MARICOPA COUNTY RECORDER

2018 Election Data Summit

Provisional Ballot Tools & Analytics

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Director of Elections

ADRIAN FONTES
COUNTY RECORDER

Provisional Ballot Tools & Analytics:

TELL OUR STORY

- Where we were… (2016)
- What we were looking for…
- Where are we now (2017-2018: SiteBook & Ballot-On-Demand System)
- Data Collection (with the new SiteBook)
- Statistics & Election Comparison
- **Provisional Tools & Analytics**

Where we were… General Election 2016

Polling places (724 precincts)

- E-Pollbooks
- In-Precinct Tabulators (Insight)
- Pre-printed ballots
- Edge voting machines
- Central Count Tabulators

…and PEVL (Permanent Early Vote List)

- Mail to 1.6 million voters
- Receive and scan for Signature Verification
- Receive and Sort Good-Sig, separate ballot from envelope
- Central Tabulation (1.3 million in 2016 General)

What we were looking for…

Create an Election System with:

- ✓ Increased Voter Access/Engagement
- ✓ Improved Security/Accountability
- ✓ Economical and Scalable

Security and Accountability

- **Reduce points of vulnerability**
  - Close Networks
  - Encrypt Networks
  - Decrease Ballot Handling
- **Professionalize Staff**
  - IT Deployment/set-up
  - Increase training opportunities
    - Board worker on-site training
    - Cross training
    - Experience-driven Election Day

- **Increase Accountability**
  - Ballot Tracking
    - Affidavit Envelope & Signature
    - Mail and Internal Tracking
  - Ballot Printing
    - Time, Date Roster (by style)
    - Individual per voter
  - Post-Election accounting
  - (Reduce waste, 7-10 Pallets of paper per election)

Where are we now: Front-side, Back-side

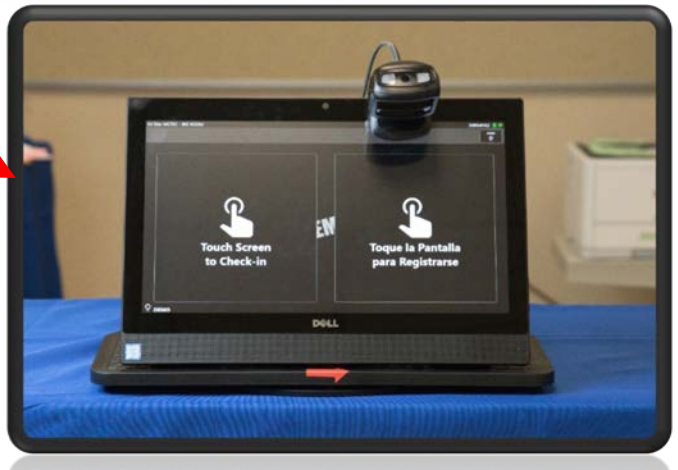
Front-side (voter's view)

- SiteBook Check-in system
  - Touch-screen
  - ID scanner
  - VPN, redundant carrier
  - Custom Software
  - Live-link to VR system
- Ballot-on-Demand Printers
  - Sentio system (proprietary)
  - Ballot AND Envelope printers

Back-side (department view)

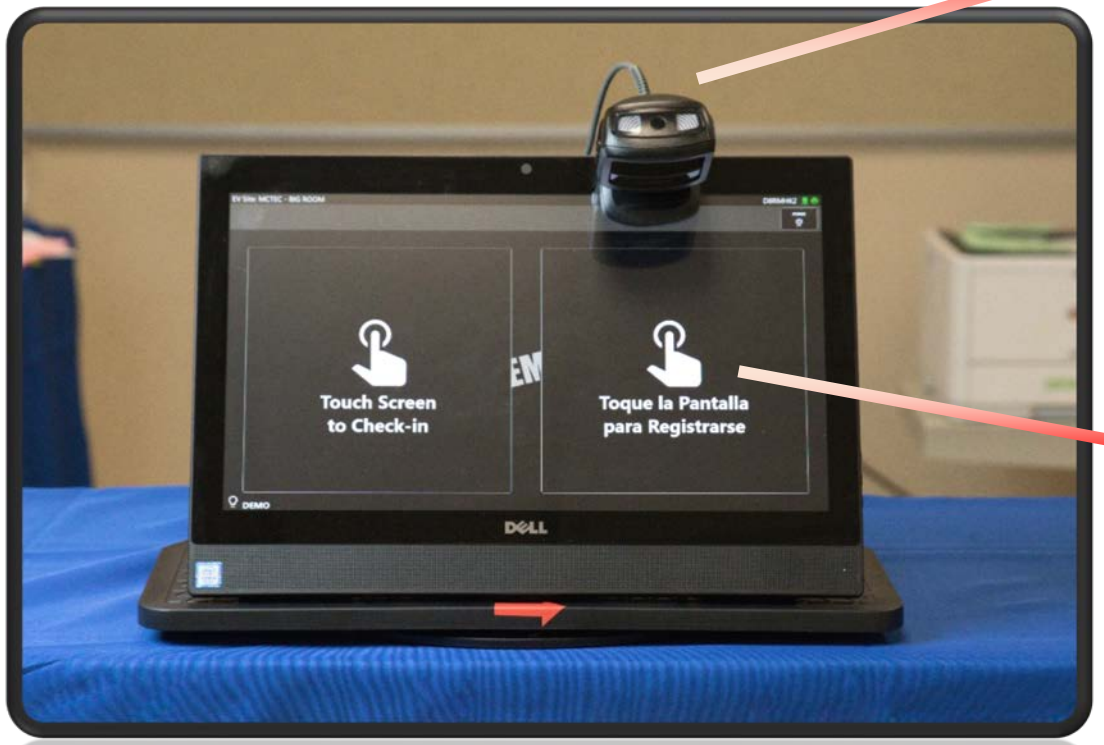
- Signature Verification
  - Inbound Scanning (Runbeck)
  - Signature Verification by trained county staff
- Ballot Count & Tabulation system
  - In-Precinct:
    - Dominion Insight Ver: APX KC 12, HPX K1.44
  - Central Count:
    - OPTECH 400-C Ver: 3.00P

