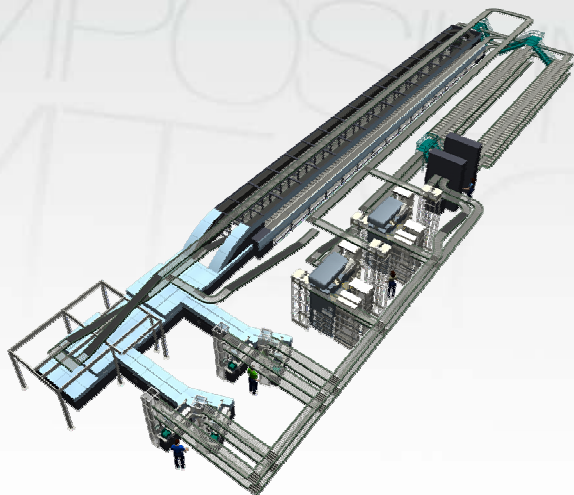


# MTAC USPS Flats Symposium

MAY 17, 2007 8 am to 4:30 pm, WASHINGTON D.C.  
L'Enfant Plaza Hotel, 480 L'Enfant Plaza, SW, Washington DC 20024



**MAILERS TECHNICAL  
ADVISORY COMMITTEE**

UNITED STATES POSTAL SERVICE®

# FLATS SEQUENCING SYSTEM (FSS) OVERVIEW

Barbara Trower  
Manager, Flat Mail Technology

Rosa Fulton  
Executive Director, FSS

May 17, 2007

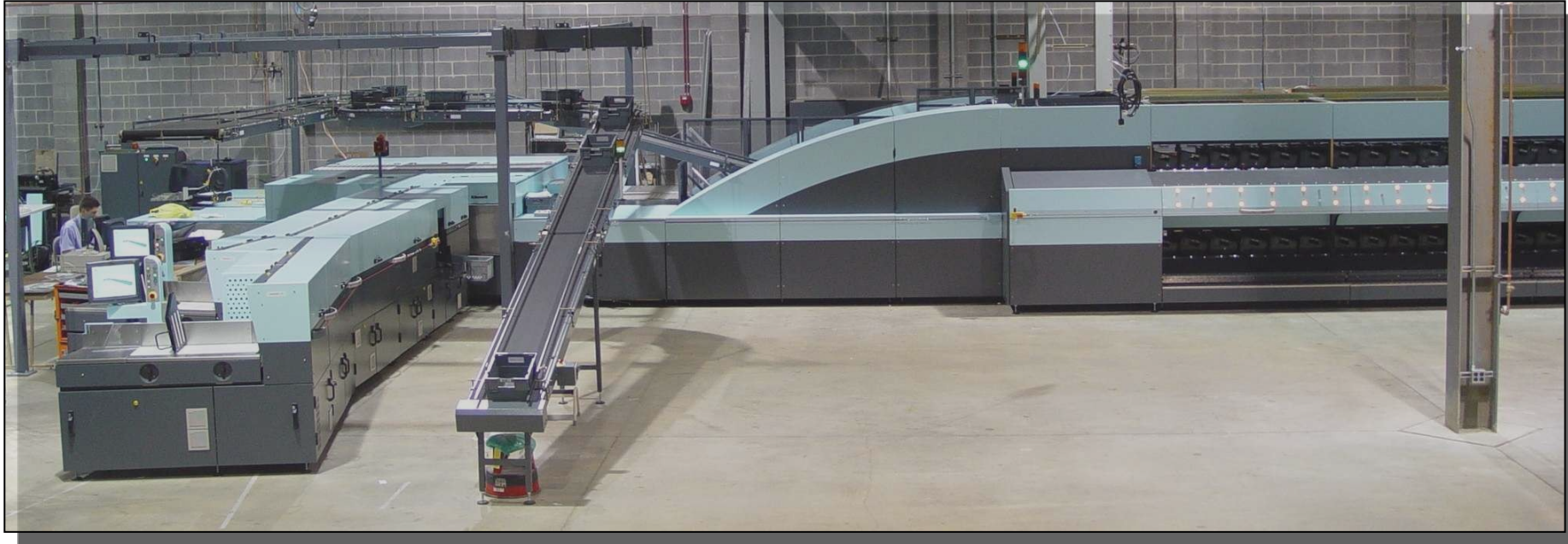
# AGENDA

- ❖ **Program Timeline**
- ❖ **Prototype FSS Test**
- ❖ **Pre-Production – Dulles VA**
- ❖ **Production System / Deployment**

# MULTI-PHASE DEVELOPMENT / DEPLOYMENT

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

# FSS PROTOTYPE MACHINE



## Test System - 192 bins and 2 feeders

Mail prep work stations  
ai equipped flat feeders  
OCR / VCS / ICS  
2<sup>nd</sup> pass feeder assist

21,600 Pieces per hour  
16,200 Delivery points  
Carrier Routes – 20 - 25  
Flat volume 30,000

# INDIANAPOLIS PROTOTYPE TEST



**Carmel Indiana Delivery Unit**

Processed mail  
for  
Zone: 46032

