

Fact Sheet

MetroGIS Quantify Public Value (QPV) Study

(August 18, 2010)

Introduction and Context:

Does this situation sound familiar? You are a GIS program manager. Your intuition tells you that sharing geospatial data produced by your organization would likely result in substantive efficiency improvements for your organization but without hard numbers to prove your case, sharing remains a novel thought. If so, MetroGIS's Quantify Public Value (QPV) Study, summarized below, will hopefully provide a means to act on your intuition. Our goal is to create a replicable methodology capable of quantifying value (direct and indirect) to both the taxpayer and participating government organizations attributable to data sharing, specifically parcel data.

David Claypool, a visionary active in the early Twin Cities (Minnesota) geospatial community, asserted that "organizations that are using GIS on their own are not getting the full benefit of the technology". Subsequently, [MetroGIS](#) was created to foster knowledge sharing and sharing of resources to accomplish collaborative solutions to shared geospatial needs. The mission being "to expand stakeholders' capacity to address shared geographic information technology needs and maximize investments in existing resources through widespread collaboration of organizations that serve the Twin Cities metropolitan area". The culture of the geospatial profession, which serves the Twin Cities, has enthusiastically embraced the notion of using the natural intra-organizational integrating capacities of geospatial technology to improve organizational effectiveness and understands that public value is created in so doing.

Need for Quantitative Measures of Value:

Over the past decade, MetroGIS completed eleven stakeholder [testimonials](#) to document public value created through its efforts. Substantive organizational efficiency improvements have been described. These testimonials, or qualitative measures of value created, provide insight and value but leadership acknowledged, in adopting MetroGIS's second performance [measurement plan](#), that quantitative measures are needed to fully realize MetroGIS's mission because more complex, cross-sector solutions are desired than the current structure is capable of accomplishing.

Study Funded:

Acting on this need, a [proposal](#) for a 2010 NSDI CAP Grant was submitted. The awarded project proposes development of a methodology capable of quantitatively measuring public value created when organizations actively participate in a geospatial commons. The study is entitled "*Measuring Public Value of Geospatial Commons: A MetroGIS Case Study*", "*MetroGIS Quantify Public Value (QPV) Study*" for short. The lead proposers represent major stakeholders in the Twin Cities geospatial community (spatial data infrastructure) – 1000 Friends of Minnesota, Hennepin County, MetroGIS, and the Metropolitan Council. The 300 local and regional organizations that serve the seven-county, Minneapolis-St. Paul metropolitan area - the MetroGIS community - comprise the study domain. The territorial focus of the study is Hennepin County, the 32nd largest county in the United States by population. The study involves participation by representatives from multiple government, non-profit, utility, industry, and academic interests.

Understanding the public value of data sharing is a key issue in discussions surrounding spatial data infrastructure (SDI) development and continued support. The proposed QPV methodology extends the Return on Investment (ROI) methodology developed by the Geospatial Information & Technology Association ([GITA](#)) to account for multiple uses and reuse chains of parcel data produced by Hennepin County. Due to limited resources, the scope of this prototyping effort has

been limited to parcel data, in particular, that which adheres to standards that support interoperability. QPV takes into account value chains and reuse benefits over a longer-term perspective.

Study Methodology Overview and Status Update:

The federal cooperative funding agreement was executed in April. [W4Sight](#) was then retained to assist with two major components of the study that involves interviews and completion of populating ROI worksheets with the information obtained. The project team received training on the GITA ROI methodology in early May. The study officially launched on May 10, 2010. It is comprised of four study major tasks. Submission of a final project report is anticipated by June 2011.

Task 1 is nearly complete. It involved administering GITA's ROI analysis for Hennepin County to document the costs and benefits to the county enterprise of utilizing geospatial technology to manage parcel data. A series of ten interviews with Hennepin staff, who use and produce parcel data in support of Hennepin County business functions, were interviewed July 19-21 by W4Sight. The Task 1 final report is expected to be completed by the end of August. It will include a discussion of both the ROI findings as well as issues encountered while administering the GITA ROI methodology for a local government enterprise. The final version of this report will also be posted on the project website.

Task 2, scheduled to begin in early September, will involve obtaining constructive feedback from a group of scientific advisors, who specialize in SDI development concerning the GITA ROI methodology as it relates to application in an SDI environment. These experts will assist in defining shortcomings in the ROI methodology that must be resolved to effectively account for value chains and reuse benefits which create public value. Task 2 is expected to be completed by late fall 2010.

Task 3, tentatively planned for winter 2011, involves obtaining information needed to address topic areas defined in the QPV methodology. This will be accomplished by conducting a series of interviews with individuals who represent non-profit, for-profit and utility interests and:

- 1) Whose operations could benefit from access to parcel data produced by Hennepin County
AND
- 2) Who believe their value added data/web service/ application(s) could improve the cost - effectiveness of:
 - a) Hennepin County operations
AND/OR
 - b) Operations of one or more taxing jurisdictions that serve Hennepin County's citizens.

Task 4, planned for spring 2011, will involve a second round of facilitating constructive feedback from scientific and content experts and to ensure the QPV methodology is replicable in other SDI environments.

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-The project website is <http://sdiqpv.net>

-MetroGIS's website is <http://www.metrogis.org>