Voting Timers: User Guide

URI V⚓TES

Engineering for Democracy

Recommendations that will lead to future sustainable practices and tools utilized to overcome new and future obstacles in voting and election processes.

The idea of democracy is simple. Execution is complicated.

Purpose of Tool

URI VOTES has created a collection of specialized timers to aid in on-site data collection during elections. There are six timers available for use through Excel: BallotScannerTimer, BMDTimer, BoothTimer, CheckInArrivalTimer, CheckInTimer, and ThroughputArrivalTimer. Each of these utilizes an Excel user form to display six individual timers. Each timer provides a text box for identifiers (i.e., clothing colors, accessories) so that several voters can be tracked simultaneously. This text is not saved and is automatically cleared after an observation is stopped. Times are recorded by marking the hour, minute, and second of the start and end of an observation, allowing the user to then determine the total time of the observation. An option for undoing the last or current observation is available to allow the user to correct mistakes while tracking a voter (e.g., the person is actually dropping off lunch, the observation was stopped prematurely or too late). To assist in fast-paced data collection, shortcut keys are built-in so that observations can be started, stopped, and arrivals can be marked quickly and accurately.

The general instructions listed below detail how to download and set up all of the timers. Following the general instructions are timer-specific instructions explaining the functions of each individual timer.

General Instructions for Setting Up Timers

- Download the zip folder containing all of the timers from the Voting System Timers page on the URI VOTES website.
- Open the desired timer. A window will appear asking if you want to disable macros before opening the file. Select "Enable Macros".
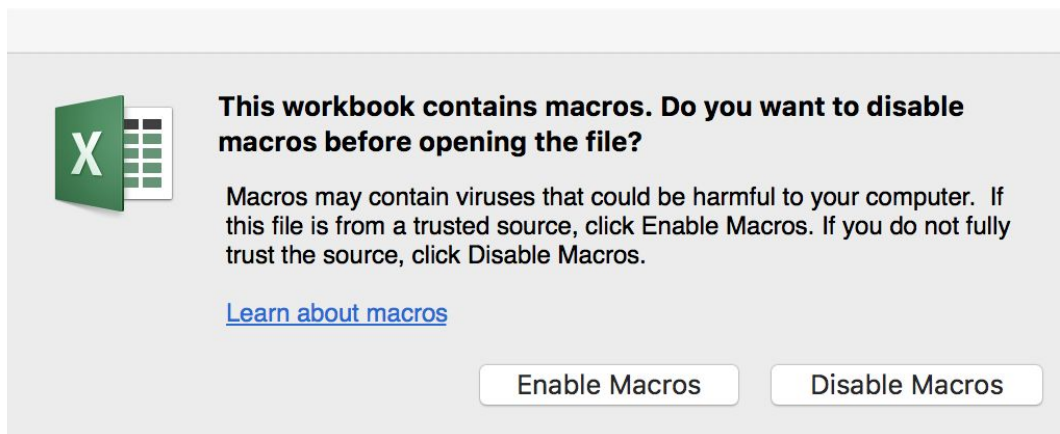

- The timer will appear as a window separate from the Excel sheet. Close the timer application window.
- Go to 'File' and click 'Save As' to select a save destination and rename the file. This will create a new file containing any data collected while saving the original timer file for future use.

- Once returned to the Excel sheet, click the 'Open Timer' or 'Show Timer' button to reopen the Timer application window.
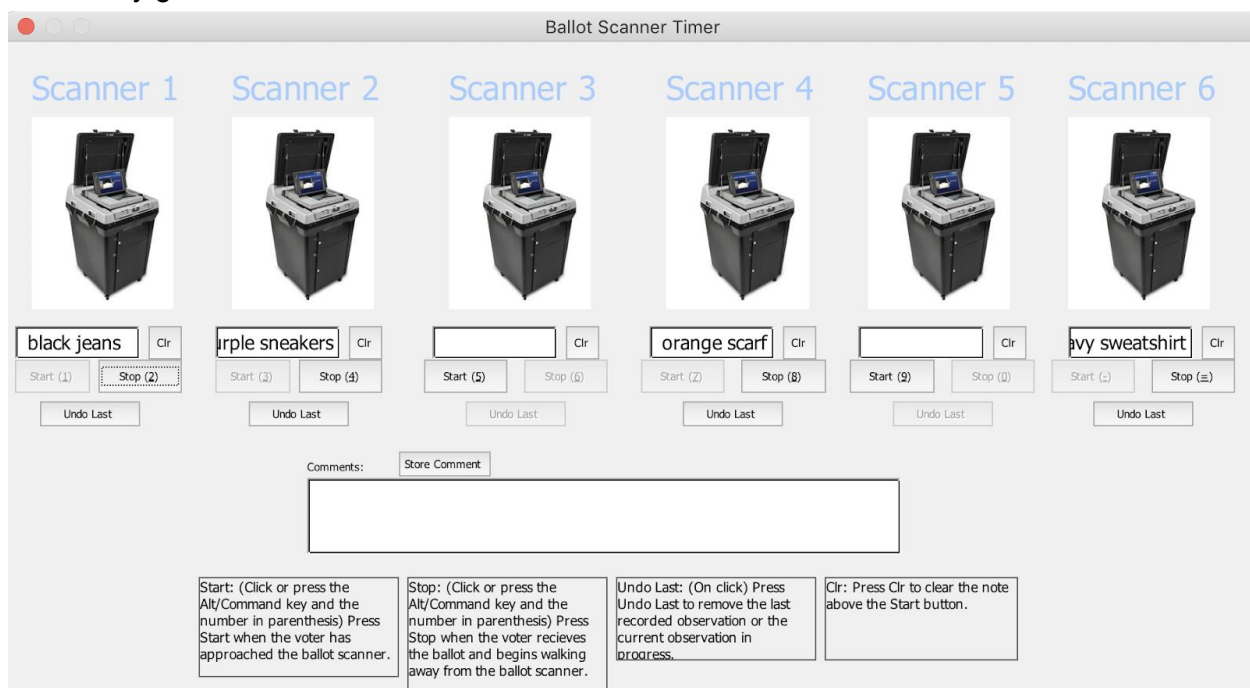

