

Raising the Value of a Local Government GIS Using a GIS-Centric Work Order and Permitting System

Justin Cure, GISP, CGCIO

Agenda

- Overview
- Public Works
- Cityworks
- Warehouse, Community Services, Wastewater Treatment Plant, Sanitation, Water Treatment Plants
- Engineering, Planning & Zoning, and Building Inspections
- Cityworks Environment
- CompassCom and CitySend
- What's Next?





City of Longview, Texas

Information Services Division

Chuck Ewings
Assistant City Manager

Justin Cure
Information Services Manager

Leesa Davis
Administrative Assistant

Vivian Sessions
Network Administrator

Blake Gore
IT Project Manager

Roger Moser
GIS Supervisor

Brandon Deaton
IT Specialist

Cody Kelly
IT Specialist

Eric Parcher
IT Specialist

Kevin Haynes
IT Specialist

Josh Gamble
Systems Security Administrator

Brad Keiser
Database Administrator

Mark Stelzel
Application Developer

Wesley Stremmel
GIS Technician

Joe Hallonquist
GIS Technician

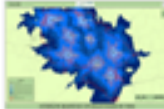
Danesa Hansen
GIS Technician

Longview GIS

- Established 2005
 - Enterprise GIS
- 6.5 Employees
- 250+ Data Layers
- 9-1-1 Addressing, GPS, Analysis, Training, Web/Mobile Applications
- ELA with ESRI and Cityworks

Geographic Information Systems


Analysis, Custom Mapping & Data Requests
A Geographic Information System (GIS) is an integrated collection of computer software and data used to view and manage information about geographic places, analyze spatial relationships, and model spatial processes. A GIS provides a framework for gathering and organizing spatial data and related information so that it can be displayed and analyzed.

 The GIS Division employs state-of-the-art software and hardware for a variety of GIS needs.

Map depicting the region time


Analysis, custom mapping & data requests can be provided as requested. Several existing maps also exist to meet your needs.

9-1-1 Addressing
With the advent of automated computer-controlled emergency services (9-1-1 systems) it has made it important that proper





crucial component of the Emergency Service System is a comprehensive, accurate, and sequential addressing system. The GIS Division enforces the City ordinance on addressing.

Global Positioning System
A Global Positioning System (GPS) is a system of radio-emitting and receiving satellites used for determining positions on the Earth. The GIS Division has the hardware and knowledge to assist in GPS data collection.




Software
The GIS Division has many types of software based on your needs. We hold an enterprise license agreement (ELA) with ESRI and CityWorks. The ESRI ELA gives us access to almost all of ESRI's software and extensions. We also support the WebMap Interactive for employees and citizens. This custom web mapping application allows you to search, view, measure, and print property related information and other map layers.



Training
 The GIS Division employs an ESRI Certified Trainer who is authorized to teach ArcGIS Desktop I, II & III. In addition the division offers training on the WebMap Interactive, CityWorks, GPS & more.

Staff
The staff in the GIS Division have over 100 years of knowledge and experience to offer you. We hold many certifications and degrees as well as having several Certified GIS Professionals on staff. We strive to meet our customers needs as quickly and accurately as possible.

