

Mobile Voter Line Wait

A Story of Citizen Engagement,
Partnerships and Panic!

Presenters

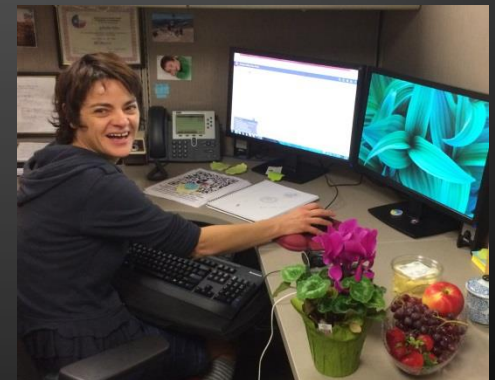
Tim Nolan,
Collin County



Michael Parma,
GISi

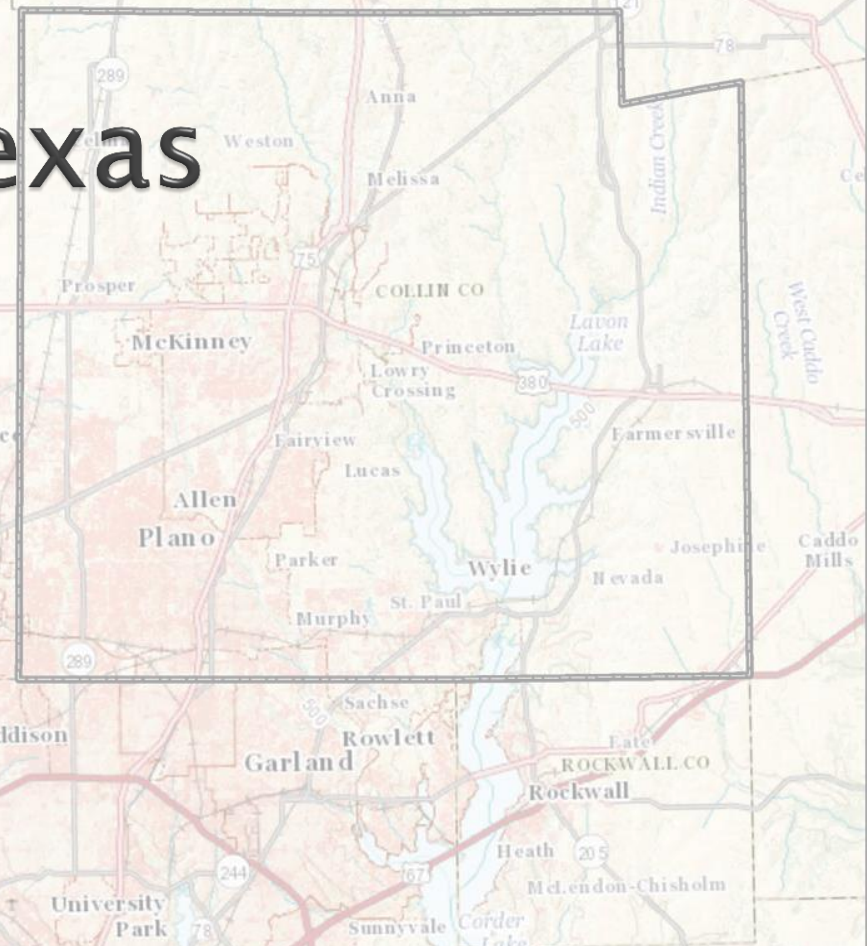


Gabi Voicu,
Collin County



Collin County, Texas

- ▶ Dallas/Ft. Worth Metroplex
- ▶ Population – 942,063
(Source: Collin Co GIS – Apr 07, 2015)
- ▶ Highly Educated, Affluent and Mobile
- ▶ Citizen Engagement is Difficult for Texas Counties
- ▶ Elections are our “High Water Mark”



Setting the Stage – Vote Centers

- ▶ HB 758 – 79th Texas Legislature
 - Vote Centers or “Super Precincts”
 - Electronic Poll Books
 - Lubbock Co as the original pilot study
- ▶ HB 719 – 81st Texas Legislature
 - Four Counties – including Collin Co
 - 1st Collin Co Vote Center Election
 - November 3, 2009
 - 2nd Vote Center Election
 - November 2, 2010
- ▶ To date: 19 Counties Participate





What's up with the **RED** text on the last slide >>

Must mean something important

November 2, 2010

- ▶ Federal Mid-Term Election
- ▶ Huge Voter Turnout
- ▶ 1st True Test of Collin Co Vote Centers



Headlines

The Dallas Morning News

Collin County voters wait in long lines due to computer problems and heavy turnout



By THEODORE KIM and ED HOUSEWRIGHT / The Dallas Morning News
tkim@dallasnews.com ehouswright@dallasnews.com

Published: 02 November 2010 09:43 AM
Updated: 30 November 2010 12:06 PM

Some voters in Collin County waited in long lines Tuesday in delays blamed on computer problems and heavy turnout.

The Dallas Morning News

News > Communities > Collin County

Collin County

Collin County judge says "vote center" system may have contributed to long lines on election day



By ED HOUSEWRIGHT / The Dallas Morning News
Newsehousewright@dallasnews.com

Published: 03 November 2010 11:17 AM
Updated: 30 November 2010 12:06 PM

Collin County officials say they are evaluating the county's unusual voting system after delays at the polls Tuesday left some voters waiting for hours to

Challenge

- ▶ How do we get the word out about Vote Centers?
- ▶ How can we reduce long voter lines?
- ▶ How do we go mobile?
- ▶ Can we use QR Codes?
- ▶ Can we have a solution by Nov 2012?



Mobile Voter Line Wait App

»» Version 1

Getting the Word Out



Vote Centers in Collin County

Vote Centers in Collin County (2013)

The League of Women Voters of Plano/Collin County supports the use of Vote Centers (Election Day centralized voting) for national, state, and local elections to facilitate voter convenience and flexibility. Collin County should provide enough voting locations, equipment, and personnel, including IT support, to ensure that voters can vote in various parts of the county without excessive wait times.

Democratic Blog News

Democratic Blog News

Comparing projected average 2012 Vote Center traffic (1,209 - 1,418 voters per center) to the lower average 2010 Vote Center traffic (967 voters per center) suggests that long polling place wait lines are again possible - and even probable - on Election Day 2012.

Historically high traffic voting locations, such as the Allen Municipal Courts Building, Plano Carpenter Park Recreation Center, Plano Christ United Methodist Church, Plano Clark High School and other 2012 Collin County Voting Centers, will most likely have lines throughout Election Day and continuing for some time after Judges call, "polls closed," at 7:00 p.m.

New QR Codes for Smart Phones

Have you seen those funky QR (quick response) "bar" codes floating around and wondered what they are and how to scan them on your iPhone or iPad?

QR codes are used to convey useful information like web URLs, contact cards, e-mail addresses and more. While QR "bar code" readers aren't built into the iPhone and iPad, there are, of course, QR code scanner apps you can download.

The Collin County elections office will trial a QR "bar code" Vote Center service at half a dozen locations on Election Day to help voters locate Vote Centers with the shortest wait times. The Vote Center QR code scan launches a Collin County Election Vote Center location map.

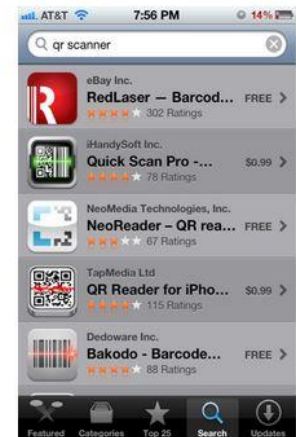
To use the QR code service you first need to download an App that scans QR codes. There are tons in the iTunes App Store that you can find with an App search for "QR code readers." ([How to Video](#))

After you have installed and launched the QR Scanner App, you can point your iPhone camera lens at the QR code image at right to test the map service. The scan should launch the Collin Co. Vote Center location map.

I've tried the free Apps *Quick Scan* and *QR Reader* for iPhones on the Collin Co. QR Vote Center bar code. Both work just fine.

Look for the QR Code poster on or around the yellow sandwich board 100' electioneering distance markers at the Election Day trial locations.

The Plano Carpenter Park Recreation Center Vote Center, where I will work as the Alternate Judge, will be one of the locations where QR code posters can be found on the yellow sandwich board 100' markers.