Election System Equipment



- **Three to Twelve SiteBook Check-In Stations**
- **One to Two Ballot On Demand Printers**

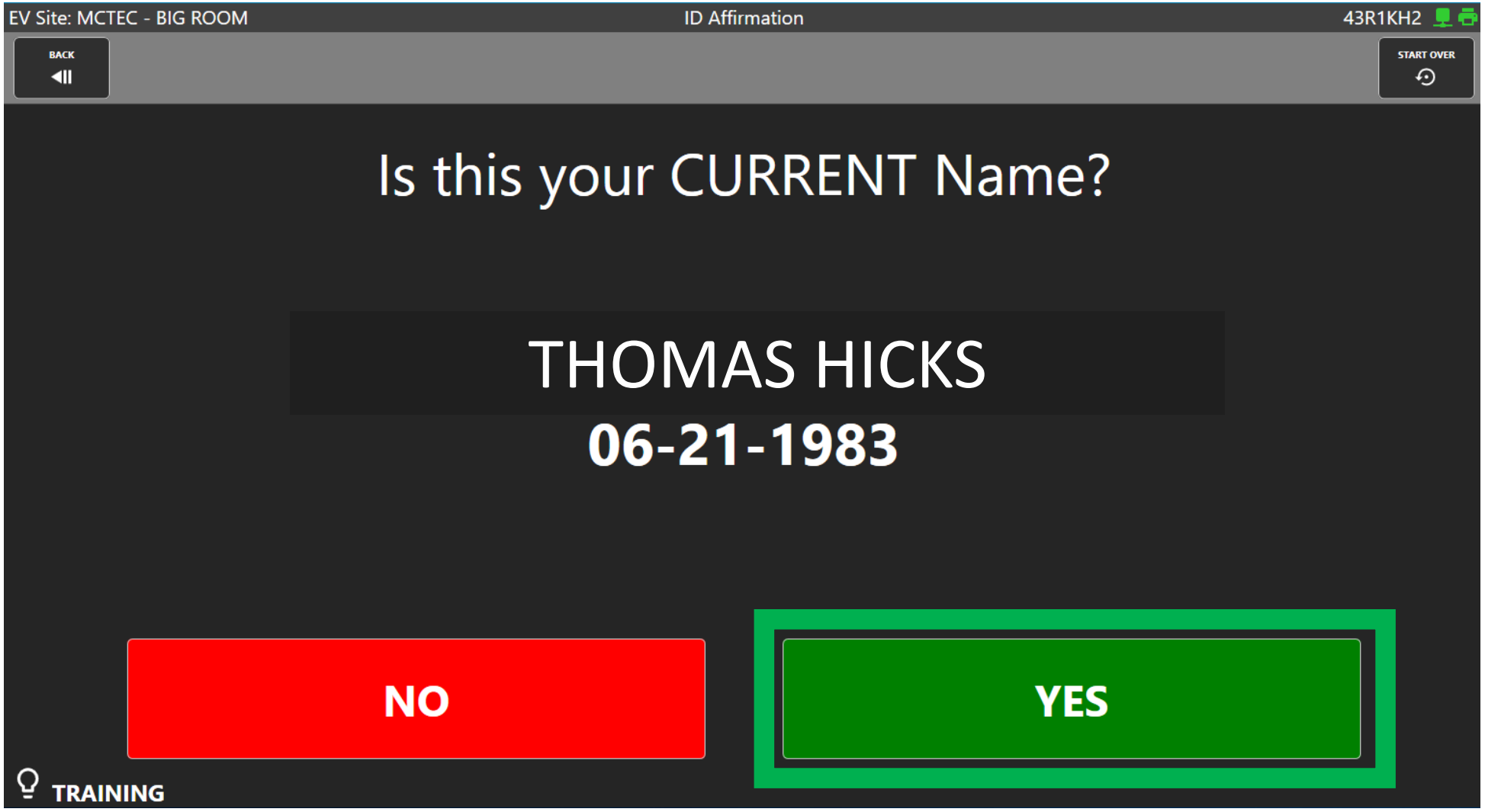
