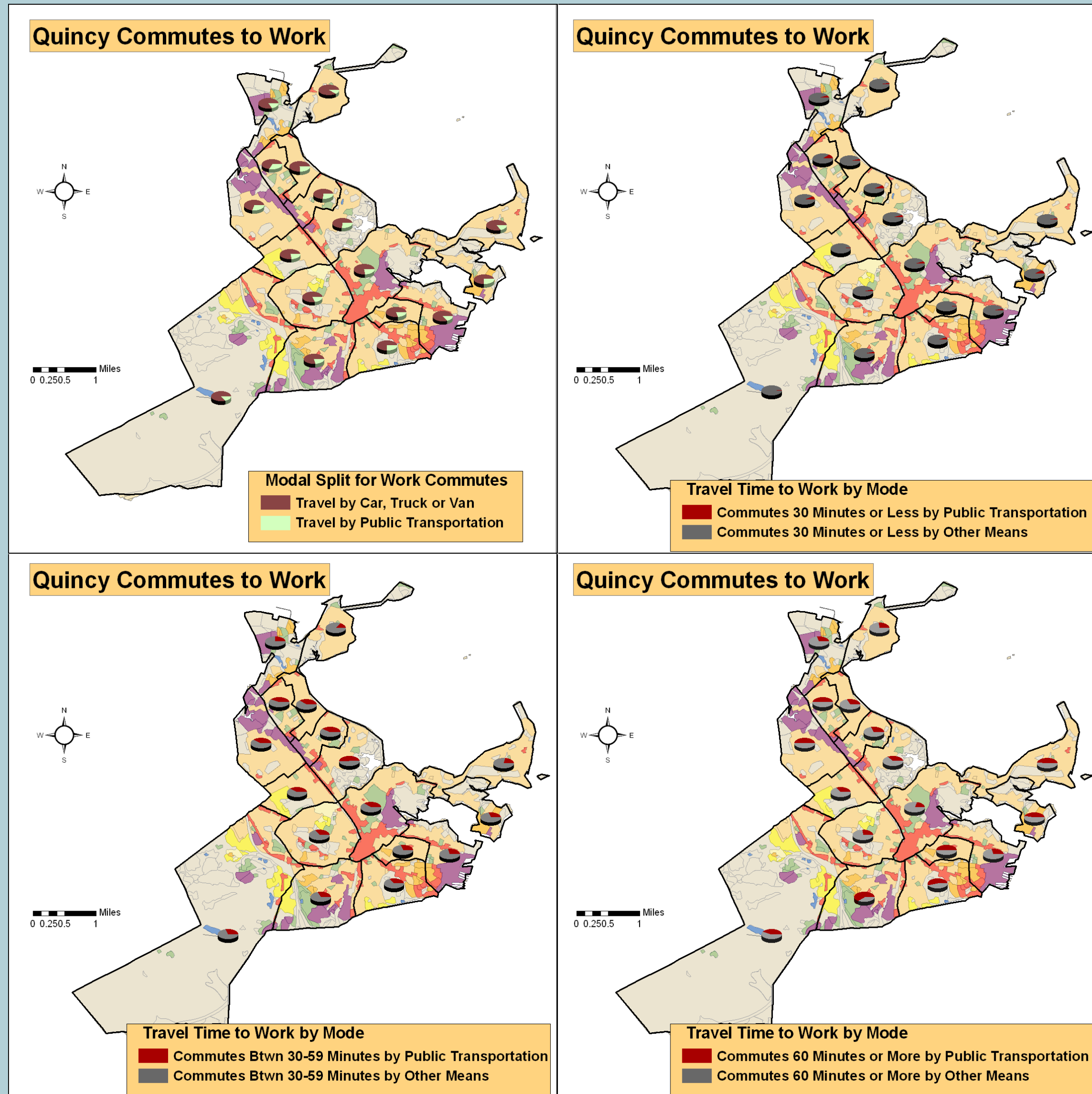


# Land Use & Census Tract Travel Data in Suburban