UTILIZING GIS TO PROMOTE GROWTH AND PLAN FOR THE FUTURE

21st Annual Public Works Roundup

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LOCATION

- Centered at the intersections of the **Dallas North Tollway**, **Collin County Outer Loop**, and **Preston Road**.

- Celina's ultimate growth boundary is 78 square miles – the **2nd largest** footprint of any Collin County city (bigger than Plano & Frisco).

- Celina will be the **only city besides Dallas** to have 10 miles of Dallas North Tollway within its boundary.
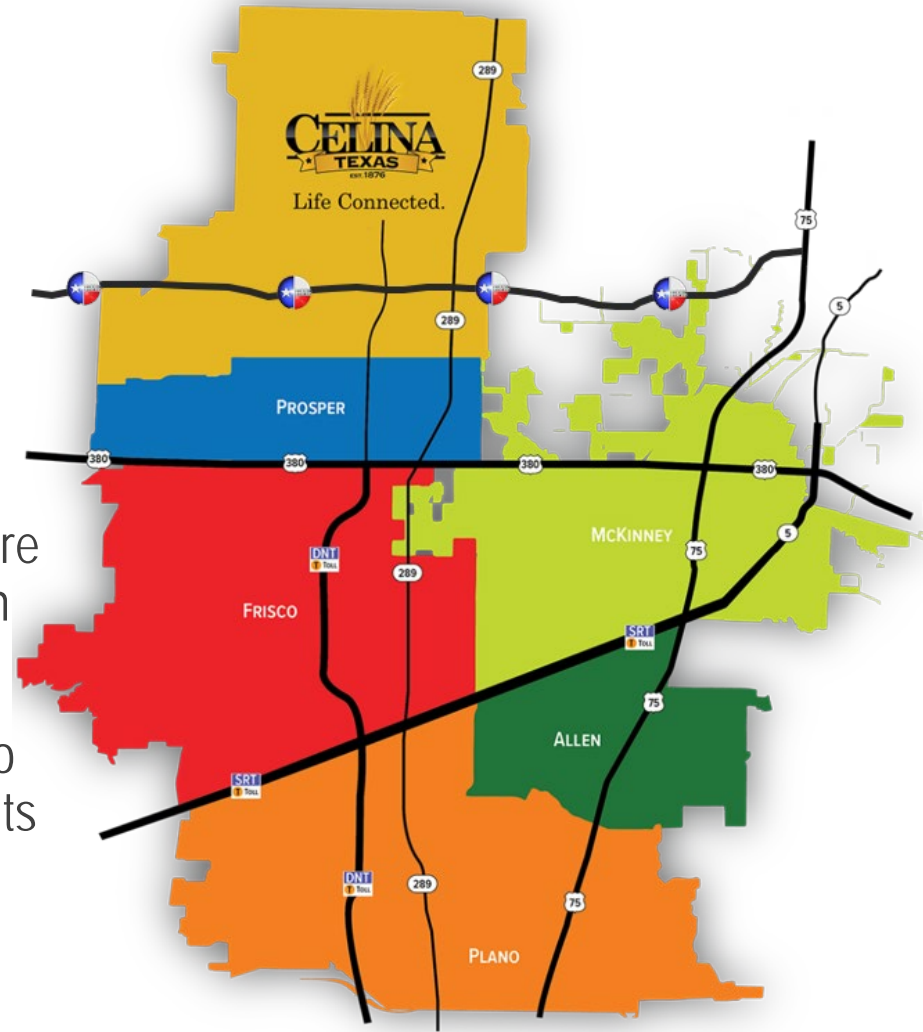
DEMOGRAPHICS

- Celina's current population is 22,641. That number is expected to grow to over **50,000 by 2025** and **200,000 by 2040**.

- Celina's **ultimate buildout** is approximately 378,000.

- Celina's **median household income** is $98,277, with an average home value of $391,991.

- **Over 50% of residents** have a Bachelor's, graduate, or professional degree.

Updated 2020

GROWTH

- Celina 2017 Issued Permits – 965

- Celina 2018 Issued Permits – 1249

- Celina 2019 Issued Permits – 1252

- A total of 4589 homes have been permitted between 2015 – 2019

- As of today Celina has done 1180 permits in 2020 and is projected to finish the year at over 1600 permits.

CELINA BY THE NUMBERS

A total of 4589 homes have been permitted between 2015-2019

Permits Increase Year-to-Year

31% 2015-2016
29% 2017-2018
10% 2018-2019
51% 2016-2017

Celina was named the #1 Fastest Growing City in North Texas in December 2019.

Current: 32 Square Miles
Projected: 78 Square Miles
Zip Codes: 75009 (Celina)
75078 (Prosper)
76227 (Aubrey)

