# Improving Communication with Cityworks®

**Tom Maggard** 

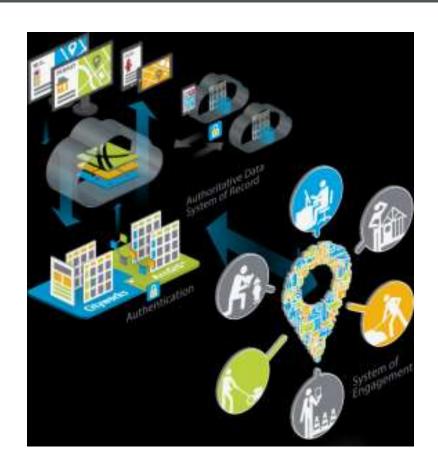
City of Greenwood

September 7, 2017

## Outline



- 1. What is Cityworks?
- 2. Communication with City Employees
- 3. Communication with GIS
- 4. Communication with Public & Others
- 5. Questions







If You Track It, You Can Fix It



**Work Management** 

- Cityworks empowers GIS to manage both physical infrastructure and land-focused asset management.
- Organizations allocate considerable resources toward developing and maintaining their GIS. Cityworks capitalizes on this valuable resource.
- Cityworks and Esri ArcGIS combine to make the perfect platform for designing and creating GIS-centric public asset management solutions.



**GIS Interaction** 



**Permits** 



Esri ArcGIS provides the tools necessary to maintain the asset inventory and for using geography as a management tool.



Cityworks provides tools for managing and tracking the work that regulates local government assets.





Cityworks can be used for an array of purposes within any organization

### Management

- ROI, Meeting Mandates, Reporting
- Cost Analysis & Negotiation
- System Integrations

#### **Administrative End-User**

- Work Management
- Ease of Use, Customization

#### Citizens

Improved Customer Service

#### **Directors**

- Asset Management, Reporting, Data Mining, KPIs
- Streamlined Permitting Processes
- IT Department-Implementation, Web Services
- GIS Capabilities, Customizable

### **Field Supervisors and Field Users**

- Improved Accuracy, Better Planning and Resolution
- Mobile
- GIS Benefits



### AMS (Asset Management Solution)

Allows you to leverage GIS and manage capital assets, infrastructure, and automates work processes
The 3 templates that comprise AMS are:

- Service Request
  - Initial inquiry to a problem/concern
- Work Order
  - Work that needs to be done on as asset
- Inspection
  - When you want information for an asset but it doesn't require a WO

PLL (Permits, Licensing, and Land)

### Designed for public agencies that manage

- permits, projects, inspections, and other activities
- permitting, planning, and engineering review

### Tracks the workflow process

 from application or request through departmental plan reviews, fee collection, inspections, regulatory meetings, hearings, and more













Browser-based solution comprised of two major components

AMS (Asset Management Solution)

GIS-centric server- and browser-based design enables enterprise web access for higher levels of operational efficiency

AMS is fully integrated with PLL, allowing GIS asset data, service requests, work orders, and inspections to be viewed in the same environment as GIS parcel data, permit, license, and other land data.

PLL (Permits, Licensing, and Land)



w.cityworks.com/wp-content/uploads/2012/01/PLL.png

## GIS Interaction



"GIS is the perfect platform for local governments to design and create an integrated GIS-centric public asset management system using spatial relationships as a way to manage, coordinate, and analyze all public assets and work activities."

"Combining infrastructure asset management with land-focused asset management enables an organization

to establish an enterprise asset management (EAM) model."

"Core to any asset management plan is managing and tracking historical, scheduled, and reactive work activities."

"Local governments recognize GIS reveals many details about the asset, nearby similar assets, and disparate assets, affecting short-term and long-term monitoring and management plans, and hence decision making."



## GIS Interaction



"The ArcGIS geodatabase is a database system with all the typical data assessment tools to categorize, classify, diagram, index, order, schematize, sort, and tabulate."

