



March 23, 2023

Mr. Ivan D. Butts
President
National Association of Postal Supervisors
1727 King St., STE 400
Alexandria, VA 22314-2753

Certified Mail Tracking Number:
7020 3160 0002 0327 5750

Dear Ivan:

As a matter of general interest, the Postal Service plans to test the use of an automated mail volume recording system through the use of visual analytics in the Athens, Georgia Sorting and Delivery Center (S&DC).

The system is anticipated to provide real-time volume recording using a live camera focused on the clerk distribution case. The system will identify the letter mail and count each piece as it is placed in the case cell. Each case cell will be associated with the assigned route, report the total volume of mail distributed and when it is pulled by the carrier. The volume will be reported in the Delivery Operations Information System/Customer Service Adjusted Workload (DOIS/CSAW) application.

The camera is designed to only capture hand movement in order to provide an accurate count of the mail pieces. It has an automatic blur feature which will assist in ensuring individual employees cannot be identified. Additionally, the system does not store any images or video recordings.

Testing at the Athens, Georgia S&DC is scheduled to begin March 28 and take place for approximately six (6) months.

Enclosed are the following documents:

- Visual Analytics – Volume Recording PowerPoint Presentation
- Standard Work Instruction – Letter Volume Recording – Visual Analytics
- Stand-up Talk – USPS Visual Analytics/Volume Recording

Please contact Dion Mealy at 202-507-0193 if you have any questions concerning this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Shannon Richardson", with a long horizontal line extending to the right.

Shannon Richardson
Director
Contract Administration (APWU)

Enclosures

Visual Analytics: Volume Recording

Review Deck

March 16, 2023



Overview

Automated Volume Recording via Computer Vision



Computer Vision & AI Analytics

- Identify letter(s) in hand
- Count volume placed in cells
- Correlate with assigned route #



Accurate Volume Capture

- Report cased/distributed volume
- Indicate when volume pulled
- Interface with DOIS/CSAW via API

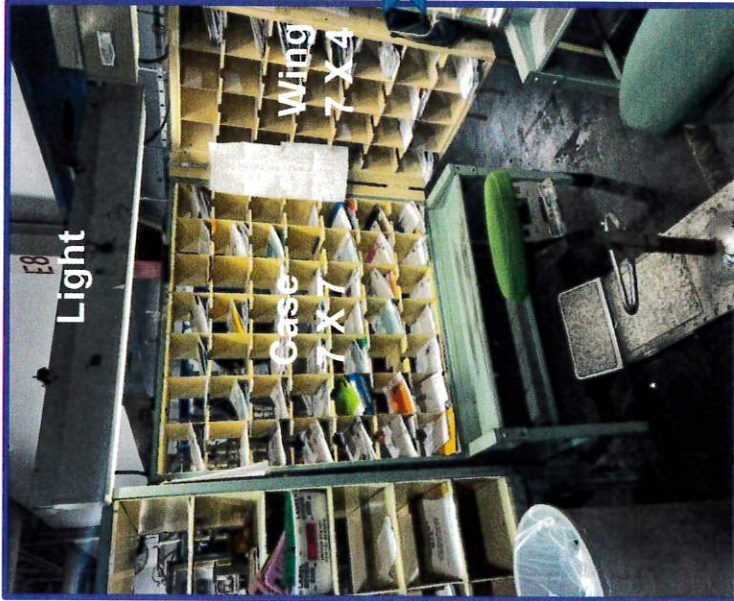


Save Time

- Re-allocate supervisor time
- Drive insights
- Create efficiencies

Computer Vision Setup: Hot Case Letters

Athens S&DC Proof of Concept



“As Is”



“To Be”

Duplicate Route Cases



Computer Vision Setup Risk: Flats

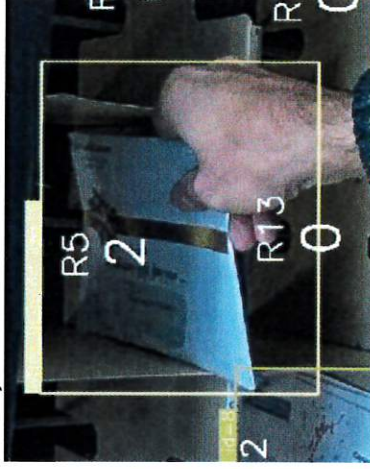


Primary AI Models for Case Counting

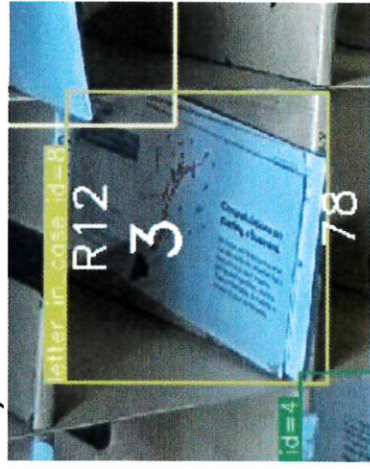
1) "Stack in hand"



