Transportation Accessibility and Industrial Land Use in Metropolitan Areas: Implications for Economic Development (Christopher Lindsey, Hani S. Mahmassani - Northwestern University Transportation Center; Matt Mullarkey, Terry Nash - CenterPoint Properties)

We examine the relationship between occupancy rates of industrial land and transportation accessibility, and its implications for economic development in a metropolitan area. In pursuing this goal, we estimate a spatial econometric model that formulates an area’s level of industrial land use occupancy as a function of transportation accessibility. The geographic area considered is the four-county region of Los Angeles, Orange, Riverside, and San Bernardino counties in the state of California, a large and economically significant region considered central to goods movement in the United States. A statistically significant association between transportation supply and industrial land use in the study area is established. Results suggest that transportation accessibility does indeed affect the occupancy of industrial space; more accessible areas exhibit higher than average levels of occupancy. In turn, increased consumption translates to economic development for metropolitan areas. As businesses consume additional industrial space they correspondingly consume additional utilities and services, as well as pay more property taxes. The economic contribution of additional industrial space consumption to local tax bases is discussed.