

# ***Flats Symposium 2007 USPS Corporate Flats Strategy Briefing Paper***

In December 2006, the Board of Governors approved phase-one of the Flats Sequencing System (FSS) program for one hundred (100) production machines. Deployment of the production FSS machines is expected to begin in October 2008 and last two years.

Recognizing the importance of flats and anticipating substantial changes, both the Postal Service and the mailers collaboratively agree to host a *Flats Symposium 2007*.

The Flats Symposium is scheduled for May 17, 2007, and is intended to provide an update on the Postal Service's strategy for flats, increase the understanding of all potential impacts that the mailing industry will face, and provide a forum for an interactive exchange of ideas and issues related to the implementation of the FSS program.

This briefing paper is being provided in advance of the Flats Symposium to provide the mailing industry a basic understanding of the flats strategy and identify key issues or concepts that will be discussed at the symposium. This is a collaborative effort and customer involvement is an integral part of the flats strategy. Holding operating costs down through an effective work-sharing program is vital toward continuing both affordability and service to meet customer expectations.

## **2006 FLAT VOLUME**

The flat volume for FY 2006 was 53.2 billion pieces and the revenue generated from flats was \$15.2 billion.

As noted in Figure 1, the percentages of the total volume by class are as follows:

- First-Class Mail 8%
- Periodicals 17%
- Standard Mail 75%

(Excludes Priority & Package Services Flats)

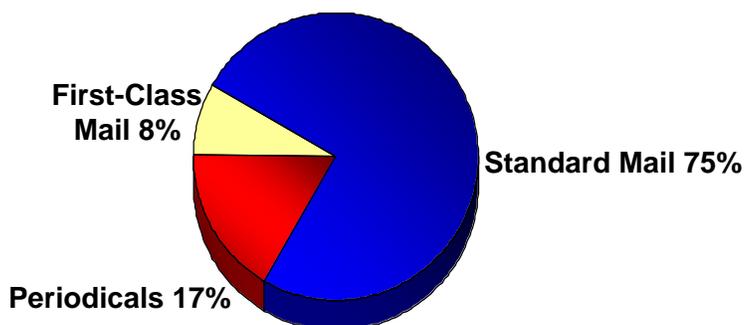


Figure 1: FY 2006 Flat Volume Percentage by Class  
Source: Revenue, Pieces, and Weight (RPW)

## CURRENT FLAT SORTING EQUIPMENT



**AUTOMATED FLATS SORTING MACHINE (AFSM 100)**

- Automated Tray Handling Systems (ATHS)
- Automatic Induction (AI)



**AUTOMATED PACKAGE PROCESSING SYSTEM (APPS)**

- Flat Bundle Sorting



**UPGRADED FLATS SORTING MACHINE (UFSM 1000)**

- Auto Flats Feeder
- Manual Keying

EQUIPMENT	OPERATION	OPERATIONAL SYSTEMS
UFSM 1000	Mechanized / Automated Flats AFF / OCR & Manual Keying Stations	304
AFSM 100	Automated Flats Processing / OCR, BCR, Video Coding	537 -----
<ul style="list-style-type: none"> <li>▪ AFSM 100 / ATHS / AI</li> </ul>	Automated Tray Handling System (ATHS) - Material Handling Tray Take-away and Tray Reload and Labeling. Automatic Induction (AI) - Ergonomic Flat Prep	263
<ul style="list-style-type: none"> <li>▪ AFSM 100 / ATHS</li> </ul>		85
<ul style="list-style-type: none"> <li>▪ AFSM 100 / AI</li> </ul>		89
Small Parcel Bundle Sorter (SPBS)	Flat Bundle Sorting Manual Keying	250
Automated Package Processing System (APPS)	Flat Bundle Sorting OCR, BCR, Video Coding	74

## **CURRENT FLAT OPERATION STRATEGIES**

- ❑ Up-the-Distribution Ladder
  - Carrier Route Processing
  - Customer Participation / Work-sharing
- ❑ Increased Productivity
  - Automate Distribution Operations
  - Standardization / Certification
- ❑ Reduce Flat Mail Preparation / Handling
  - Substitute Technology for Labor