486 637 965 1249 1252
2015 2016 2017 2018 2019

SINGLE FAMILY PERMITS

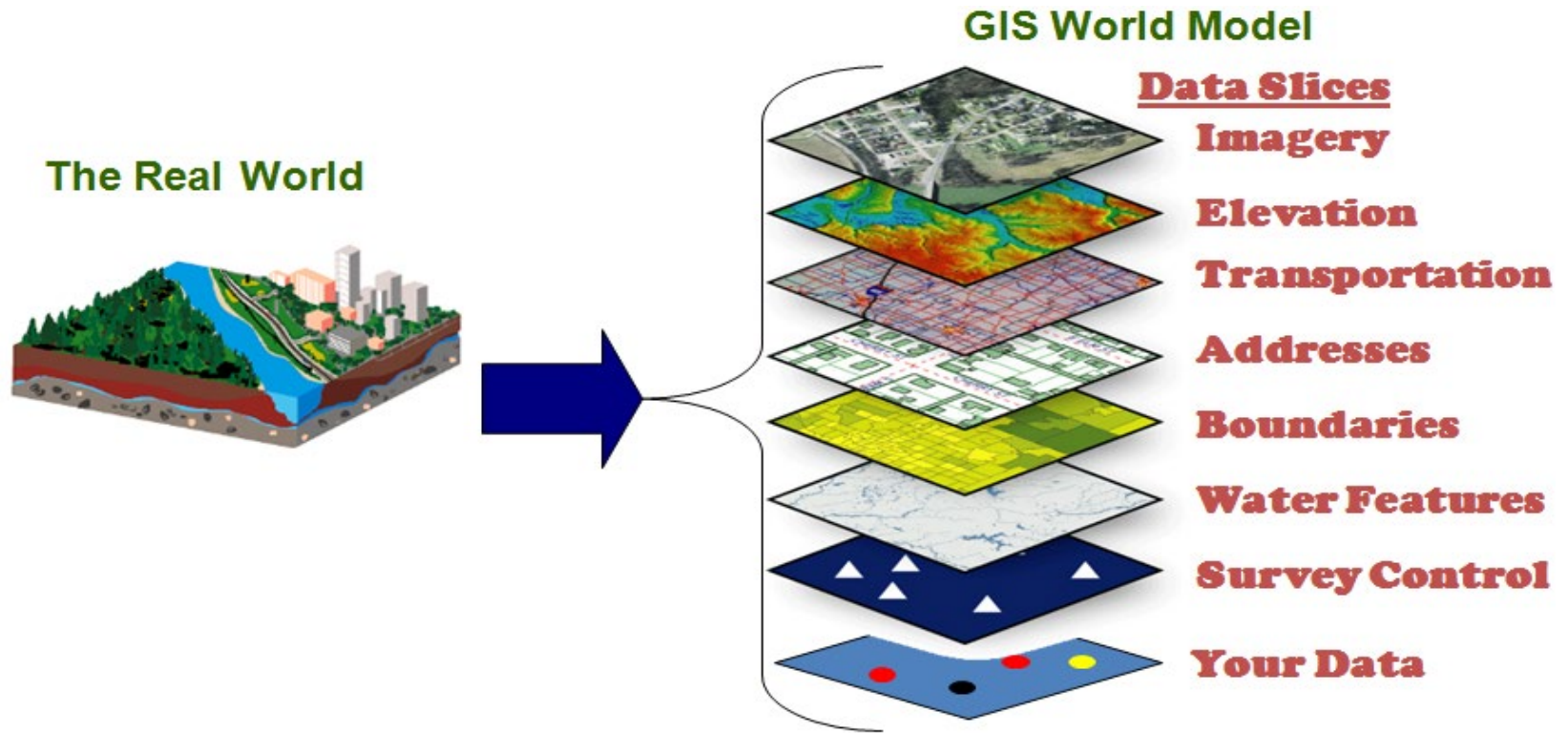# Life Connected
Servant Leadership in Practice

- **Our Core Values:** Excellence, Community, Integrity, Service

- **Fiber connectivity** throughout 100% of Celina.

- Embedded **Mobility Framework** in Downtown Master Plan.

- Forward-looking **Trails and Parks Plans** emphasize biking, enhanced landscaping, and extensive trails.

How would you define GIS?

Role of GIS?

Celina & GIS

- GIS Department was established in January of 2018

- GIS is part of Development Services

- GIS currently has one personnel member

- Adding additional team member Fiscal Year 2020-21

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Overview of GIS

- Internal Service
  - Development Services
  - Engineering
  - Public Works
  - Marketing
  - Public Safety
  - Economic Development

- External Service
  - Citizens
  - Contractors
  - Developers
  - Builders

Celina Pre GIS

- Difficulty locating existing infrastructure

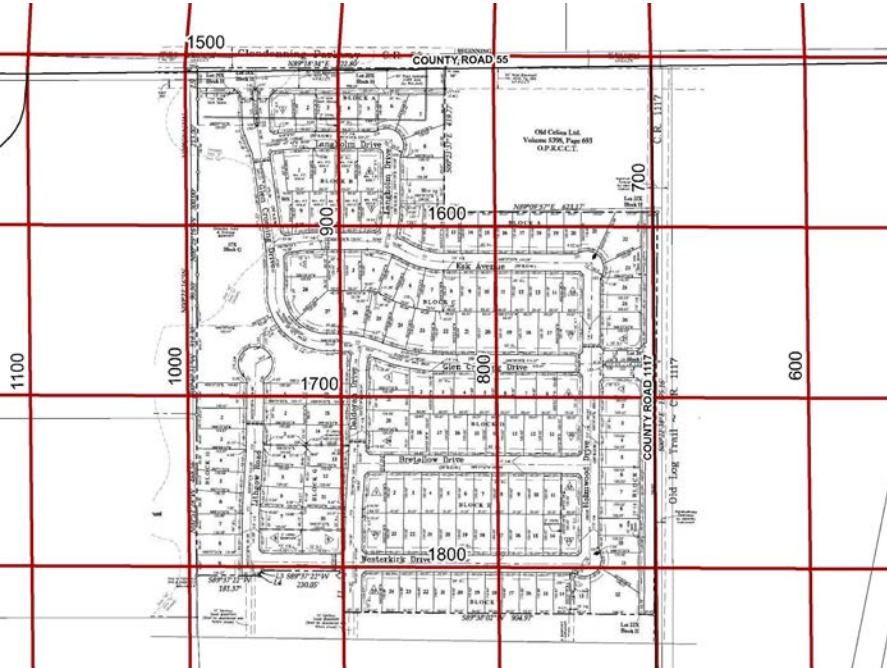- Staff efficiency limited by using alternative methods