City Carriers – 24  
Rural Carriers - 16

Test performed from April 17th  
to June 10th 2006

- ❖ FSS Machine Location
  - ◆ **Mail Processing Annex (MPA)**
  - ◆ **Indianapolis, IN**
  
- ❖ FSS Delivery Unit
  - ◆ **Carmel IN**
  - ◆ **Zip Code – 46032, 46033, & 46082**
  - ◆ **City Carriers – 35**
  - ◆ **Rural Carriers - 31**

# FSS PROTOTYPE TEST PLAN

## Four Major Areas Tested

1. **Machine Performance**
2. **Function 1 Operational Impacts**
3. **Function 2 (City & Rural) Impacts & Concepts**
  - **In-office**
  - **Street**
4. **Function 4 Impacts**

# PROTOTYPE MACHINE PERFORMANCE

Attribute	Test Goal	Actual
Sort Accuracy	98%	98.8%
Accept Rate	93%	92.2%
1 <sup>st</sup> Pass Throughput	17,500 pph	16,000 – 17,000 pph
2 <sup>nd</sup> Pass Throughput	17,500 pph	16,000 – 18,000 pph
Combined Throughput* * Starts with first letter on first pass until first letter on first pass of subsequent run	8,250 pph	7,700 – 8,000 pph

- ❖ Impacts to Acceptance Rates
  - ◆ Address Hygiene
  - ◆ 11-Digit Barcode
  - ◆ Polywrap Standard



