

PURPOSE

To develop, modify, analyze and manage location-based information.

MAJOR PROGRAMS**Rural Addressing**

Assign e911 emergency response addresses to rural structures of Collin County. The responsibilities of this program are to assign addresses, update the statewide e911 address range database to reflect city annexations and communicate address and changes to the customer, Post Office, Sheriff's Office and other related agencies. This program is part of the Building Permit work-flow process of Development Services. This program is dependent on the Geospatial Database Management, Application Development, Cartography and Spatial Analysis programs of the GIS Department to be functional. The results of this program benefit Public Works, Auditor's Office (GASB 34), Sheriff's Office and the Elections Department. Each of these departments has a vested interest in the accuracy of roads and boundaries.

**Goals & Objectives**

To Assign Addresses within 3 business days of receipt 95% of the time.

To update Annex / Deannex information within 10 business days of receipt 90% of the time.

To process Road Name Petitions within 21 business days of receipt 90% of the time.

To update 911 Net system for rural MSAGs within 10 business days of receipt 95% of the time.

To make City/County coordinated MSAG recommendations within 10 days for City 911 Net system updates 95% of the time.

To communicate with City to update 911 Net system as recommended.

Track acreage of land annexed by cities monthly.

| PERFORMANCE MEASURES                                  | CURRENT YEAR ACTUALS |                  |                  |                  | GOAL    |
|-------------------------------------------------------|----------------------|------------------|------------------|------------------|---------|
|                                                       | FY 2011<br>QTR 1     | FY 2011<br>QTR 2 | FY 2011<br>QTR 3 | FY 2011<br>QTR 4 | FY 2011 |
| # of Addresses Assigned                               | 45                   |                  |                  |                  | 200     |
| # of Addresses Assigned in 3 days or less             | 45                   |                  |                  |                  | 200     |
| % of Addresses Assigned within 3 days                 | 100                  |                  |                  |                  | 95%     |
| # of Annexations / Deannexations                      | 22                   |                  |                  |                  | 75      |
| # of Annex / Deannex updates completed within 10 days | 22                   |                  |                  |                  | 75      |
| % of Annex / Deannex updates completed within 10 days | 100                  |                  |                  |                  | 90%     |
| # of MSAGs started                                    | 267                  |                  |                  |                  | 500     |
| # of MSAGs entered into 911 Net system within 10 days | 267                  |                  |                  |                  | 500     |
| # of MSAG requests completed within 10 days           | 100                  |                  |                  |                  | 95%     |
| # of Road Name Petitions Received                     | 3                    |                  |                  |                  | 5       |
| # of Road Name Petitions completed within 21 days     | 3                    |                  |                  |                  | 5       |

| PERFORMANCE MEASURES                              | CURRENT YEAR ACTUALS |                  |                  |                  | GOAL     |
|---------------------------------------------------|----------------------|------------------|------------------|------------------|----------|
|                                                   | FY 2011<br>QTR 1     | FY 2011<br>QTR 2 | FY 2011<br>QTR 3 | FY 2011<br>QTR 4 | FY 2011  |
| % of Road Name Petitions completed within 21 days | 100                  |                  |                  |                  | 95%      |
| Track acreage of land annexed by cities monthly   | 3254                 |                  |                  |                  | 2,000.00 |

**GIS Services**

There has been some interest in hiring our GIS department for GIS services by other agencies. We started providing GIS Services to the City of Wylie in FY 2005. We have many resources that some cities within Collin County cannot afford, maintain or staff. We have an opportunity to leverage our GIS investment to support other County entities as well as generating revenue. This program is dependent on the Geospatial Database Management, Application Development, Cartography, Spatial Analysis and Web-Based GIS programs of the GIS Department to be functional. The result of this program is that the geospatial database that we develop for our customers is the same as ours. Thus, we do not have to convert or manipulate data to fit into our database schema.

**Goals & Objectives**

To complete all projects outlined in our Inter-Local Agreement with Wylie by October 1st each year.

To offer proposals to agencies that are interested in GIS Services.

| PERFORMANCE MEASURES                                            | CURRENT YEAR ACTUALS |                  |                  |                  | GOAL    |
|-----------------------------------------------------------------|----------------------|------------------|------------------|------------------|---------|
|                                                                 | FY 2011<br>QTR 1     | FY 2011<br>QTR 2 | FY 2011<br>QTR 3 | FY 2011<br>QTR 4 | FY 2011 |
| # of Projects identified in ILA                                 |                      |                  |                  |                  | 2       |
| # of Projects completed by current FY                           |                      |                  |                  |                  | 2       |
| % of Projects completed                                         |                      |                  |                  |                  | 100%    |
| # of Proposals written for GIS Services                         |                      |                  |                  |                  | 1       |
| # of Proposals for GIS Services delivered to prospective agency |                      |                  |                  |                  | 1       |

**Geospatial Database Management**

It is our department's goal to provide access to our GIS database to all employees and citizens. We have tiered our environment to three major components – Development, Power User and Web. Development is the GIS department. Power users are the departmental users and the web is for all. Mobile and Wireless GIS are now part of the architecture. All of the GIS Departments major programs are dependant on Geospatial database management. This program is the essence of GIS and requires hardware, software and network infrastructure.