Celina Pre GIS-Cont.
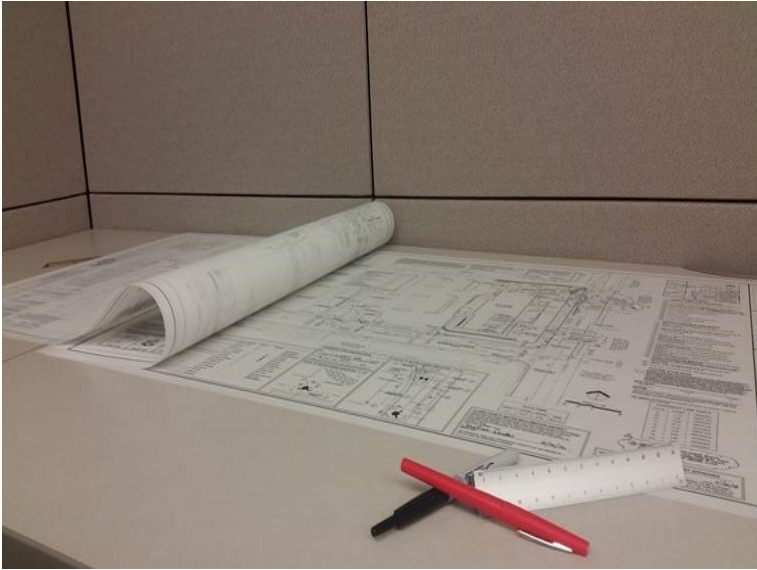
- Prolonged plan review

- Lack of electronic filing of record drawings

Celina Pre GIS-Cont.
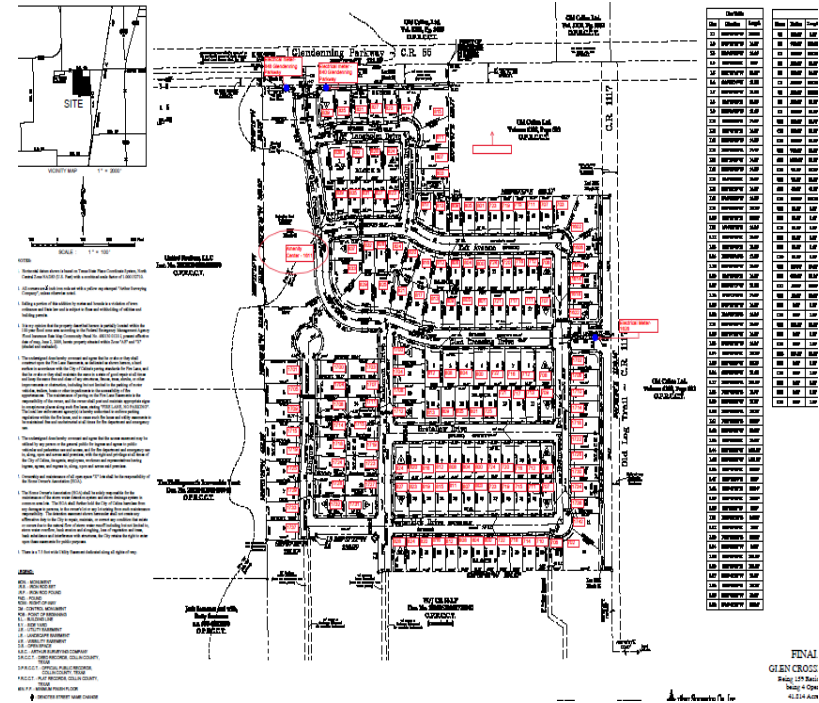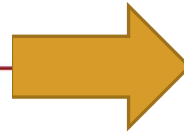
- 911 headache / disorganized address plats

Introduction of GIS

- ORGANIZE, ORGANIZE, ORGANIZE!

- ACCURATE Data is CRITICAL!

- Understanding Departmental Needs

- Creation of in house GIS System

- Creation / maintenance of database structures

GIS Continued

- 911 Address & Road Database Management

- Infrastructure Focus
  - Water
  - Wastewater
  - Stormwater

- Public Safety Support

GIS Continued

- Creation of a GIS Portal

- Use of ArcGIS Online

- Integration of a GIS Server

Creation of a GIS Portal

Heavy ArcGIS Online Presence

All In One Interactive Map
Web Mapping Application

Arts&Parks Story Map
Web Mapping Application

Capital Improvement Projects
Web Mapping Application

Celina Drive Times
Document Link

Celina Marketing Brochure
Document Link

Celina Points of Interest
Web Mapping Application

Celina Resident Dashboard
Web Mapping Application

City Limits & ETJ
Document Link

Downtown Eateries, Brewery & Winery
Document Link

EDC Interactive Map
Web Mapping Application
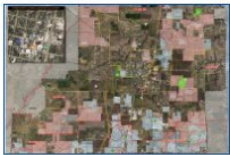
EDC Map 2020
Document Link

Existing & Potential School Sites
Document Link
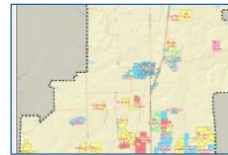
Fiber Providers
Document Link
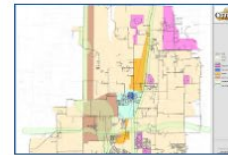
Future Land Use Plan
Document Link

