



RESEARCH PROJECT CAPSULE [14-4SS]

February 2014

TECHNOLOGY TRANSFER PROGRAM

Identifying Local Transit Resources for Evacuation

JUST THE FACTS:

Start Date:
November 5, 2013

Duration:
15 months

End Date:
February 4, 2015

Funding:
SPR: TT-Fed/TT-Reg

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Sponsored jointly by the Louisiana
Department of Transportation and
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University

POINTS OF INTEREST:

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

PROBLEM

In addition to the large urban area transit systems, there are hundreds of small "on demand" transit systems that provide transportation to various categories of riders: the elderly, low-income, veterans, disabled, and those needing access to jobs. These are funded through at least eight different state agencies with over 60 different federal funding programs with little centralized coordination. Currently, there is no single means of identifying all these local resources (drivers and vehicles) and yet, with sufficient organization and collaboration, these resources could be leveraged to address localized transportation needs, particularly during an emergency.

A Working Group was established by the Louisiana legislature to establish coordination and collaboration among these agencies and providers, but most were not sufficiently motivated to put their full weight behind the effort. However, if the call to collaboration is to provide life-saving support during an emergency, and they see sufficient benefit to themselves and those they serve, these agencies may be motivated to commit more earnestly.

Inventorying and assessing the capabilities of the various human services transportation providers operating in the state would aid in coordinating resources during and after evacuation events, support transportation efficiencies and mobility year round, and could result in significant cost savings to the state and local authorities.

OBJECTIVE

The objectives of this research are to determine what laws or procedures exist or can be developed to secure the use of transportation assets and the appropriate compensation or incentives for the use of transportation assets from the public, private, and state sectors during an emergency or disaster; consolidate information on transportation assets in the public, private, and state sectors to facilitate the movement of and transportation support for special or human service transportation need citizens in Louisiana's 20 coastal parishes during an emergency or disaster; identify the number of passengers currently served by special or human service transportation services and estimate the proportion who are likely to rely on transportation from these transit services during an evacuation; and incorporate information into a Geographic Information System (GIS) capable of querying evacuation demand and transit supply by geographic area in the 20 coastal parishes of Louisiana.

METHODOLOGY

Researchers plan to identify the means to secure collaboration among transit providers, develop inventory of resources, establish demand for service, create GIS query program, demonstrate the program in a test case, and prepare a final report.

IMPLEMENTATION POTENTIAL

The product of this research will be an on-line GIS based information system that can be accessed by emergency managers to determine transit resources during an emergency. The system will be able to display the type, number, and location of transit resources within a designated area or within a certain distance from a point. Since the Louisiana Department of Transportation and Development (DOTD) is responsible for providing transportation information during an emergency, this information will be useful to officials responsible for emergency evacuation management in the department. Thus, implementation of the system will rest with emergency planning officials in the DOTD.

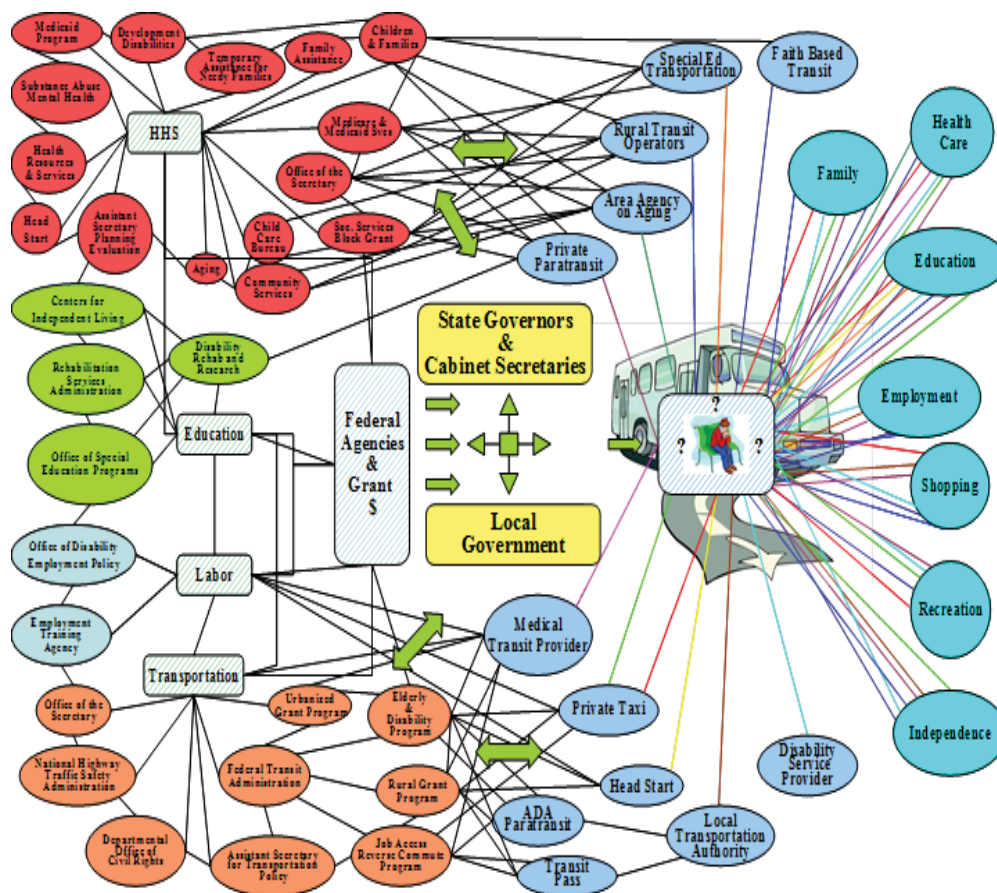


Figure 1
Courtesy of USDOT