Ballot Scanner Timer:

- Identify a voter that is approaching the ballot scanner. In the textbox of one of the timers, insert a comment that describes the voter and will help in tracking the individual at the ballot scanner.
  - Refrain from using any language that comments on the voter's gender, age, race, ethnicity, or physical appearance.
  - These notes are not stored in the Excel file.
  - The 'Clr' button next to the text box clears the note if needed.
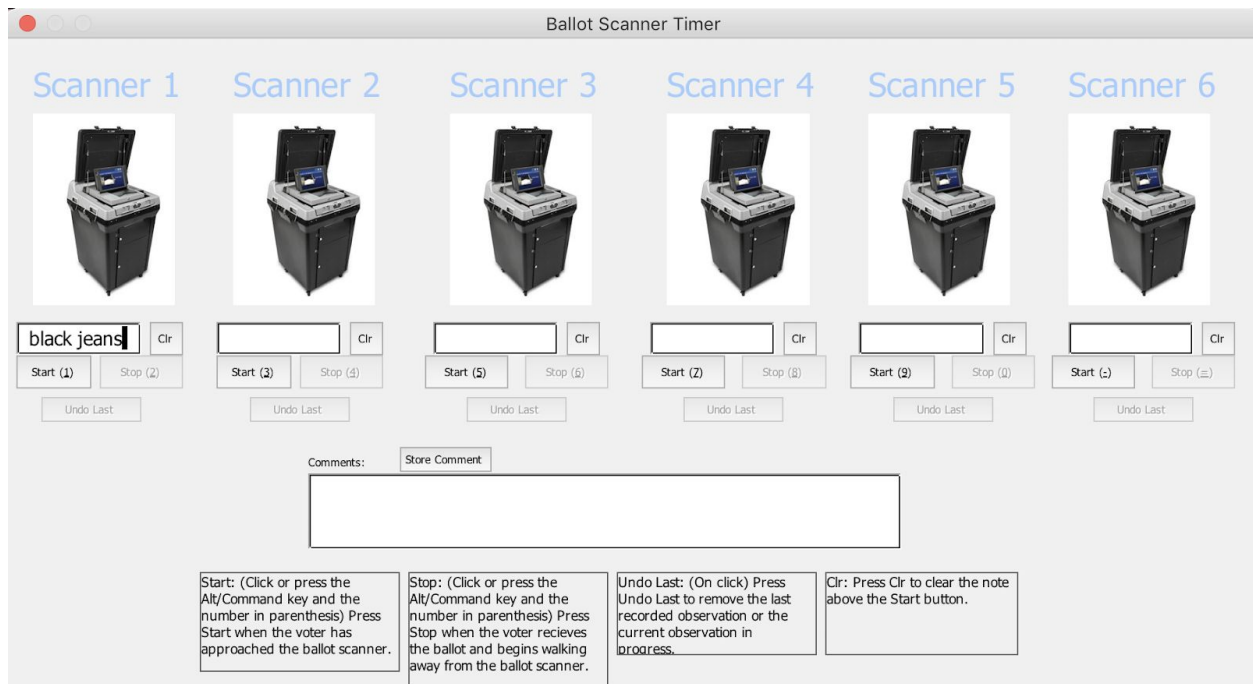
- When the voter reaches the ballot scanner, either click the 'Start' button for that timer or use the shortcut keys described at the bottom of the application window. The 'Start' button will then change color (i.e., grey on a Mac computer or green on a Windows computer).
  - 'Start' creates a timestamp in the Excel file that marks the time that the voter began using the ballot scanner with accuracy down to the second.
  - Ensure that there is a standardized method to marking the 'Start' of when a voter begins using the ballot scanner (e.g., when they begin interacting with the device, when they first walk up to the device).
- When the voter is no longer using the ballot scanner, either click the 'Stop' button for that timer or use the shortcut keys described at the bottom of the application window.

- ○ 'Stop' creates a timestamp in Excel marking the time that the voter exits the ballot scanner.
- ○ Similarly to the start process, ensure that there is a standardized method for determining when a voter exits the ballot scanner (e.g., as the voter steps away from the device).
- If there is any need to remove an observation that is currently running or to remove the last observation for a timer, the 'Undo Last' button clears the last or current observation of the individual timer (e.g., when a voter leaves the ballot scanner and the data collector does not click the 'Stop' button).
- For each additional voter that the user tracks at the ballot scanner, use a timer that is not currently in use and follow the steps outlined above. Up to six voters may be tracked at any given time.

- To save any comments during the data collection process, insert comments in the text box at the bottom of the application window and click the 'Store Comment' button.
- Occasionally exit the application window and save the file (do this when no timers are actively tracking a voter).

BMD Timer:

- Identify a voter that is approaching a BMD. In the textbox of one of the timers, insert a comment that describes the voter and will help in tracking the individual at the BMD.
  - ○ Refrain from using any language that comments on the voter's gender, age, race, ethnicity, or physical appearance.
  - ○ These notes are not stored in the Excel file.

○ The 'Clr' button next to the text box clears the note if needed.