**Goals & Objectives**

To acquire roads /city boundary from "digital" cities monthly 90% of the time.

To process acquired roads / city boundaries into GIS database within 10 business days of acquisition date 90% of the time.

To add hydrants within 1 month of receipt 90% of the time.

To track the number of additions to the GIS database monthly.

| PERFORMANCE MEASURES                                                     | CURRENT YEAR ACTUALS |                  |                  |                  | GOAL    |
|--------------------------------------------------------------------------|----------------------|------------------|------------------|------------------|---------|
|                                                                          | FY 2011<br>QTR 1     | FY 2011<br>QTR 2 | FY 2011<br>QTR 3 | FY 2011<br>QTR 4 | FY 2011 |
| # of roads / city boundary updates requested from "digital" cities       |                      |                  |                  |                  | 12      |
| # of roads / city limit updates received from "digital" cities within 1  |                      |                  |                  |                  | 12      |
| % of roads / city limit updates received from "digital" cities monthly.  |                      |                  |                  |                  | 90%     |
| # of acquired roads / city data received                                 |                      |                  |                  |                  |         |
| # of acquired roads / city data entered into GIS database within 10 days |                      |                  |                  |                  |         |
| % of acquired roads / city data entered into GIS database within 10      |                      |                  |                  |                  |         |
| # of records received added to GIS Database                              |                      |                  |                  |                  |         |
| mileage of roads added to the GIS Database                               | 6.73                 |                  |                  |                  |         |
| acreage of city boundaries added to GIS database                         | 3254                 |                  |                  |                  |         |
| # of hydrants to be added <b>FIX THIS CELL</b>                           | 162                  |                  |                  |                  | 200     |
| # of hydrants added within 1 month                                       | 162                  |                  |                  |                  | 200     |
| % of hydrants added within 1 month.                                      | 100%                 |                  |                  |                  | 90%     |

**Application Development**

Automating tasks, improving operational efficiency, supporting major programs and customizing are all reasons for designing applications. Our GIS has been developing applications since its inception in 1992. Application development represents the flexibility of GIS. Through code, our office is able to design internal and external web applications; develop address and road range calculations for our Rural Addressing program; automate methods to manage geospatial data; population estimates; and an efficient method to produce maps. The Application Development program requires development software such as Visual Studio and a GIS. This program supports Rural Addressing, GIS Services, Web-Based GIS, Spatial Analysis and Cartography.

**Goals & Objectives**

To develop forecasted applications using the RAD scoring system.

Track the number of application development projects.

| PERFORMANCE MEASURES                            | CURRENT YEAR ACTUALS |                  |                  |                  | GOAL    |
|-------------------------------------------------|----------------------|------------------|------------------|------------------|---------|
|                                                 | FY 2011<br>QTR 1     | FY 2011<br>QTR 2 | FY 2011<br>QTR 3 | FY 2011<br>QTR 4 | FY 2011 |
| # of Application development projects requested |                      |                  |                  |                  | 3       |
| # of Application development projects approved  |                      |                  |                  |                  | 3       |

### Spatial Analysis

Spatial Analysis is a set of techniques whose results are dependent on the locations of the objects being analyzed (Dr. Michael F. Goodchild, National Center for Geographic Information and Analysis University of California, Santa Barbara). The Rural Addressing, GIS Services and Web-Based GIS programs all are dependent on spatial analysis. This program requires the Geospatial Database Management program to function.

### Goals & Objectives

To process spatial analysis requests within 1 month from receipt 90% of the time.

| PERFORMANCE MEASURES                    | CURRENT YEAR ACTUALS |                  |                  |                  | GOAL    |
|-----------------------------------------|----------------------|------------------|------------------|------------------|---------|
|                                         | FY 2011<br>QTR 1     | FY 2011<br>QTR 2 | FY 2011<br>QTR 3 | FY 2011<br>QTR 4 | FY 2011 |
| # of Spatial Analysis requests received | 7                    |                  |                  |                  | 40      |

| PERFORMANCE MEASURES                                     | CURRENT YEAR ACTUALS |                  |                  |                  | GOAL    |
|----------------------------------------------------------|----------------------|------------------|------------------|------------------|---------|
|                                                          | FY 2011<br>QTR 1     | FY 2011<br>QTR 2 | FY 2011<br>QTR 3 | FY 2011<br>QTR 4 | FY 2011 |
| # of Spatial Analysis requests completed within 1 month  | 7                    |                  |                  |                  | 40      |
| % of Spatial Analysis requests completed within 1 month. | 100                  |                  |                  |                  | 90%     |

### Web-Based GIS

This program allows Collin County to “give back” to our constituency all of the time and resources spent developing GIS database. Any citizen can view our aerial images, 2' contours or any other data at any time. Most of our GIS layers are now on the web. We will continue to develop web GIS projects. This program is dependent on the Geospatial Database Management, Application Development, Cartography, and Spatial Analysis programs of the GIS Department to be functional. The result of this program is a cost-effective method for the citizens, County departments, agencies and business to access our geospatial data.