Lot Inventory
Web Mapping Application

Multi-Family Locations
Document Link

Parks Master Plan
Document Link

Public Crime Map
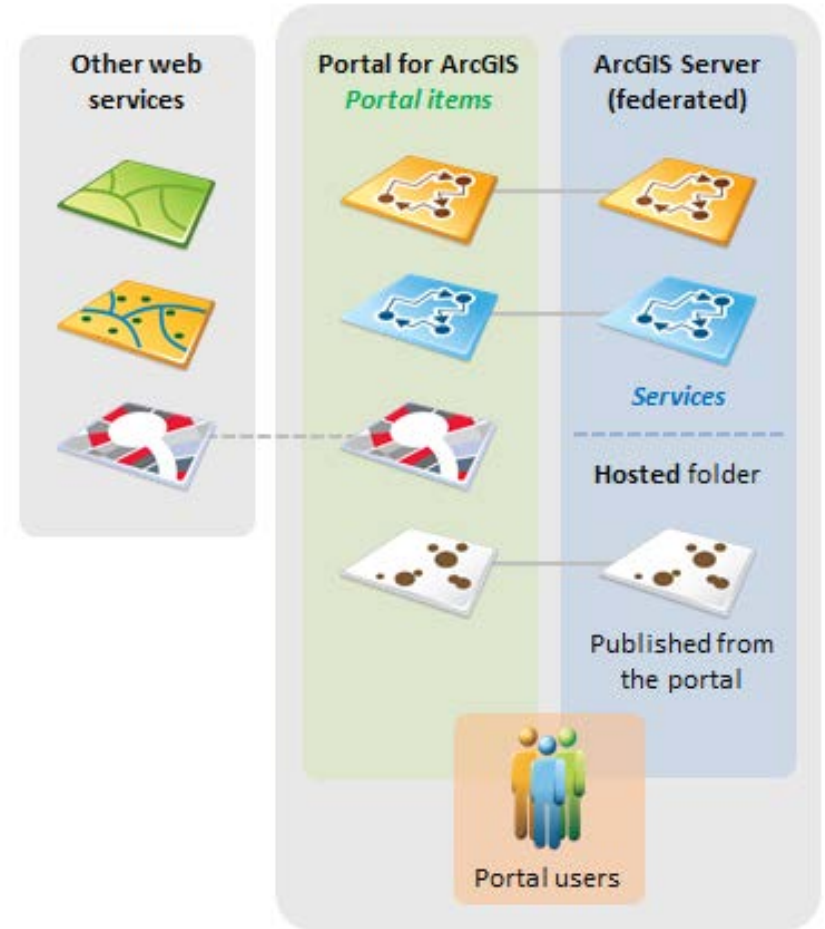Web Mapping Application

Roadway Projects
Document Link

School Districts
Document Link

Integration of a GIS Server

- Publish services