SiteBook



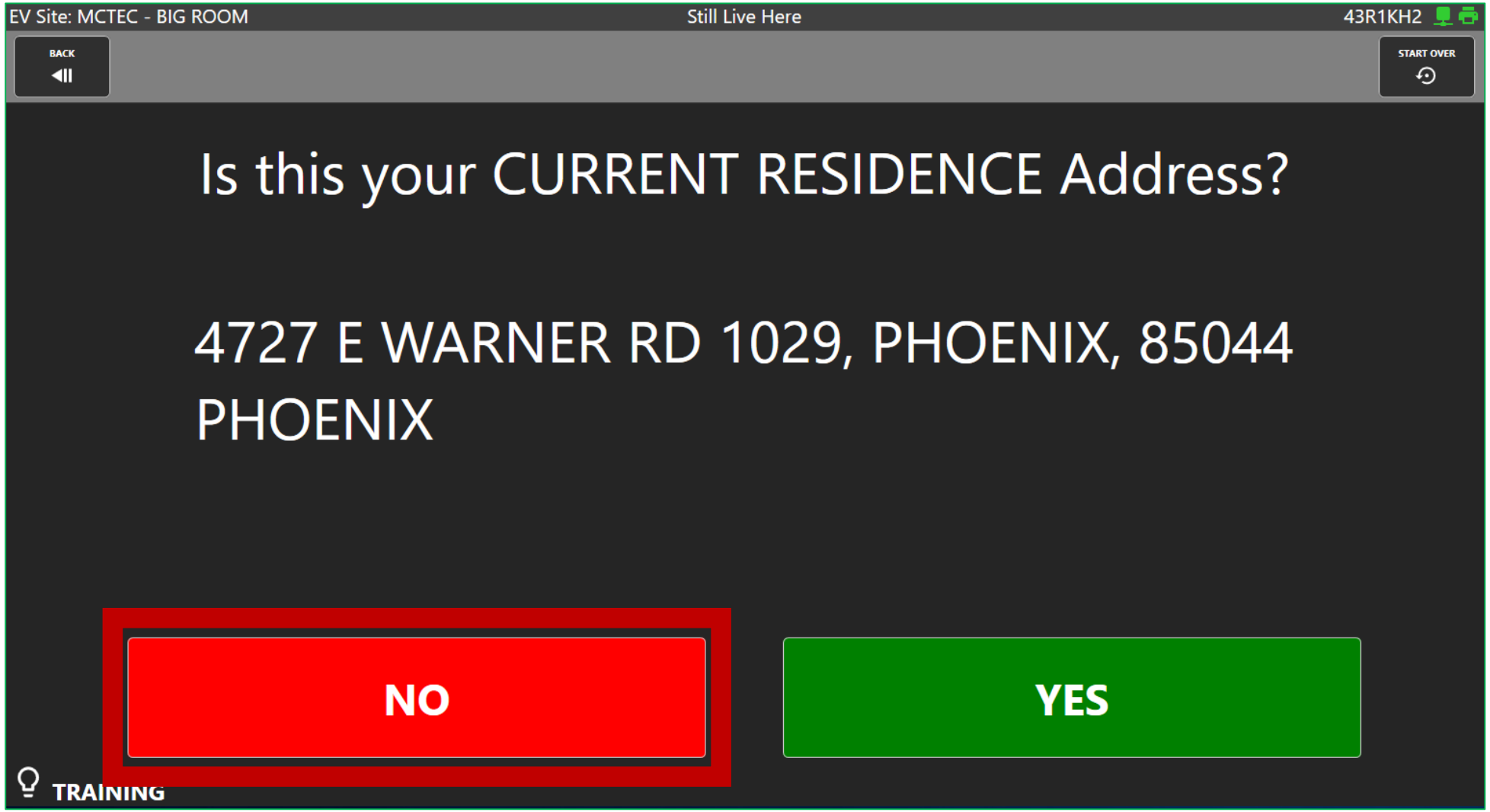
- Barcode Scanner for Licenses, Voter Identification & Digital Voter ID Card