Boston

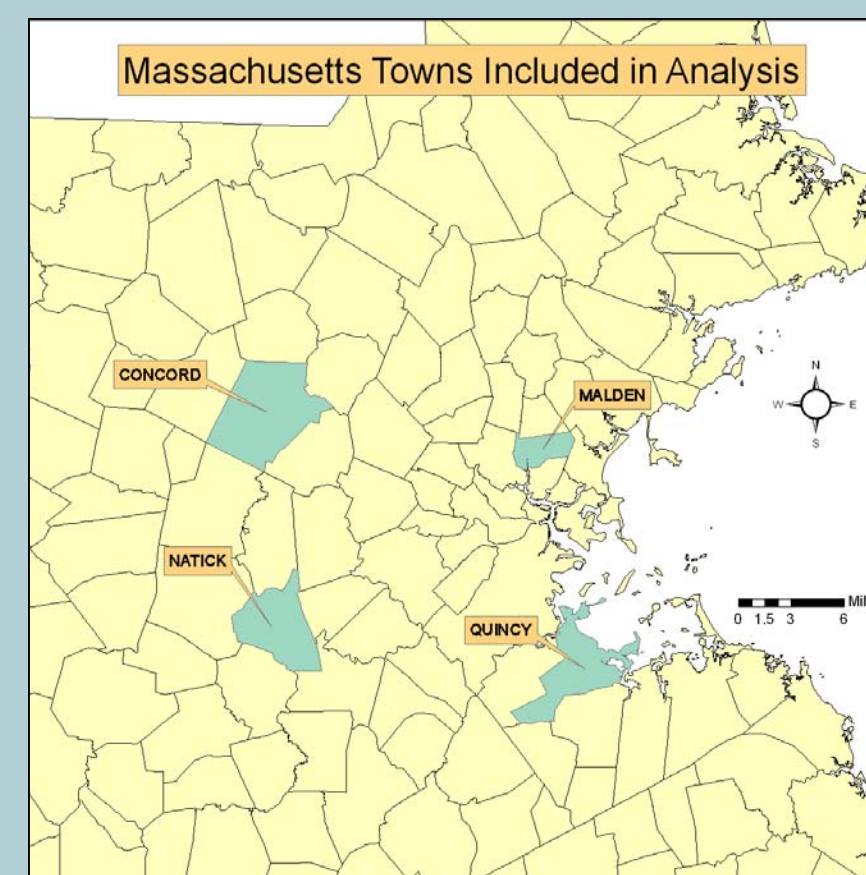
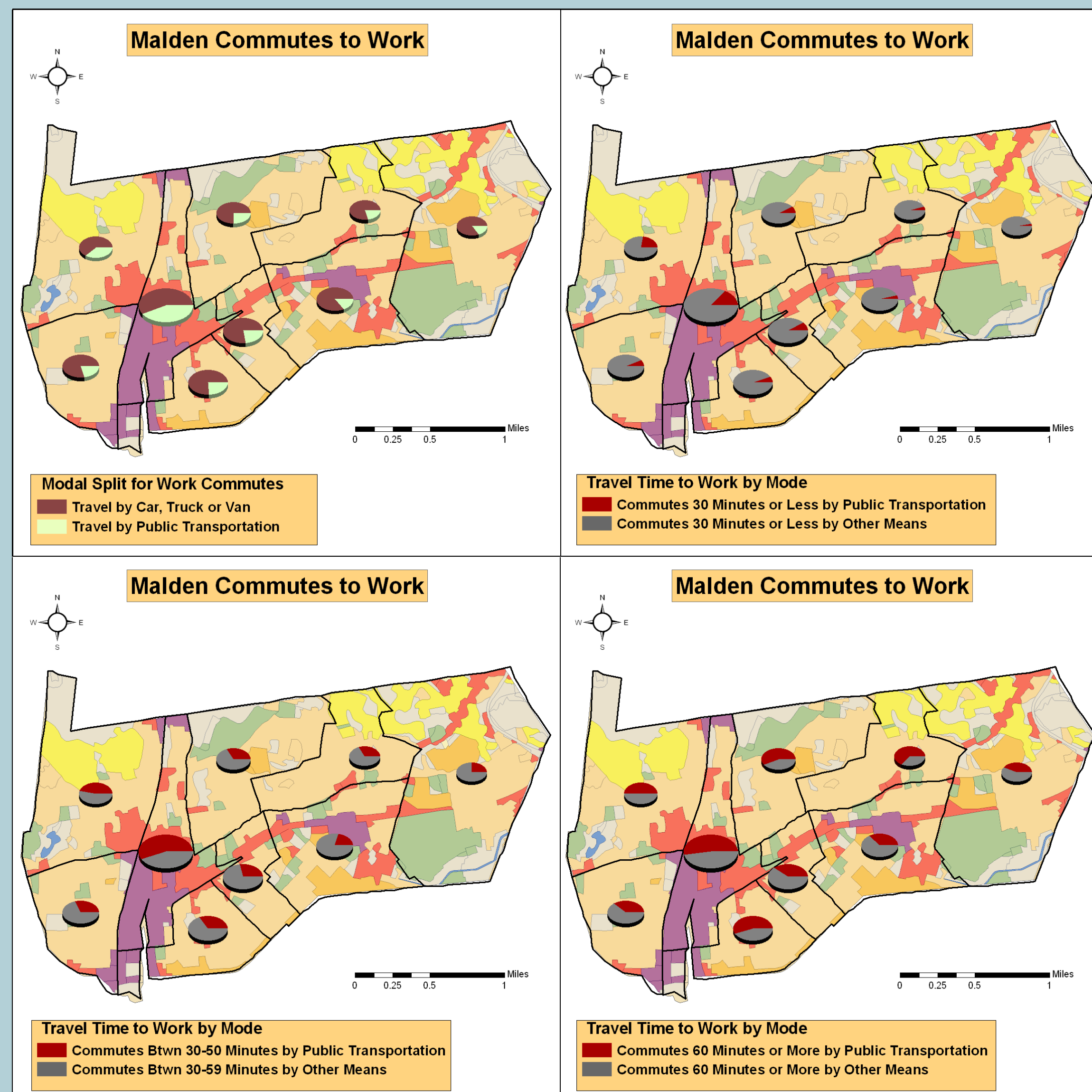


