

# Evolution of a Dynamic Theory of Collaboration: Modeling Intergovernmental Use of Information Technology

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## *Abstract*

Researchers from the Center for Technology in Government (CTG) collaborated with the Bureau of Housing Services (BHS) of the New York State Office of Temporary and Disability Assistance between 1999 and 2001 to develop a new information repository, called the Homeless Information Management System (HIMS). This paper describes the evolution of an ongoing research project—related to HIMS—at the University at Albany that focuses, by means of Group Model Building efforts, on the dynamics of collaboration in interorganizational settings. Modelers from the Rockefeller College of Public Affairs and Policy and researchers from CTG at the University at Albany constructed formal models in order to explore the dynamics observed in the HIMS project and more generally to explore the dynamics emerging from linking collaborative work with knowledge, trust, and facilitation design. The modelers and field researchers have come to regard their experiences working together as instructive in, and informed by, the cross-boundary facilitation that CTG does in its interagency, intergovernmental work, and have begun to apply the research to their own interactions (casting models as boundary objects). During the development of this project, four system dynamics models have been created that have acted as boundary objects to push forward theorizing about collaboration. The theory of collaboration has evolved from centering on project dynamics, to the interaction dynamics of HIMS team members, to the dynamics generated by the use of facilitative tools and methods in the collaborative effort. The evolution of the theory in this case can inform group model-building practice by presenting the possibility of changing the output (models built) to improve the theory (explanation of the phenomena) as an organized, and perhaps desirable, way of conducting the process. The different models developed are presented.