Tracking the Dynamics of Financial Capital Flows in Transportation Planning Governance Networks: Which Actors' Priorities are Funded?

Despite extensive research on financing the United States' transportation system, little is understood about the processes of how federal, state, regional, and local governmental agencies interact and prioritize projects for funding within this system. Unpacking the details of the decision-making processes and intergovernmental relations in transportation funding can help explain why some towns garner more attention. This study uses a governance network framework to analyze the equity of transportation project prioritization in one small sized metropolitan area in New England. Three categories of Gini coefficients are calculated based on the amount of formula funds, competitive grants, and earmarked funds each town received per capita, per square mile, and per vehicle mile traveled for funding amounts between 1998 and 2010. A systems dynamics model explores the intergovernmental relationships to explain why there may be inequity in the allocation of federal and state monies across local towns. The flow of financial capital from a specific federal program is tracked between 1998 and 2010 to each town that ultimately receives the money. Attractors in the model, towns that receive more funding, are identified and their characteristics are explored. Results from this study contribute to the body of literature on governance networks and complex systems as it describes some of the details inside the "black box" of transportation planning and project prioritization.