



Polling Locations and Wait Times

Elections Assistance Commission Clearinghouse 2020 Awards Outstanding Innovations in Elections Application

The Maricopa County Elections Department respectfully requests that the Elections Assistance Commission consider Maricopa County's polling location webpage, with searchable functions and live voter wait times, as an example of *Outstanding Innovations in Elections*.

The global pandemic created unprecedented challenges for elections administrators across the county. As COVID-19 cases surged in Arizona, the Maricopa County Elections Department found solutions to increase voter access to the ballot, while also ensuring voter safety and elections security.

Even with a robust ballot-by-mail system, Maricopa County still expected upwards of 300,000 voters to cast a ballot in person for the 2020 General Election. Given this projection and the potential of COVID-19 exposure the longer voters waited at voting locations, the Elections Department built an election model that would safely accommodate that volume of voters.

Election Model

In the 2020 Primary and General Election, Maricopa County moved to a Vote Center election model (vote anywhere sites) with robust early in-person voting options. For the General Election in November, Maricopa County provided voters with 175 Vote Centers on Election Day, phasing in the opening of most of the locations prior to November 3. This expansion included opening Vote Centers on weekends and during evening hours. The county also opened 23 secure ballot drop boxes and 15 drive through drop boxes. For comparison, in 2016, Maricopa County provided voters with just one in-person early voting location and used a precinct model on Election Day, where voters could only vote at one location.

Because of the need to provide for physical distancing and other COVID-19 safety precautions, many of the 2020 Vote Centers were in new locations. The county proactively moved traditional polling locations out of senior living facilities and small conference rooms into large spaces like convention centers, retail facilities and even sports arenas.

The Solution

Maricopa County needed an innovative solution to allow voters to quickly search for voting locations because of the new locations with unique hours, an increased number of early voting locations, and the ability to choose from any location. The elections team developed a unique webpage, Locations.Maricopa.Vote, which allowed voters to quickly search by any Maricopa County address to find a convenient Vote Center, ballot drop box or drive through drop box location. In addition to the search feature, the webpage also provided voters with estimated wait times and the estimated number of voters at each location. Voters could filter by city, date, locations that were currently open, drop box locations and more!

The screenshot shows the Maricopa County Elections Department website. At the top is the header with the Maricopa County Seal, the text 'MARICOPA COUNTY Elections Department', and the Maricopa County Recorder Seal. Below the header is a navigation bar with links: Home, About Us, Recorder, Elections, Media, Publications, Help & Support, and a user login link. The main content area is titled 'Where Do I Vote?' and includes a sub-header 'Election Day is Tuesday, November 3. There are no assigned locations. Maricopa County voters can drop off an early ballot or vote in person at Vote Center. Visit [BeBallotReady.Vote](#) to find out if you're registered, what's on your ballot and more. All Vote Centers in the list below are open from 6 a.m. – 7 p.m. on Election Day. If you have any questions please call us at (602) 506-1511.' Below this is a section titled 'Enter An Address' with a text input field for the address and buttons for 'Submit' and 'Clear Address Filter'. Underneath is a 'Filter' section with checkboxes for 'Open Locations', 'Weekend Voting', 'No Electioneering', 'Drop Box Only', 'Drive Through Drop Boxes', and 'Sort By Shortest Wait Time'. At the bottom of the filter section are dropdown menus for 'Filter Locations by City' and 'Filter by Open Date'.



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Once a voter typed in an address, the website would highlight the closest open voting location, and filter by all locations in that area. The website provided voters with the distance from the address, the ability to get directions, and the hours of operation.

Information Technology experts in the Maricopa County Recorder's Office developed the wait time feature in-house. The wait time program is housed in the county's unique SiteBook check-in system and poll workers were trained to update it every 30 minutes. Wait times are calculated by the average check-in time (165 seconds) multiplied by the number of people in line. The SiteBook program then divided that number by the number of check-in stations at the location. The website divided that figure by 60 to give the estimate in minutes.

$$\left(\frac{\text{Number of voters in line} \times 165 \text{ seconds}}{\text{Number of Check in Stations at Site}} \right) / 60 = \text{estimated wait time}$$

The Elections Department used this system internally in past elections as an indicator of potential issues at a location, which allowed staff to help poll workers quickly troubleshoot any potential issues, but 2020 was the first year it became available to the public.

