

## NCITEC Project Summary

**Project Title:** **Using a Typological Approach to Compare the Impact of Transit-Oriented Development and Intermodal Transportation in the United States (Phase II)**

**Principal Investigators:** Dr. Keith A. Ratner

**Keywords** Transit-oriented development (TOD), intermodal transportation

**Funds Requested** \$10,000

**Match:** \$25,000

**Start Date:** June 2013

**Completion Date:** August 2015

### **Project Summary**

Building upon previous studies of transit oriented development (TOD) and its impact on the intermodal transportation system in metropolitan areas the present study attempts to expand on previous findings by gathering comparative data from several additional cities with similar infrastructure configurations. In addition, simulations on the energy consumption associated with different types of TOD typologies area also planned. The impact of TOD on intermodal and freight transportation has not been fully studied and some assessment of the impact of TOD on freight movements will be examined. Clearly the impact on small package deliveries will be noticeable. One hypothesis is that increased TOD will lead to reduced energy consumption due to increased ridership on public transportation and increased use of intermodal transportation. However, data to support these ideas is limited at best. The purpose of Phase II is to advance beyond the single case study method to a large scale comparison.

The project will continue work begun in Phase I and gather data on several additional cities relative to the impact of TOD on the passenger and intermodal freight transportation system in American metropolitan regions for comparison purposes. Using the TOD typology as a comparison variable the impact of TOD will examine the following outcome variables: 1) modal and intermodal movement of passengers and freight 2) congestion 3) energy consumption through reduced numbers of trips 4) reduced energy consumption through use of more intermodal options 5) and improved mobility.

Data for comparison will be obtained from land use development data, transit ridership data, travel behavior data, and quality of life data in three large metropolitan areas Seattle, New Orleans, and Salt Lake City. Station-areas in the chosen metropolitan areas will be assigned typological designations similar to those found in Denver& Boston. Results of these analyses will be disseminated in a final report and through presentations at national and regional conferences such as TRB and TRF.