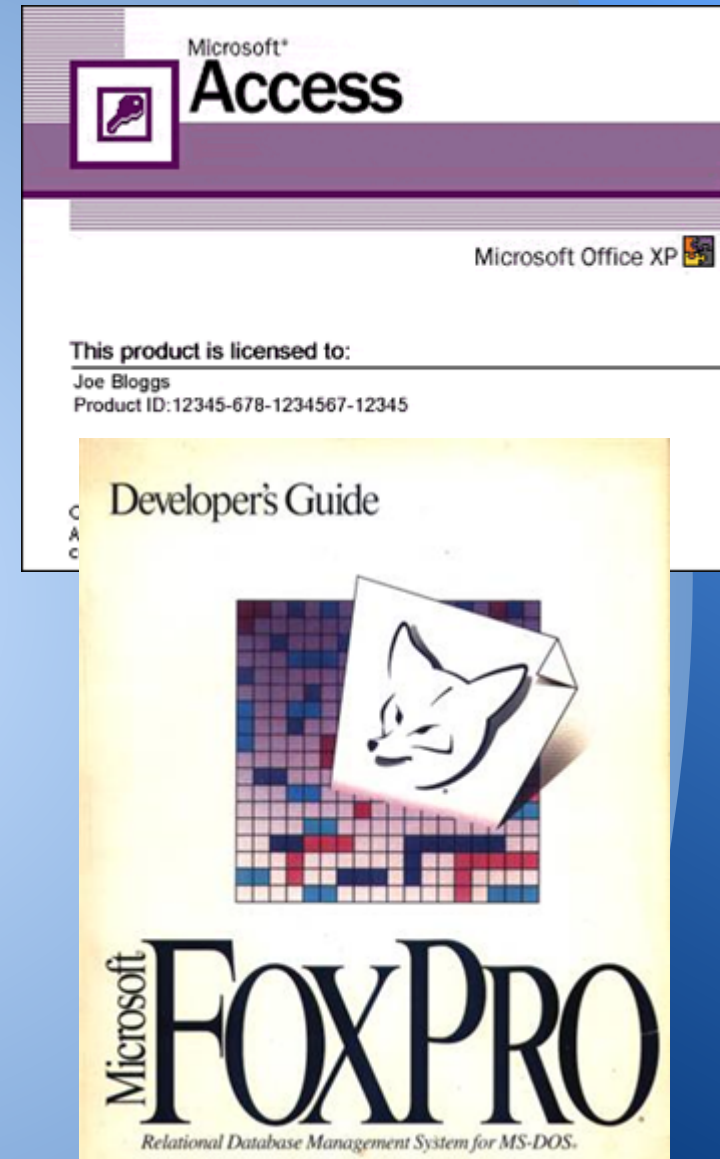


GIS HELPDESK
Your one stop shop for all of your GIS needs!!

901.217.1041
gis@longviewtexas.gov

Public Works

- Streets, Traffic, Drainage, Wastewater Collection, and Water Distribution divisions
- 6 different databases
 - 2 divisions - 2 customized FoxPro databases
 - 3 divisions - 4 separate Access databases



Cityworks

Cityworks®

Empowering GIS™

Log In ►

pw

Enable F

Cityworks | [Inbox](#) | [New Service Request](#) | [Search Service Requests](#) | [New Work Order](#) | [Search Work Orders](#) | [Saved Searches](#) | [GIS](#) | [Admin](#) | [Crew Manager](#) |

[Request View](#) | [Save](#) | [New](#) | [Close](#) | [Delete](#) | [Help](#)

Service Request

Description: Sewer stopped up
Request Id: 29139
Category: Waste Water Collection | Priority: Medium
Status: OPEN
Initiated By: RICE, TERESA A | Date: 2/28/2014 1:07 PM
Investigation: ☐ | Date:
Emergency: ☐ | WO Needed: ☐
Submit To: | Date:
Dispatch To: ROHRB, KYLE | Date: 2/28/2014 1:07 PM
Project Name: | Proj. Comp. Date: 3/2/2014 1:07 PM

Project Tree
Date:
Cancel Reason: | Cancelled By:
Closed By: | Date:
New Comments:

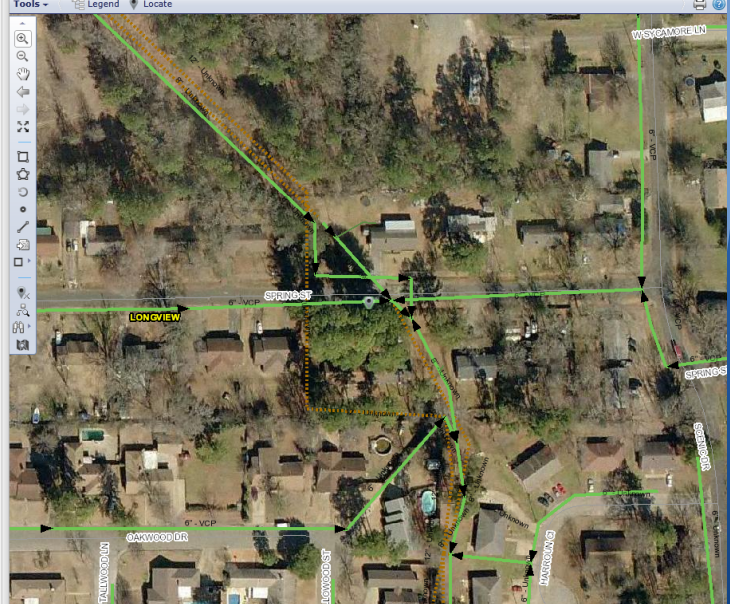
Existing Comments:
Resolution:

Incident Information

Address: 712 SPRING ST
Apt #: | City: LONGVIEW

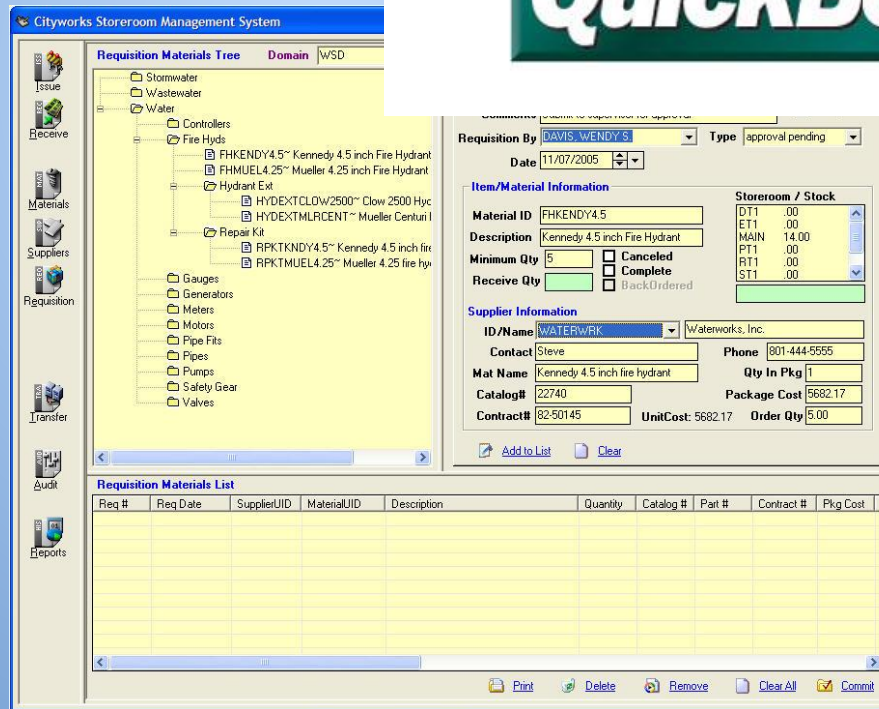
X: 3106193.71207 Y: 6891774.83867

Tools | [Legend](#) | [Locate](#)



#	Table	Work Order # Assignment	Original Count	CityWorks Count	Percent Transferred
1	PAVEMENT MARKINGS AND SIGNS	2000 – 32889	30901	30890	99.96 %
2	TRAFFIC SIGNAL GREEN CARDS	32890 – 36085	3197	3197	100 %
3	TRAFFIC SIGNAL TICKETS	36086 – 59662	23577	23577	100 %
4	STREET SWEEP	59663 – 118762	59100	59100	100 %
5	STREETS AND DRAINAGE	118763 – 242421	123671	123659	99.99 %
6	WDWWC	242422 – 445872	203451	203451	100 %
7	WDWWC TICKETS	445873 – 447609	1737	1735	100 %
8	PW REQUESTS	447610 – 453344	5737	5737	99.97 %
9	TRAFFIC REQUESTS	453345 – 456426	3083	3082	99.97 %
10	SCHOOL ZONE GREEN CARDS	456427 - 456462	36	36	100 %
TOTALS		2000 – 456462	454490	454464	99.99 %