Scan the QR Code for other Polling Locations and Wait Times

Escaneé el Código QR para otros Centros de Votación y Tiempos de Espera
<http://gismaps.collincountytx.gov/mobilelections.html>

Technology Makes Collin County Voting Easier

November 5, 2012 5:18 PM

Share

47

Tweet

5

Share

6

View Comments

Related Tags: Collin County, Early Voting, election, QR code, QR Codes, Technology, voting



(credit: CBSDFW.COM)

NORTH TEXAS (CBSDFW.COM) – Every year technology seems to be changing the election process. This year Collin County had its biggest early voting turnout ever and those ballots are currently being stored inside sealed electronic machines that will be counted on Tuesday, November 6.



On the technological front, the busiest polling places in Collin County will also have QR Codes on site. Voters can swipe the code with a smartphone and look at a map displaying green and red lights. A green light means the vote wait time is less than 20 minutes and provides another option to standing in a long line.

bit.ly/CBSQRCode

Voter Dashboard v1

Early Voting Location Search

Type an address into the search form below to find the nearest Early Voting Location.

Address:

Click on the name of the Early Voting Location below for an interactive map of this location.

May 10, 2014 Election - Early Voting Locations

MapLink	Address	City	Status
Collin County Elections (Main Early Voting Location)	2010 Redbud Blvd, Suite 102	McKinney	
Allen Municipal Courts Facility	301 Century Pkwy	Allen	
Anna City Hall Administration Building	111 N Powell Pkwy	Anna	
Celina ISD Administration Building	205 S. Colorado	Celina	
Collin College - Preston Ridge Campus	9700 Wade Blvd	Frisco	
Frisco Fire Station #5	14300 Eldorado Parkway	Frisco	
Lovejoy ISD Administration Building	259 Country Club Rd	Allen	
McKinney Fire Station #5	6600 W. Virginia Parkway	McKinney	
McKinney Performing Arts Center	111 N. Tennessee St	McKinney	
Murphy City Hall	206 N. Murphy Rd	Murphy	
Parker City Hall	5700 E. Parker Road	Parker	
Princeton ISD Administration Bldg.	321 Panther Parkway	Princeton	
Prosper Municipal Chambers	108 W. Broadway	Prosper	

Polling Locations

Polling Location Wait Time

- Click View Map
- Choose Polling Location
- Route From Current Location

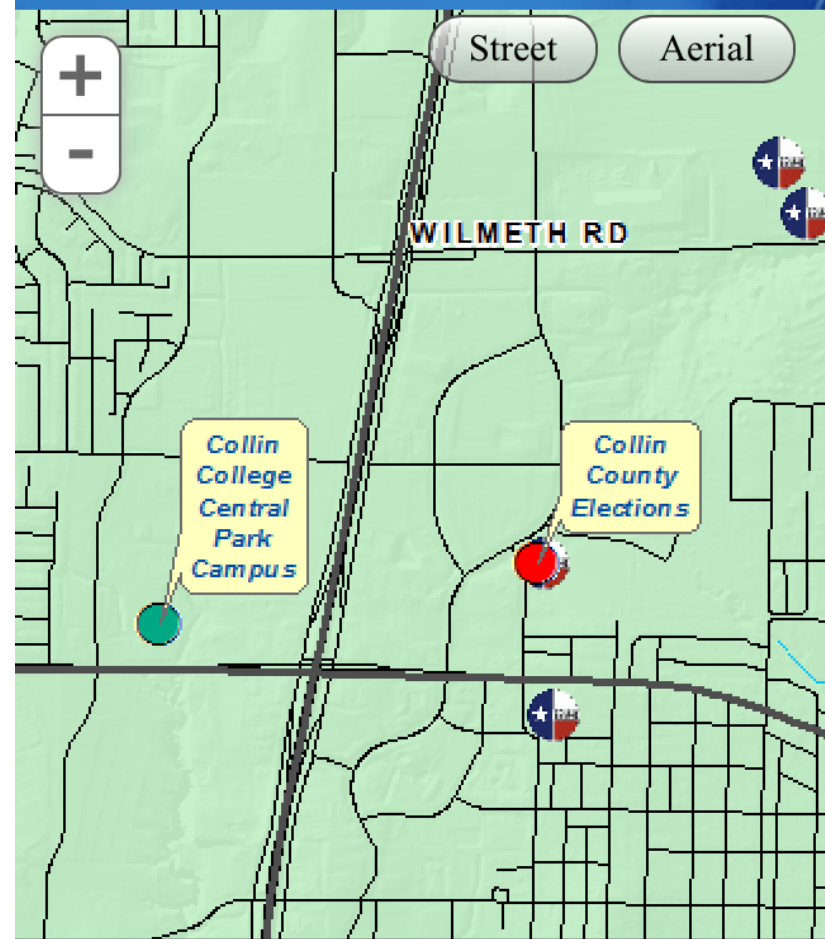
Estimated Waiting Times

- < 20 Min
- 20 - 40 Min
- > 40 Min

View Map



2300 Bloomdale Rd, 75071





The Best of Texas Awards program salutes IT professionals and projects in Texas state and local government organizations and educational institutions at the annual Texas Digital Government Summit/GTC (Government Technology Conference) Southwest event. All government and educational organizations in Texas are invited to submit nominations each March. The awards are presented at the event held annually in June.

Best of Texas 2014 Award Winners Announced

BY JANET GRENSLITT / JUNE 18, 2014

0



2014 Award Recipients:

Demonstrated Excellence in Project Management

Bridget Wolf, Application Development Manager

Texas Parks and Wildlife

Best Application Serving the Public

- Texas Student Data System (TSDS) Unique ID, Texas Education Agency
- Voter Line Wait Mobile Application, Collin County

Best Application Serving an Agency's Business Needs

- Electronic Mileage System + (eMS+), Texas Department of Family and Protective Services
- Automated License Plate Reader (ALPR), City of Dallas

Best IT Collaboration Among Organizations

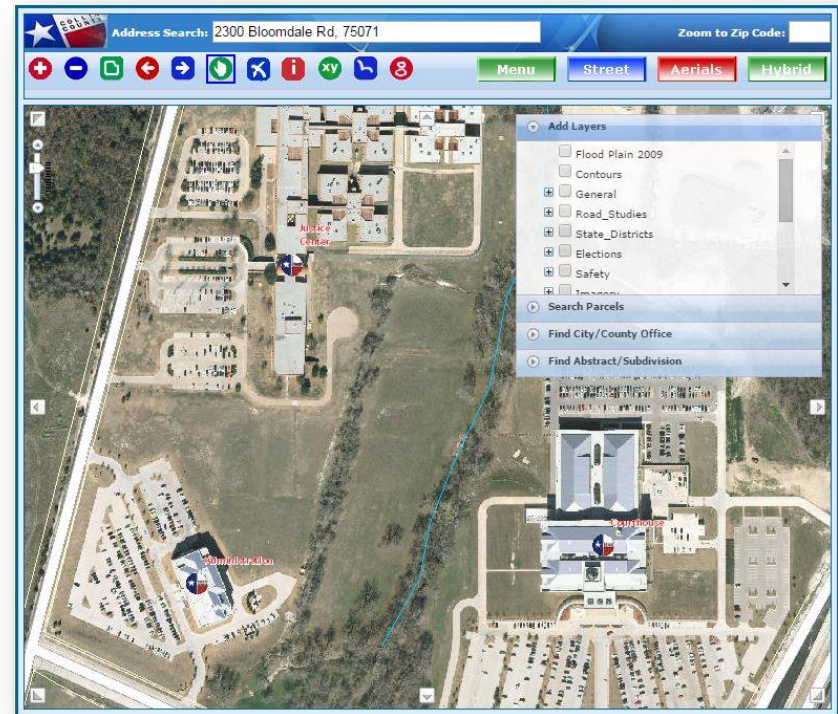
- Bexar County's BiblioTech
- Pilot for Texas Cloud Offering (PTCO), Texas Department of Information Resources

Best In-House Developed Application

- Active Felony Warrants GIS Application, Bexar County
- FAST (Financial Allocation Study for Texas) Tracker, Texas Comptroller of Public Accounts

ArcGIS 10.2+ Upgrade

- ▶ New Esri Architecture
- ▶ Current Environment is “remarkably average.”
- ▶ Consolidate our GIS Servers
- ▶ Utilize Collin Co Infrastructure (DMZ, F5, etc)
- ▶ JSAPI Interactive Maps