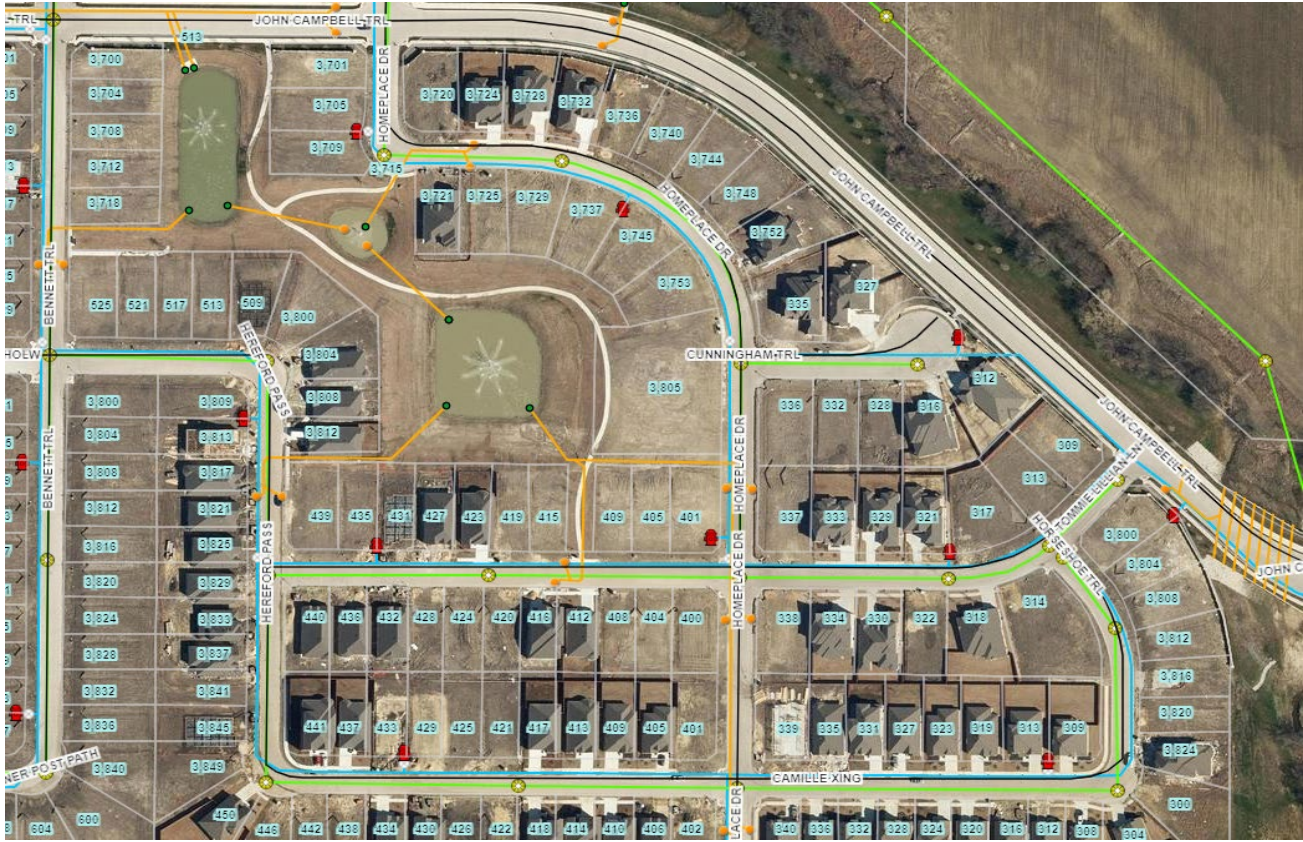
- Create web maps

- Develop custom web applications

GIS in Engineering & Public Works

- Create web applications to support daily operations

- Organize as built / record drawings

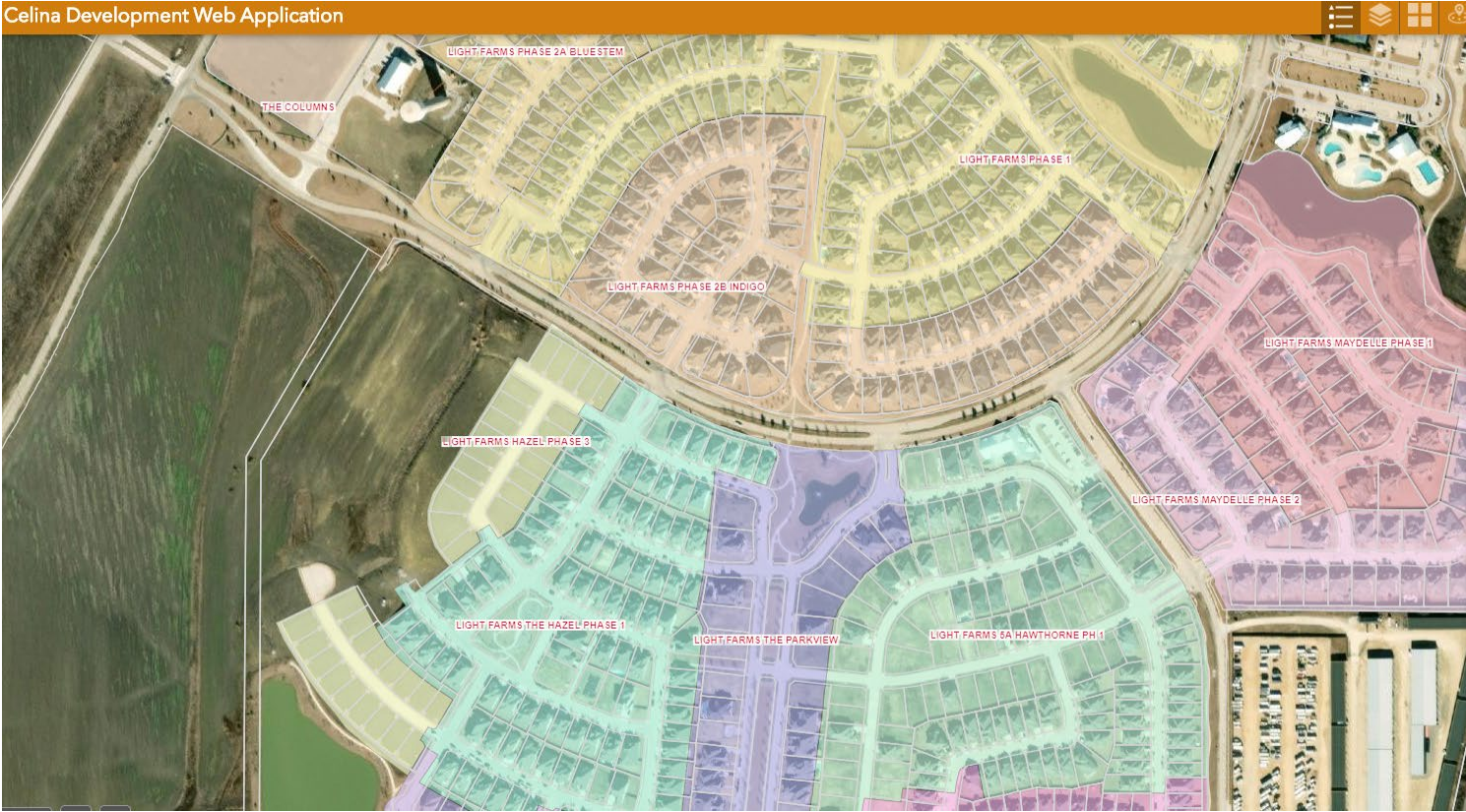- Create web applications to support field crews