- Quickbooks
 - Inventory
 - Invoices
 - Suppliers
 - Reports
- Storeroom



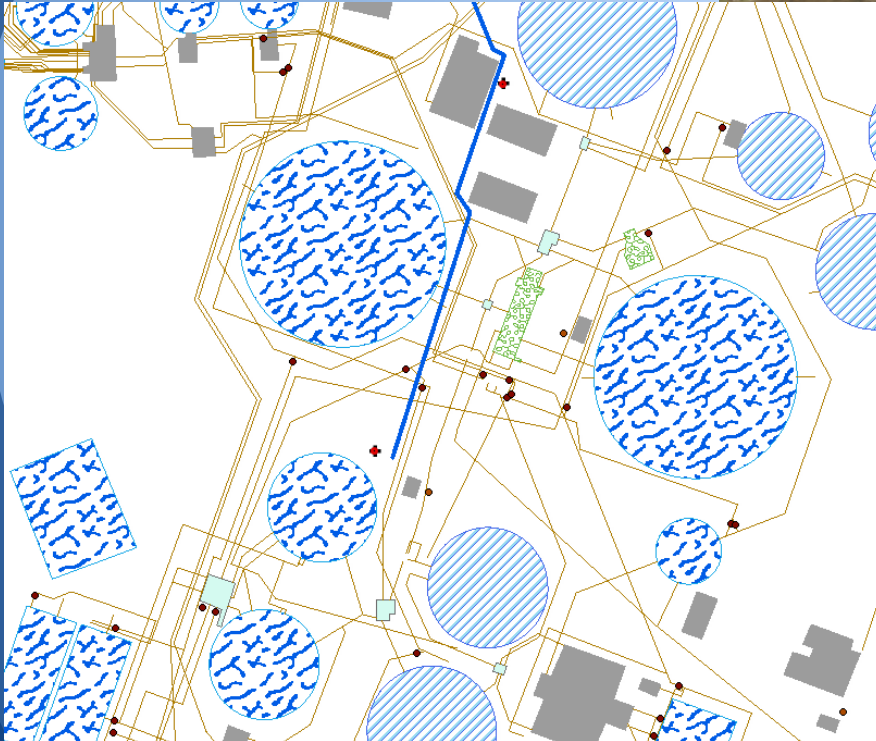
Community Services

- Parks Operations
 - MainTrac
- Parks Recreation
 - MainTrac
- Building Maintenance
- Activity Complex