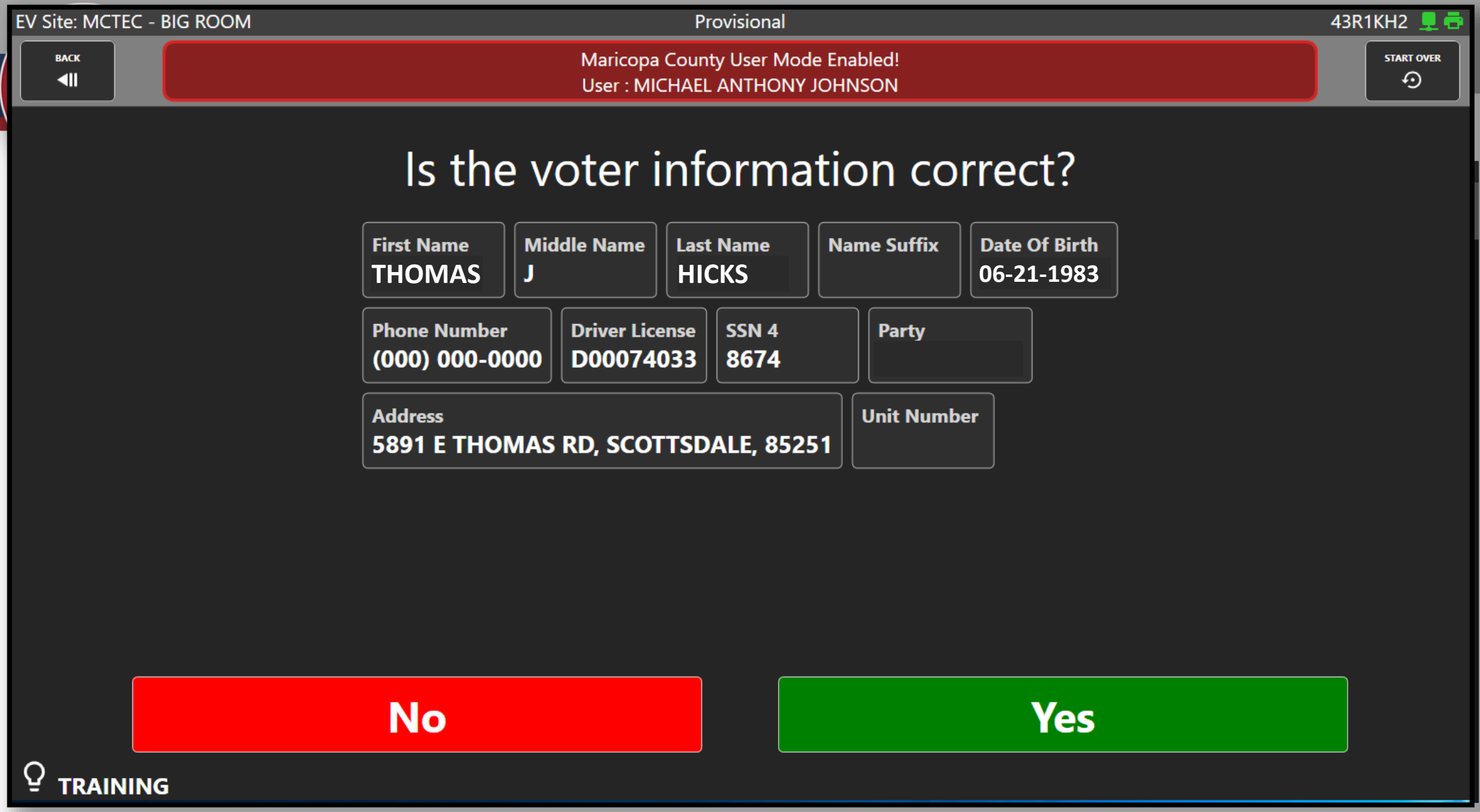
- Touchscreen Interface with Privacy Screens
- Barcode Scanner also used for Board Worker “Gatekeeper” Security Screens
- Mounted on a Rotating Tray to Allow for Board Worker Access from Behind the SiteBook
- Multilingual
- Inverts Black/White Background for Easy Reading

SiteBook


EV Site: MCTEC - BIG ROOM
ID Affirmation
43R1KH2
BACK
START OVER
Is this your CURRENT Name?
THOMAS HICKS
06-21-1983
NO
YES
TRAINING

SiteBook


EV Site: MCTEC - BIG ROOM
Still Live Here
43R1KH2
BACK
START OVER
Is this your CURRENT RESIDENCE Address?
4727 E WARNER RD 1029, PHOENIX, 85044
PHOENIX
NO
YES
TRAINING


EV Site: MCTEC - BIG ROOM
Provisional
43R1KH2
BACK
Maricopa County User Mode Enabled!
User : MICHAEL ANTHONY JOHNSON
START OVER
Is the voter information correct?
First Name
THOMAS
Middle Name
J
Last Name
HICKS
Name Suffix
Date Of Birth
06-21-1983
Phone Number
(000) 000-0000
Driver License
D00074033
SSN 4
8674
Party
Address
5891 E THOMAS RD, SCOTTSDALE, 85251
Unit Number
No
Yes
TRAINING

EV Site: MCTEC - BIG ROOM | Signature Pad | 43R1KH2

BACK

Maricopa County User Mode Enabled!
User : MICHAEL ANTHONY JOHNSON

START OVER

Have the voter sign the signature pad.

THOMAS J HICKS

Address: 5891 E THOMAS RD, SCOTTSDALE, 85251

VOTER DECLARATION – By signing below, I swear or affirm under penalty of perjury that the above information is true and correct, that I am a RESIDENT of Arizona and reside at the address indicated, that I am NOT a convicted FELON or my civil rights are restored, and I have NOT been adjudicated INCOMPETENT. Further, I understand that executing a false registration is a class 6 felony.