"In addition, ArcGIS is able to render data as maps; analyze interconnectivity, proximity, and other complex spatial relationships; and model the physical world."

"Linking Cityworks permits, licenses, code enforcement, and other land cases to a geospatial reference, like parcels, buildings, or facilities, empowers the GIS in managing these additional work processes."

## **Goal of Communication**



The goal of communication is to convey a message and prompt the recipient to act

- The need for interpretation and guesswork should be kept to a minimum.
- Effective communication ensures all tasks are assigned, deadlines are agreed to and kept and conflicts are brought to light and dealt with accordingly.
- Internal communication should inform, reassure and direct members of the organization.
- External communication should create a positive relationship between the organization and its customers.



# Current Communication Methods

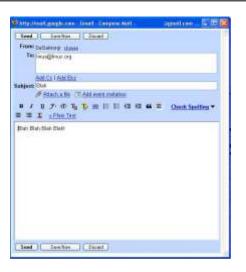




Didn't you get my phone call about the inlet issue?

I told you about the pothole that needs fixed didn't I?





Do you still have the email that told you what manhole to repair? Did you see the post-it note I left on your desk with the address of the map I needed?



# Communication with Cityworks



Multiple ways to communicate in Cityworks



### **AMS & PLL**

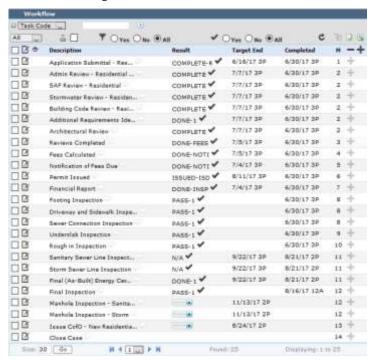
templates display initial case information and case updates to be viewed by all

### **GIS Map**

where you can find work history by location as well as geographic asset information

### **Public Portal**

citizens, contractors, etc can apply for and track the progress of a permit

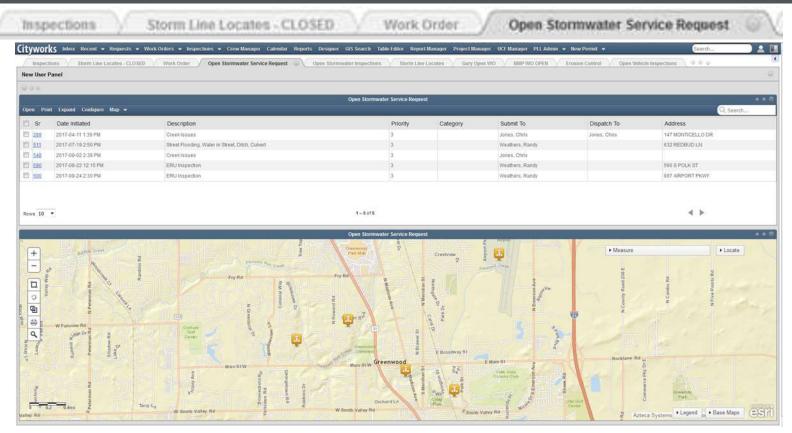


Sept 7, 2017 South Bend, IN



### Cityworks Inbox

- Main source of communication
- User specific
- check email & Inbox to start day
- Tabs can contain multiple panels and display a variety of information
  - Individualized Reports
  - Queries of SR, WO, IN, PLL Cases
  - Map of SR, WO, IN, PLL Cases
  - Announcements
  - Images
  - Weather
  - Websites