Wastewater Treatment Plant

- Antero
- No GIS

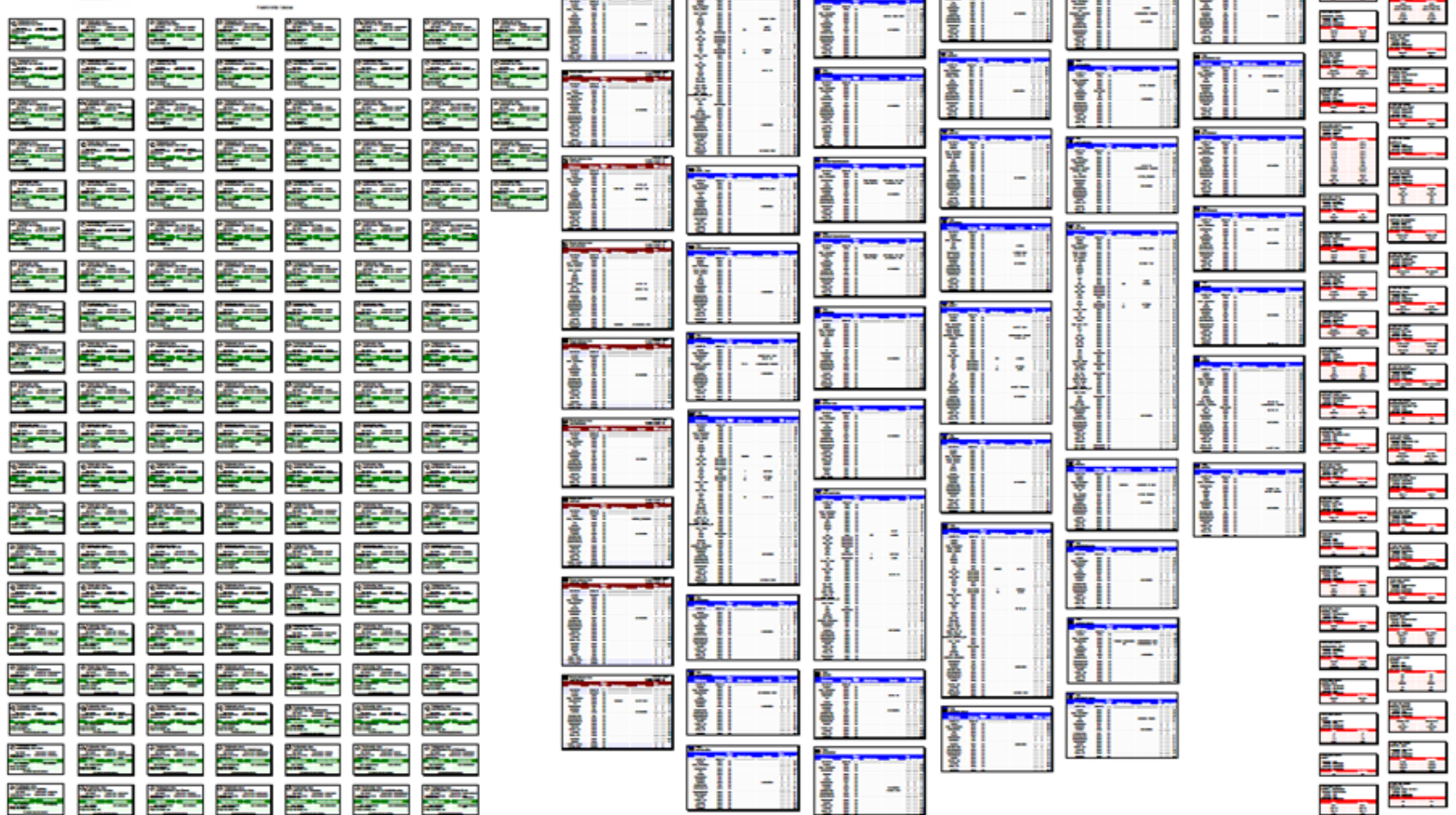


Wastewater Treatment Plant

Outlines Design for City of College Station Wastewater Treatment Plant
March 8, 2010