Interactive Maps

- ▶ JSAPI – many upgrades
- ▶ Lots of baggage
 - JSAPI version
 - Dojo version
 - Esri version
 - Custom code
- ▶ Will the “Print” button work



Partnerships

- ▶ Configuration Recommendations – Esri
 - 3-Day Onsite
 - Deliverable: Report
- ▶ Jumpstart Service Package (10.2) – GISi
 - 3-Day Onsite
 - Deliverable: Software Upgrade



Problem

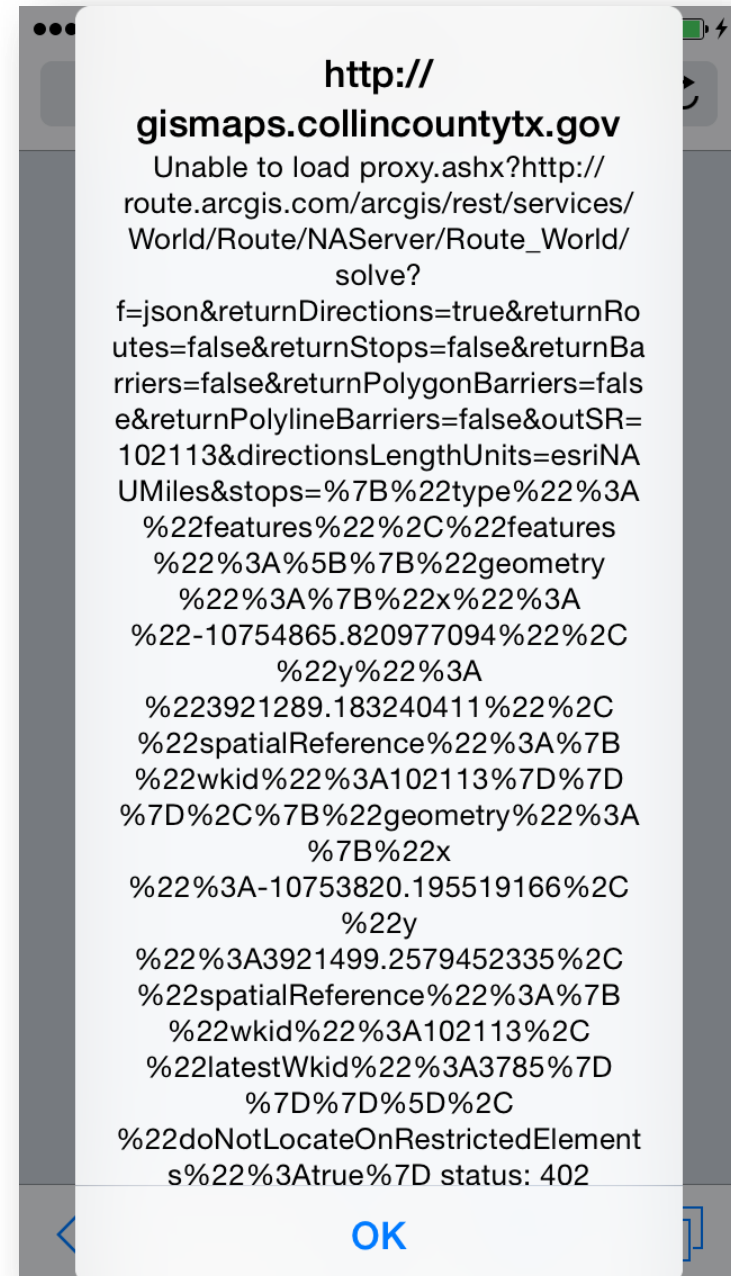
- ▶ VLW v1 Does NOT work in 10.2
- ▶ Ultimatum
 - Rollback or Redesign
 - 1^{1/2} Days Redesign Effort
- ▶ VLW v2 NOT Ready for Prime Time
- ▶ Collin Co Infrastructure Issues
 - IT Audit Concerns
- ▶ Federal Mid-Term Election is a Month Away
 - Tick-tock, Tick-tock...

Solution

- ▶ Redline VLW v2 Project with Purchasing
 - Clock is Ticking – Cannot Reschedule the Election
- ▶ Hire GISi to Complete VLW v2
 - 2nd Engagement
 - Consulting Services – Remote
- ▶ Responsive Design is a **MUST**
- ▶ Ready App for Election Day
 - ...and Early Voting if Possible

Issues

- ▶ IT Audit Compliance
 - Internal vs External
- ▶ Webserver
 - DMZ vs Reverse Proxy
- ▶ A Wedding
- ▶ GISi Unable to Recreate Issues/Problems
- ▶ And this...



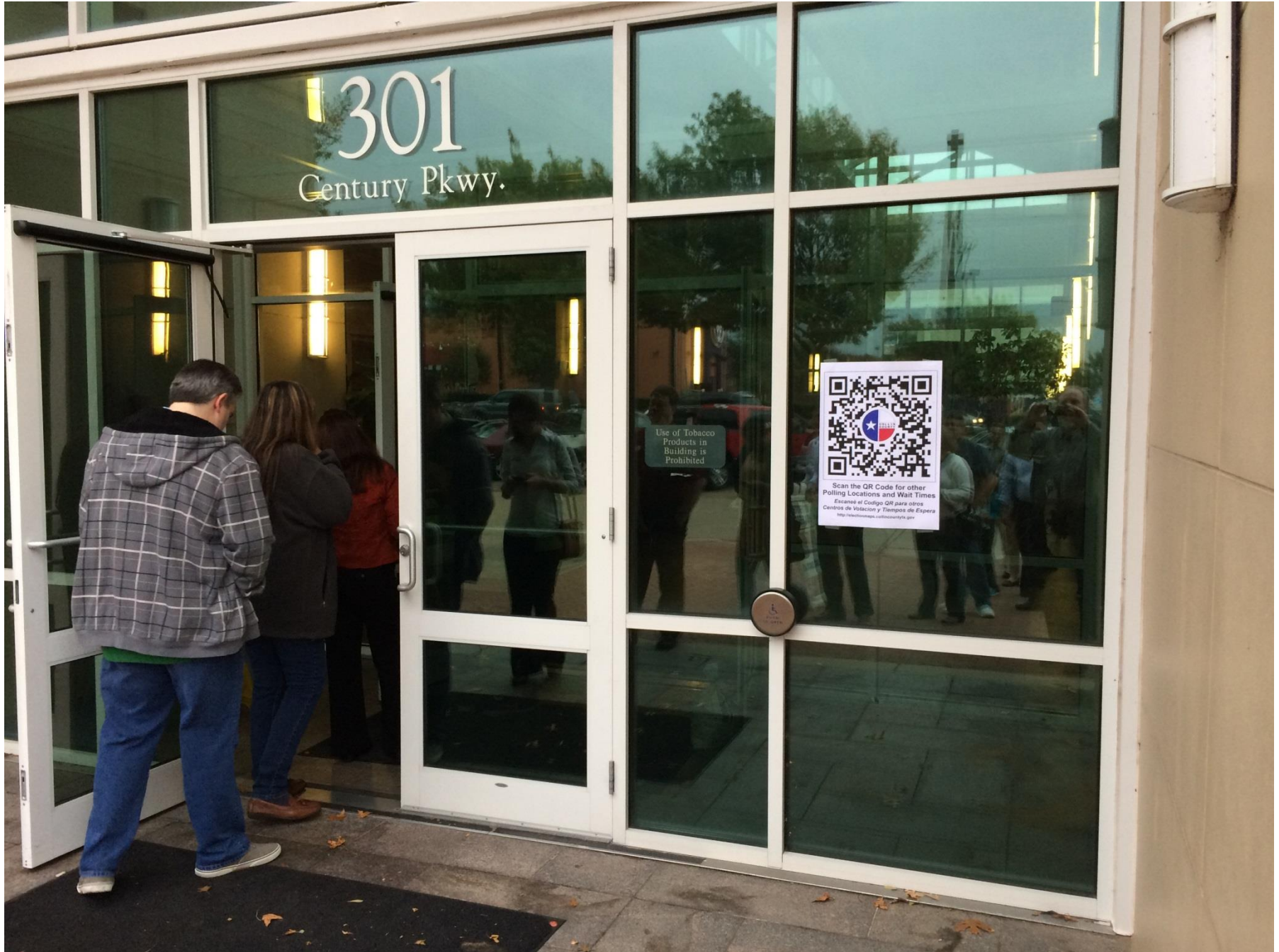
Issues (cont.)