CLEAR

CONTINUE

TRAINING

Ballot On Demand Printer System

Custom Precinct Ballot

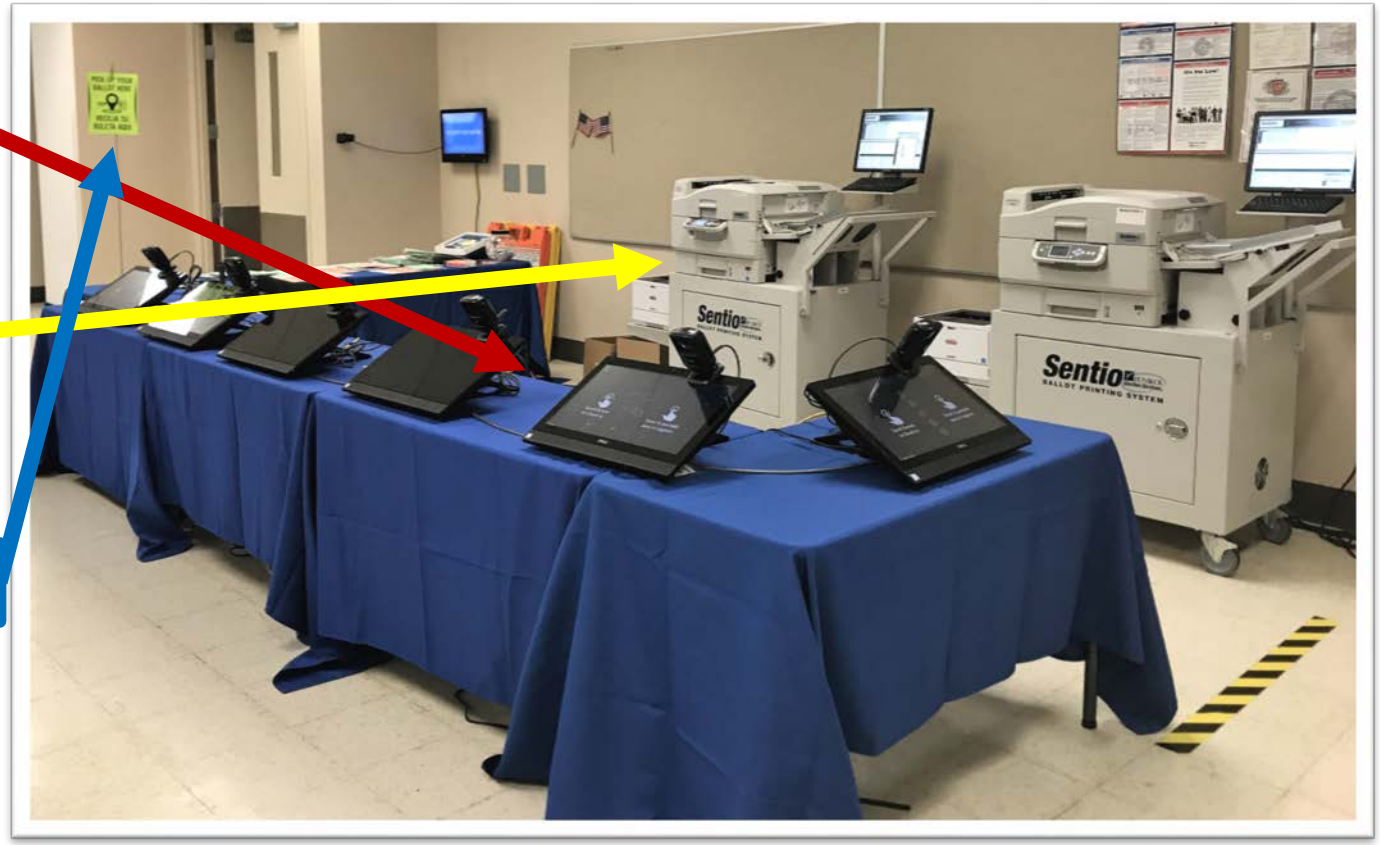
Affidavit Envelope

Visiting an Early Voting or Polling Location

Voters check-in on “Site Books”

Ballot on Demand Printers print your ballot

Pick up your ballot from the ballot clerk



MARICOPA COUNTY RECORDER

SiteBook Data Collection

Location Code	Location Name	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct	22-Oct
ABIL	Ability 360												
AFHS	Agua Fria Union HS Dist												
ALEL	Alhambra Elem Sch Dist												
AREL	Arlington Elem Sch Dist												
AVCH	Avondale City Hall	0	3	6	3	1	7	9	4	10	1	1	1
BESD	Buckeye Elem Sch Dist												
BVFD	Buckeye Valley Fire Dist												
CHUN	Chandler Unif Sch Dist												
DTWN	Downtown Elections	0	2	3	0	0	0	0	1	3	0	0	0
FHUN	Fountain Hills Unif Sch Dist												
FOEL	Fowler Elem Sch Dist												
GBTH	Gila Bend Town Hall												
ISEL	Isaac Elem Sch Dist												
LAEL	Laveen Elem Sch Dist												
LESS	Litchfield Elem Support Serv												
MESA	Mesa Elections Office	1	0	0	0	0	3	1	0	1	1	0	0
MTEC	MCTEC Elections	5	3	0	0	0	0	0	0	0	1	0	0
MUCR	Murphy Sch Comm Rm												
OSEL	Osborn Elem Sch Dist												
PECC	Pecos Comm Center												
PUHS	Phx Union HS Dist												
PVUN	Paradise Valley Unif Sch Dist												
QCUN	Queen Creek Unif Sch Dist												
SPCH	Surprise City Hall												
TEPL	Tempe Public Library												
TUHS	Tolleson Union HS Dist												
VMWC	Verna McClain Wellness Ctr												
TOTALS	REGULAR	6	8	9	3	1	10	10	5	14	3	1	1
	PROVISIONAL	0	0	0	0	0	2	0	1	0	0	0	0
	CUMULATIVE (PROV + REG)	6	8	9	3	1	12	10	6	14	3	1	1