# FSS RESULTS - CARMEL DELIVERY UNIT



Non-DPS Flat Route

# FSS RESULTS - CARMEL DELIVERY UNIT



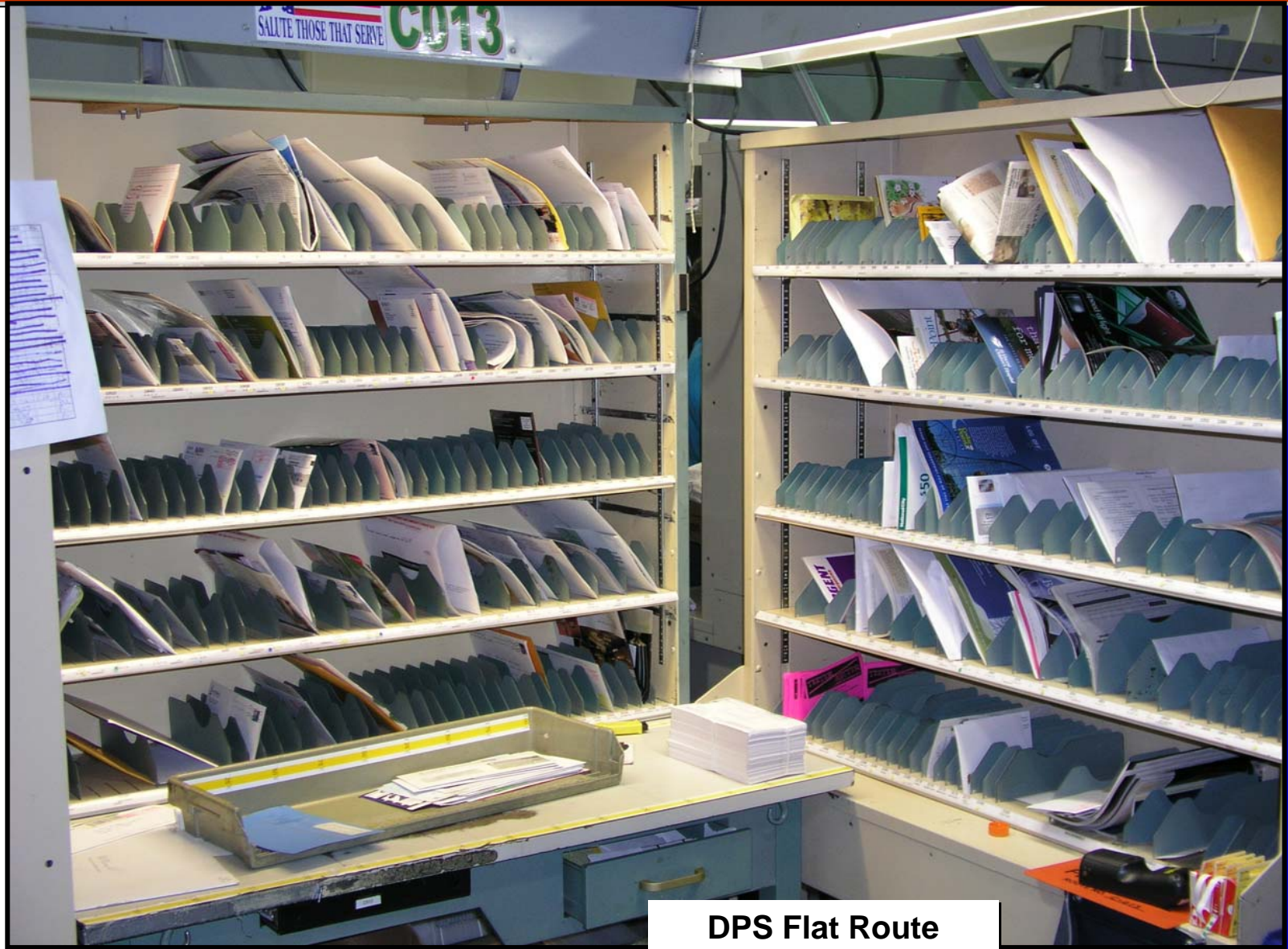
DPS Flat Route

# FSS RESULTS - CARMEL DELIVERY UNIT



DPS Flat Route