2) "Letter in hand"



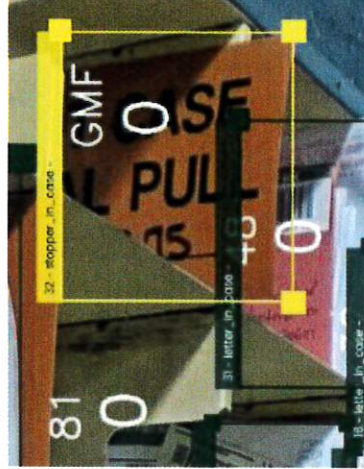
3) "Letter in case"



4) "Gaussian Blur"



5) "Stopper in case"



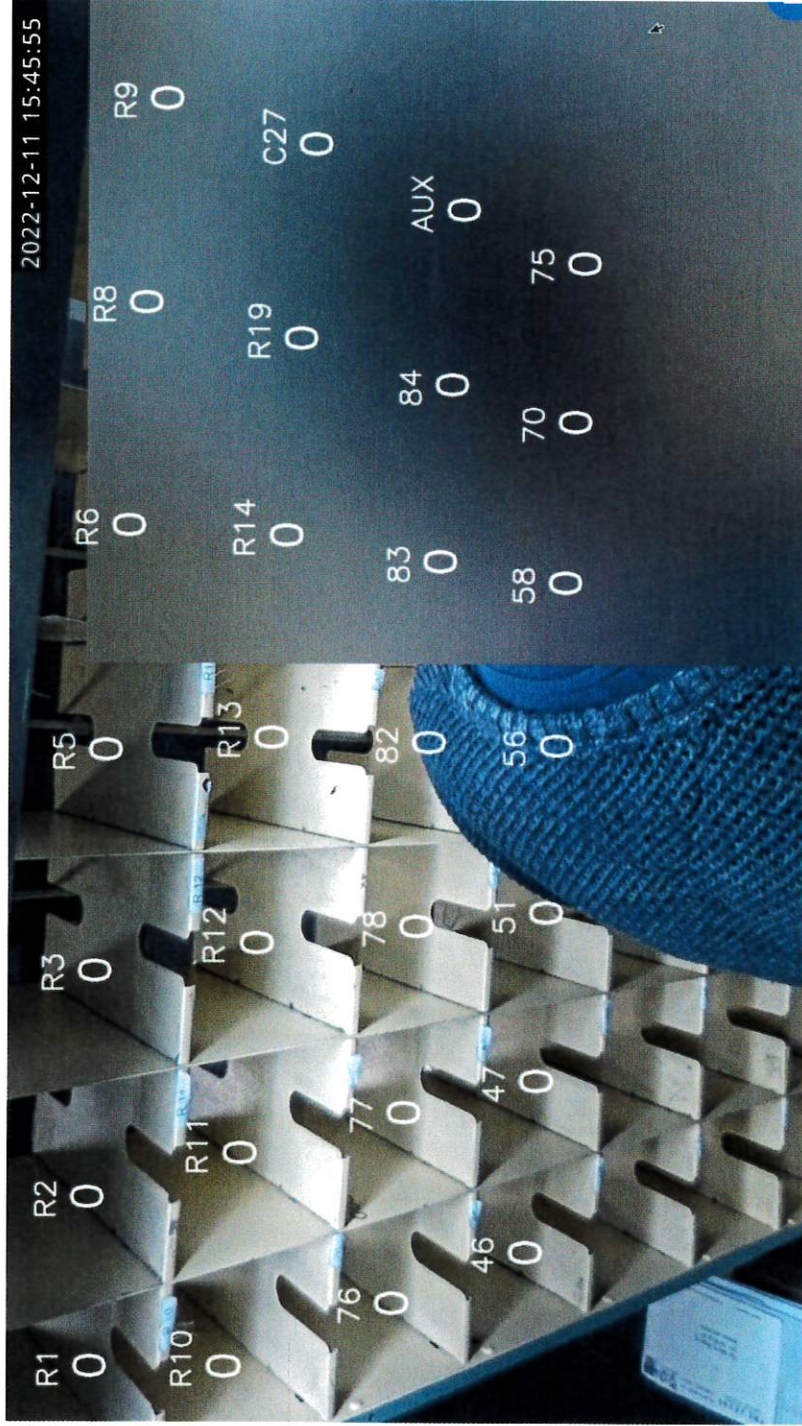
Additional Models
Under Development:

- Head
- Arm
- Hand



Privacy – Pii – X-Ray Vision

- Auto blur the identify of all clerks who may fall within view of the camera

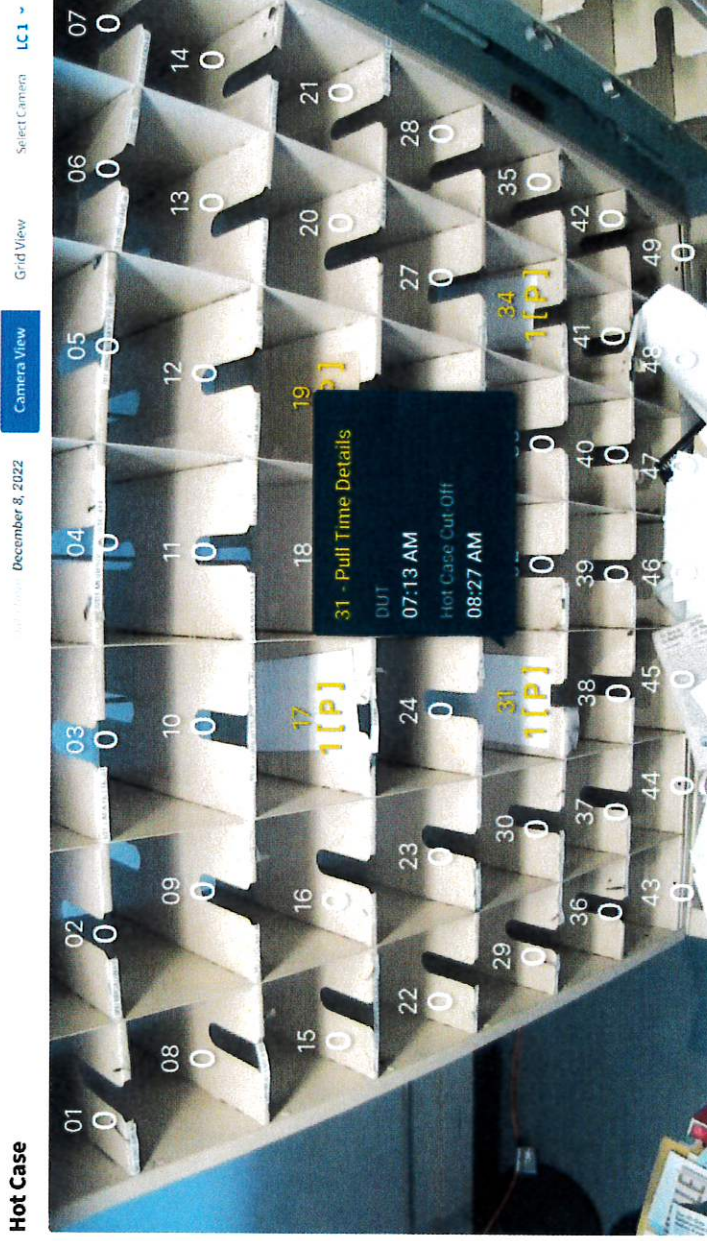


X-ray vision allows for letter count to remain visible even when a blur is required.



Volume Recording System: Live Camera View

Live Camera Reporting



Hover-over cells returns an overlay of volumed pulled at cut-off times



HQ – Admin - PM view.

Volume Recording System: Live Camera Grid View

Live Camera Reporting

Hot Case

December 8, 2022

Camera View

Select Camera LC1

01	02	03	04	05	06	07
0	0	0	0	0	0	0
08	09	10	11	12	13	14
0	0	0	0	0	0	0
15	16	17	18	19	20	21
0	0	1[P]	0	[P]	0	0
22	23	24	26	27	28	28
0	0	0	DUT 07:13 AM Hot Case Cut Off	0	0	0
29	30	31	33	34	35	35
0	0	1[P]	0	1[P]	0	0
36	37	38	39	40	41	42
0	0	0	0	0	0	0
43	44	45	46	47	48	49
0	0	0	0	0	0	0

31 - Pull Time Details
DUT
07:13 AM
Hot Case Cut Off
08:27 AM



Supervisor view.

