

The letters 'UC' in a large, bold, orange font, positioned in the top left corner of the slide. The background of the slide is a textured orange-to-red gradient with abstract, wavy patterns in shades of blue and purple on the right side, resembling a stylized map or topographic relief.

UC

# Accessing Apps Anywhere using Web App Builder

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# Outline

- Altamonte Springs Overview
- GIS at the City Overview
- GIS Staff
- History of GIS at the City
- Web Application Progression
- ArcGIS Viewer for Flex
- ArcGIS for Server
- WAB
- AGO



# City of Altamonte Springs

- Located just north of Orlando
- 9.6 square miles
- Population : 43,905
- 425 Employees



# GIS at the City

- Part of IS Department – 3 person team
- Esri SGELA
- AGO Organization – 100 users available
  - Home/Gallery Pages – for City Employees
  - Public Gallery & Downloads
- Pictometry Online
- Esri Local Government Solutions
  - LGIM – slowly moving data
  - My Government Services
  - Park Locator
- Serves all city departments



# GIS at the City

- ArcGIS Desktop – 10.4.1
- ArcGIS Server – Enterprise 10.4.1
  - SQL Server
  - Two ArcGIS Server machines – Production & Staging
  - Web Adapter Machine outside firewall
  - PD Server
    - SQL Express
    - 10.4.1
- ERP Software – Tyler Technologies
  - Multi-year project
  - GIS at core of software
- Davey Tree – Tree Inventory



# GIS Staff

- One GIS Manager and two GIS Analysts.
- All GIS Staff have either GIS Certificates, Certifications, or Degrees.
  - GISP Certification
  - Bachelors of Science Degree in GIS
  - GIS Certification from University
  - Esri Desktop Certification



# History of GIS at the City

- 1996 – MapInfo
- 2000 – Esri
- 2010:
  - Data silos
    - Data kept in shapefiles
  - ArcReader software for 29 users across 4 departments
  - One person still using MapInfo software
- 2011
  - GIS moved under IS department
  - Hired first GIS professional



# Old GIS Setup: 2010

- Data silos
  - Data kept in shapefiles
  - Not shared across departments
  - Resulted in redundancies and conflicting data
- ArcReader software for 29 users across 4 departments
  - SLOW
  - Poor quality
  - Data locking issues





# Web Map/App Progression

- First big obstacle in establishing GIS was cleaning up data.
- Decided to push clean data out to users through web services.
- Changing technologies bring us through different web mapping platforms.
  - ArcGIS Server 10.0 Web Maps (2012)
  - ArcGIS Viewer for Flex (2013 - 2015)
  - ArcGIS Online Web App Builder (2015 – Present)



# ArcGIS Viewer for Flex

- Benefits at that time
  - Better than ArcReader
  - Up-to-date data
  - Standardized
  - Easier to configure
- Drawbacks
  - Hosted internally—not accessible outside of intranet.
  - Apps built for certain people or departments were only available to people with those links.
- Retired June 2016



# ArcGIS for Server Configuration

- Leverages ArcSDE (Spatial Database Engine).
- ArcSDE provides one location for all GIS data.
  - Every Map, Layer, Application, etc. is pointing to the same data.
- Adopted full SQL in 2016.
  - SQL Express - 10GB limit (Used from 2012 – 2016).
- Ties into City's Active Directory
- Secured services, not apps



# Web App Builder

- Made it easier for the City of Altamonte Springs to deliver its data to internal users.
- No longer have to update software—ESRI pushes updates automatically
  - New features
  - Bug fixes
  - Needs less customization so no code changes
- Hosted on AGO so can be accessed anywhere with internet connection
- Javascript/HTML5 means any device
  - Automatically resizes to different sized screens
- Anyone can access
  - From fieldworkers trying to resolve a broken pipe emergency to decision-makers attending remote meetings, anyone can readily access GIS data.



# Benefits

- No longer have to update software
- HTML5/Java means any device
- AGO provides central location
- AGO makes it easier to manage public and private apps