- ▶ Configuration Problems
- ▶ Missed Early Voting
- ▶ Running Low on Contract Hours
- ▶ Extremely Late System Configuration
- ▶ Prepping to use VLW v1 on Old System
 - No New Technology

Election Day – Panic!

- ▶ Getting the “Unable to load proxy” Error
 - After 5p prior to Election Day
- ▶ Mon Nov 3rd (9:27p) email to GISi
- ▶ GISi Finally Sees the Proxy Error
 - 5:24a Election Day
- ▶ Pre-Dawn Troubleshooting with GISi





Resolved.

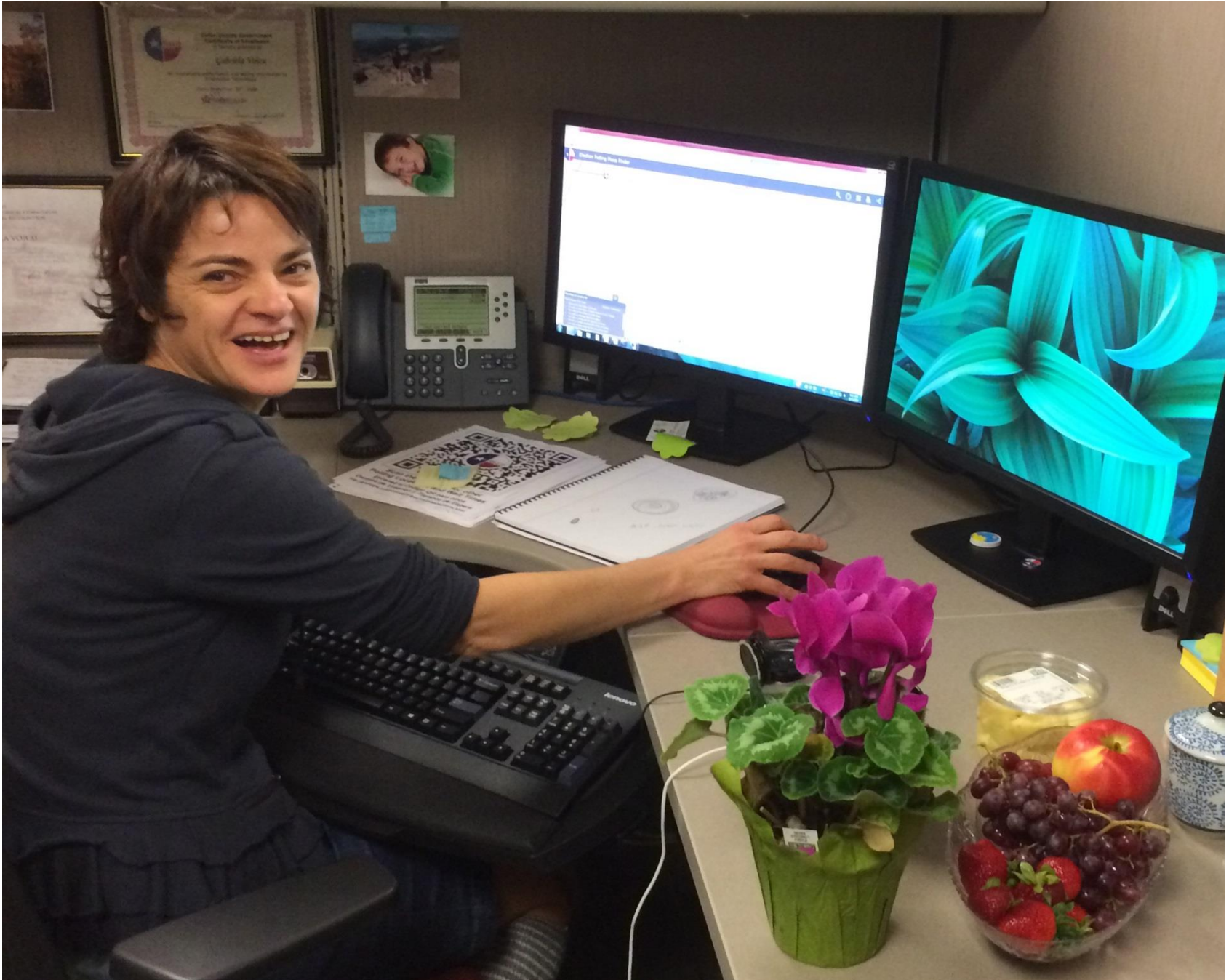
- ▶ Reverse Proxy Webserver
- ▶ Change “**rateLimit**” setting in the Proxy Config
 - Max Number of Requests in Period of Time
 - 6 → 30 → 100 → 200 ...seriously!
 - Thank you, Katie!

Euphoric!



- ▶ Reverse Proxy Webserver
- ▶ Change “rateLimit” setting in the Proxy Config
 - Max Number of Requests in Period of Time
 - 6 → 30 → 100 → 200 ...seriously!
 - Thank you, Katie!





Mobile Voter Line Wait App

»» Version 2

Voter Dashboard v2

Election Day Vote Center Search

Type an address into the search form below and click the Submit button to find the nearest Election Day Vote Center Location.

Address:

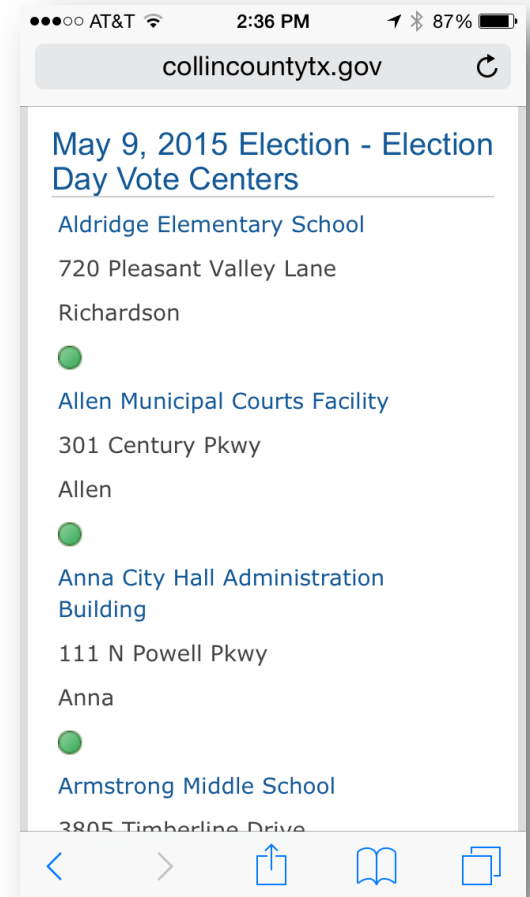
May 9, 2015 Joint General and Special Elections - Election Day Vote Center Locations

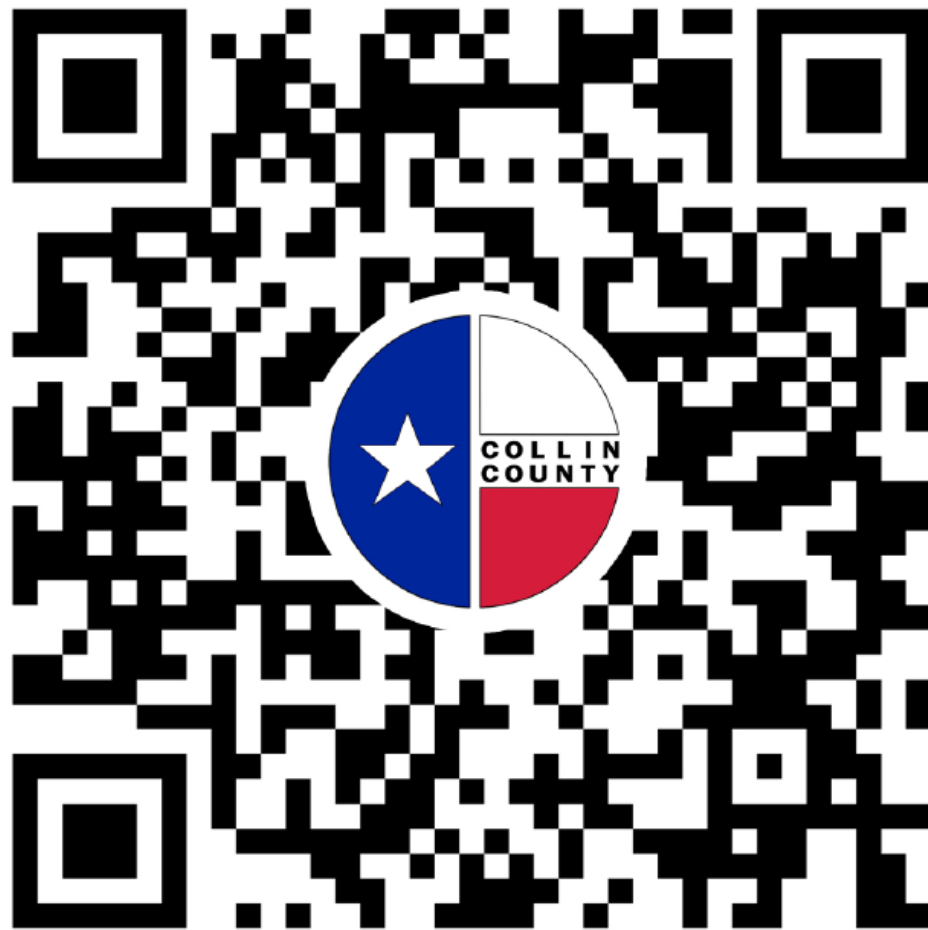
The polling locations listed below will be open for voting from 7:00 am to 7:00 pm on Saturday, May 9, 2015.

