



# County of Essex

## Improving access to information and service delivery through web mapping

### Case Study



#### Problem:

The county of Essex needed to reduce wait times for municipal staff in logging citizens' service requests through Citrix to make more efficient use of municipal employees' time and improve the quality of service to constituents.

#### Goals:

- Reduce time consuming procedures and processes followed in the past (logging into Citrix, municipal employees receive and log citizen requests)
- Create an easy to use, accurate, and efficient workflow to record and track citizen service requests
- Improve municipal governments response to their citizens
- Reduce costs associated with manually receiving calls from constituents
- Improve citizens perception of municipal service delivery

#### Results:

- Phase One, internal roll out extremely successful resulting in significant savings in time and effort to log citizen service requests.
- System integration between web mapping service request application embedded in Geocortex and centralized Cityworks work management application smooth and seamless

#### ESRI Software Used:

ArcGIS  
ArcIMS

#### Other Software Used:

Geocortex (Latitude)  
Cityworks (Azteca)

#### Overview

The County of Essex is located in southern Ontario and has a GIS Department that is responsible for coordinating various GIS activities for seven local municipalities. The Department helps determine GIS software and hardware needs, establishes spatial data and technology standards, and provides direction for the management of regional spatial datasets. Their main goal is to reduce duplication of effort and increase communication through shared technology and data standards.

To better coordinate public works asset management, Essex implemented a centralized work order management system (Cityworks) in 2004. Using Cityworks, each municipality connects to their own data and is able to control access and edit rights to their information which is located in a Geodatabase which resides on servers at the County of Essex.

Cityworks quickly proved to be a valuable work order management system to process municipal work orders.

#### The Challenge

Since Cityworks ran off the County's server, it was accessed by Municipalities through an application (Citrix) that integrates Municipal networks with County enterprise systems and software. Although the enterprise model is an efficient one, loading the integrating software, Citrix, could be time consuming. This meant when Citizens' called a Municipality with a service request, they were required to wait on the phone until the application had loaded to allow staff to enter the information relating to the issue into the Cityworks software and generate a work order. The time delay not only affected the quality of service constituents received, but was also an inefficient use of employees' time.

#### The Solution

To reduce these procedural inefficiencies and improve citizen satisfaction, the County of Essex developed a map based service request system using Latitude GeoCortex Internet Mapping Framework (IMF) to receive citizen information and directly send this information to Cityworks via the Internet. Web-based mapping was viewed as the common application pulling all County applications together. The benefits of online administration provide convenience, while providing the capabilities to visualize assets on a map improves communication and workflow efficiencies. "Not only was this a user friendly solution to implement and use, it seamlessly integrates with our work management software Cityworks that runs in conjunction with ArcGIS," said Wendy St. Amour, Essex County, Manager of Information Technology.

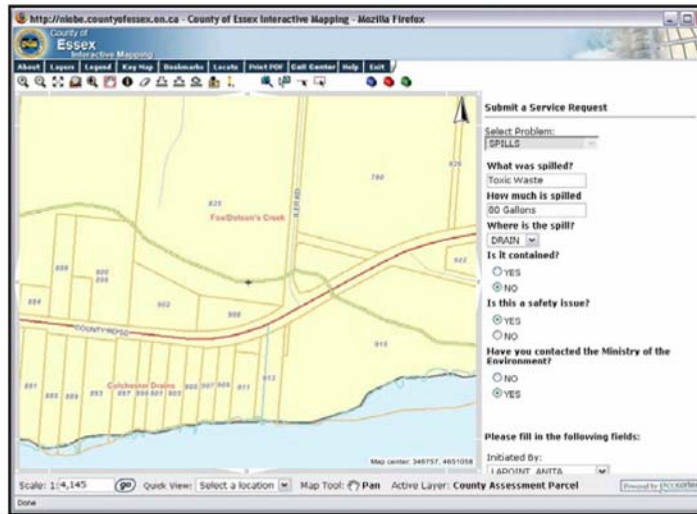
The County's plan is to roll out the web service request system in two phases.



**Phase One**

Phase one, launched May 2007, made the web application available internally. During this phase, municipal employees receive service requests from citizens by phone and then enter this information into the front end web interface, using GeoCortex, on behalf of Citizens. Once the request is submitted, this information automatically populates the Essex Cityworks database and generates a work order.

When submitting a service request through the web interface, the user (the employee in this phase) must first locate the problem on the map either by clicking a location on the map, locating by address, or locating by place name (e.g., a school, park, etc.). These coordinates are attached to the service request along with problem type and customer information. Each problem may also have questions and answers associated with it and further instructions if action is required. In addition, once the problem is submitted, the system returns an incident number that can be used to check the future status of the request. An email with the incident number and the problem details is then sent to the employee who is responsible for the specified problem that is assigned in the CityWorks database. This email contains the problem description, problem location, and caller's information and comments. The user can also add and attach further comments to the request, such as updates to the problem.



*The County's map based service request system is used to receive citizen information and directly sends this information to a work management system.*

**Future Plans**

**Phase Two**

For this phase, the same website and service request front end interface will be made publicly available for citizens to directly enter their information regarding a service request. The website will allow citizens to check on the status of their request using the email and incident number received when the request is submitted. Information such as status pending, in progress, or completed can be viewed for updates on service progress. The launch of Phase Two will not necessarily be the same for each Municipality. Each Municipality will decide when to allow the public to enter their own requests, this depends on the need and readiness of internal staff to handle public requests.

**Results**

Through a web-based enterprise approach, shared resources have meant significant cost savings as well as the ability to provide more applications for employees' internal and citizens' external use. Phase One has been highly successful, due to a user friendly website and noticeable efficiencies gained in processing times. It is anticipated that Phase Two will be equally successful and well received by constituents. Municipalities expect the service to drastically cut down on the number of calls received at local offices, which will result in significant savings in time, cost, and effort.

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