● When the voter reaches a BMD, either click the 'Start' button for that timer or use the shortcut keys described at the bottom of the application window. The 'Start' button will then change color (i.e., grey on a Mac computer or green on a Windows computer).
  ○ 'Start' creates a timestamp in the Excel file that marks the time that the voter began using the BMD with accuracy down to the second.
  ○ Ensure that there is a standardized method to marking the 'Start' of when a voter begins utilizing the BMD (e.g., when they begin interacting with the BMD, when the voter first walks up to the BMD).
● When the voter exits the BMD, either click the 'Stop' button for that timer or use the shortcut keys described at the bottom of the application window to mark the end of the voter using the BMD.
  ○ 'Stop' creates a timestamp in Excel marking the time that the voter exits the BMD.
  ○ Similarly to the start process, ensure that there is a standardized method for determining when a voter exits BMD (e.g., as the voter steps away from the BMD).
● If there is any need to remove an observation that is currently running or to remove the last observation for a timer, the 'Undo Last' button clears the last or current observation of the individual timer (e.g., when a voter leaves the BMD and the data collector does not click the 'Stop' button).
● For each additional voter that the user tracks at a BMD, use a timer that is not currently in use and follow the steps outlined above. Up to six voters may be tracked at any given time.

BMD Timer

| BMD 1 | BMD 2 | BMD 3 | BMD 4 | BMD 5 | BMD 6 |

| pink shirt | Clr | | Clr | denim jacket | Clr | white boots | Clr | black jacket | Clr | | Clr |

| Start (1) | Stop (2) | Start (3) | Stop (4) | Start (5) | Stop (6) | Start (7) | Stop (8) | Start (9) | Stop (0) | Start (-) | Stop (=) |

| Help | Undo Last | Help | Undo Last | Help | Undo Last | Help | Undo Last | Help | Undo Last | Help | Undo Last |

Comments: [Store Comment]

Start: (Click or press the Alt/Command key and the number in parenthesis) Press Start when the voter has approached a ballot printing station or BMD.

Stop: (Click or press the Alt/Command key and the number in parenthesis) Press Stop when the voter begins walking away from the ballot printing station or BMD.

Undo Last: (On click) Press Undo Last to remove the last recorded observation or the current observation in progress.

Clr: Press Clr to clear the note above the Start button.

Help: Press Help to label the current observation when a voter requires assistance when using the BMD.

- To save any comments during the data collection process, insert comments in the text box at the bottom of the application window and click the 'Store Comment' button.
- Occasionally exit the application window and save the file (do this when no timers are actively tracking a voter).

Privacy Booth Timer:

- Identify a voter that is approaching a privacy booth. In the textbox of one of the timers, type a comment into the box that describes the voter and will help in tracking the individual in the system.
  - Refrain from using any language that comments on the voter's gender, age, race, ethnicity, or physical appearance.
  - These notes are not stored in the Excel file.
  - The 'Clr' button next to the text box clears the note if needed.
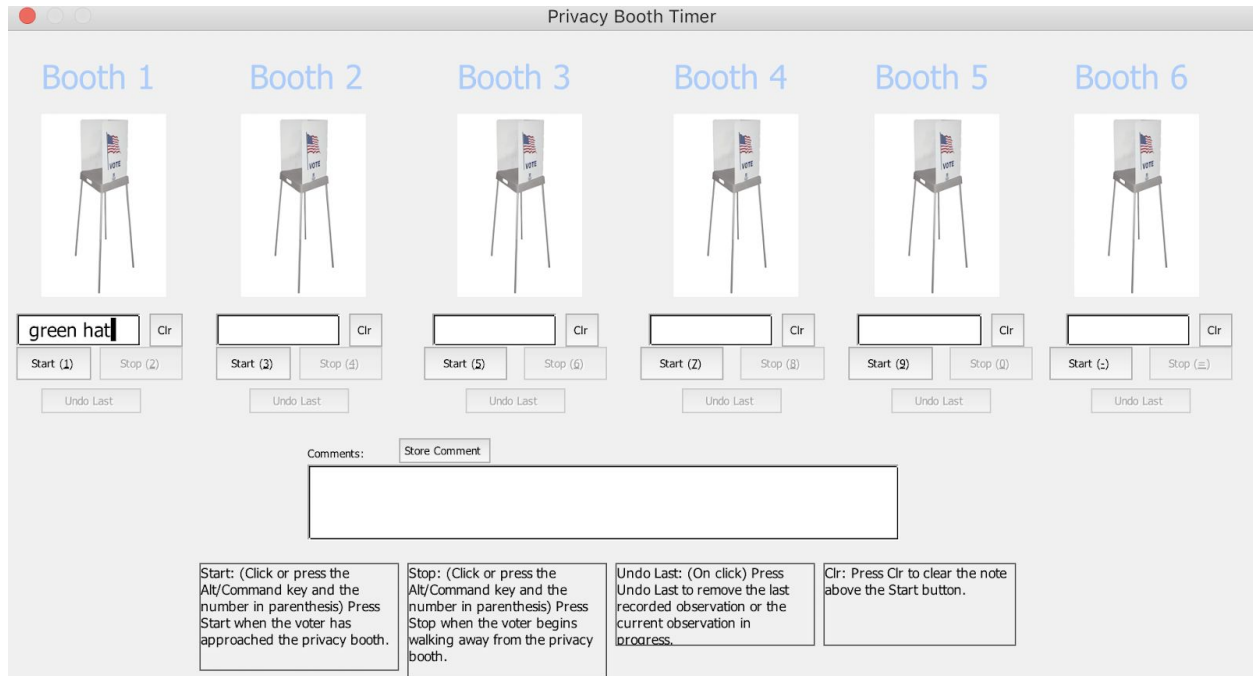
Privacy Booth Timer

| Booth 1 | Booth 2 | Booth 3 | Booth 4 | Booth 5 | Booth 6 |

green hat | Clr
Start (1) | Stop (2)
Undo Last

Start (3) | Stop (4)
Undo Last

Start (5) | Stop (6)
Undo Last

Start (7) | Stop (8)
Undo Last

Start (9) | Stop (0)
Undo Last

Start (-) | Stop (=)
Undo Last

Comments: | Store Comment

Start: (Click or press the Alt/Command key and the number in parenthesis) Press Start when the voter has approached the privacy booth.

Stop: (Click or press the Alt/Command key and the number in parenthesis) Press Stop when the voter begins walking away from the privacy booth.

