

Maritime Transportation Research & Education Center

MarTREC UTC Project Information Form USDOT Tier 1 University Transportation Center Agency ID or Contract Number DTRT13-G-UTC50

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

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 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.

Describe Implementation of Research Outcomes (or why not implemented):

We have been successful in merging data from The National TOD Database and the National Transportation Atlas Database. Some of the overall findings are:

Stations Near Coastlines:

- 197 are within ½ mile of coastline (4.5%)
- 409 are within 1 mile of coastline (9.3%)
- 1169 are within 3 miles of coastline (26.6%)

Stations near Rivers:

- 229 are within ½ mile of a major river (5.2%)
- 543 are within 1 mile of a major river (12.3%)
- 879 are within 3 miles of a major river (20.0%)

Stations Near Ports:

- 27 are within ½ mile of a major port (.6%)
- 250 are within 1 mile of a major port (5.7%)
- 954 are within 3 miles of a major port (21.7%)

All of the quantitative work was completed by mid-2015. This led to some questions regarding last mile issues of coordinating freight and passenger transportation planning so I decided to conduct a case study of New Orleans. I led over a dozen interviews with both freight and passenger transportation stakeholders to better understand how decisions are made and what the issues are.

The study produced fascinating results that shows how in some cases planning for TOD in the last mile of the port is sometimes coordinated and sometimes not coordinated. I learned of a major project that was completed in New Orleans several decades ago to create a truck-way along the port which was driven by community interests in Uptown New Orleans to eliminate truck traffic in the neighborhoods. This project has been a major success but now neighborhoods downriver are looking for a similar outcome as those neighborhoods grow in residential, retail and tourism. One state legislator introduced legislation in 2015 based on claims that freight traffic is hazardous and unsafe for residents and tourist. Other groups claim that the expansion of streetcar systems has been stymied by freight rail companies. However, the interviews revealed that the city, port and MPO is working to coordinate these complex issues, which take time and major investment to resolve.

Several options are on the table to potentially reduce freight traffic in the last mile along the port, including a steel-wheel shuttle along the Public Belt rail corridor and a new interchange between US-90, the HOV lanes on the Mississippi River Bridge and the port. Such options are being vetted with local and regional decision-makers.

The New Orleans Case study reveals that coordinating transportation planning between freight and passenger interests for last mile conflicts of expanding TOD in close proximity to a port is mainly occurring amongst key stakeholders groups, each has their own goals and interests. The city and MPO are serving to represent the interests of the general public and working in a resource constrained environment to identify long-term solutions. To date, neighborhood-level engagement hasn't been a large part of the process but this is likely because there hasn't been a consensus among stakeholder groups about which options are viable at this time.

Impacts/Benefits of Implementation (actual, not anticipated):

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.

Web Links: <u>http://toddata.cnt.org/</u> Port data from: <u>http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_atlas_dat</u> <u>abase/2013/points.html</u> Coastline data from: <u>http://www.census.gov/cgi-bin/geo/shapefiles2013/main</u> USA major rivers shape file from ArcGIS layer package:

http://www.arcgis.com/home/item.html?id=290e4ab8a07f4d2c8392848d011add32

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

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Principal Investigator Institution (University): University of New Orleans