# FSS RESULTS - CARMEL DELIVERY UNIT

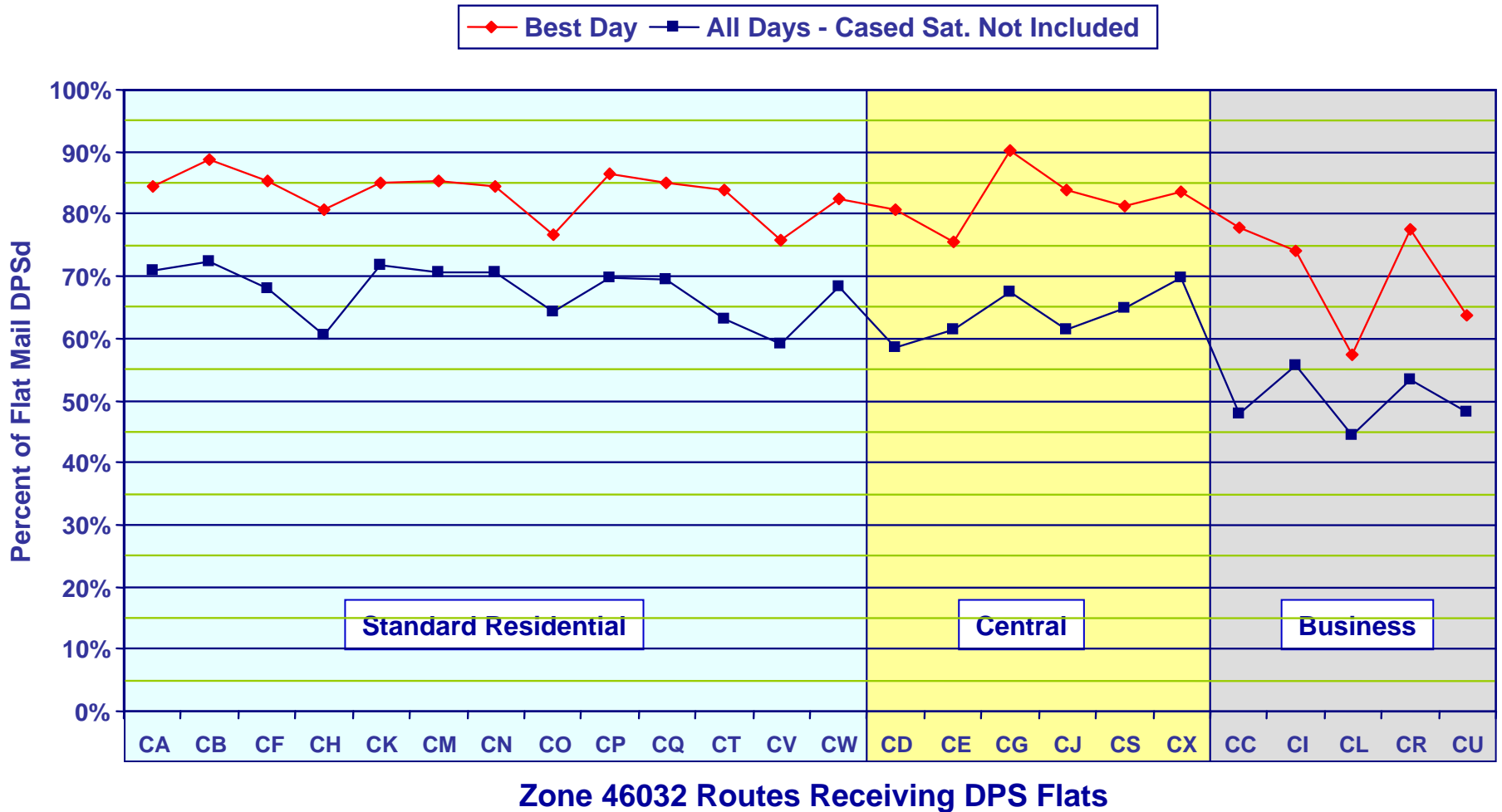


# DPS FLATS DIRECTLY TO THE STREET

**Takin' it to the Street**



# OVERALL % FLATS SORTED to DPS



