

## Fact Sheet

### MetroGIS Quantify Public Value (QPV) Study (June 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. The results of the Hennepin County-based ROI component will be shared with an international team of scientific advisors who are experts on SDI. 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.

**Status of QPV Study:**

The federal cooperative funding agreement was executed in April. [W4Sight](#) was then retained to assist with major components of the study. The study officially launched on May 10, 2010. It consists of four major tasks. Completion is anticipated by June 2011. Task 1 involves conducting GITA's ROI analysis for Hennepin County; defining costs and value internal to Hennepin County of utilizing geospatial technology to manage parcel data. Task 2 involves defining benefits for a SDI environment, initiating the outward looking QPV analysis, and is scheduled to begin in September 2010. Experts specializing in SDI development will be invited to participate, beginning with Task 2.

**Contact Information:**

- Study Administrative Matters: Randall Johnson, MetroGIS Staff Coordinator, [randy.johnson@metc.state.mn.us](mailto:randy.johnson@metc.state.mn.us)
- Study Research Matters: Francis Harvey, University of Minnesota, [francis.harvey@gmail.com](mailto:francis.harvey@gmail.com)
- The project website is <http://sdiqpv.net>
- MetroGIS's website is <http://www.metrogis.org>