Closest Open Voting Location
 MESA COMMUNITY COLLEGE (1.2 miles away)
 1833 W SOUTHERN AVE, MESA 85202 [Map It](#) [Print It](#)
WAIT TIME ESTIMATES:
 3 minutes 20 people in line 8:45 AM Last Updated
[OPEN](#) [Closes at 7:00 PM](#) [See All Hours](#)

Filter (Scroll down to see results)
☐ Open Locations ☐ In-Person Voting ☐ No Electioneering ☐ Drop Box Only ☐ Drive Through Drop Boxes ☐ Sort By Shortest Wait Time
 Filter Locations by City: Filter by Open Date:

Voting Locations & Drop Boxes
 In-Person Voting, Ballot Drop Box (1.5 miles away)
THE RILEY
 105 W MAIN ST, MESA 85201 [Map It](#) [Print It](#)
WAIT TIME ESTIMATES:
 0 minutes 0 people in line 8:45 AM Last Updated
[OPEN](#) [Closes at 7:00 PM](#) [See All Hours](#)

The sort-by-date feature allowed voters to plan ahead and see all nearby locations, and decide what day, time and location fit best in their schedule.

Filter (Scroll down to see results)
☐ Open Locations ☐ In-Person Voting ☐ No Electioneering ☐ Drop Box Only ☐ Drive Through Drop Boxes ☐ Sort By Shortest Wait Time
 Filter Locations by City: Filter by Open Date:

Voting Locations & Drop Boxes
 Filter by Date Open
 10-7-2020
 10-8-2020
 10-9-2020
 10-10-2020
 10-11-2020
 10-12-2020
 10-13-2020
 10-14-2020
 10-15-2020
 10-16-2020
 10-17-2020
 10-18-2020
 10-19-2020
 10-20-2020
 10-21-2020
 10-22-2020
 10-23-2020
 10-24-2020

Each location also had a customized title to provide voters with information about what voting services the Elections Department offered at that location.

Voting Locations & Drop Boxes
 In-Person Voting, Ballot Drop Box
 DREAM CITY CHURCH PHOENIX CAMPUS
 13613 N CAVE CREEK RD, PHOENIX 85022 [Map It](#) [Print It](#)
 Closed until 11-3 [Opens at 6:00 AM on 11-3-20](#) [See All Hours](#)

Drive Through Drop Box
 MARICOPA COUNTY RECORDER/ELECTIONS - MESA
 277 E JAVELINA AVE, MESA 85210 [Map It](#) [Print It](#)
[OPEN](#) [Closes at 11:59 PM](#) [See All Hours](#)

Drop Box Only
 MESA CITY HALL
 20 E MAIN ST, MESA 85201 [Map It](#) [Print It](#)
Drop Box ONLY Location
 This facility ONLY has a secure ballot drop box. In-person voting is NOT available.
[OPEN](#) [Closes at 6:00 PM](#) [See All Hours](#)



IT and Cybersecurity Features

In addition to the features for voters, Maricopa County also worked to implement robust database and cybersecurity measures on the page to ensure it could facilitate the millions of expected views.

The website was migrated to new web servers. Maricopa County added CAPTCHA controls, which mitigate against automated attacks by requiring a user to prove they are human. In addition, Maricopa County's IT team rewrote the address autocomplete functionality after the primary election to be much more efficient and resistant to abuse.

The county also collaborated with Cloudflare and their Project Athenian to implement additional distributed denial of service (DDoS) protections. Cloudflare's reverse proxy caching increased performance and user experience on Locations.Maricopa.Vote and reduced the load on county servers. Additionally, the county implemented rate limiting, which adjusts how quickly an IP address can make a request against the web server and require additional CAPTCHA from any overseas visitors to our website.

All of these additions ensured the stability, resiliency, and performance of our website, ensuring voters were able to quickly and safely find voting locations.

The Outcome

In an effort to better serve voters, the county created a shortlink for the website, Locations.Maricopa.Vote. This page was a critical piece to the success of the election. It was shared broadly with voters through:

- Public board meeting [presentations](#)
- Wait-Time Remediation [Plan](#), Election Day [Plan](#) and Early Voting [Plan](#)
- Maricopa County's voter dashboard at BeBallotReady.Vote.
- Social media
 - In the Election Department's [social media toolkit](#) shared with political parties, cities and towns, election groups, government agencies and others.
 - Directly on @MaricopaVote [Facebook](#) and [Twitter](#) and on @MaricopaRecorder [Facebook](#), [Twitter](#) and [Instagram](#).



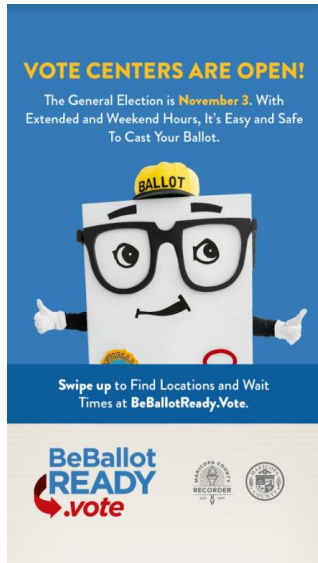


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- Advertising campaigns in print, social media, billboards, [TV](#) and more!



