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.
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.
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.
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?

The Real World

GIS World Model
- Data Slices
- Imagery
- Elevation
- Transportation
- Addresses
- Boundaries
- Water Features
- Survey Control
- Your Data
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
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
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
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

**P - Multi-Utility Plans**

<table>
<thead>
<tr>
<th>Plan Type</th>
<th>Location</th>
<th>On File</th>
<th>Plan Number</th>
<th>Engineer</th>
<th>Plan Type</th>
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<tr>
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<td>Willock Hill</td>
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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

Events
Eat & Drink
City Website
GIS Map
Podcast
Live.Work.Play
# All in One City Application

<table>
<thead>
<tr>
<th>Online Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Record Requests</td>
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<tr>
<td>Alerts Sign Up</td>
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<tr>
<td>Employment Opportunities</td>
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<tr>
<td>Pay My Bills</td>
</tr>
<tr>
<td>Pay Court Fees</td>
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<tr>
<td>Maps</td>
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<tr>
<td>Celina Downtown</td>
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<tr>
<td>Apply for Permit</td>
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<tr>
<td>Business Directory</td>
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<tr>
<th>Social Media</th>
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<tbody>
<tr>
<td>Facebook</td>
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<tr>
<td>Instagram</td>
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Service Requests

- Direct link between the app & Cityworks
- Direct link between the app & designated email
Service Requests

Your submission has been received. If you would like to follow-up on the request, please reference case 251.

Thanks for making Celina a community families and businesses want to call home.
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
Life Connected.

DEVELOPERS

STAFF

RESIDENTS
THANK YOU