Undo Last: (On click) Press Undo Last to remove the last recorded observation or the current observation in progress.

Clr: Press Clr to clear the note above the Start button.

- When the voter reaches the privacy booth, either click the 'Start' button for that timer or use the shortcut keys described at the bottom of the application window. The 'Start' button will then change color (i.e., grey on a Mac computer or green on a Windows computer).
  - 'Start' creates a timestamp in the Excel file that marks the time that the voter entered the privacy booth with accuracy down to the second.
  - Ensure that there is a standardized method to marking the 'Start' of when a voter enters the privacy booth (e.g., when they begin interacting with the booth, when they first walk up to the booth).
- When the voter exits the privacy booth, either click the 'Stop' button for that timer or use the shortcut keys described at the bottom of the application window.
  - 'Stop' creates a timestamp in Excel marking the time that the voter exits the privacy booth.
  - Similarly to the start process, ensure that there is a standardized method for determining when a voter exits the privacy booth (e.g., as the voter steps away from the booth).
- If there is any need to remove an observation that is currently running or to remove the last observation for a timer, the 'Undo Last' button clears the last or current observation of the individual timer (e.g., when a voter leaves the privacy booth and the data collector does not click the 'Stop' button).
- For each additional voter that the user tracks in the system, use a timer that is not currently in use and follow the steps outlined above. Up to six voters may be tracked at any given time.
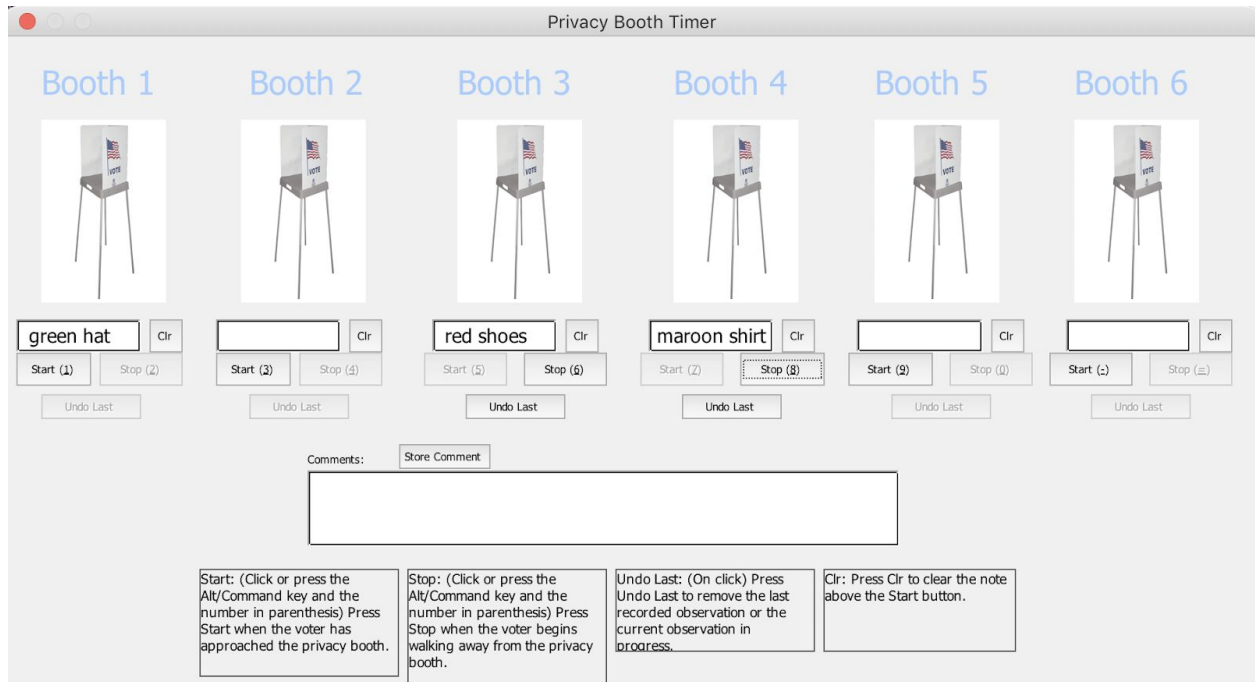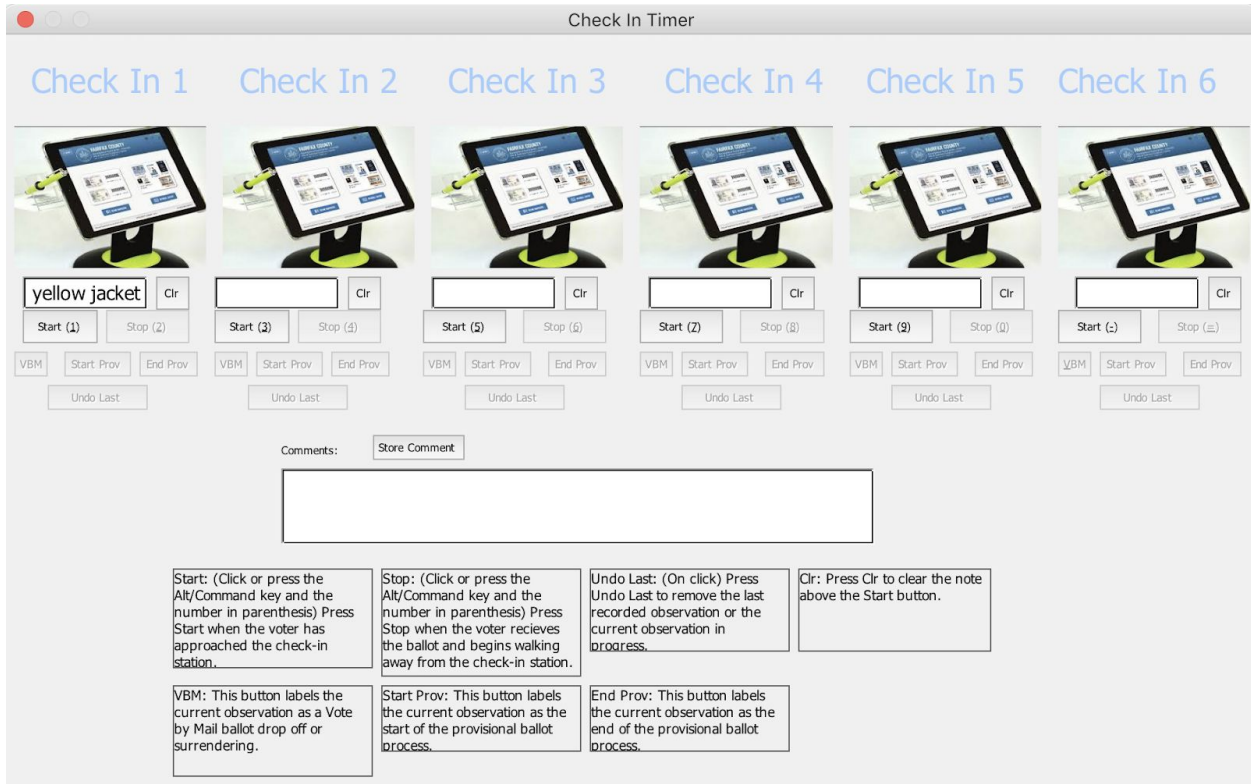
Privacy Booth Timer