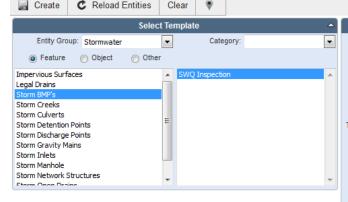




Inboxes are able to be user/group specific because of the

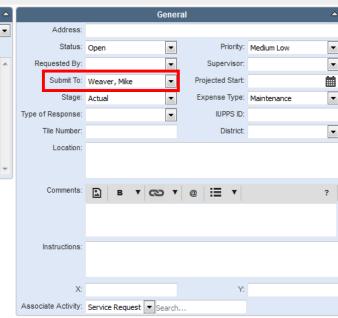
'Submit To:'

option in Cityworks



Work responsibility defined at the creation of a SR, WO, IN

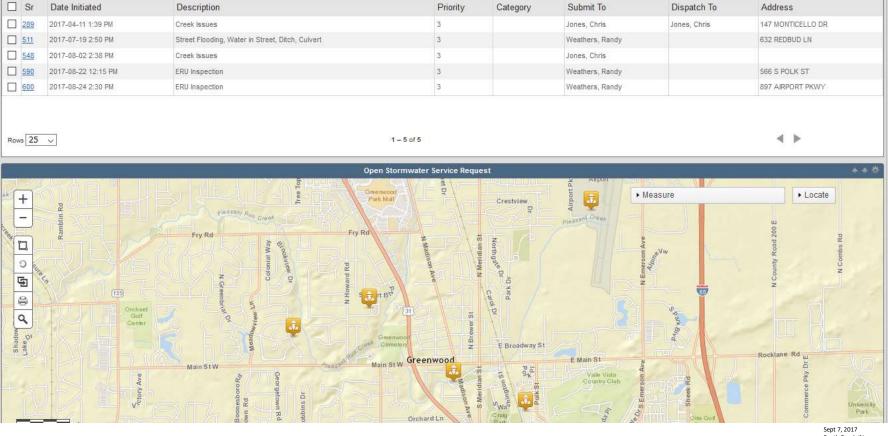
- Worked with crews and supervisors to ensure right person(s) for the job
- Even though jobs can only be assigned to 1 person, multiple people can view the SR, WO, IN because the same tab can be put on multiple people's Inbox





## Cityworks Inbox

- You can customize each tab's search results fields based on department or type of template
  - Can search all fields in a tab
  - Create a map of the same search results
  - Not a one size fits all solution





### Cityworks Templates

Regardless of the type of SR, WO, IN, PLL template you see, you have some basic information that is the same for all

- Who the work is Submitted To  $\leftarrow ---- \rightarrow$  Who is doing the work?
- Comments ←------ What has been happening on site?

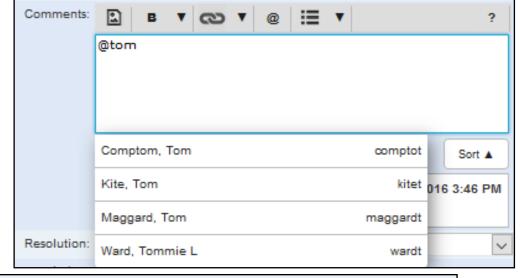
All of this information is crucial in keeping the lines of communication open in a organization

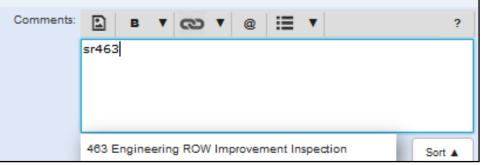


### Comments in a Template

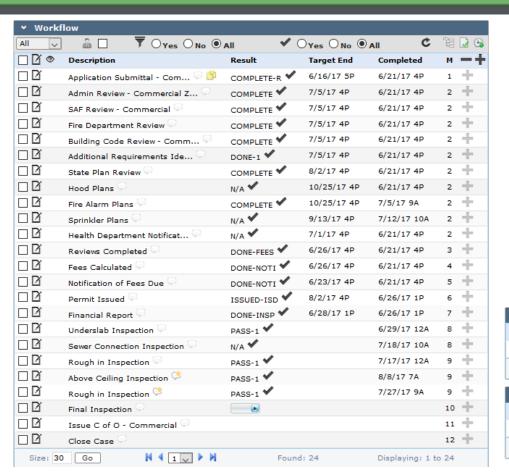
Comments enhance communication even more

