



PUBLICLY-AVAILABLE TOOL TO ESTIMATE VOTE-BY-MAIL LEAD TIMES!

Wonder how long it will take to count mail ballots after receipt or what happens if you have to adjust resources along the way? PLEJ and the Engineering for Democracy Institute (EDI) have created a publicly available tool to help election offices plan the time to process and count mail ballots—from arrival through verification, scanning, and tabulation—based on resources available.

This tool uses data-backed simulations to allow election officials to enter their specific, step-by-step vote-by-mail processing methods, voter turnout estimates, and vote-by-mail ballot arrivals to predict the time required to process all vote-by-mail ballots. This tool (i) helps address concerns that voters have regarding when election results are finalized and (ii) provides a mechanism for election officials to use to help project the lead time required to complete the counting and tabulation processes. Rest assured, no information that you enter is saved or stored by PLEJ or EDI.

Consider using this tool to:

- ✓ Forecast processing times
- ✓ Determine optimal times to bring in staff
- ✓ Evaluate operational impact of resource changes (i.e. allocation of staffing by stage, adapting to staffing shortages, budget adjustments, changes in available equipment, introducing automatic signature verification)



View:

- User Guide (bit.ly/PLEJ-VBMTU)
- Video Tutorial (bit.ly/PLEJ-VBME)
- How-To Instructions on the Reverse Side

VBMTIME.APP





USING THE VOTE-BY-MAIL LEAD TIME ESTIMATOR

Step 1: Go to vbmtime.app

← → ↺ vbmtime.app 🔍 ☆

Step 2: Enter the two "General Inputs" values. (You can always mouse over over the small "i" for more information!)

General Inputs

Number of Envelopes: ⓘ

Enter Number

Average Number of Ballot Cards Per Envelope: ⓘ

Enter Number

Step 3: Click "Add Steps" Button, use the + sign to add all of the expected stages in your vote-by-mail process.



Download the User Guide Watch a Video Walkthrough

PROCESSING STEPS ⓘ

ADD STEPS +

Run Simulation

Arrange Incoming Envelopes into Trays +

Count Envelopes +

Scan Signatures & Sort Envelopes +

Manual Signature Verification +

Rescan & Sort Envelopes +

Open Envelopes +

Step 4: Enter the necessary information for each of the stages in your VBM process.

Manual Signature Verification

Number of Stations: ⓘ

Enter quantity

Number of Staff per Station: ⓘ

Enter quantity

Select Processing Time: ⓘ

Default

Manual Verification Percent: ⓘ

Enter percentage

Signatures Checked Simultaneously ⓘ

Enter number

☐ Level 2 Signature Verification ⓘ

Step 5: Ensure all values are entered.

Number of Stations: ⓘ

Enter quantity

ⓘ This value is required

Step 6: Start simulation!

(Note: Larger estimates may take a few minutes to process)

Run Simulation

Step 7: Explore your data!

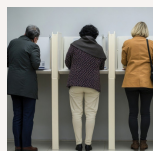
After simulation completes, a "results" window will pop up with information about each stage of the process, overall wait times, bottlenecks, and more.

Download results, or save data to compare and contrast against a future simulation as you adjust resources.

Current Results		Saved Results	
Station Wait Times:		Station Wait Times:	
Scan Signatures & Sort Envelopes-1 :	22 minutes	Scan Signatures & Sort Envelopes-1 :	22 minutes
Manual Signature Verification-2 :	3 minutes	Manual Signature Verification-2 :	28 minutes
Level 2 Signature Verification-3 :	3 minutes	Level 2 Signature Verification-3 :	1 minute
Rescan & Sort Envelopes-4 :	1 minute	Rescan & Sort Envelopes-4 :	0 minutes
Open Envelopes-5 :	41 minutes	Open Envelopes-5 :	1 hour 4 minutes
Average Time that a Ballot is in the System: 1 hour 6 minutes		Average Time that a Ballot is in the System: 1 hour 39 minutes	
Average Time that a Ballot Spends Waiting: 1 hour 6 minutes		Average Time that a Ballot Spends Waiting: 1 hour 39 minutes	
Required Working Hours: ⓘ	2 hours 8 minutes	Required Working Hours: ⓘ	2 hours 57 minutes
Required Staff:	58	Required Staff:	36

About PLEJ

PLEJ is a national, nonpartisan nonprofit providing a community of support to large election jurisdictions (those with 250K+ population or any of the four largest jurisdictions in the state or U.S. territory) and professional development opportunities to individuals working in the election administration space.



Wait-to-Vote Calculator votetime.app

Allows election offices to plan ahead for in-person voting by estimating wait times based on ballot length, equipment allocations, and voters in line.



Warehouse Estimator ballotstorage.app

Helps election offices estimate storage needs and off-site storage costs for ballots, equipment, and supplies per election cycle.



Precinct Design Tool votelayout.app

Allows election offices to create digital layouts of all assigned equipment, staff, etc at in-person voting locations by election type.