- Direct mailers to all voters that did not request a ballot in the mail

MARICOPA COUNTY ELECTIONS DEPARTMENT
111 S. 3rd Ave.
Phoenix, Arizona 85003

Sample Ballot
NOVEMBER GENERAL ELECTION
November 3, 2020
Maricopa County, Arizona

Boleta de Muestra
ELECCIÓN GENERAL DEL 2020
3 de noviembre, 2020
Condado Maricopa, Arizona

Only one sample ballot has been mailed to each household containing one or more registered voters.
Sólo se ha enviado una boleta de muestra a cada hogar que contiene uno o más votantes registrados.

IN PERSON VOTING
Voting locations in Maricopa County are open from October 7-November 3, including some evenings and weekends. There are **NO assigned locations** this election. Find a location and time that works in your schedule.
[Locations.Maricopa.Vote](#) or call (602) 506-1511

Los lugares de votación en el Condado Maricopa están abiertos del 7 de octubre al 3 de noviembre, incluyendo algunas tardes y fines de semana. **No hay ubicaciones asignadas** en esta elección. Encuentre una ubicación y horario que funcione mejor para usted.
[Ubicaciones.Maricopa.Voto](#) o llame al (602) 506-1511

VOTACIÓN EN PERSONA

**NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES**

OFFICIAL ELECTION MAIL

1-301 *****JOSHUA D GIBBY 80014
JOHN D VOTER
4740 N 87TH ST
PHOENIX AZ 85018

OFFICIAL ELECTION NOTICE

WHERE TO VOTE

Maricopa County voters can cast a ballot in-person between now and Election Day on November 3 at any Vote Center, including some evenings and weekends. All locations have heightened safety and cleaning measures. Voters may also request a ballot in the mail. The deadline is October 23 at 5 p.m. Visit [Request.Maricopa.Vote](#).

Safety at the Polls
PHYSICAL DISTANCING
All check-in stations and voting booths at least six feet apart.
HEIGHTENED CLEANING
We'll be frequently cleaning high touch surfaces and providing poll workers with masks and gloves.
GLOVES & MASKS FOR VOTERS
We will provide all voters with gloves and masks when checking in and will disinfect pens after each use.

NO ASSIGNED LOCATIONS
Pick a vote center that works for you! Go online or call us to find one.
(602) 506-1511
[Locations.Maricopa.Vote](#)

AVISO OFICIAL DE LA ELECCIÓN

DÓNDE VOTAR

Los votantes del Condado Maricopa pueden emitir su voto en persona desde ahora hasta el Día de la Elección el 3 de noviembre en cualquier Centro de Votación, incluyendo algunas tardes y fines de semana. Todos los lugares cuentan con altas medidas de seguridad y limpieza. Los votantes también pueden solicitar una boleta por correo. La fecha límite es el 23 de octubre para las 5 p.m. Visite [Soliciteud.Maricopa.Voto](#).

Seguridad en las Urnas
DISTANCIAMIENTO FÍSICO
Todas las terminales de registro y las cabinas de votación tendrán al menos seis pies de distancia.
LIMPIEZA INTENSIFICADA
Estaremos limpiando frecuentemente superficies de alto tacto y proporcionaremos a los trabajadores electorales máscaras y guantes.
GUANTES Y MASCARILLAS PARA LOS VOTANTES
Proporcionaremos a todos los votantes guantes y mascarillas al registrarse y desinfectaremos plumas después de cada uso.

NO HAY UBICACIONES ASIGNADAS
Elija un centro de votación que funcione para usted! Visite nuestro sitio web o llámenos para encontrar uno.
(602) 506-1511
[Ubicaciones.Maricopa.Voto](#)

Maricopa County is not aware of any other jurisdiction that provides voters with live wait time data. This was crucial during the pandemic when crowds could present serious health concerns.

Moving forward, Maricopa County will continue to provide this option for voters. It provides voters with an easily searchable tool that places the choice about when and where to vote in voters' hands. Since this system was created internally, there will be no issues or costs associated with continuing to provide this page to Maricopa County voters.

The outcomes show that this innovative webpage was a success with more than 2.12 million page views from Oct. 1-Nov. 4, 2020. Voters spent an average of 1.5 minutes on the page, which shows they were quickly able to search and find a voting location or ballot drop box. But, the impact didn't stop at just page views. Maricopa County served



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more than 395,000 in-person voters, and more than 1.1 million voters visited a Vote Center or Ballot Drop Box. That is more than all the voters who returned a ballot in the mail. The county was able to keep wait times low, averaging just under three minutes on Election Day. Some locations were busier than others, with one location exceeding an hour wait time. But just a few miles away, voters could select a location with a much shorter wait time.



Although Maricopa County created the wait time system and website in-house, other jurisdictions looking to provide voters with more access to information about voting options could implement the concept.

Given the abundance of voting options in Maricopa County coupled with COVID-19 concerns, the website provided the public a tool to make a safe voting choice that best fit their needs.