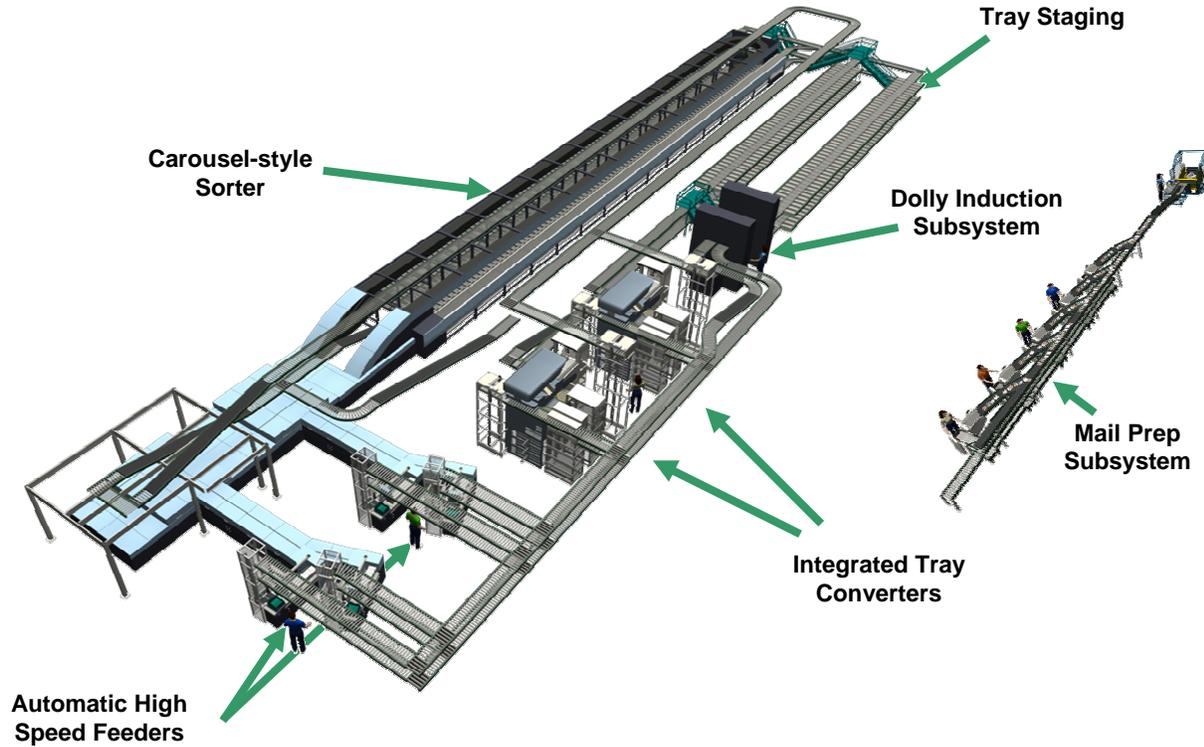
## **DELIVERY STRATEGY**

- ❑ Letters and Flats Sorted Separately
  - DPS Letter Sorting Continues
  - Flats Sequencing in Delivery Point Order
- ❑ Saturation Mail Continues
- ❑ Reengineer Our Processes for Handling “Residual Volumes”

## **DELIVERY VISION**

- ❑ Minimize Carrier In-Office Time
  - Substitute Technology for Manual Carrier Casing
    - Delivery Point Sequence Letters and Flats
- ❑ Benefit from Street Opportunities
  - Carriers Start Street Delivery Earlier
  - Consistent Delivery Times
  - Manage Growth
  - Optimize Routes
- ❑ Other Benefits
  - Delivery Day Visibility
  - Capture Real Estate Opportunities
  - Manage Vehicle Fleet