- Integration of Cityworks

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Web Applications

- Internal Web Application

Web Applications

- Development Web Application

Web Applications

- Public Works Field Crew Web Application

As Built / Record Drawings

- Links to plans in GIS

- Plans attached to water / sewer / storm infrastructure
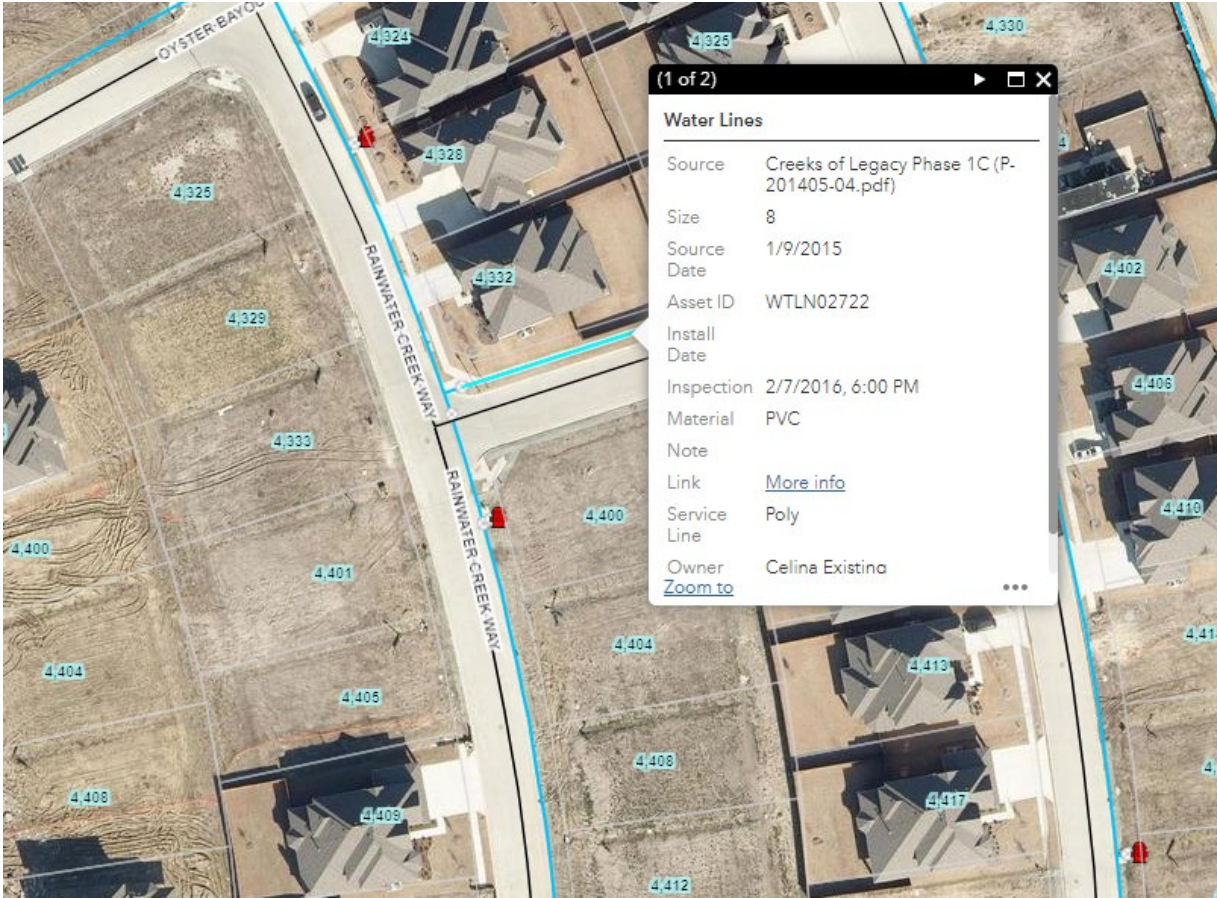
As Built / Record Drawings

- Plans access on City Website

Record Drawing

P = Multi-utility plans

R = Roadway plans

SD = Storm drain plans

SS = Sanitary sewer plans

W = Water plans

	On File	Plan Number	Engineer	Plan Type
P - Multi-Utility Plans				
Willock Hill	Yes	P-198403-01	Jerry L. Lehew and Associates	Construction
Winn Addition II	Yes	P-198509-01	McNamara Engineering Company	Construction
Estates on Preston	Yes	P-199308-01	Boyle Engineering	Construction
Morgan Lakes Estates	Yes	P-199502-01	The Nelson Corporation	Construction
Preston Meadow - Phase 1	Yes	P-199604-01	Geer Surveying and Engineering	Construction
North Preston Lakes - Phase 1	Yes	P-199606-01	Greg Edwards	AsBuilt
North Preston Lakes - Phase 2	Yes	P-199612-01	Greg Edwards	AsBuilt