- All comments are time stamped and populated with the name of the commenter automatically upon creation
- Include a User in a comment and they will receive an email with a link to the SR, WO, IN, PLL
- You can create a link to an existing SR, WO, IN, PLL









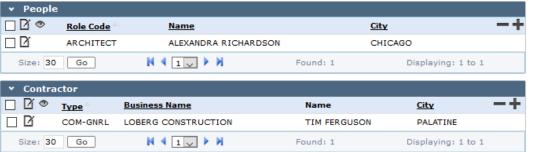
PLL Case Templates have additional methods of Communication

Workflows that communicate tons of information

Most notably workflow can't move on until certain milestones are met

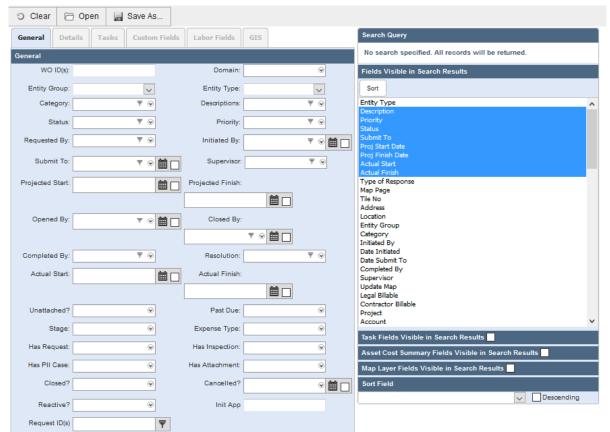
People and Contractor Roles

Easy to classify individuals involved in case



Fees are calculated based on entered data





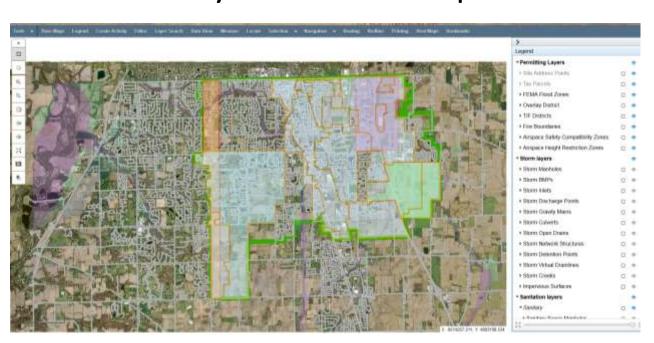
### Saved Search

- Basically database searches
- Ability to search for almost anything in a SR, WO, IN, PLL
- You can save searches to utilize multiple ways
  - Inbox
  - eURL— mapping
  - Just keep a saved search
- Searches can be saved for a User, Group or the entire Domain

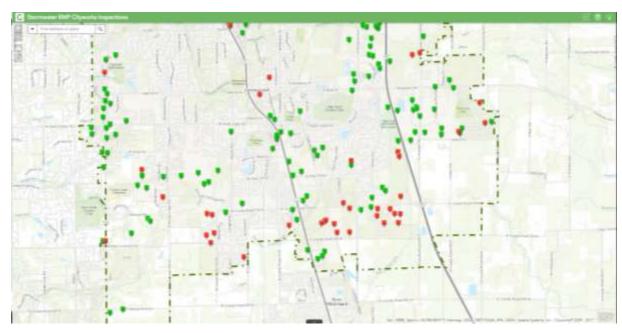




Cityworks User Map



### Stormwater BMP WO AGOL Map





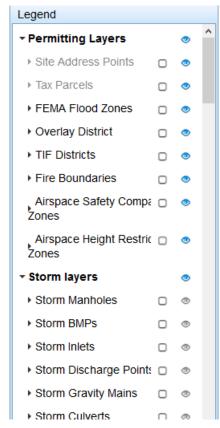
### Cityworks User Map

GIS data from GIS Server

- Over 70 distinct layers of Greenwood specific data
- Since data is housed on server it updates automatically to user map