| Booth 1 | Booth 2 | Booth 3 | Booth 4 | Booth 5 | Booth 6 |

green hat | Clr | | Clr | red shoes | Clr | maroon shirt | Clr | | Clr | | Clr

Start (1) | Stop (2) | Start (3) | Stop (4) | Start (5) | Stop (6) | Start (7) | Stop (8) | Start (9) | Stop (0) | Start (-) | Stop (=)

Undo Last | Undo Last | Undo Last | Undo Last | Undo Last | Undo Last

Comments: | Store Comment

Start: (Click or press the Alt/Command key and the number in parenthesis) Press Start when the voter has approached the privacy booth.

Stop: (Click or press the Alt/Command key and the number in parenthesis) Press Stop when the voter begins walking away from the privacy booth.

Undo Last: (On click) Press Undo Last to remove the last recorded observation or the current observation in progress.

Clr: Press Clr to clear the note above the Start button.

- To save any comments during the data collection process, insert comments in the text box at the bottom of the application window and click the 'Store Comment' button.
- Occasionally exit the application window and save the file (do this when no timers are actively tracking a voter).

Check-In Timer:

- Identify a voter that is approaching service at check-in. In the textbox of one of the timers, type a comment into the box that describes the voter and will help in tracking the individual throughout check-in.
  - Refrain from using any language that comments on the voter's gender, age, race, ethnicity, or physical appearance.
  - These notes are not stored in the Excel file.
  - The 'Clr' button next to the text box clears the note if needed.

Check In Timer

| Check In 1 | Check In 2 | Check In 3 | Check In 4 | Check In 5 | Check In 6 |

yellow jacket | Clr

Start (1) | Stop (2)
VBM | Start Prov | End Prov
Undo Last

Start (3) | Stop (4)
VBM | Start Prov | End Prov
Undo Last

Start (5) | Stop (6)
VBM | Start Prov | End Prov
Undo Last

Start (7) | Stop (8)
VBM | Start Prov | End Prov
Undo Last

Start (9) | Stop (0)
VBM | Start Prov | End Prov
Undo Last

Start (-) | Stop (=)
VBM | Start Prov | End Prov
Undo Last

Comments: | Store Comment

Start: (Click or press the Alt/Command key and the number in parenthesis) Press Start when the voter has approached the check-in station.

Stop: (Click or press the Alt/Command key and the number in parenthesis) Press Stop when the voter recieves the ballot and begins walking away from the check-in station.

Undo Last: (On click) Press Undo Last to remove the last recorded observation or the current observation in progress.

Clr: Press Clr to clear the note above the Start button.

VBM: This button labels the current observation as a Vote by Mail ballot drop off or surrendering.

Start Prov: This button labels the current observation as the start of the provisional ballot process.

End Prov: This button labels the current observation as the end of the provisional ballot process.

- When the voter reaches check-in, either click the 'Start' button for that timer or use the shortcut keys described at the bottom of the application window. The 'Start' button will then change color (i.e., grey on a Mac computer or green on a Windows computer).
  - 'Start' creates a timestamp in the Excel file that marks the time that the voter began service at check-in with accuracy down to the second.
  - Ensure that there is a standardized method to marking the 'Start' of when a voter begins check-in service (e.g., when they begin actively being served at check-in, when they first walk up to the check-in station).
- While a timer is active, labels may be applied to the observation with the 'VBM', 'Start Prov', or 'End Prov' buttons.
  - Press the 'VBM' button when a voter is being processed at the check-in station to drop off a vote by mail ballot.
  - Press the 'Start Prov' button when a voter requires a provisional ballot (it may not be possible to tell this, depending on the observer's location).
  - Press the 'End Prov' button when the voter returns to the check-in station with their provisional ballot (it may not be possible to tell this, depending on the observer's location).
  - Observations that are not labeled by the observer will automatically be labeled 'Normal'.
- When the voter exits the check-in station, either click the 'Stop' button for that timer or use the shortcut keys described at the bottom of the application window.
  - 'Stop' creates a timestamp in Excel marking the time that the voter exits check-in.