### Goals & Objectives

To achieve "Top 10 Most Visited" status on the County's website 95% of the time.

To have the ePolling site up with in 10 business days of Elections Office request 90% of the time.

To process webGIS requests within 5 days 90% of the time.

Track the number of public-designed custom maps monthly. 1st Quarter- 3,263

| PERFORMANCE MEASURES                                             | CURRENT YEAR ACTUALS |                  |                  |                  | GOAL    |
|------------------------------------------------------------------|----------------------|------------------|------------------|------------------|---------|
|                                                                  | FY 2011<br>QTR 1     | FY 2011<br>QTR 2 | FY 2011<br>QTR 3 | FY 2011<br>QTR 4 | FY 2011 |
| # of page views for the Interactive Maps site                    | 100,951              |                  |                  |                  | 15,000  |
| Ranking among the Top 100 most visited site on the Collin County | 9                    |                  |                  |                  |         |
| % of time achieved "Top 10 Most Visited" Status                  | 100                  |                  |                  |                  |         |
| # of times ePolling site requested                               | 1                    |                  |                  |                  | 4       |
| # of times ePolling site up within 10 days of request            | 1                    |                  |                  |                  | 4       |
| % of time ePolling site up within 10 days of request             | 100                  |                  |                  |                  | 90%     |
| # of webGIS requests received                                    | 2                    |                  |                  |                  | 10      |
| # of webGIS requests processed within 5 days                     | 2                    |                  |                  |                  | 10      |
| % of webGIS requests processed within 5 days                     | 100                  |                  |                  |                  | 90%     |

### Cartography

Many may consider mapping the only thing the GIS Department does. However, cartography is often the end result of analysis that is performed. For instance, the Rural Addressing, GIS Services and Web-Based GIS all use cartography as part of their function. The Cartography program allows our office to creatively represent spatial information in clear and concise manner. We are an office of Geographers and cartography is our tool to creatively express ourselves. This program requires the Geospatial Database Management program (GIS software) to function.

#### Goals & Objectives

To complete Jury Trial maps prior to trial date 95% of the time.

#### Goals & Objectives

To design / plot fire district maps within 1 month of request from VFD 90% of the time.

To Geocode / print SO Dispatch Cities maps within 10 days of receipt of CFS / IBRS data from SO 90% of the time.

To process "standard" map requests as identified in the Incident Management system 90% of the time.

To process "custom" map requests identified in the Incident Management system 90% of the time.

| PERFORMANCE MEASURES                                                                 | CURRENT YEAR ACTUALS |                  |                  |                  | GOAL    |
|--------------------------------------------------------------------------------------|----------------------|------------------|------------------|------------------|---------|
|                                                                                      | FY 2011<br>QTR 1     | FY 2011<br>QTR 2 | FY 2011<br>QTR 3 | FY 2011<br>QTR 4 | FY 2011 |
| # of Jury Trial maps requested                                                       | 6                    |                  |                  |                  | 15      |
| # of Jury Trial maps completed as identified in the Incident Management system       | 6                    |                  |                  |                  | 15      |
| % of Jury Trial maps completed as identified in the Incident                         |                      |                  |                  |                  | 95%     |
| # of fire district map requests from VFD                                             | 44                   |                  |                  |                  | 45      |
| # of fire district map requests completed within 1 month                             | 2                    |                  |                  |                  | 45      |
| % of fire district map requests completed within 1 month                             | 5                    |                  |                  |                  | 90%     |
| # of SO Dispatch Cities maps updates received                                        | 21                   |                  |                  |                  | 98      |
| # of SO Dispatch Cities maps completed and printed                                   | 21                   |                  |                  |                  | 98      |
| % of SO Dispatch Cities maps printed within 10 days                                  | 100                  |                  |                  |                  | 90%     |
| # of standard map requests                                                           | 39                   |                  |                  |                  | 250     |
| # of standard map requests processed as identified in the Incident Management system | 39                   |                  |                  |                  | 250     |
| % of small quantity standard map requests processed as identified in                 | 100                  |                  |                  |                  | 90%     |
| # of custom map requests                                                             | 79                   |                  |                  |                  | 600     |
| # of custom map requests processed as identified in the Incident Management system   | 79                   |                  |                  |                  | 600     |

#### Admin

General office support and administration. This program includes staff performance reviews, managing projects and requests,

#### PROGRAM IMPROVEMENTS