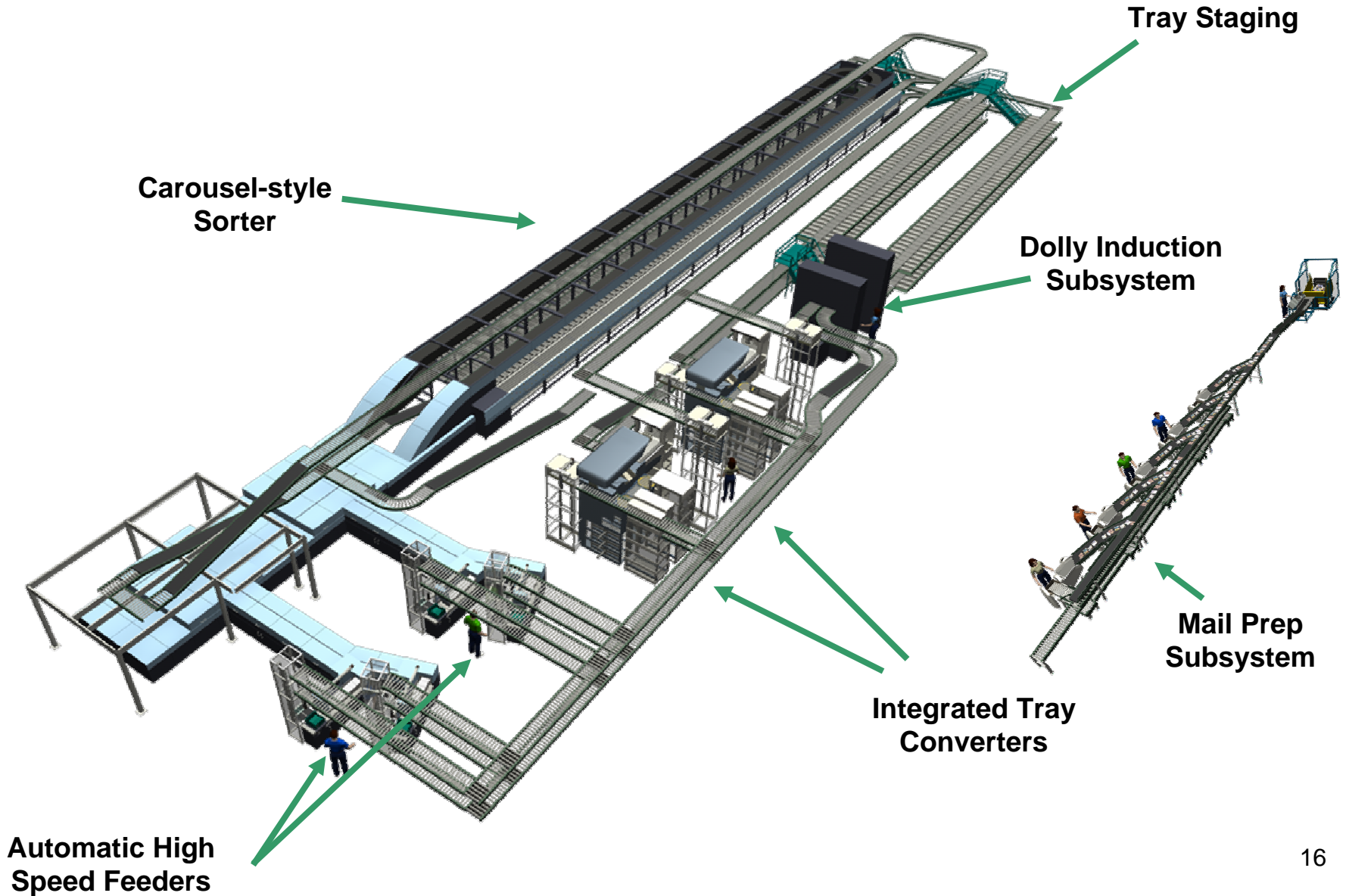
# FSS PRE-PRODUCTION – DULLES VA

Dulles VA – 201, 226 & 227



- ❖ **Install: June 2007**
- ❖ **Field Acceptance Test: Sep 2007**
- ❖ **Live Operations: Sep/ Oct 2007**