# FLATS SEQUENCING SYSTEM



ATTRIBUTE	PRODUCTION FSS
OUTPUTS (BINS)	360
INDUCTIONS / FEEDERS	2 / 4
FEEDER THROUGHPUT (4 FEEDERS - MAXIMUM THEORETICAL)	43,200 PCS/HR
APPROXIMATE DELIVERY POINTS SEQUENCED / 2 PASS RUN	30,000
TYPICAL CARRIER ROUTES / 2 PASS RUN	40 - 50
AVERAGE DAY RUN – TIME ACTUAL RUN TIME VARIES BY SEASON	17 HOURS
TYPICAL NUMBER OF DAILY RUNS	6 - 8

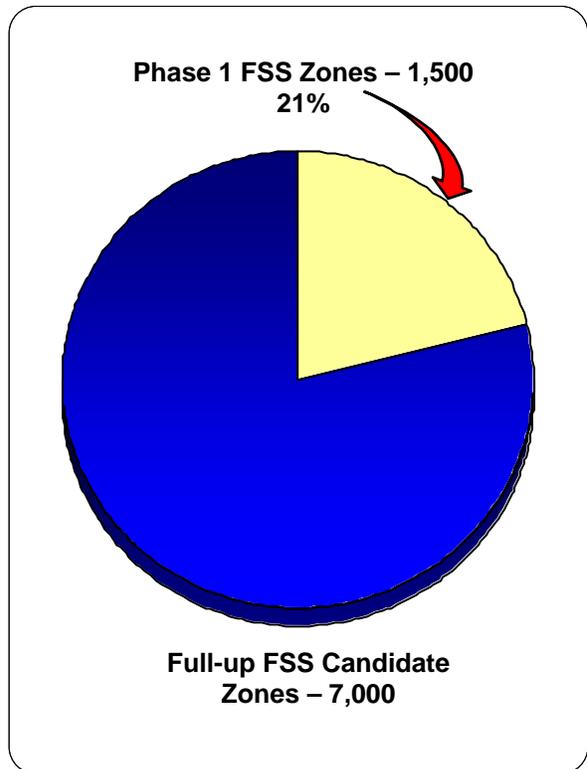
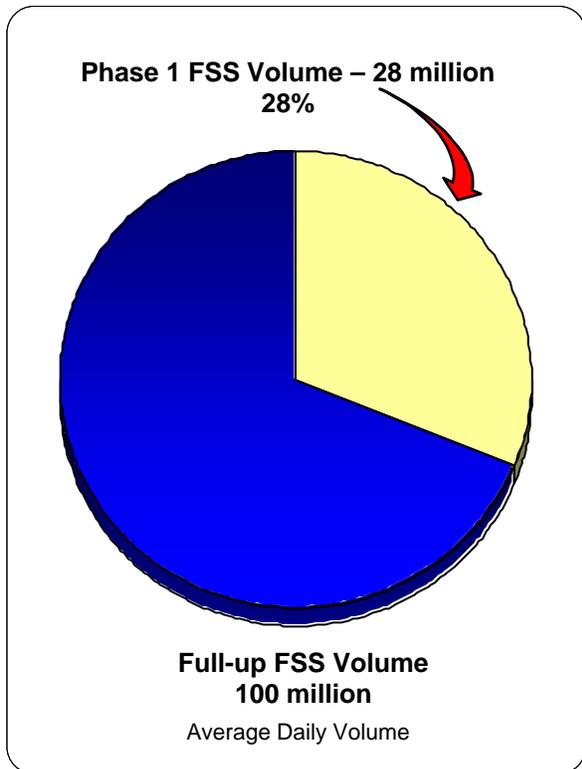
❑ **MULTI-PHASE DEVELOPMENT / DEPLOYMENT**

- Prototype – Indianapolis IN Apr 2006
- BOG Approval of 100 Production FSS Machines Dec 2006
- Pre-production Install – Dulles P & DC Jun 2007
- Pre-production – Live Operations Sep / Oct 2007
- Production First Article Jul 2008
- Phase 1 Deployment Begin Oct 2008
- Phase 1 Deployment End Oct 2010

