

RESEARCH PROJECT CAPSULE

June 2020

TECHNOLOGY TRANSFER PROGRAM

Assessing the Economic Benefits of the Transportation Infrastructure Model for Development (TIMED) Program

PROBLEM

In 1989, Louisiana embarked on a program called TIMED (Transportation Infrastructure Model for Development), consisting of 16 transportation infrastructure improvement projects that were intended to produce economic development benefits for the state of Louisiana.

It is desirable to determine a way in which the economic development benefits of these projects can be estimated, and to be able to use the same criteria to estimate the benefits of future projects.

OBJECTIVE

The primary objective of this research is to identify measures that could be used to estimate the economic development impact of transportation improvement projects in Louisiana. Application of these measures to the 14 currently-complete TIMED projects will establish a baseline so that the measures can then be used to assess the economic development potential of future transportation projects.

METHODOLOGY

Initially, the research team will review literature on the economic development impacts of transportation investments, and look particularly at simulation models that are sufficiently sensitive to transportation improvements, while examining the availability of appropriate measures for Louisiana.

Direct economic development measures may include property tax receipts and employment levels. Ideally, such measures will be available historically for at least 35 years. The research team will also examine the potential of using surrogate variables in a more simplistic model for assessing economic development impacts.

Chosen models will be run for two or three TIMED projects, using historic beforeproject and after-project input data to test each model's ability to detect economic development differences. Different measures will also be tested in the models to compare availability and adequacy of input data.

Based on the findings, one model will be applied to the entire set of completed TIMED projects with selected measures as input. Economic development will be estimated for the complete TIMED program and compared with economic development in areas not directly served by a TIMED project.

JUST THE FACTS:

Start Date: July 1, 2019

Duration: 12 months

End Date: June 30, 2020

Funding: SPR:TT-Fed/TT-Reg

Principal Investigator:

Chester G. Wilmot, Ph.D., P.E. Department of Civil and Environmental Engineering Louisiana State University Louisiana Transportation Research Center

Administrative Contact:

Tyson Rupnow, Ph.D., P.E. Associate Director, Research 225-767-9124

Technical Contact:

Kirk Zeringue, P.E. Special Studies Research Administrator 225-767-9169

Louisiana Transportation Research Center 4101 Gourrier Ave Baton Rouge, LA 70808

Sponsored jointly by the Louisiana Department of Transportation and Development and Louisiana State University

POINTS OF INTEREST:

Problem Addressed / Objective of Research / Methodology Used / Implementation Potential

WWW.LTRC.LSU.EDU

$= \frac{RESEARCH}{PROJECT CAPSULE} = \frac{19-555}{page 2}$

IMPLEMENTATION POTENTIAL

There is widespread recognition that transportation investment impacts economic development and that estimation of these impacts is needed. Results from this research may be used for assessing future major projects in Louisiana.

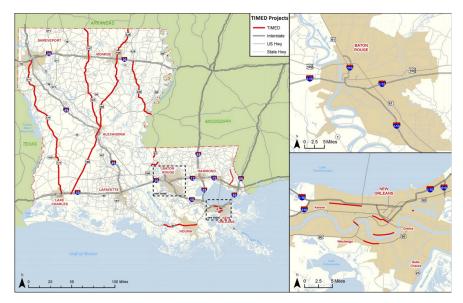


Figure 1 TIMED projects in Louisiana

For more information about LTRC's research program, please visit our website at www.ltrc.lsu.edu.