Click on the name of the polling place to view a map of that location.

May 9, 2015 Election - Election Day Vote Centers

MapLink	Address	City	Status
Aldridge Elementary School	720 Pleasant Valley Lane	Richardson	●
Allen Municipal Courts Facility	301 Century Pkwy	Allen	●
Anna City Hall Administration Building	111 N Powell Pkwy	Anna	●
Armstrong Middle School	3805 Timberline Drive	Plano	●
Bethany Elementary School	2418 Micarta Drive	Plano	●
Bowman Middle School	2501 Jupiter Road	Plano	●
Carpenter Middle School	3905 Rainier Road	Plano	●
Celina ISD Administration Building	205 S. Colorado	Celina	●
Collin College - Central Park Campus	2200 W. University Dr	McKinney	●
Collin College - Higher Education Center	3452 Spur 399	McKinney	●
Collin College - Preston Ridge Campus	9700 Wade Blvd	Frisco	●
Collin College - Spring Creek Campus	2800 E. Spring Creek Pkwy	Plano	●
Fairview Town Hall	372 Town Place	Fairview	●
Farmersville Intermediate School	807 N. Main Street	Farmersville	●

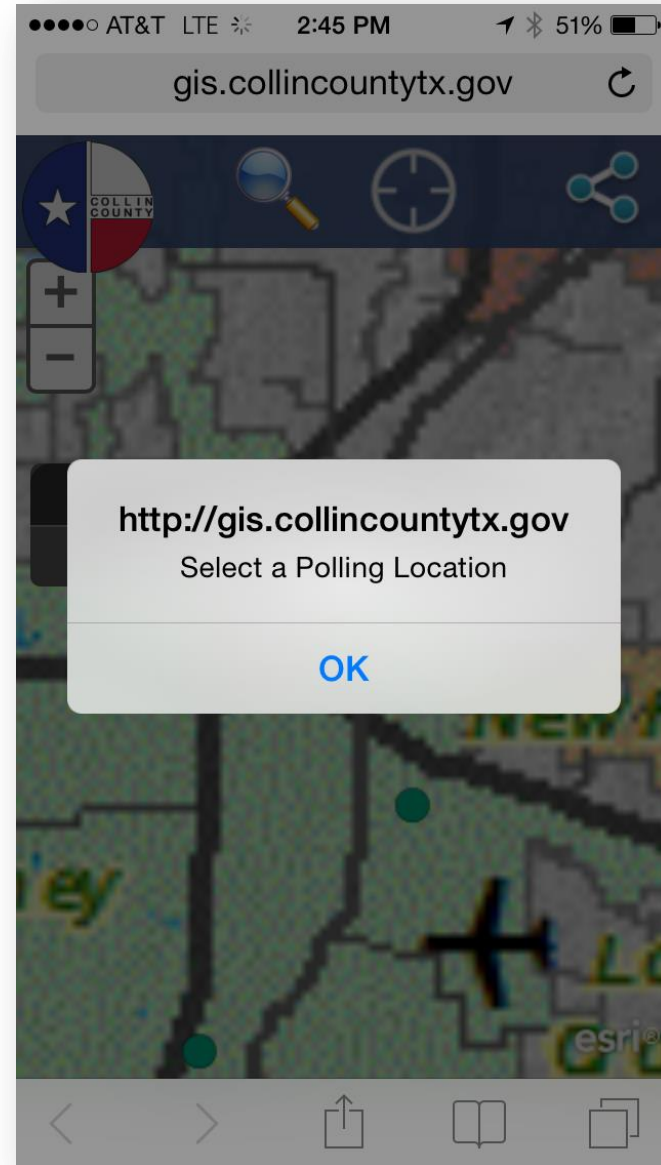
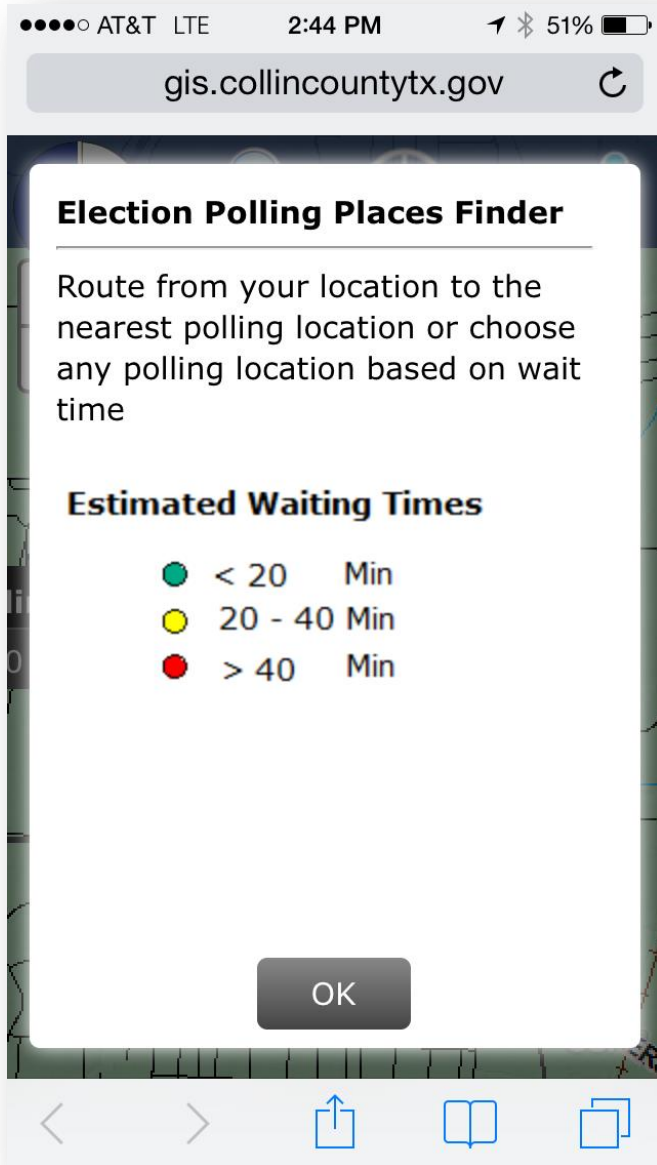