❑ **PHASE 1 DEPLOYMENT – 100 FSS SYSTEMS**

- 29 Districts
- 32 Processing Facilities (FSS Locations)
  - 27 Existing Processing Centers
  - 5 New Facilities
- 2 - 5 Systems per Facility
- 1,500 Zones

**Phase 1 FSS Volume / Zones**



**☐ PHASE 1 DEPLOYMENT LIST**

Area	Districts	# FSS	FSS Location
NYM	Northern NJ	4	NJ BMC
	Long Island NY	3	Mid Island NY P & DC
	Central NJ	3	Trenton NJ P & DC
NE	Boston	3	Northwest Boston P & DC
	Massachusetts	4	Middlesex Essex P & DC
	Connecticut	5	Springfield BMC
	SE New England	3	Providence RI P & DC
EA	Columbus	3	Former Columbus P & DC
SE	South Florida	5	New Miami Facility Project
	Atlanta	2	Atlanta AMC
		2	North Metro GA P & DC
	Central Florida	4	Orlando P & DC
WE	Colorado/Wyoming	5	Denver P & DC
	Arizona	5	West Valley (Phoenix) Facility Project
	Mid America	2	Kansas City MO P & DC
PA	Los Angeles	2	Herb Peck Annex
	Sacramento	3	Sacramento P & DC
	Bay-Valley & San Francisco	4	San Jose P & DC
	Sierra Coastal	4	Van Nuys Main Office
	Santa Ana	5	New Aliso Viejo Facility Project
	San Diego	2	New Perris DPC Facility Project
CM	Greensboro	2	Raleigh P & DC
		2	Greensboro P & DC
	Northern VA	4	Dulles P & DC
	Richmond	4	New Richmond Facility Project
	Capital	2	Curseen-Morris P & DC
GL	Greater Indiana	2	Indianapolis MPA
	Northern IL	3	Palatine P & DC
		2	Carol Stream P & DC
	Central IL	2	Fox Valley P & DC
		2	South Suburban P & DC
	Southeast MI	2	New Royal Oak Facility Project

**☐ FSS Processing Strategy**

- 17 Hour Run Day (Operating Window)
- 280,500 Sequenced Pieces Per Day Per Machine
- 1<sup>st</sup> and 2<sup>nd</sup> Pass are Run Consecutively
- Each Zone Will be Run Once a Day
- One Dispatch Per Day Per Zone (other than FCM)
- FCM May Not be in DPS based on FSS Operating Window and Mail Availability

## ❑ **Future Flats Enhancements**

- End-to-End Visibility
- Postal Automated Redirection System (PARS) for Flats

## ❑ **Flats Strategy Summary**

- Drive Down Costs Through Automation
- Improve Processing Performance and Service
- Enable Future Growth
- End-to-End Visibility
- Create Lowest-Combined-Cost System

## **CUSTOMER IMPACTS / INVOLVEMENT**

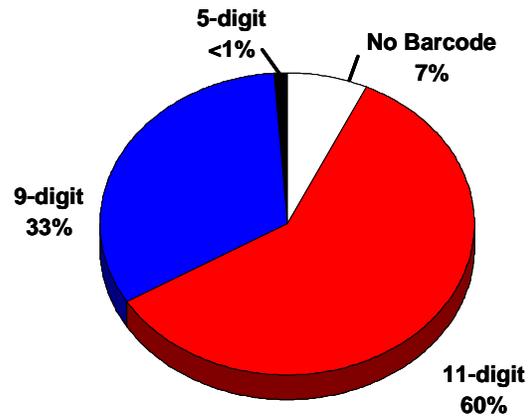
Through work-share rate discounts, the Postal Service provides customers incentives to integrate mailer production techniques with postal processing to improve overall operating efficiency. Affordability and quality service are key to fostering growth in the mailing industry. The Postal Service is committed to continue to work closely with the mailing industry on initiatives regarding flat mail that will reduce handlings and achieve lowest combined costs. As we embark on our journey with commercial mailers to reduce the total cost of flat mail we have several collaborative strategies that will continue to be pursued:

- 1. Increase Customer-Applied Delivery Point Barcodes**
- 2. Improve Address Accuracy and Barcode Readability**
- 3. Evolving Standards for Machinability**
- 4. Standard Address Placement**
- 5. Match Mail Preparation Requirements to Processing Needs**
- 6. Changes to Entry Points and Critical Entry Times**
- 7. Structure Rates to Support Sortation / Handling**

Each of these impacts is examined in more detail in this document:

## 1. Increase Customer-Applied Delivery Point Barcodes

- Transition from 9-Digit to 11-Digit Barcode
- Move From 11-Digit to Intelligent Mail Barcode
- Intelligent Mail Barcode is Available Now for Flats



**2007 Flat Barcode Analysis**  
Barcode sampling results - January 2007

## 2. Improve Address Accuracy and Barcode Readability

- Standard Destination Address Block
- Address Construction Improvements
  - Font Size, Horizontal and Vertical Character Spacing, and Extraneous (to the address) Information
  - Barcode Location
- Reduce OCR Return Address Reading Conflicts
- CASS Certification™ Requirement
- DPV™ Requirement
- MOVE Update Requirement

## 3. Evolving Standards for Machinability

- Automation Flats
  - Flexible, Rectangular and Uniformly Thick
  - Polywrap Standards

## 4. Standard Address Placement

Recommend in an FSS environment all addresses are placed in a manner to increase the ability to locate and see the address block when the flats are “verticalized” or placed standing up. Orient the address location for the letter carrier street handling.

Anywhere, USA 12345

John Doe  
123 Main St  
Anywhere, USA 12345

Can face left or right

Can be left or right justified, or centered.

Anywhere, USA 12345  
123 Main St  
John Doe

Address orientation restrictions will be determined by the USPS (e.g., cannot read upside down when at the top) based on the needs of delivery.

**Bound edge on right**

- This could represent the front cover or back cover of the mail piece.
- Customer address and optional delivery endorsement can appear anywhere in the address zone (top third above the dotted line) when the bound edge is aligned to the right.
- Customer number, source code and messaging can appear anywhere on catalogs.

## 5. Match Mail Preparation Requirements to Processing Needs

- Shift from CR-RT Presort to FSS Scheme Sort for FSS Zones
- Evaluate the Preparation of FSS Bundles on Pallets, Each With One or Multiple Set of FSS Schemes
- Evaluate Non-compensated FSS Scheme Bundles– Secured by One or Two Straps
- Retain Saturation Flats
- Target the Use of APPS for the CR-RT and 5-Digit (Non-FSS), 3-Digit, and ADC Bundles to the Greatest Extent Possible
- Promote Co-palletization Through Additional Incentives
- Promote Co-mailing Through Additional Incentives
- Continue to Promote the Drop-shipment of Flats Deep into the USPS System

## 6. Changes in Entry Points

- ❑ The Postal Service is Optimizing the Co-location of FSS, APPS, and AFSM 100 Machines Where Space Allows
- ❑ Objective is to Consolidate the Entry of Flats to Facilitate More Efficient Processing Through the Use of APPS and the FSS Equipment

## 7. Structure Rates to Support Sortation / Handling

- ❑ Future Pricing Must Create Work Sharing Opportunities and Discounts That Drive Towards Lowest Combined Costs

## CONCLUSION

This USPS Corporate Flats Strategy Briefing Paper is intended to provide participants of the *Flats Symposium 2007* an advance understanding of essential elements of the USPS overall flats strategy. Participants are encouraged to formulate questions prior to the symposium regarding the USPS vision for flats. At the symposium the mailing industry and USPS representatives will engage in an open discussion and an exchange of ideas about the impacts and issues related to the implementation of the FSS program.

Questions and comments can be sent to: [flats\\_symposium@usps.gov](mailto:flats_symposium@usps.gov)