# FSS PRODUCTION MACHINE





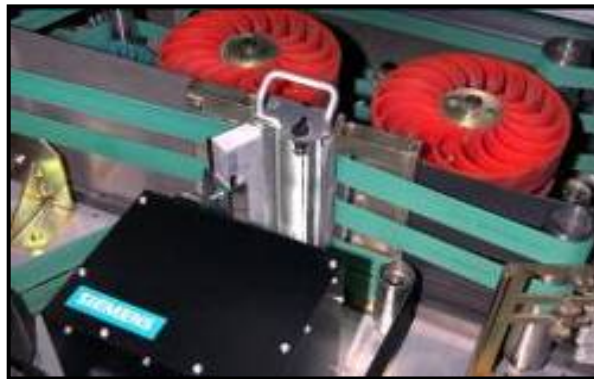
# FSS PRODUCTION MACHINE



**Tray Transfer**



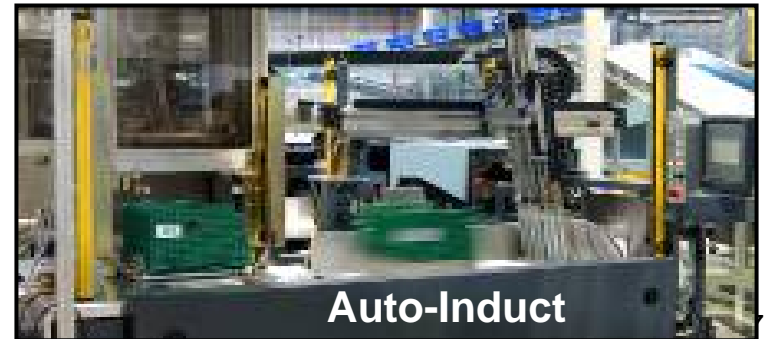
**Prep**



**Image Processing**



**Street  
Trays**

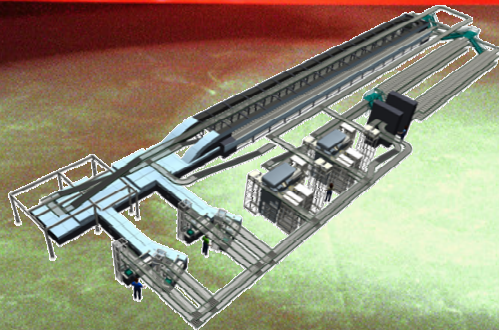


**Auto-Induct**

# PRODUCTION FSS

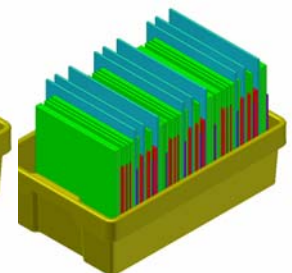
Attribute	Production FSS
Outputs (Bins)	360
Inductions / Feeders	2 / 4
Feeder Throughput (4 Feeders - Maximum Theoretical)	43,200 pcs/hr
Approximate Delivery Points Sequenced / 2 Pass Run	30,000
Typical Carrier Routes / 2 Pass Run	40 - 50
Average Day Run – Time Actual Run Time Varies by Season	17 hours
Typical Number of Daily Runs	6 - 8

Let's Take a Look



# FSS NEW EQUIPMENT – FLAT TRAYS

Tray Type	Contents	Where used
Automation Compatible Tray (ACT) 16"x16.25"x10.4"	<ul style="list-style-type: none"> <li>Mail to be sequenced</li> <li>12" mail</li> </ul>	<ul style="list-style-type: none"> <li>Mail preparation</li> <li>Automated Induction (ai)</li> <li>ITC output</li> </ul>
Rigid Tray 19" x 13.75"x 12"	<ul style="list-style-type: none"> <li>1<sup>st</sup> pass &amp; 2<sup>nd</sup> pass in process mail</li> <li>Sequenced mail</li> <li>9" mail</li> </ul>	<ul style="list-style-type: none"> <li>Sorter outputs</li> <li>In process tray staging</li> <li>ITC Input</li> </ul>
Street Tray 17.83"x12.125"x6"	<ul style="list-style-type: none"> <li>Verticalized mail for carrier</li> <li>15" mail</li> </ul>	<ul style="list-style-type: none"> <li>ITC output dispatch</li> <li>Dispatch</li> <li>Mail Carrier</li> </ul>