Location Code	Location Name	-Nov	3-Nov	4-Nov	5-Nov	6-Nov
ABIL	Ability 360	0	0	0	0	2
AFHS	Agua Fria Union H		2	0	0	3
ALEL	Alhambra Elem Sc		2	0	1	3
AREL	Arlington Elem Sc		0	0	0	0
AVCH	Avondale City Hal	7	3	7	2	12
BESD	Buckeye Elem Sch	1	1	0	0	2
BVFD	Buckeye Valley Fi		2	0	0	4
CHUN	Chandler Unif Sch	6	9	2	6	18
DTWN	Downtown Electi	0	1	0	0	5
FHUN	Fountain Hills Uni	4	7	8	1	3
FOEL	Fowler Elem Sch D		0	1	3	3
GBTH	Gila Bend Town H		3	3	1	6
ISEL	Isaac Elem Sch Di		1	0	1	2
LAEL	Laveen Elem Sch D		0	1	0	2
LESS	Litchfield Elem Su		2	1	1	5
MESA	Mesa Elections Of	1	0	0	0	0
MTEC	MCTEC Elections	2	1	0	0	2
MUCR	Murphy Sch Comm		0	0	0	1
OSEL	Osborn Elem Sch D		6	1	2	0
PECC	Pecos Comm Cent	1	0	4	4	1
PUHS	Phx Union HS Dist	4	3	3	0	9
PVUN	Paradise Valley U	7	5	7	0	11
QCUN	Queen Creek Unif	3	4	3	4	10
SPCH	Surprise City Hall	9	10	2	1	16
TEPL	Tempe Public Libr	8	9	3	3	10
TUHS	Tolleson Union HS		3	0	0	3
VMWC	Verna McClain Wa		0	1	1	0
TOTALS		53	74	47	31	133
	PI	2	5	1	0	1
	CUMULATIVE (	55	79	48	31	134

Location Code	Location Name	Check-In Time
ABIL	Ability 360	10/28/2017 11:45:52 AM
ABIL	Ability 360	10/30/2017 12:14:33 PM
ABIL	Ability 360	11/1/2017 9:35:28 AM
ABIL	Ability 360	11/1/2017 2:44:52 PM
ABIL	Ability 360	11/6/2017 9:00:14 AM
ABIL	Ability 360	11/6/2017 4:01:20 PM
ABIL	Ability 360	11/7/2017 7:27:14 AM
ABIL	Ability 360	11/7/2017 8:41:32 AM
ABIL	Ability 360	11/7/2017 8:57:42 AM
ABIL	Ability 360	11/7/2017 11:46:29 AM
ABIL	Ability 360	11/7/2017 12:29:31 PM
ABIL	Ability 360	11/7/2017 1:32:19 PM
ABIL	Ability 360	11/7/2017 1:45:54 PM
ABIL	Ability 360	11/7/2017 1:52:43 PM
ABIL	Ability 360	11/7/2017 2:35:12 PM
ABIL	Ability 360	11/7/2017 3:13:42 PM
ABIL	Ability 360	11/7/2017 3:42:51 PM
ABIL	Ability 360	11/7/2017 3:44:20 PM
ABIL	Ability 360	11/7/2017 4:05:40 PM
ABIL	Ability 360	11/7/2017 4:06:34 PM
ABIL	Ability 360	11/7/2017 4:07:16 PM
ABIL	Ability 360	11/7/2017 4:16:43 PM

Location Code	Location Name
ABIL	Ability 360
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Site Name	Check In Count	First Check In	Latest Check In
Liberty High School	988	6:42:31 AM	7:01:23 PM
Family Life Assembly of God	982	6:01:58 AM	7:01:40 PM
Dove of the Desert Church	978	6:01:43 AM	7:05:55 PM
North Valley Library Anthem	846	6:05:50 AM	7:01:49 PM
Peoria Church of the Nazarene	784	6:01:38 AM	7:00:56 PM
Christ Church ofthe Valley PE	776	6:01:24 AM	6:58:09 PM
Glendale Christian Church	712	6:01:36 AM	6:58:09 PM
Church at Litchfield Park	700	6:05:15 AM	7:00:49 PM
Desert Hills Community Church	613	6:04:12 AM	6:55:22 PM
Vineyard Church of North Phx	601	6:01:43 AM	7:02:17 PM
Surprise City Hall	594	6:02:10 AM	7:02:03 PM
St Helens Catholic Church	587	6:01:54 AM	6:59:15 PM
Cotton Lane Community Church	547	6:01:18 AM	6:59:34 PM
Goodyear City Hall	531	6:02:24 AM	7:00:24 PM
Westbrook Village	529	6:04:09 AM	6:58:49 PM
Desert Sage Elem School	523	6:06:18 AM	6:59:33 PM
Southwest Indian Ministry	517	6:01:40 AM	7:05:00 PM
Worship & Word Church	472	6:01:48 AM	7:02:11 PM
Marley Park	463	5:40:34 AM	7:00:33 PM
Thunderbird Senior Living	447	6:01:35 AM	7:01:25 PM
All Saints ofthe Desert Church	385	6:01:23 AM	6:57:25 PM
Canyon Ridge Elem School	384	6:04:35 AM	7:00:47 PM