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Integration of Cityworks

All in One City Application

- Automate internal workflows

- Creation of service requests & integration with Cityworks

- Marketing tool

All in One City Application
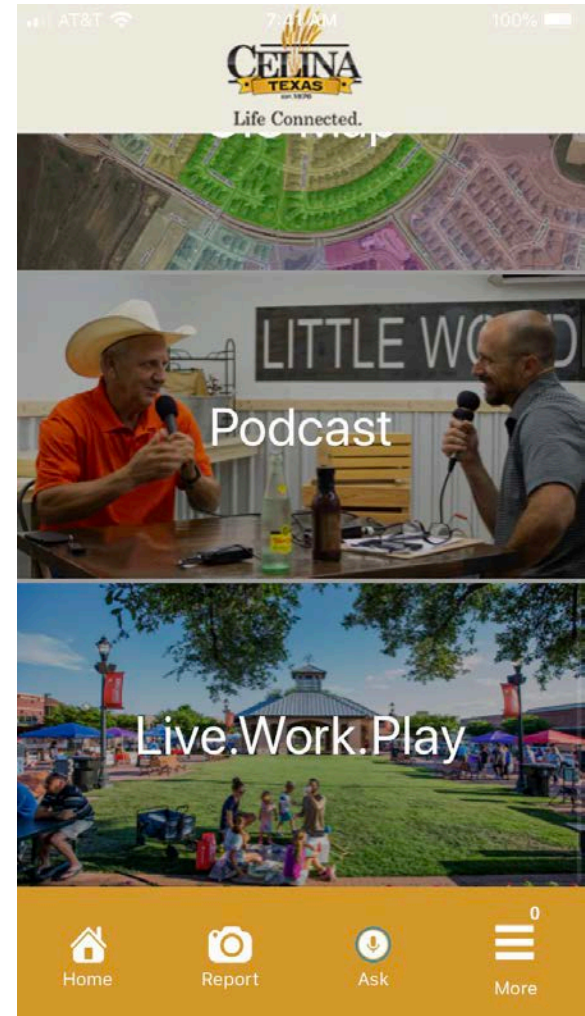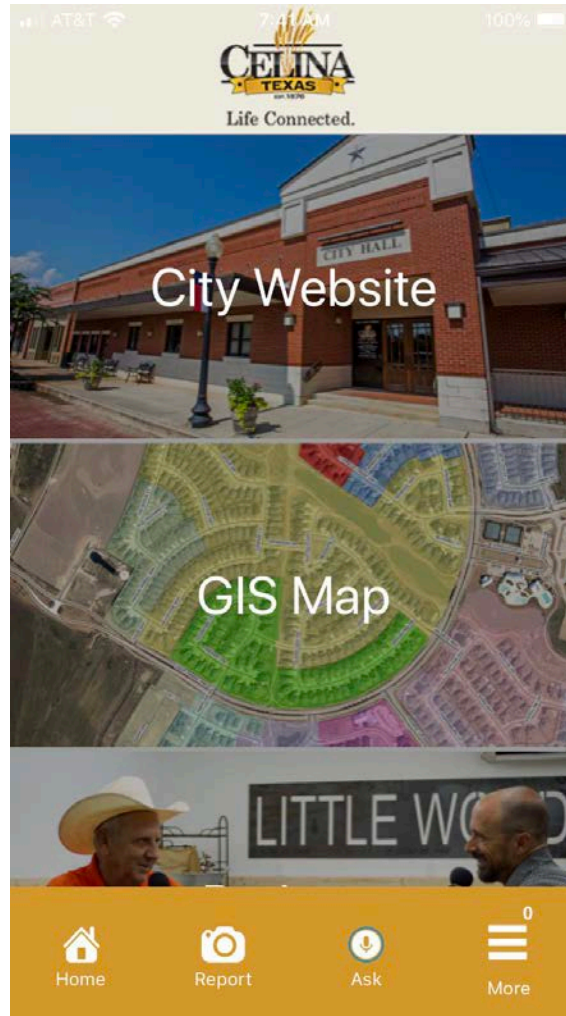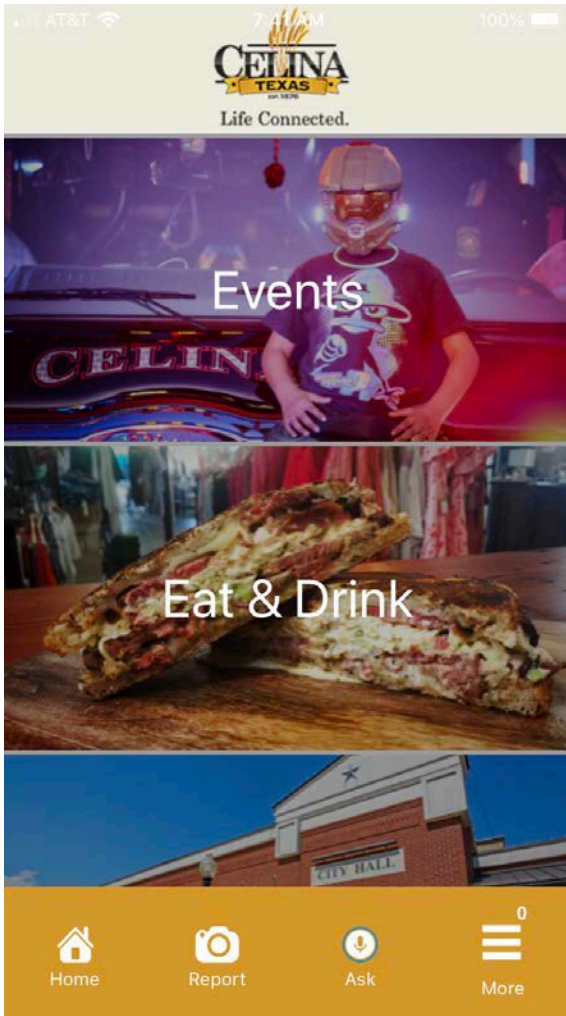
All in One City Application