- ○ Similarly to the start process, ensure that there is a standardized method for determining when a voter exits the check-in station (e.g., as the voter steps away from the check-in station).
- If there is any need to remove an observation that is currently running or to remove the last observation for a timer, the 'Undo Last' button clears the last or current observation of the individual timer (e.g., when a voter exits check-in and the data collector does not click the 'Stop' button).
- For each additional voter that the user tracks in the check-in process, use a timer that is not currently in use and follow the steps outlined above. Up to six voters may be tracked at any given time.
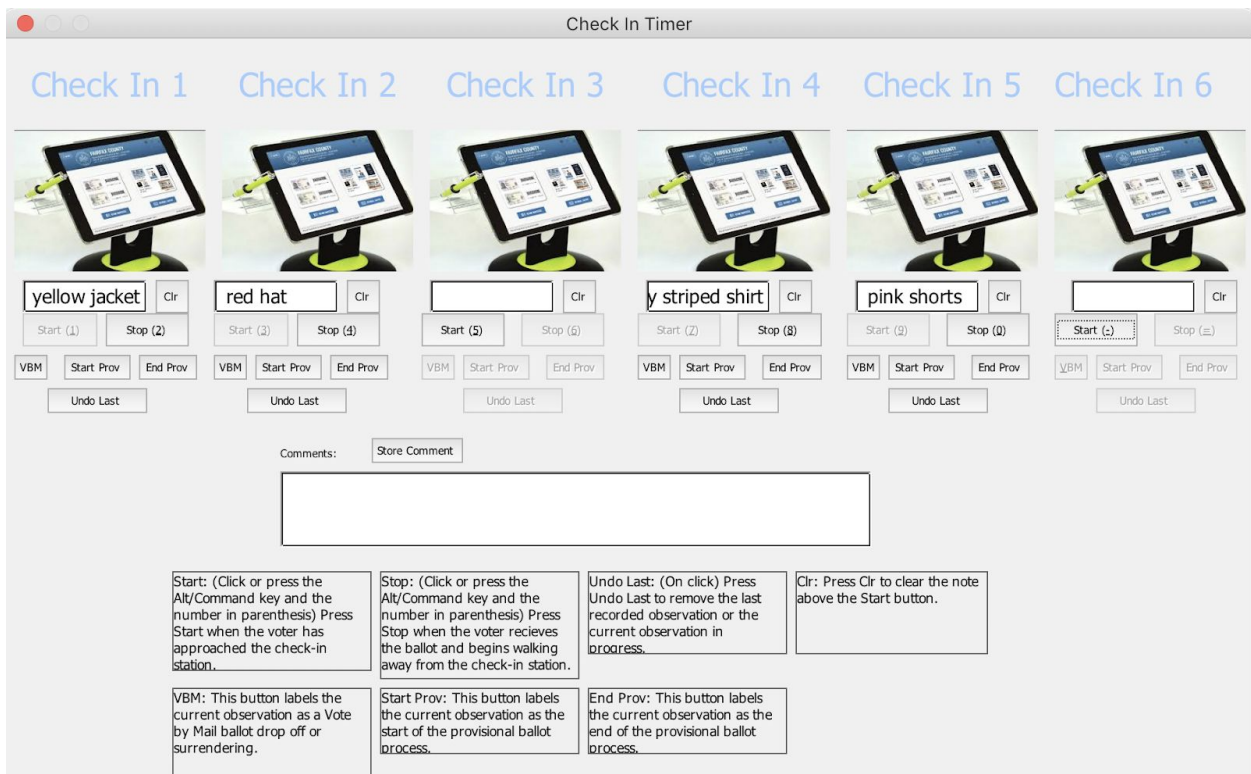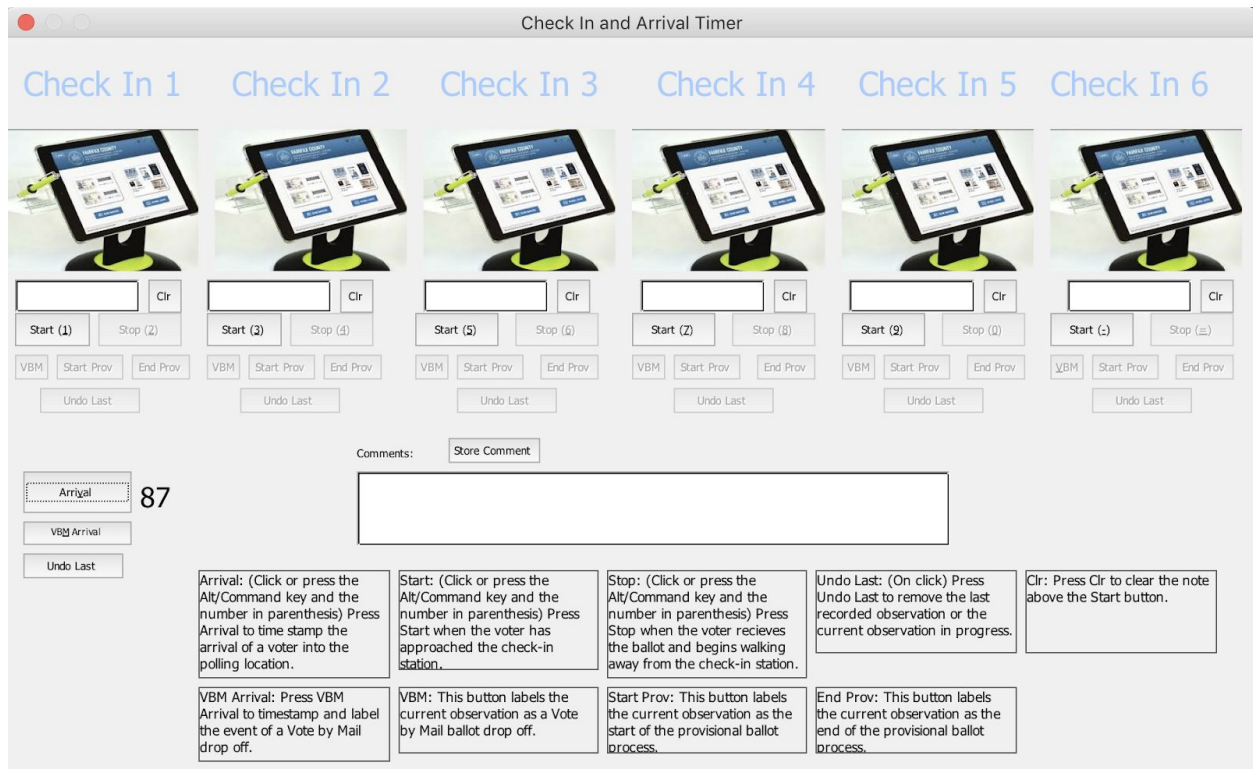

- To save any comments during the data collection process, insert comments in the text box at the bottom of the application window and click the 'Store Comment' button.
- Occasionally exit the application window and save the file (do this when no timers are actively tracking a voter).