11/7/2017 4:16:43 PM

ClockedInTime	Hours Worked	VoterId	BoardWorkerId	Name	SiteId	FacNo	SiteName
2018-02-27 05:03:47.470	15.350000	109120	25825	BENNY CORDOVA ESTRADA SR	2	14886	Avondale City Hall
2018-02-27 05:21:09.208	13.716666	3145559	94946	ALAN MARK RUSSELL	80	15580	Canyon Ridge Elem School
2018-02-27 05:33:34.058	13.500000	4587214	124659	HAILEY CARMEN GARCIA ALVIZO	80	15580	Canyon Ridge Elem School
2018-02-27 05:31:08.029	13.550000	2927512	79523	KENNETH MCCOY	80	15580	Canyon Ridge Elem School
2018-02-27 05:23:33.627	13.666666	1018193	116682	LINDA K HARDESTY	80	15580	Canyon Ridge Elem School
2018-02-27 05:23:23.298	13.683333	1018194	116683	ROBERT HARDESTY SR	80	15580	Canyon Ridge Elem School
2018-02-27 05:27:52.027	13.616666	2918858	75248	TRESSCELLA GRIGSBY MCCOY	80	15580	Canyon Ridge Elem School
2018-02-27 06:09:22.103	13.516666	1006150	95931	ANGELA P NELSON	63	13902	Christ Church ofthe Valley PE
2018-02-27 06:08:48.037	13.533333	2688817	63300	CARMEN CELINA BEEBE	63	13902	Christ Church ofthe Valley PE
2018-02-27 06:08:58.397	13.533333	1785605	15598	CATHERINE P FORD	63	13902	Christ Church ofthe Valley PE
2018-02-27 06:09:14.430	13.516666	2264586	82911	GERALD EUGENE ANDERSEN	63	13902	Christ Church ofthe Valley PE
2018-02-27 06:08:53.678	13.550000	456829	77813	GLORIA ANN SAMODELL	63	13902	Christ Church ofthe Valley PE
2018-02-27 05:23:47.972	14.716666	300688	101543	ANNETTE KAY EVERS	36	10647	Church at Litchfield Park
2018-02-27 05:21:21.271	14.733333	1012331	2630	BILLY RICHARD ATCHISON	36	10647	Church at Litchfield Park
2018-02-27 05:23:34.252	14.700000	3606936	99345	DARYL L STEVANSON	36	10647	Church at Litchfield Park
2018-02-27 05:23:09.500	14.716666	17284	5157	ELVIRA R CRUZ	36	10647	Church at Litchfield Park
2018-02-27 05:31:02.404	14.583333	4668698	125971	ENRIQUE NAVARRO	36	10647	Church at Litchfield Park
2018-02-27 05:22:09.651	14.733333	1377009	75145	LINDA GAYLE STEVANSON	36	10647	Church at Litchfield Park
2018-02-27 05:21:45.774	14.750000	4537809	123165	MARIO AUGUSTO DONOSO	36	10647	Church at Litchfield Park
2018-02-27 05:48:30.814	14.666666	2834900	109979	EDWARD F FREUND	58	12745	Church on the Green
2018-02-27 05:48:18.000	14.650000	3371622	96724	LOWELL D SCHWALBE	58	12745	Church on the Green
2018-02-27 05:47:48.232	14.683333	3449214	96725	MERILYN KAY CONERY	58	12745	Church on the Green

Statistics & Election Comparison

2017 Jurisdictional Elections

- Average Check-In Time:
  - **Signature Verification on Aff. Envelope used for Identification = 31 Seconds**
- Provisional Balloting:
  - 44 Provisional Ballots Cast
    - Historical:
      - 2013: ~2,900 **(98.5% reduction)**
      - 2015: ~2,700
  - 14 Valid Ballots Cast

2018 Congressional District 8 Primary

- Average Check-In Time:
  - **Board Workers Checking ID at the Polls (Per Statute) = 75 Seconds**
- Provisional Balloting:
  - 531 Provisional Ballots Cast
    - Historical:
      - 2016 PRI: ~3,200 **(83.5% reduction)**
      - 2016 GEN: ~52,200 ***(would have been 9,100 with current system)***
  - 447 Valid Ballots Cast (System Allows for Out-Of-Precinct Voting)

Statisti

2017 Juris

- Average
  - Sig
    for
- Provisic
  - 44 l
    -
  - 14 V

All times are in seconds

Check in = ballot sent to printer.

Average non-provisional, non-registration update, non-EDGE check-in
With "ID at the Polls" Check Requirement

Seconds	Count
75	7800

Average non-provisional, non-registration update, non-EDGE check-in
With "EV Affidavit" (ID verifed via signature check)

Seconds	Count
31	180

Average registration update check-in

Seconds	Count
305	236

Average provisional check-in

Seconds	Count
180	531

Edge check-in (DRE assited voting method)

