

Downsizing the ROI Report

By Wade Kloos, GIS Director, Utah Department of Natural Resources

In my [previous article](#) in the fall 2015 issue of *ArcUser*, “The ROI Mind-Set for GIS Managers,” I emphasized that the purpose of a GIS return on investment (ROI) effort is to discover and communicate the value that GIS (and you) deliver to your organization.

I mentioned that there may be many GIS professionals who have reasons for not spending time on ROI studies. One of those reasons could be that they don’t know where to start or how to do ROI. This article addresses that very issue: how to get your organization started documenting ROI.

Who Is Your Audience

Let’s first consider: who are you documenting ROI for? The audience for your ROI results are the people that made the choice to invest in your GIS program whether it was to start or continue it. Let’s also include the people who review your performance.

The people who set the goals for your organization should also be included, as they may have more than a passing interest in knowing what you have done for them lately. You will recall from our previous discussion that these organizational leaders can be fickle. They need constant reminders of your impact.

There is one person in your organization who cannot be left off this audience list. Although often underestimating their contributions and influence, this person plays a key organizational role. This person is you.

Throughout your career, you will engage in hundreds of projects that will help others accomplish important tasks. Each time you document your GIS results in an ROI report, you get to keep a piece of that project for

yourself. You help define your value. You document the difference you make. With this knowledge, you will always be able to answer the question, what have you done for us lately?

Key References

Before delving into the nuts and bolts of defining GIS value, let’s look at two pivotal books on the subject. I want to give credit where credit is due. These are essential references for understanding GIS, its management, and its ROI. I often find myself pondering some core GIS principle only to discover these authors have already “gone down that road” and then drawn a map for the rest of us.

The first is *Thinking about GIS* by Roger Tomlinson. While Tomlinson’s book does not focus specifically on ROI, he explains many core components of GIS success that naturally spill into ROI as easily as rivers flow to the ocean.

The other book, *The Business Benefits of GIS, An ROI Approach*, by David Maguire, Victoria Kouyoumjian, and Ross Smith, will give you an understanding of the methodology for conducting a comprehensive ROI study within a dynamic organization. These authors are thought leaders in the GIS field.

Starting Your Journey

The ROI journey that I am asking you to consider does differ from these books in a significant way. After reading these books, a GIS professional could likely conclude that that ROI documentation requires a costly, mission-critical project or new GIS program, a team of people to research and document,

and the dedication of a good portion of a year to produce a complete report. It’s no wonder few GIS professionals raise their hands when asked if they measure their GIS results. Perhaps, if we change our assumptions about GIS ROI and our approach to it, we could convince more GIS professionals to document their work and its impact on their organization.

ROI at DNR

In looking at the multitude of GIS projects conducted within the Utah Department of Natural Resources (DNR), it was evident that we did very few high-cost GIS projects. The vast majority of GIS effort involved projects that just consumed staff time or only required a modest investment. Surely these projects produce benefits, so why not examine these projects and their impact on our department?

To undertake ROI tracking for smaller GIS projects, it made sense to consider an abbreviated ROI process. DNR was intrigued by this concept for several reasons. First, like every other organization, we have GIS managers who are busy. With a short, focused ROI process, documenting results would be more likely to happen rather than using an ROI process that required many months of effort. Second, if fairly simple information was collected, a single staff member could complete an ROI study. This would lead to the creation of more documented GIS value. Third, creating something new for GIS staff to do represented change, and change is not always easy to implement. A small change is easier to implement than a big change, and we were fine with taking baby steps into ROI.

<h2>GIS Project ROI and Benefits Report</h2>			
Project Name:			
Department or Division:			
Project Manager/Sponsor:			
Project Completion Date:			
Executive Summary: (Concisely state the problem and its impact on the organization then describe the solution and its impact on the organization)			
Describe current workflow or limitation: (Be as detailed as needed)			
Describe proposed enhancement: (Be as detailed as needed)			
Current Workflow Costs: (Enter values for hours, wage - see note below, and occurrence. Dollar values are calculated, no need to enter these values)			
Hours to complete current workflow	6.0	Current workflow cost	\$150.00
Hourly wage rate*	25.00	Current annual cost	\$11,250
Annual occurrence of workflow	75		
Enhanced Workflow Costs			
Hours to complete workflow after enhancement	2.0	Enhanced workflow cost	\$50.00
Hourly wage rate*	25.00	Enhanced annual cost	\$3,750
Annual occurrence of workflow	75		
Enhancement Production Costs and Savings			
Hours to complete enhancement	20.0	Enhancement cost	\$500.00
Hourly wage rate*	25.00	Annual Savings	\$7,500
Annual maintenance costs of enhancement, if any	\$0.00	3 year savings	\$22,500
Projected ROI			
ROI=Savings-cost of improvement/cost of improvement		1 Year ROI	1400%
		2 year ROI	2900%
		3 year ROI	4400%
Tangible Benefits to the Organization: (i.e., quality or quantity improvements, effects to throughput, cost avoidance, better decisions, etc.)			
Benefit 1:			
Benefit 2:			
Benefit 3:			
Tangible Benefits to Others Outside the Organization: (i.e., other divisions, state agencies, stakeholders, public, etc.)			
Benefit 1:			
Benefit 2:			
Benefit 3:			
Meaningful Measures of Success: (Describe how can/will the project be measured - what is needed to implement regular measurement?)			
Measurement Observations: (interval varies depending on project, typical may be 3-6 months, 1 yr., 2 yrs., and 3 yrs. after completion date. The purpose of these observations is to			


↑ DNR created a one-page GIS ROI report that is simple to use but collects information relevant to the organization.

[illegible][illegible][illegible][illegible]

fields, so the math is automatically worked out. DNR believes it is important to document the specific measurements of GIS project success to get staff thinking about what it takes to track project performance and then take the actions needed to validate assumptions and results over time. We ask that all GIS ROI Reports be confirmed by a project sponsor or staff manager so that the assumptions and information collected can be vetted by management. Our hourly wage information for various staff levels is suggested so that the collection of salary information is not an uncomfortable/inappropriate situation for GIS staff and helps ensure consistency across the department.

[illegible]

In my next article, I will share some specific examples of DNR's GIS ROI and Benefits Report and summarize what we have learned from using this abbreviated ROI Report over the past two years.



Monitor Your GIS Platform

G GeoSystems Monitor®

Reduce the Impact
of Service Failures

Receive instant alerts pinpointing issues when your maps or services fail, helping you to get back online before users call.

- Monitor ArcGIS® for Server & More
- Real-Time Performance Monitoring
- Instant Text and/or Email Alerts
- Rapidly Pinpoint Issues
- Charts, Graphs, & Historical Database
- Customized User Interface
- User Defined Monitoring Points
- Easy Installation & Setup

VESTRA

530-223-2585
www.vestra.com