## Project Description

My project focuses on integrating land use with census travel data. I looked at four Massachusetts towns: Concord, Malden, Natick and Quincy. Two locations closer to Boston and two further away. I combined land use data sets using census tract level area boundaries with 2000 census block group level travel time data. The main objective of the project was to determine for each census tract, the number of acres of each land use type and then compare that information with modal split and travel time data to make a preliminary analysis regarding how residential density may affect travel choices and times. The purpose of this project is to provide a foundation for future research into whether there are relationships between land use and travel mode choices or subsequent travel times.

## Comprehensive Planning

Land use patterns as they relate to transportation functions have been widely discussed and debated but many planners now recognize the need to study the relationship between these two entities. Suburban and sprawling developments have been linked to longer work commutes as people move further outside economic centers. As the commutes grow longer, the vehicle miles traveled (VMT) increase and thus carbon dioxide emissions intensify. With a better understanding of the state of the environment, many planners have focused their attention on land use patterns as a way to mitigate transportation and climate change issues. Most progressive transportation planning strategies today focus land use changes that would include infill development near existing roads and employment centers, new development around rail stations; more mixed use land use patterns to support work and residential living in the same area; workforce housing nearer to employment centers, and other measures that are location specific depending on landscape, economics and political will.



Cartographer: Alison Corwin  
 Date: December 13, 2007  
 Data Sources: MassGIS Land Use Data-LU21\_1999  
 21-category land use code for 1999  
 MassGIS Census 2000  
 Projections:  
 NAD\_1983\_StatePlane\_Massachusetts\_Mainland\_FIPS\_2001

