that said they would <u>definitely</u> visit the *Systems at Work* exhibition again were more likely to rate *Systems at Work* as Superior (33%), compared to only 8% of those who <u>might</u> come back.

12 | Page

Appendix A: Systems at Work Exhibition Survey Form

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Summer 2012 Systems at Work Exhibition Survey						
Is this your first visit to the National Postal Museum? □ Yes □ No, I have visited □ times before today						
	What led you to visit the museum □ General visit to museum □ To see Mail Call exhibition today? [Mark all that apply] □ To see Systems at Work exhibition □ To visit the museum store □ Other reason, specify: □ To see Systems at Work □ To visit the museum store					
Please rate your overall e Systems at Work exhibition	-	□Poor □]Fair □	Good 🗖 E	Excellent	Superior
For each of the following	activities in the o	exhibition p	lease note	your expei	ience with	them today:
[Mark all that apply]	Main, Narrated Video	Postcard Stamping	Package Sorting	Zip Code Keying	Handheld Scanning	Sticky Note Comments
Didn't notice it						
Watched at least some of it						
Saw it, but didn't try it						
Saw it, and tried it						
Read how to use it						
Tried it, and it was fun/easy						
Tried it, and it took practice/difficult						
Tried it and never got it						
Tried it, but it was broken						
Self Family No Don't know If you were in Washington in the next year, would you visit this exhibition, Systems at Work, again? No, I would not I might Yes, I definitely would Do you live in the United States or another country? United States, specify ZIP code: Image: Control of the country, specify:						
Are you male or female?	⊐Male □Femal	le Wha	t is your a	ge?		
Are you visiting alone or w	vith other people	? 🗆 I am a	lone 🗖 I	am with oth	ier people	
Other than yourself, how # of youth under 12 # of adults (18 and over) many people are with you? # of youth 12 to 17						
Please comment on your experience in the exhibition, Systems at Work:						
	hank you for	r your as	esístance	2/		

Appendix B: Frequencies of Systems at Work Exhibition Survey Responses

Is this your first visit to the National Postal Museum?

Yes	86%	
No	14%	
TOTAL	100%	
Visits: 0-2	57%	
Visits: 3-8	30%	
Visits: more than 8	13%	
TOTAL	100%	

What led you to visit the museum today? [Could select multiple options]

General visit to museum	83%
To see Mail Call exhibition	less than 1%
To see Systems at Work exhibition	less than 1%
To visit the Museum Store	2%
Other reason	17%

Please rate your overall experience in the *Systems at Work* exhibition today:

Poor	0%
Fair	2%
Good	25%
Excellent	58%
Superior	15%
TOTAL	100%

For the following activities in the exhibition please note your experience with them today: [Could select multiple options]

	Main, Narrated	Postcard	Package	Zip Code	Handheld	Sticky Note
	Video	Stamping	Sorting	Keying	Scanner	Comments
Didn't notice it	16%	21%	8%	18%	15%	18%
Watched at least some of it	52%	9%	12%	7%	5%	6%
Saw it, but didn't try	22%	15%	25%	21%	18%	43%
it						
Saw it, and tried it	14%	30%	20%	22%	21%	14%
Read how to use it	NA	7%	11%	12%	11%	9%
Tried it, an it was	NA	28%	33%	22%	16%	14%
fun/easy						
	Main, Narrated	Postcard	Package	Zip Code	Handheld	Sticky Note

	Main, Narrated Video	Postcard Stamping	Package Sorting	Zip Code Keying	Handheld Scanner	Sticky Note Comments
Tried it, an it took	NA	2%	5%	11%	9%	1%
practice/difficult						
Tried it an never got	0%	Less than	Less than	1%	10%	Less than
it		1%	1%			1%
Tried it, but it was	0%	Less than	Less than	1%	11%	2%
broken		1%	1%			

Have you or a member of your family ever worked for the U.S. Postal Service? [Could select multiple options]

Self	6%
Family	13%
No	80%
Not sure	1%

Do you live in the United States or another country?

United States	80%
Another country	20%
TOTAL	100%

Are you visiting alone or with other people?

Alone	15%
With others	85%
TOTAL	100%

Other than yourself, how many people are with you?

With adults (18 and over)		
0-2	83%	
3-5	16%	
more than 5	1%	
With youth 12 to 17		
0-2	81%	
3-5	19%	
more than 5	0%	
With youth under 12		
0-2	80%	
3-5	16%	
more than 5	5%	

Are you male or female? Male

Male	51%
Female	49%
TOTAL	100%

What is your age?

Aged 60 or above	16%
Aged 50-59	19%
Aged 40-49	27%
Aged 30-39	14%
Aged 18-29	25%
TOTAL	101%

If you were in Washington in the next year, would you visit this exhibit, Systems at Work again?

No, I would not	9%
I might	60%
Yes, I definitely would	31%
TOTAL	100%