Seconds	Count
144	2

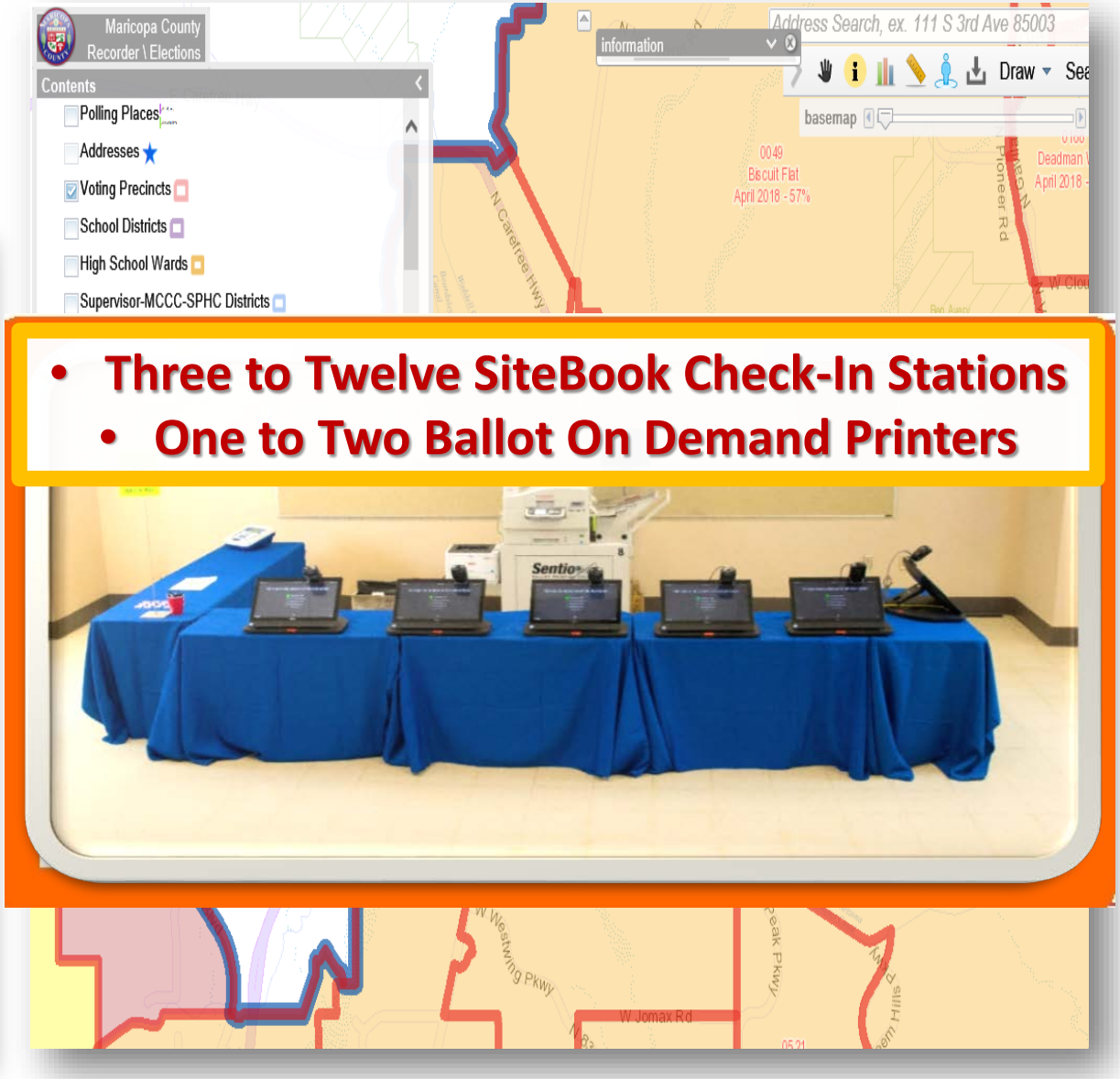
MOD PREVENTING PROV

Location Code	Location Name	Count
ABIL	Ability 360	7
AFHS	Agua Fria Union HS Dist	1
ALEL	Alhambra Elem Sch Dist	0
AREL	Arlington Elem Sch Dist	0
AVCH	Avondale City Hall	18
BESD	Buckeye Elem Sch Dist	1
BVFD	Buckeye Valley Fire Dist	2
CHUN	Chandler Unif Sch Dist	51
DTWN	Downtown Elections	9
FHUN	Fountain Hills Unif Sch Dist	11
FOEL	Fowler Elem Sch Dist	1
GBTH	Gila Bend Town Hall	2
ISEL	Isaac Elem Sch Dist	2
LAEL	Laveen Elem Sch Dist	2
LESS	Litchfield Elem Support Serv	8
MESA	Mesa Elections Office	7
MTEC	MCTEC Elections	8
MUCR	Murphy Sch Comm Rm	1
OSEL	Osborn Elem Sch Dist	4
PECC	Pecos Comm Center	6
PUHS	Phx Union HS Dist	7
PVUN	Paradise Valley Unif Sch Dist	12
QCUN	Queen Creek Unif Sch Dist	16
SPCH	Surprise City Hall	18
TEPL	Tempe Public Library	28
TUHS	Tolleson Union HS Dist	6
VMWC	Verna McClain Wellness Ctr	2
TOTAL		230

Provisional Tools & Analytics

Pulled Provisional Ballot datasets off SiteBooks to create InfoGraphics and Mapping:

- ✓ Identify areas of interest where high attrition exists **(rise & fall of provisional ballots cast).**
  - ❑ What are the demographics of the area **(Houses vs. Apartments, etc.).**
  - ❑ If statistically shown to be a highly nomadic area, do we **increase Board Workers and/or equip** to accommodate?



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Seconds	Count
144	2

MOD PREVENTING PROV

Location Code | Location Name

ABIL

13-Oct 14-Oct 15-Oct 16-Oct 17-Oct 18-Oct 19-Oct 20-Oct 21-Oct 22-Oct

6 3 1 7 9 4 10 1 1

3 0 0 0 0 1 3 0 0

0 0 0 3 1 0 1 1 0

0 0 0 0 0 0 1 0

3 1 10 10 5 14 3 1

0 0 2 0 1 0 0 0

3 1 12 10 6 14 3 1

TOTAL

Latest Check In

7:01:23 PM
7:01:40 PM
7:05:55 PM
7:01:49 PM
7:00:56 PM
6:58:09 PM
6:58:09 PM
7:00:49 PM
6:55:22 PM
7:02:17 PM
7:02:03 PM
6:59:15 PM
6:59:34 PM
7:00:24 PM
6:58:49 PM
6:59:33 PM
7:05:00 PM
7:02:11 PM
7:00:33 PM
7:01:25 PM
6:57:25 PM
7:00:47 PM

End