Online Services

Open Record Requests

Alerts Sign Up

Employment Opportunities

Pay My Bills
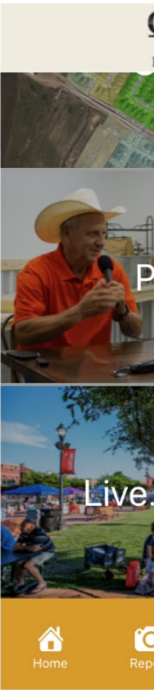
Pay Court Fees

Maps

Celina Downtown

Apply for Permit
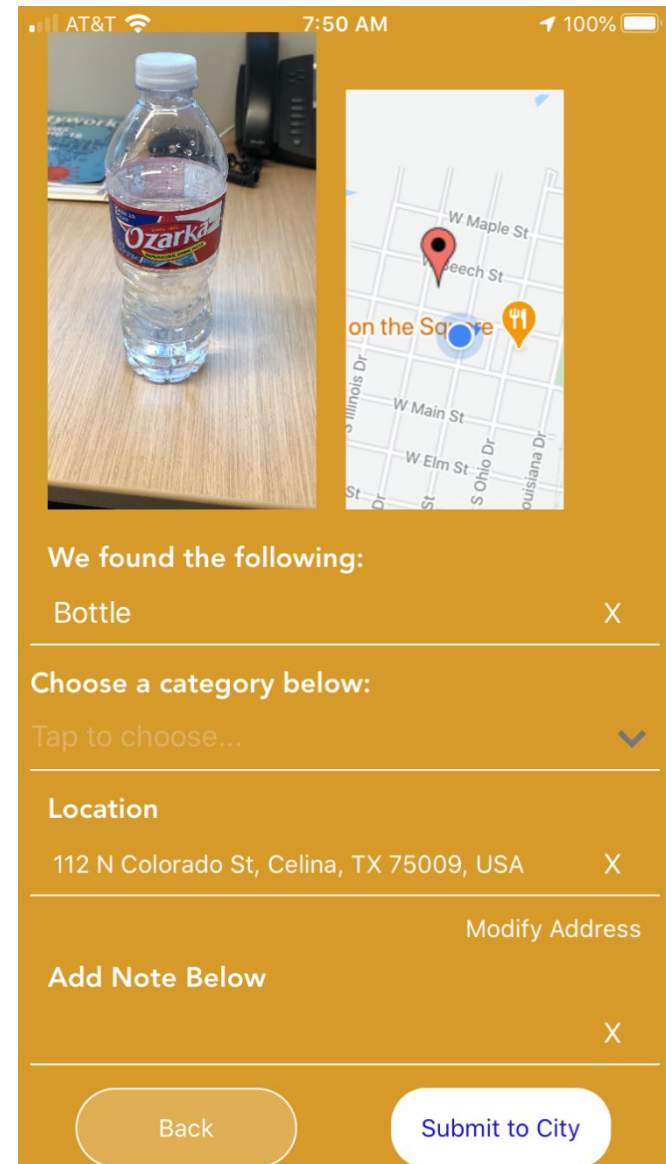
Business Directory

20 Eats

Social Media

Facebook

Instagram

Live.

Home

28

Service Requests

- Direct link between the app & Cityworks

- Direct link between the app & designated email

| Description |
| --- |
| Manhole Issue/Concern |
| Sewer Odor/Smell |
| Sewer Problem |
| Sewer Back-Up |
| Pothole |
| Pavement Issue |
| Debris In Street |
| Damaged Curb |
| Broken Concrete |
| Sidewalk Issue |
| Water Standing Pooling |
| Fire Hydrant Issue |
| Line Locate Request |
| Emergency Line Locate |
| Possible Main Break |
| Water Quality Concern |
| Restore Service |
| Disconnect Service |
| Signage |
| Water Pressure Concern |
| Possible Meter Leak |

Service Requests

Service Requests Demo

Current Challenges

- Keeping up with the demand

- Internal communication

- Optimizing workflows
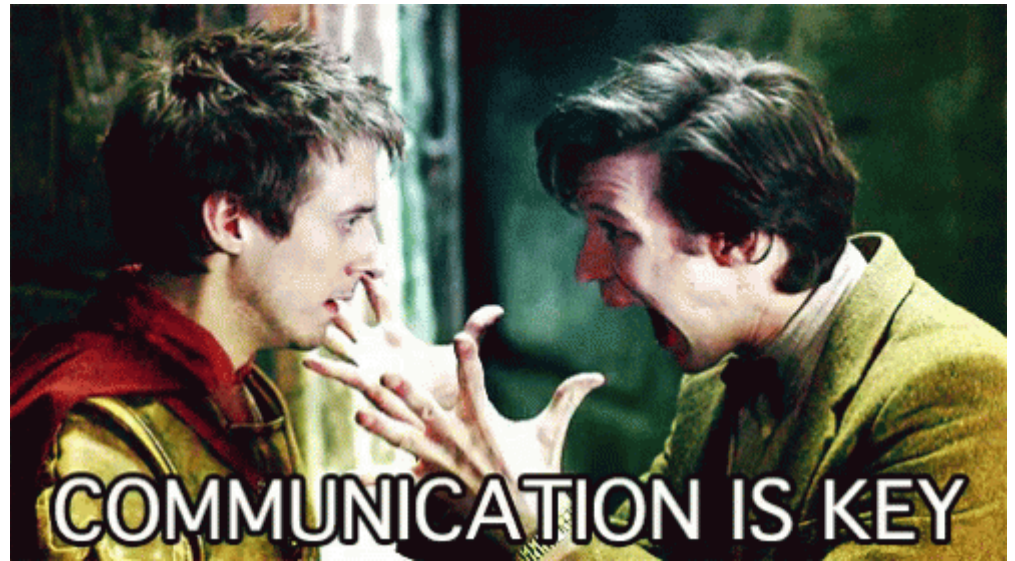
Looking towards the future

- Geo Event Server

- Integrating Public Safety (cars, cameras, floor plans)

- Connecting all departments with GIS

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DEVELOPERS   STAFF   RESIDENTS

THANK YOU