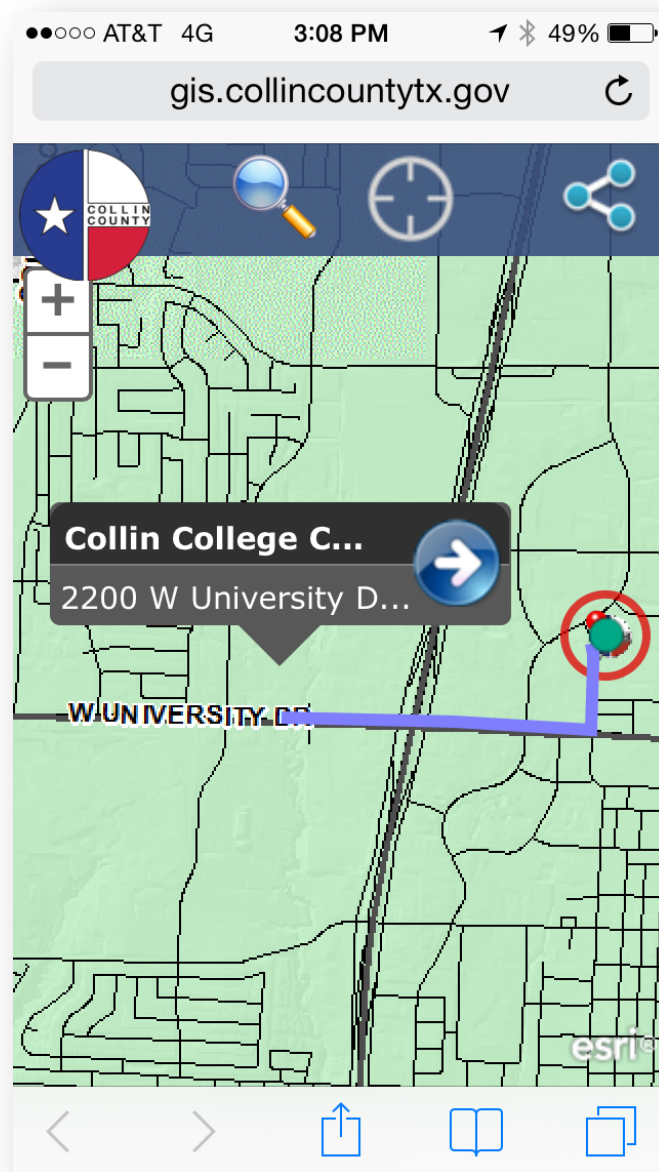


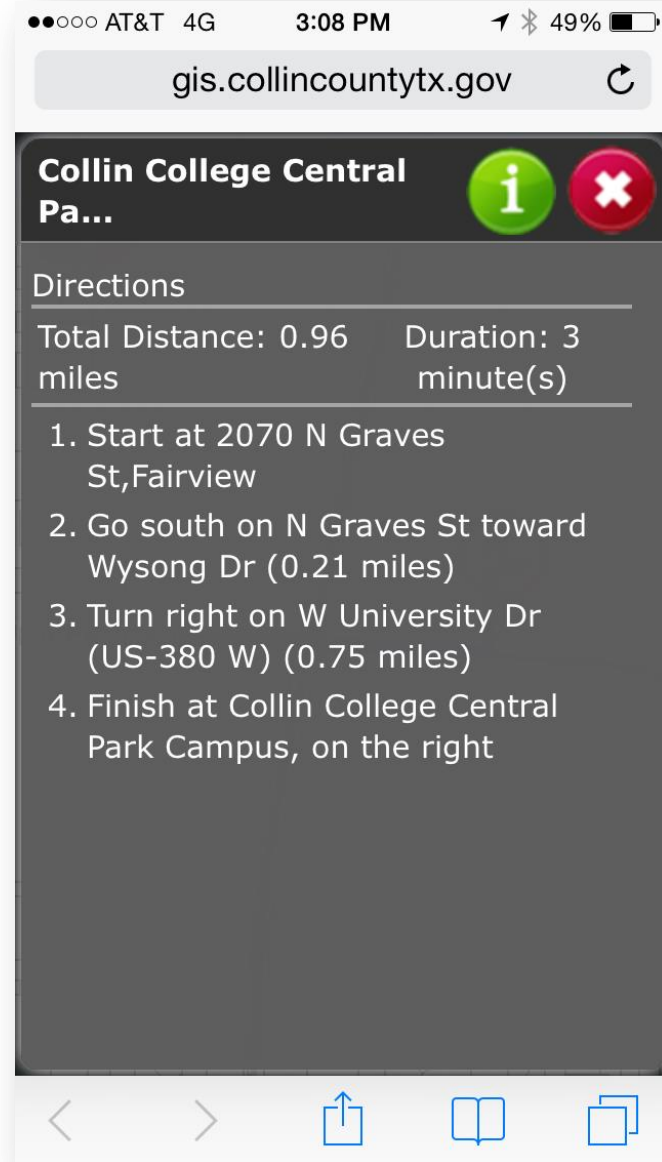
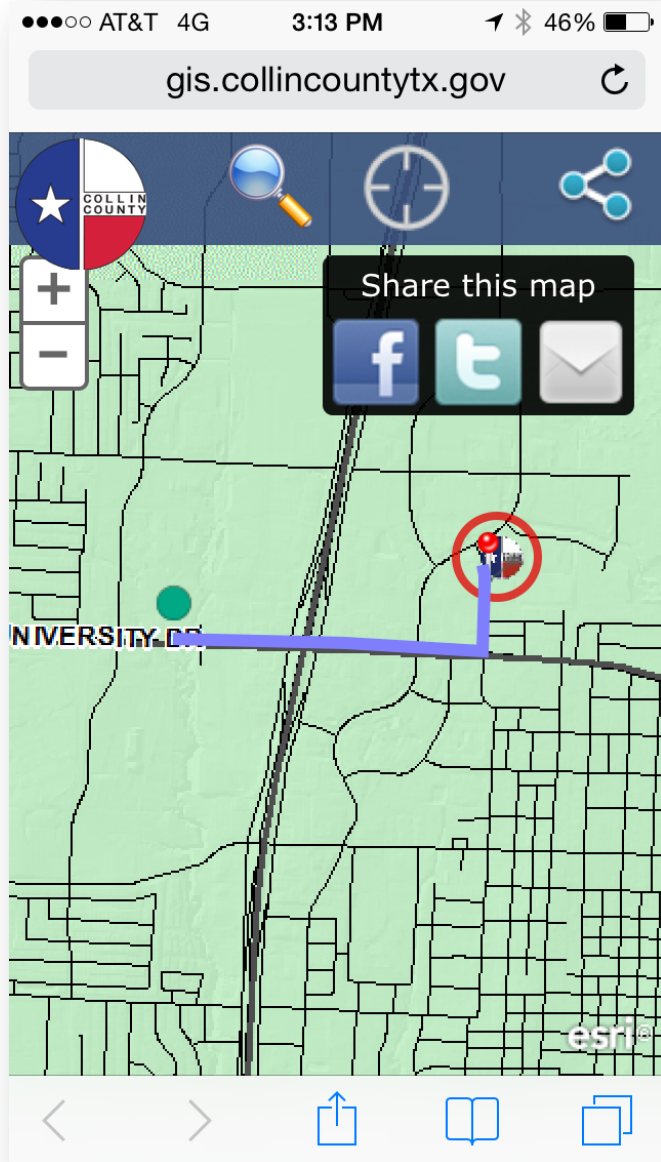
**Scan the QR Code for other
Polling Locations and Wait Times**