Maps are customizable

- They are set up individually or by group
- This allows for people to get data initially on map that they want
- Stomwater has all GIS layers but only has certain layers on initially

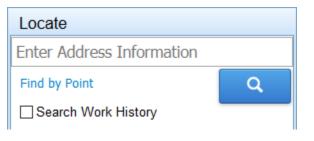


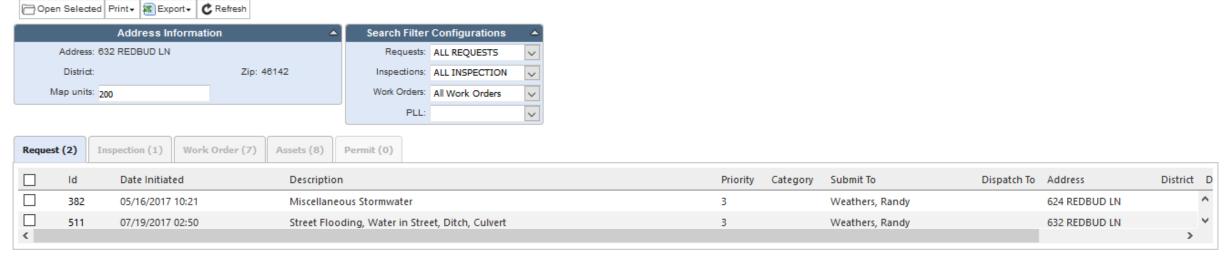
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▶ Storm Detention Points	0	•	
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▶ Impervious Surfaces		•	
<b>▼</b> Sanitation layers		•	
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	Sept 7, 2017		



You can search Work History for all templates on Cityworks User Map

- You can choose address or place a point on the map
- Change the map units to broaden or reduce range
- You can search any/all of SR, WO, IN, PLL saved searches







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Service

<u>Service</u>

Service

Service

Service

**Enterprise URL** 

- Gives the capability to generate eURLs that can be used to share saved searches
- Here is an example <u>map</u>
- Nice way to share data to non-tech people



### Others would be defined by

- People Roles (first column to right)
- Contractor Roles (second column to right)
- Outside Review firms
- White River Township Fire Department
- Johnson County Health Department
- Johnson County Planning & Zoning

Some of these individual will be 'clicking buttons'...

- WRTFD
- Outside Review

...others would just be contact people...