# FSS NEW EQUIPMENT – STREET TRAYS



Prototype Trays – Under Development

# FSS NEW EQUIPMENT – STREET TRAYS



Prototype Trays – Under Development

# NEW EQUIPMENT – TRANSPORT



**Carrier Automation Street Tray Rack (CASTR)**

Prototype – Under Development

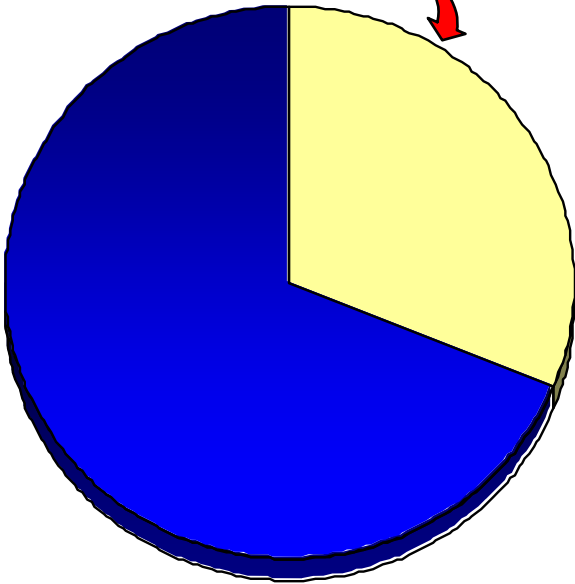
# PHASE 1 DEPLOYMENT – 100 SYSTEMS

- ❖ 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

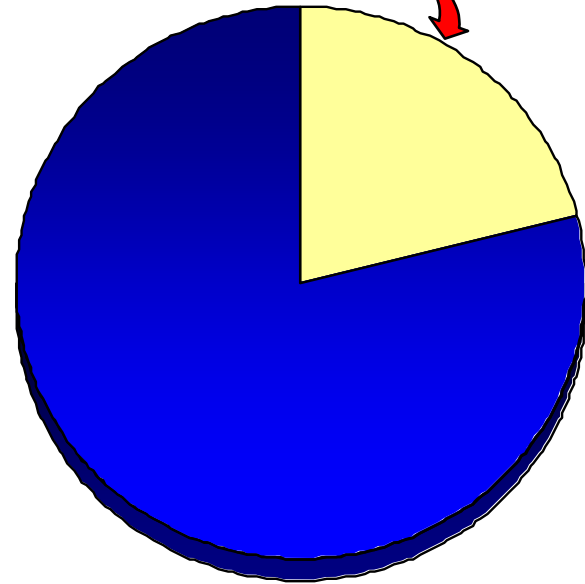
Phase 1 FSS Volume – 28 million  
28%



Full-up FSS Volume  
100 million

Average Daily Volume

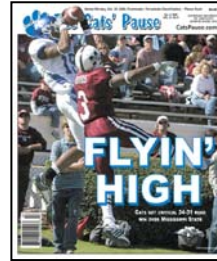
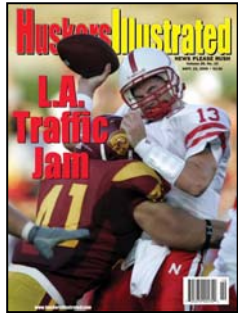
Phase 1 FSS Zones – 1,500  
21%



Full-up FSS Candidate Zones  
7,000

# FSS PROCESSING STRATEGY

- ❖ 17 Hour Run Day (Operating Window)
- ❖ 280,500 Sequenced Pieces Per Day Per Machine
- ❖ 1st and 2nd 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



# Thank You!

