

GIS-Based Infrastructure Management for Municipalities

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2008 Ohio GIS Conference

September 10-12, 2008

Crowne Plaza North Hotel

Columbus, Ohio

about us

innovation + creativity



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about you

Who's here?

county engineers

city engineers

private sector

other

course objective

we will discuss:

Creating and managing service requests, work orders, parts inventories, phone calls and other office tasks using GIS-based management solutions in order to streamline workflow processes and increase staff productivity.

in order to:

Evaluate whether a GIS-based management system would be a viable solution for your agency.

Implement new technology to increase work flow efficiency and management through GIS integration.

Develop a plan to integrate GIS-based management.

horns and beverage holders

Clip from “The Simpsons” episode “O brother where art thou?”

first things first

What are you trying to accomplish?

Are you looking for and/or trying to build a “Homer”?

Less is more.

Why?

How much data do you really need to track?

typical system components

service requests

Indicate that service is needed on a particular asset or in a particular location.

work orders

Problem resolution - track parts, labor, equipment costs, and other work related details.

inventory management

Manage stock levels, monitor parts, labor, and equipment usage.

phone calls / dispatching

Log phone calls and efficiently route service calls to appropriate departments.

billing and accounting

Integrate with work orders and inventory for accurate reporting.

software evaluation

Things to consider when selecting an asset management package.

software

- Old Technology?
- Web Based?
- Modular?
- Proprietary database?
- Learning curve?

maintenance

- Technical support?
- Maintenance fees?
- Upgrades?
- Third-party updates?

installation

- Setup Costs?
- Training Expenses (Location)?
- Implementation Time (Duration)?

licensing

- Third-party licenses?
- Per seat licensing?
- Available site licenses?
- Standalone application?

GIS integration methods

direct read / write to GIS

advantages:

Single GIS database.

Possible field advantages.

disadvantages:

Licensing costs.

Third-party synchronization.

vs.

hybrid GIS integration

advantages:

Price and compatibility.

Not third-party dependent.

disadvantages:

Creating GIS data.

Possible multiple databases.

Is your solution tied to a specific GIS application? Does this matter?

evaluate

Evaluate whether a GIS-based management system would be a viable solution for your agency.

why

What are the advantages of GIS-based management solutions?

who

Are specific organizations too big or too small for it? Why?

when

What level of priority is your GIS-based management solution?

cost / benefit analysis

How do you quantify and measure expected results?

implement

Implement new technology to increase work flow efficiency and management through GIS integration.

true cost

Setup, training, implementation, and maintenance fees.

Third-party licenses, training, and maintenance fees.

true timeline

When will you be fully up and running with your solution?

Will it take a couple of months or a couple of years?

Remember: Other people will use the software too!

A clean and simple interface is key.

contact information

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