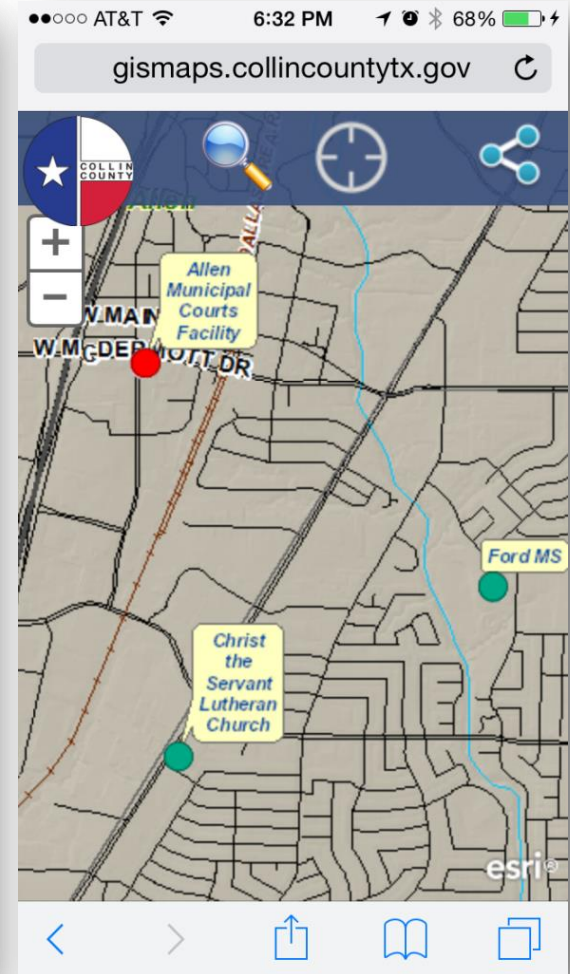
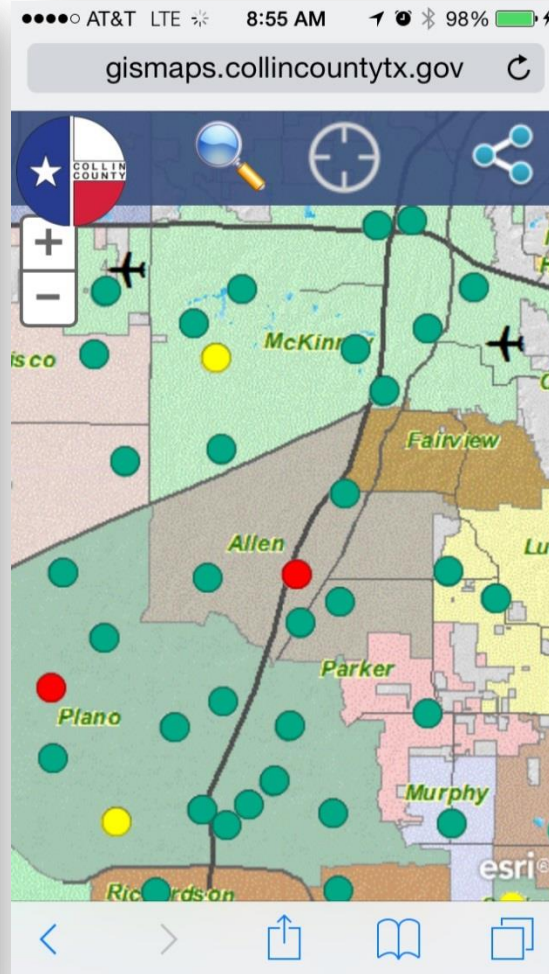
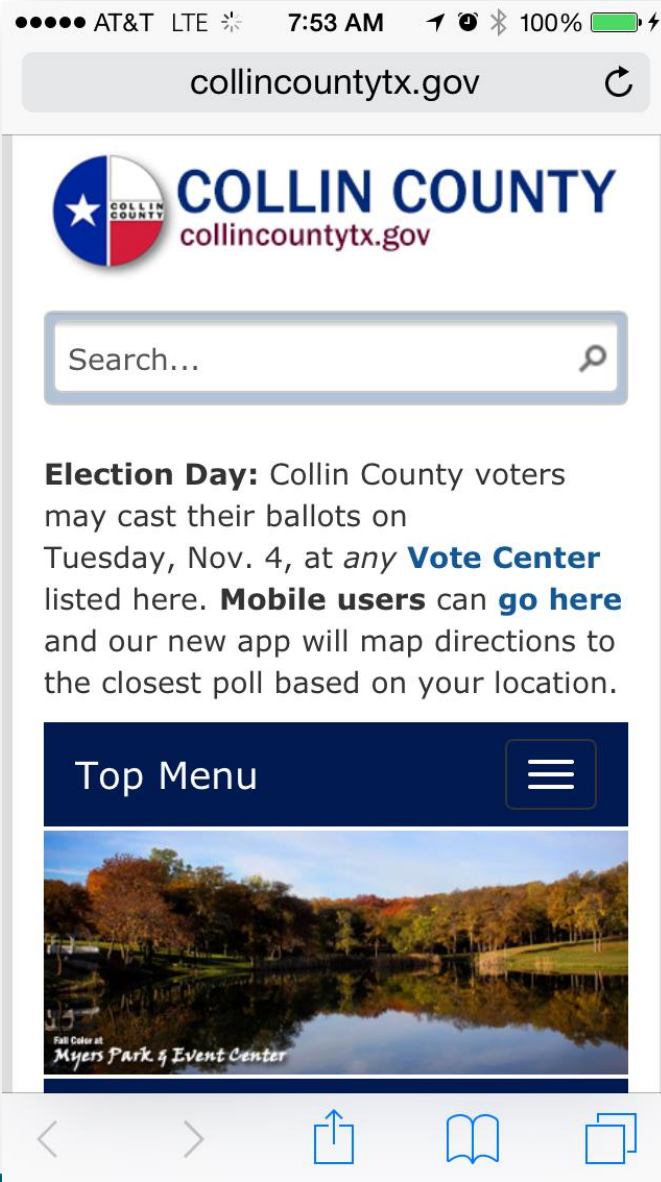
***Escaneè elCodigo QR para otros
Centros de Votacion y Tiempos de Espera***

<http://electionmaps.collincountytexas.gov>



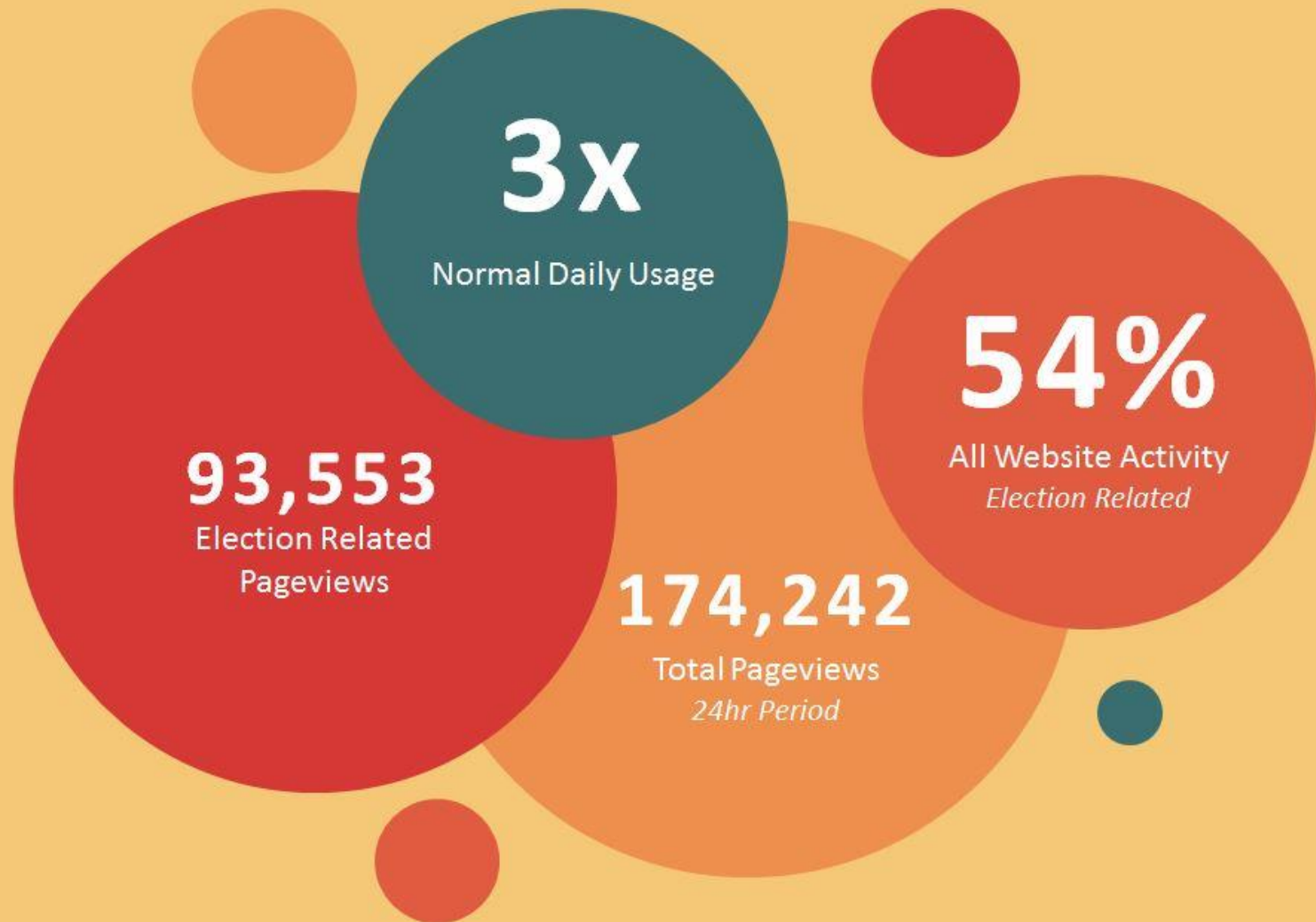








Election Day statistics reflect the entire Collin County, Texas website. The Election hits clearly dominate the day.



