



Chapter I

GIS as a Communication Process: Experiences from the Milwaukee COMPASS Project

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Abstract

We examine the role of GIS in communication and decision-making processes by re-interpreting the experiences of the Milwaukee COMPASS Project (Community Mapping, Planning and Analysis for Safety Strategies) in the light of Enhanced Adoptive Structuration Theory. Using numerous practice-derived examples, we conclude that GIS not only facilitates and strengthens communication, but can be used to defuse political constraints to collaborative decision making.

Introduction

This chapter focuses on the communication process of the Milwaukee COMPASS, a federally funded demonstration project to use GIS to improve data sharing, public access to data, and reliance on data in public decision making. The overall goal of this chapter is an investigation of how well geographic information technologies support communication between city government, citizenry, technical staff, neighborhood organizations, and academic researchers. Probably the single most important aspect of Milwaukee's success story has been the common belief, *a priori*, among the participants, that communication, openness and collaboration are valuable to the policy-making and implementation processes. Without this tenet, they would probably not have been in the position to overcome many of the difficulties inherent to any multi-agency project. The political, technical and financial barriers to implementation are high, and will not be overcome unless the value is readily seen by a majority of participants. The experiences of the Milwaukee COMPASS project illustrate the power of GIS as a tool for improved communication across sectors in a community, and for opening new lines of communication among actors who simply need a common language to begin meaningful dialogs. It is, indeed, the power of GIS as a communication tool that facilitates the shared value among participants and makes community-wide, collaborative problem-solving efforts possible.

This research focuses on the communication process of innovation, diffusion, and adoption of spatial technologies to combat crime and foster healthy neighborhoods. The experiences of the Milwaukee COMPASS project are illustrative of these concepts because GIS played a central role in the project's mission, "to make public safety decision making more collaborative, strategic and data-driven" (City of Milwaukee, 2003).

GIS and Communication Processes

At least four forms of GIS communication processes have been described in the relevant literature:

- (a) GIS as a mapping tool, mirroring the cartographic communication process (Foote & Crum, 1995);
- (b) GIS as part of a decision support system and facilitating the communication between its various components – usually in a PPGIS (Merrick, 2003) or GIS-in-developing-countries context (Jenssen, 2002);

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