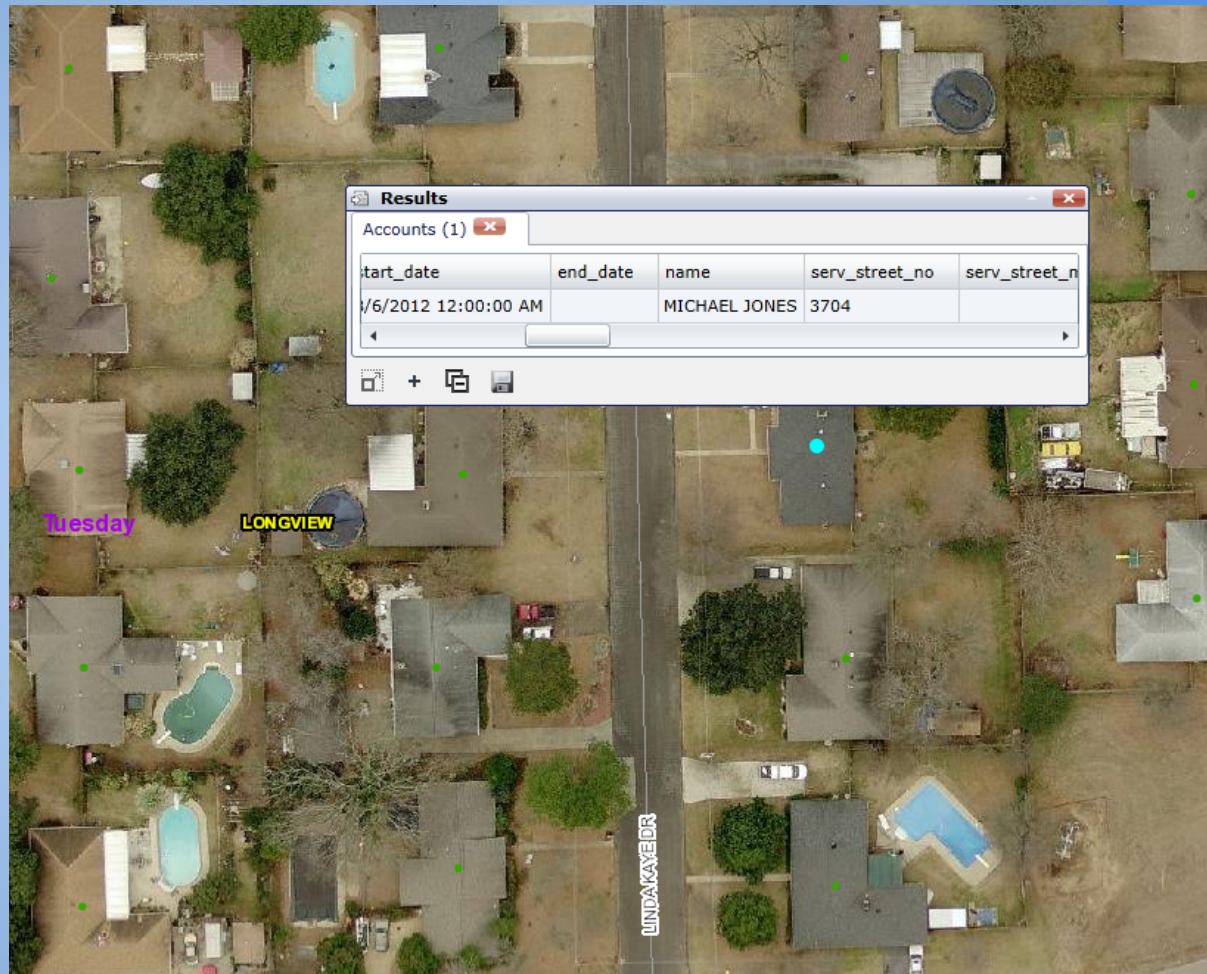


Cityworks



Sanitation

- Animal Removal
- Bulky Items
- Missed Garbage



Water Treatment Plants

- 3 Water Treatments Plants
- No GIS



Engineering, Planning & Zoning, and Building Inspections

- PLL
 - Permits
 - Inspections
 - Contractor Registrations
 - Workflows
 - Fees and Payments

Cityworks | Inboxes | Permits & Cases | Search Permits | Inspections/Tasks | License Renewals | GIS & Land | View Reports | PLL Admin | Admin

WASHING MACHINES - QUANTITY:
Qty: Rate: 1.0000 Value:

URINALS - QUANTITY:
Qty: Rate: 1.0000 Value:

DRINKING FOUNTAINS - QUANTITY:
Qty: Rate: 1.0000 Value:

Fees

Fee Code	Fee Description	Amount	Paid
PLUMFEE	PLUMBING PERMIT MINIMUM FEE	40.00	0.00
PLUNWSWR	PLUMBING NEW SEWER (EACH)	0.00	0.00
PLUWTRSRV	PLUMBING WATER SERVICE (EACH)	0.00	0.00
PLUDRNPIPE	PLUMBING DRAIN / VENT PIPING (EACH)	3.45	0.00
PLURRSWR	PLUMBING REPAIR / REPLACE SEWER (EACH)	0.00	0.00
PLUFLDRN	PLUMBING FLOOR DRAIN / TRAP (EACH)	0.00	0.00
PLUWTRPIPE	PLUMBING WATER PIPING (EACH)	3.45	0.00
PLUGREASE	PLUMBING GREASE TRAP (EACH)	0.00	0.00
PLUSAND	PLUMBING SAND TRAP (EACH)	0.00	0.00
PLUWTRHTR	PLUMBING WATER HEATER/ VENT (EACH)	0.00	0.00
Re: Calculate Fees		59.15	

Size: 10 | Go | Found: 12 | Displaying: 1 to 10

Payment

Tender Type: | No Entries Found

Size: 10 | Go | Found: 0 | Displaying: None

Workflow

Description	Result	Target Start Date	Due/Scheduled	M
APPLICATION INTAKE	COMPLETED	03/03/14 10:31A	03/06/14 10:31A	1-2
PAYMENT RECEIVED	BILLED	03/03/14 10:31A	03/03/14 10:31A	2-3
ISSUE	ISSUE	03/03/14 10:32A	03/04/14 10:32A	3-4
WATER FIRE LINE SERVICE	INSPEC			4-5

Tools | Legend | Create Activity | Locate

Map showing property boundaries and street names: WASHINGTON ST, E FAIRMONT ST, GULFVIEW ST.