Check-In Arrival Timer:

- The check-in timers at the top of the application window function the same as the Check-In Timer listed above.
- Arrival Tracking
  - ○ When a voter arrives at the polling location, either click the 'Arrival' button on the left of the window or use the shortcut keys described at the bottom of the timer.
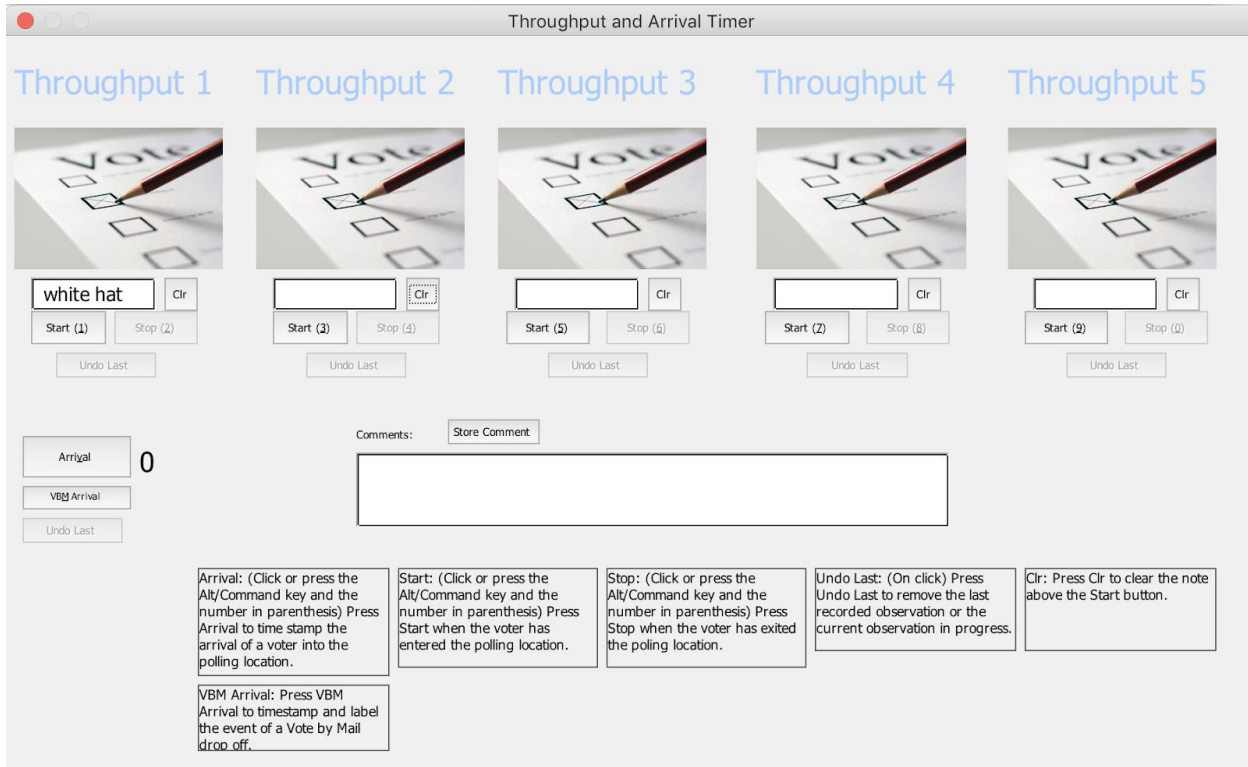
- ■ 'Arrival' creates a timestamp in the Excel file that marks when a voter arrives at the polling location.
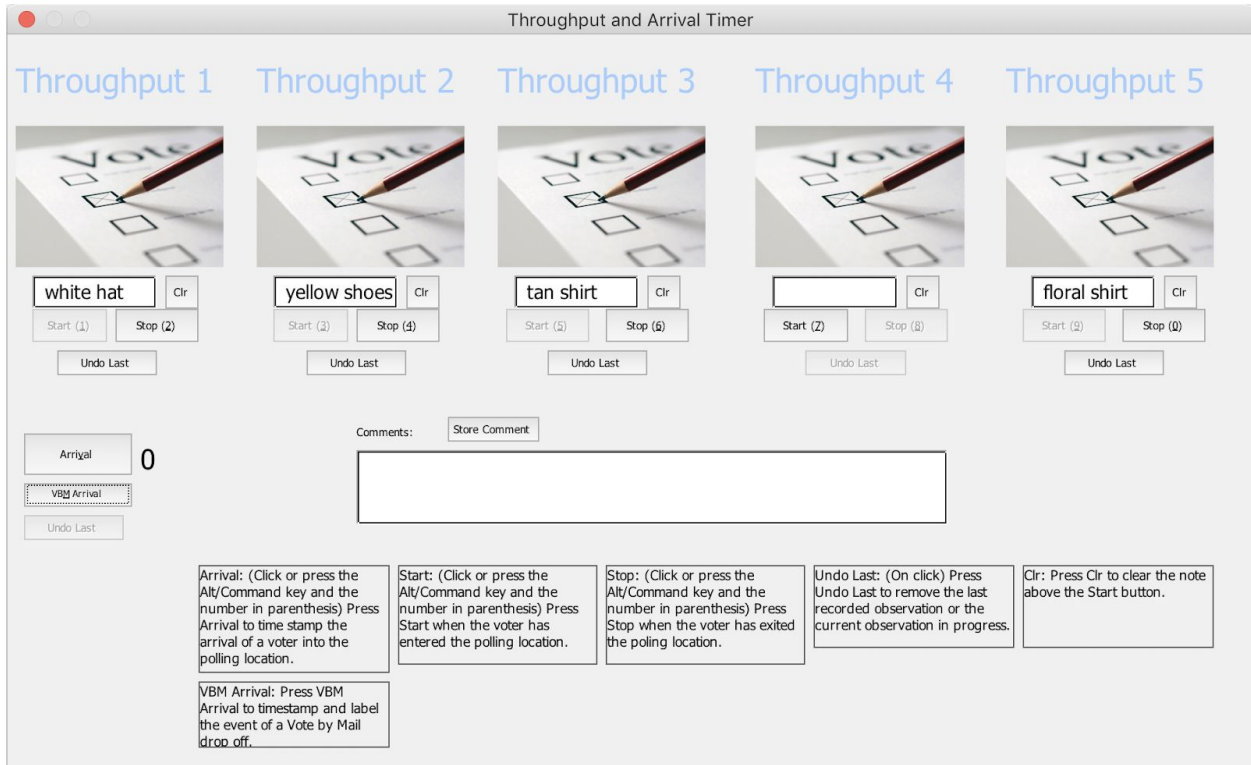- ■ The number of total arrivals is listed to the right of the 'Arrival' button.