- People Roles
- Contractor Roles

#### Description

Applicant

Architect

Engineer

Person(s) Who Will Attend Meeting

On-Site Contact Person

Petitioner/Applicant
Property Owner

Representative

SW Poll Prvntn Plan (SWPPP) Contact

...while others need to be listed as their work affects templates

- Johnson County Health Dept
- Johnson County Planning & Zoning

#### Description

Commercial - General

Commercial HVAC

Communication

Demolition

Property Developer

Fireworks Vendors

Mobile Home Installer

Swimming Pool Installers

Residential - Accessory Structures

Residential - Electric

Residential - General

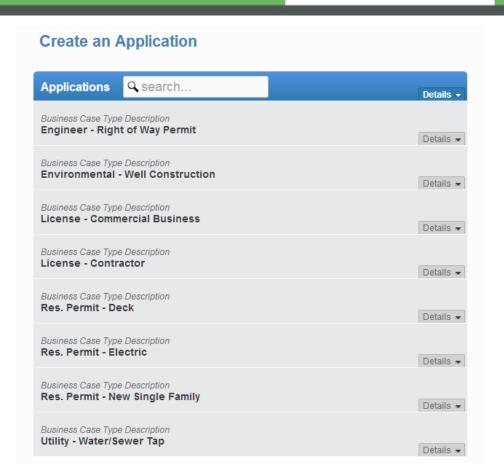
Sign Contractors

Tent Company

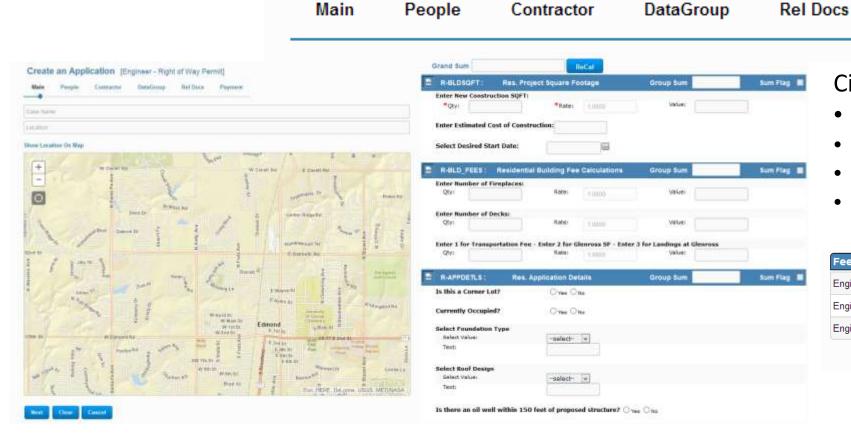


### **Public Access Portal**

- Allows citizens and contractors to apply for and track the progress of permits
- PLL templates are the backbone of this portal
- City of Greenwood plans on having our portal up and running Jan 1, 2018







Citizen/Builder Will Fill Out following

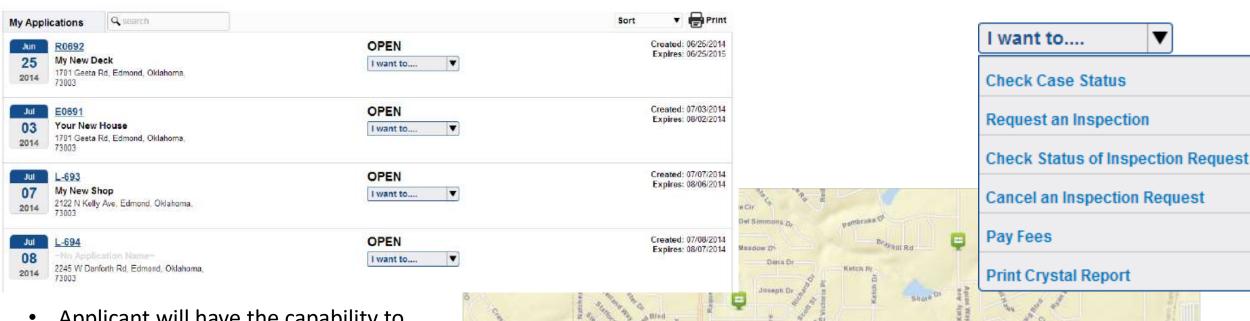
• Location of permit

Payment

- people & contractor roles
- Data Group data which determines Fees
- Have the ability to add attachments

Fee	Amount
Engineering Construction Inspection Fee	\$0
Engineering ROW Permit & Inspection Fee	\$610
Engineering ROW Permit Add. Inspect. Fee	\$0
	Total: \$610





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NW TROOK SE

Victoria Dr

Plannacte Lit

- Applicant will have the capability to view all case data through the portal
- Increased transparency will improve communication with all parties

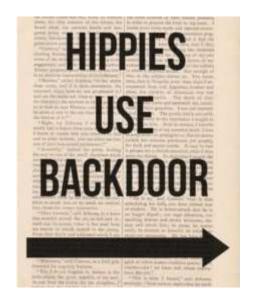
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Esri, HERE DeLorme, PO, USGS, METUNASA

## QUESTIONS??



### maggardt@greenwood.in.gov



Tom Maggard



Tom Maggard