X: 3117758.39684 Y: 6890742.50145

Cityworks Environment

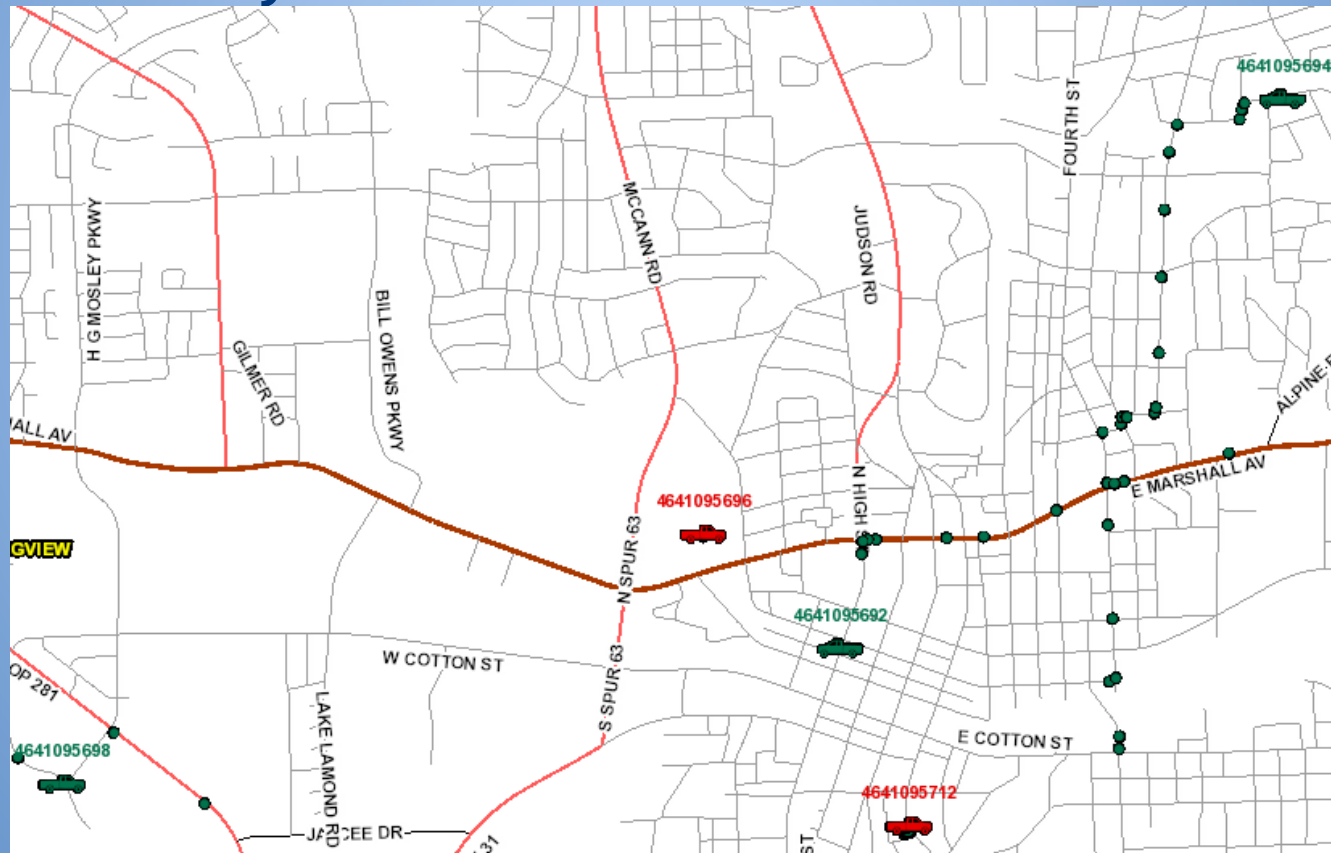
- Cityworks 2013 SP1
 - AMS & PLL
 - Cloud hosted on Amazon cloud
 - Supported by NTB Associates, Inc.
 - ArcGIS Server 10.1
- 2013 Cityworks Exemplary User Award



CompassCom AVL

- Parks

- 25 Trucks, Tractors, Garbage Truck, and Delivery Vans



CitySend

- Citizen Reporting Application
 - Powered by CitySourced
 - Tightly Integrated with Cityworks
 - 2013 Texas Association of Government IT Manager's Excellence Award Winner



What's Next?

- Restaurant Inspections, Code Enforcement, Animal Control, Vector Control
- Field Implementation
- Web Permitting Application / Inspection Requests
- SCADA, Industrial Pre-Treatment?

