Project Title: A National Inventory and Analysis of Transit Oriented Development in Proximity to Coasts

Project Abstract (Brief Description): There is often a tension between the development of mixed-use transit oriented developments (TODs) and heavy industry near coastal areas, major rivers and near port facilities. This study will quantify and examine the number of jobs and residents in station areas near coastal areas, major rivers and near port facilities across the United States. The study will also forecast future development and job potential of underbuilt station areas, which could become TODs over the next several decades. The National TOD Database will be combined with the National Transportation Atlas Database, coastline data from the Census and data on major rivers from ArcGIS. The GIS analysis will isolate all rail stations located within a half-mile, 1-mile and 3-miles of coastlines, major rivers and ports. Once identified, a typology of station areas will be applied based on Renne and Ewing 2013, which outlines a method for determining if a station area is a TOD, Hybrid or Transit Adjacent Development (TAD) (which is a station area that is low-density and automobile focused). The study will identify the number and type of jobs located in all types of stations and compare and contrast by typology. It will also calculate the number of people and households as well provide a snapshot about commuting behavior, vehicle ownership, housing tenure, and socio-economics of residents. The study will also forecast future development potential by looking at several build-out scenarios to turn TADs and Hybrids into TODs.

Impacts/Benefits of Implementation: The impacts will allow for professionals to have better data about the conflicts between TOD and port facilities for future population and job growth. Providing such a GIS database to professionals will result in better decision-making for planning for future TODs in river and coastal communities.

Impacts/Benefits of Implementation: The case study of New Orleans illustrates a need for a more coordinated planning approach. The City of New Orleans and New Orleans Regional Planning Commission (MPO) served to connect stakeholders in the passenger and freight industries. However, conversations about port and TOD planning along the river, including investments in transit, bicycle and pedestrian infrastructure were often ad hoc. Planning and coordination were occurring among key governmental stakeholders, including the Port, City, MPO, and Convention Center. However, such planning activities were not as open to neighborhood, transit and bicycle advocacy groups who were concerned about safety issues following a series of high-profile bicycle fatalities.

Web Links: https://martrec.uark.edu/

Budget (Funding) Amounts & Source(s) (US DOT +Match(s) =Total Costs): Budget $24,404, Match $12,203 = total cost of $36,607

Project Start and End Dates: 10/01/2013-09/30/2017. Project complete

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Principal Investigator Institution (University): University of New Orleans

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