These numbers represent how the Voter Line Wait app responded on Election Day. The peak time for the app was 6a-6p.



19,020

Voter Line Wait App
Most Visited Page

8:00a

Busiest Hour
13,883 pageviews

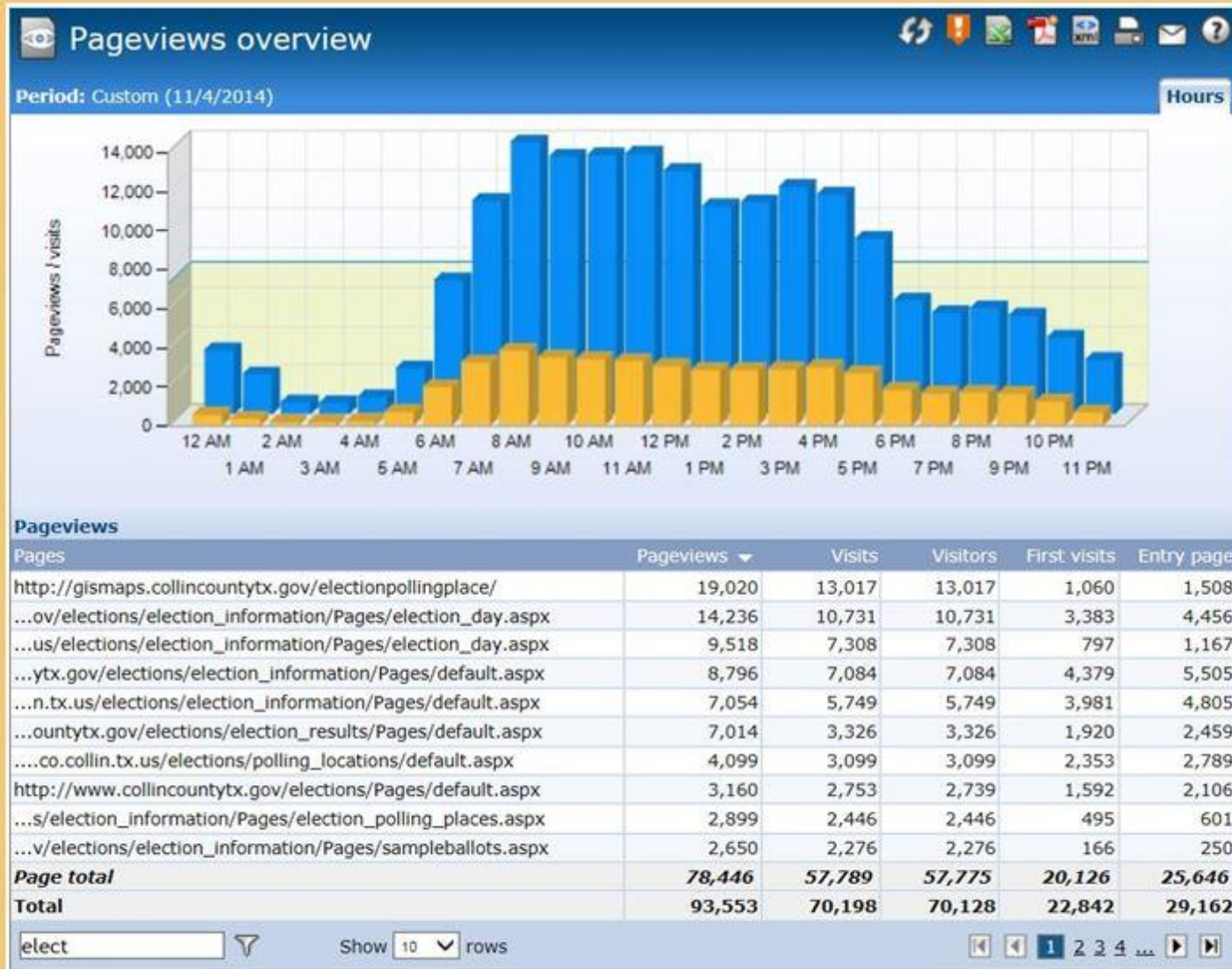
26,842

Routes Generated

0

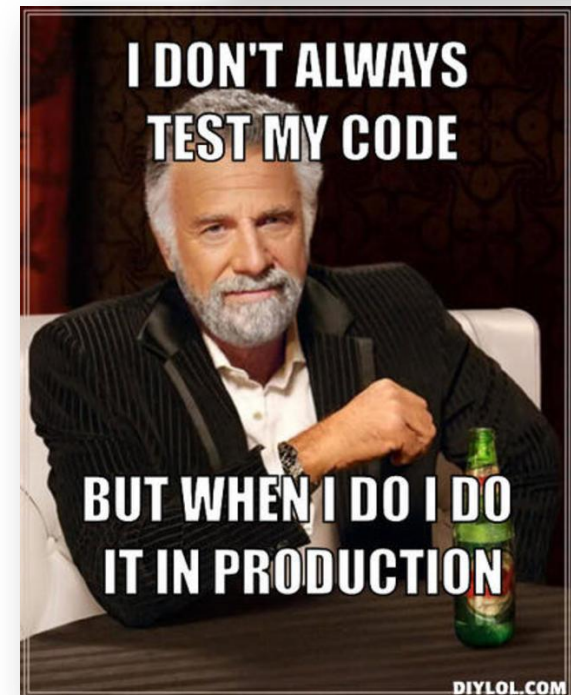
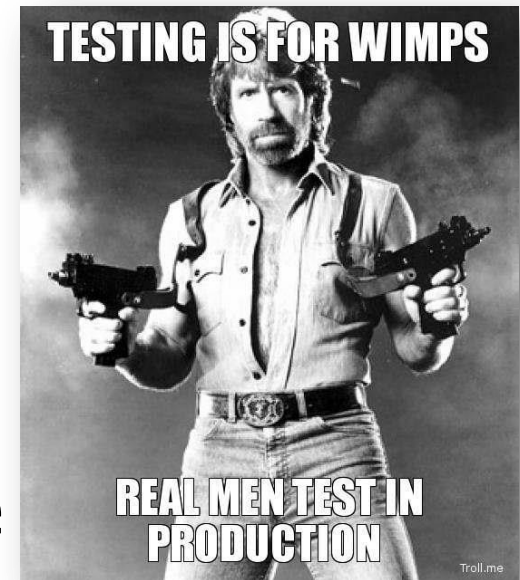
Amount of Server Reboots
or Application Refreshes

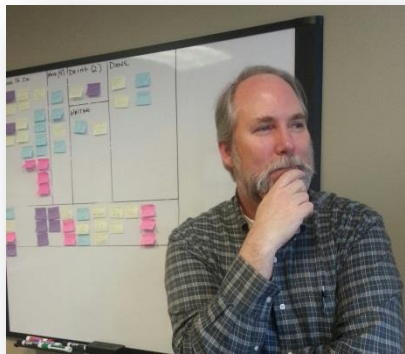
Number of election related pageviews.
This chart displays pageview filtered by
“elect.”



Retrospective

- ▶ Stop Changing the Infrastructure
- ▶ Understand the Errors
- ▶ Do NOT wait until the last minute
- ▶ Avoid testing in Production





Tim Nolan, *Collin County*
tnolan@co.collin.tx.us



nolantim



@plotboy



TimNolan3

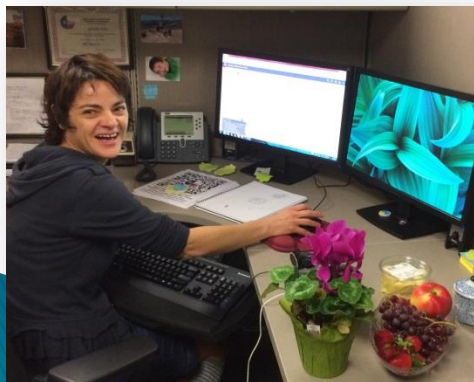
Questions?



Michael Parma, *GISi*
Michael.Parma@gisinc.com



michaelparma



Gabi Voicu, *Collin County*
gvoicu@co.collin.tx.us



gabi-voicu