Reporting: Cased Letter Volume By Distribution Up Time & Hot Case Cut-Off



Letter Case Count

Live Camera Reporting



Route info

Select Time ▼ Hide/Show Column ▼ ↓ ↻

Tomorrow

Current Day

Data from: December 8, 2022

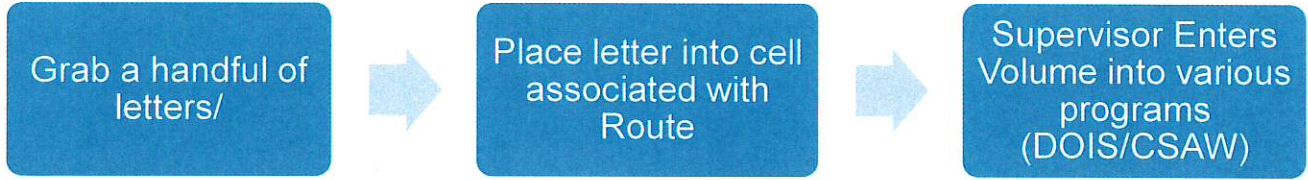
Route #	DUT 07:30 am	Hot Case Cut-Off 08:30 am	Total Mail Volume	Future Count
Route 1	12	12	24	36
Route 2	20	40	60	60
Route 3	11	3	14	23
Route 4	20	9	29	54
Route 5	2	7	9	12
Route 6	30	60	90	72


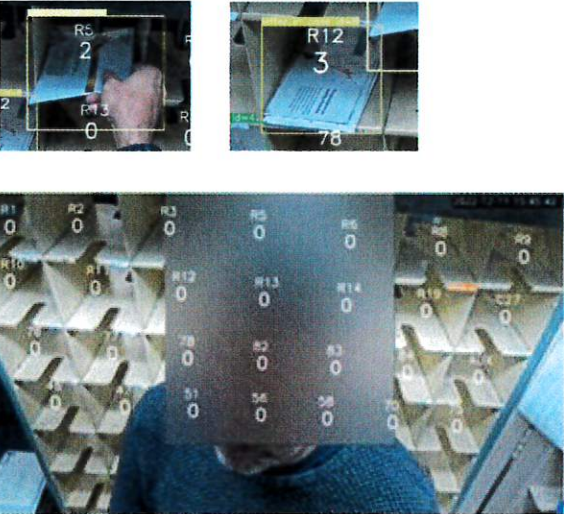


Supervisor view.



Standard Work Instruction: LETTER VOLUME RECORDING – VISUAL ANALYTICS



	Important Steps	Key Points	Reasons for Key Points
	<ol style="list-style-type: none"> 1) Clerk sits at the letter distribution case 2) Grabs handful of letters 	<ul style="list-style-type: none"> ▪ Sit on approved distribution stool. ▪ Handful of mail provides letters close to the distribution cells. 	<ul style="list-style-type: none"> ▪ To have an adequate amount of mail in hand to conduct sortation
	<ol style="list-style-type: none"> 3) Place letter into cell by route scheme 	<ul style="list-style-type: none"> ▪ Separate mail for each route ▪ Volume will be recorded by each route 	<ul style="list-style-type: none"> ▪ Mail is available for each carrier to withdraw ▪ Volume by route

Standard Work Instruction: LETTER VOLUME RECORDING – VISUAL ANALYTICS



Reporting: DUT & Hot Case Time Customization, Exporting, & Printing

Letter Case Count

View: User Controls | Reporting

Route info

Route #	PCF # of cases	Post Case Count	Hot Case Count	Filtered Count
Route 1	12	12	0	12
Route 2	20	20	0	20
Route 3	11	1	0	21
Route 4	25	9	0	34
Route 5	1	1	0	12
Route 6	30	10	0	12

Download, Export & Print

Supervisor view.

4) At designated time record volume

- Volume recording performed via visual analytics

- No manual volume recording required

Stand-Up Talk

USPS Visual Analytics / Volume Recording

The Postmaster General's, Delivering for America 10 year plan encouraged every level of the Postal Service to improve, replace, or completely rethink how the Postal Service conducts business. Today I talk to you about a unique opportunity to replace an outdated technology. The time has come for the Postal Service to use technology of today to record volume.

The system is anticipated to provide real-time volume recording using a live camera focused on the clerk distribution case. The system will identify the letter mail and count each piece as it is placed in the case cell. Each case cell will be associated with the assigned route, report the total volume of mail distributed and when it is pulled by the carrier. The volume will be reported in the Delivery Operations Information System/Customer Service Adjusted Workload (DOIS/CSAW) application.

The camera is designed to only capture hand movement in order to provide an accurate count the mail pieces. It has an automatic blur feature which will assist in

ensuring individual employees not be identified.
Additionally, the system does not store any images or
video recordings.

Thank you for what you do every day, Delivering for
America, and YOUR customers.