Summary

- 3 Departments
 - 19 Divisions
- 11 Softwares/Databases Eliminated
- Citizens
- GIS is Part of Daily Activities

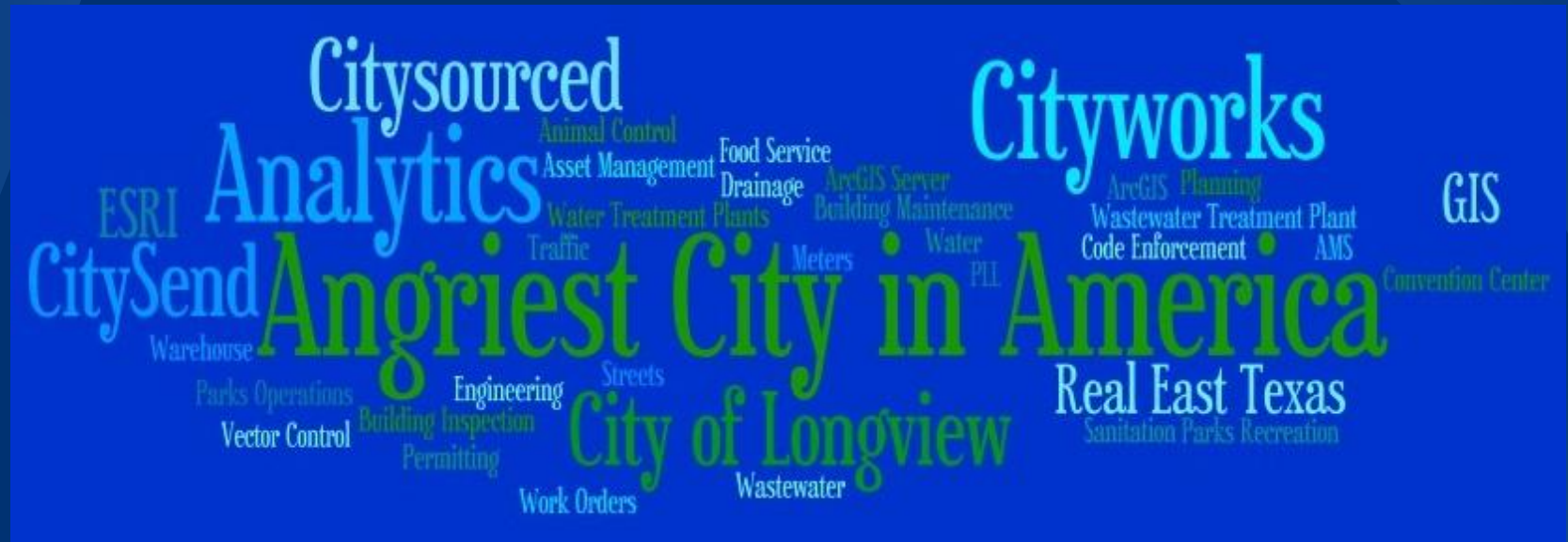


WORST PERFORMERS



BEST PERFORMERS

39% Springfield, OH		Frequent exercise		Boulder, CO 63.6%
52% Terre Haute, IN		Healthy eaters		Santa Fe, NM 77.8%
82.3% Springfield, OH		Happiness		Casper, WY 94.2%
39% Pascagoula, MS		Obese		Boulder, CO 14.4%
27.5% Johnson City, TN		Depression		Ocean City, NJ 12%
18.7% Longview, TX		Anger		Ocean City, NJ 9.2%
18.7% McAllen-Edinburg-Mission, TX		Headaches		Ames, IA 6.5%
42.9% Florence, SC		High blood pressure		Boulder, CO 18.1%
36.9% Johnson City, TN		High cholesterol		Logan, UT-ID 16.8%
19.8% Brownsville-Harlingen, TX		Diabetes		Boulder, CO 4.7%
9.7% Palm Coast, FL		Heart attack		Santa Fe, NM 1.0%
17.3% Springfield, OH		Asthma		Naples-Marco Island, FL 6.5%
11.3% Battle Creek, MI		Cancer		Hanford-Corcoran, CA 3.1%
31.5% Springfield, OH		Smokers		Provo-Orem, UT 6.8%
48.8% McAllen-Edinburg-Mission, TX		Uninsured		Worcester, MA 3.3%



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