- ○ When a vote by mail ballot is dropped off, click the 'VBM Arrival' button.
  - ■ 'VBM Arrival' creates a timestamp in the Excel file that marks when a vote by mail ballot is dropped off and labels the arrival as VBM.
- ○ If there is any need to remove the previous arrival observation, the 'Undo Last' clears the previous Arrival or VBM Arrival observation (e.g., when an individual is marked as an arrival but they are not a voter).

Throughput Arrival Timer:
- ● Throughput Timer
  - ○ Identify a voter that is approaching the polling location. In the textbox of one of the timers, type a comment into the box that describes the voter and will help in tracking the individual throughout the system.
    - ■ Refrain from using any language that comments on the voter's gender, age, race, ethnicity, or physical appearance.
    - ■ These notes are not stored in the Excel file.
    - ■ The 'Clr' button next to the text box clears the note if needed.

Throughput 1	Throughput 2	Throughput 3	Throughput 4	Throughput 5

| white hat | Clr | | Clr | | Clr | | Clr | | Clr |

| Start (1) | Stop (2) | Start (3) | Stop (4) | Start (5) | Stop (6) | Start (7) | Stop (8) | Start (9) | Stop (0) |

Undo Last   Undo Last   Undo Last   Undo Last   Undo Last

| Arrival | 0 |

VBM Arrival

Undo Last

Comments: Store Comment

Arrival: (Click or press the Alt/Command key and the number in parenthesis) Press Arrival to time stamp the arrival of a voter into the polling location.

Start: (Click or press the Alt/Command key and the number in parenthesis) Press Start when the voter has entered the polling location.

Stop: (Click or press the Alt/Command key and the number in parenthesis) Press Stop when the voter has exited the poling location.

Undo Last: (On click) Press Undo Last to remove the last recorded observation or the current observation in progress.

Clr: Press Clr to clear the note above the Start button.

VBM Arrival: Press VBM Arrival to timestamp and label the event of a Vote by Mail drop off.

- ○ When the voter reaches the beginning of the system, either click the 'Start' button for that timer or use the shortcut keys described at the bottom of the application window. The 'Start' button will then change color (i.e., grey on a Mac computer or green on a Windows computer).
    - ■ 'Start' creates a timestamp in the Excel file that marks the time that the voter entered the system with accuracy down to the second.
    - ■ Ensure that there is a standardized method to marking the 'Start' of when a voter enters the system (e.g., when the voter enters the polling location, when the voter enters the check-in queue).
- ○ When the voter exits the system, either click the 'Stop' button for that timer or use the shortcut keys described at the bottom of the application window.
    - ■ 'Stop' creates a timestamp in Excel marking the time that the voter has exited the system.
    - ■ Similarly to the start process, ensure that there is a standardized method for determining when a voter exits the system (e.g., when the voter casts their ballot, when the voter exits the polling location).
- ○ If there is any need to remove an observation that is currently running or to remove the last observation for a timer, the 'Undo Last' button clears the last or current observation of the individual timer (e.g., when a voter exits the system and the data collector does not click the 'Stop' button).
- ○ For each additional voter that the user tracks in the system, use a timer that is not currently in use and follow the steps outlined above. Up to five voters may be tracked at any given time.

○ To save any comments during the data collection process, insert comments in the text box at the bottom of the application window and click the 'Store Comment' button.

○ Occasionally exit the application window and save the file (do this when no timers are actively tracking a voter).

● Arrival Tracker
  ○ When a voter arrives at the polling location, either click the 'Arrival' button on the left of the window or use the shortcut keys described at the bottom of the timer.
    ■ 'Arrival' creates a timestamp in the Excel file that marks when a voter arrives at the polling location.
    ■ The number of total arrivals is listed to the right of the 'Arrival' button.
  ○ When a vote by mail ballot is dropped off, click the 'VBM Arrival' button.
    ■ 'VBM Arrival' creates a timestamp in the Excel file that marks when a vote by mail ballot is dropped off and labels the arrival as VBM.
  ○ If there is any need to remove the previous arrival observation, the 'Undo Last' clears the previous Arrival or VBM Arrival observation (e.g., when an individual is marked as an arrival but they are not a voter).

Feedback

Please contact URIVOTES@etal.uri.edu with any questions, concerns, or feedback. The URI VOTES team will respond as quickly as possible to help resolve any problems and answer any questions.