

# Database Design for the Public Transit Facilities Management System (Phase II)

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## Problem

The Intermodal Surface Transportation Efficiency Act (ISTEA) passed by Congress requires Louisiana and other states to develop a systematic process to collect, analyze, and update information on the condition and cost of transit assets. Because of the volume of data to be analyzed, it is necessary to develop a computerized database for timely analysis and reporting.

## Objectives

- ▶ Review Public Transit Facilities Management System (PTFMS) guidelines,
- ▶ Evaluate current database,
- ▶ Design new computer database management program on the basis of the existing one,
- ▶ Train potential program users.

(contd.)



Researchers will identify the measures and standards to be used by DOTD, MPOs and transit authorities to evaluate the condition of transit assets such as these vans.



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## Description

A Public Transit Facilities Management System means a systematic process that collects and analyzes information on the condition and cost of transit assets. Such a system provides input to the metropolitan and statewide planning processes. PTFMS should be capable of monitoring federal funding activities in coordination with the recipients of federal transit capital and operating funds. The system should also coordinate with other management systems, such as the congestion management system and intermodal management system. Finally, PTFMS should address current and future asset needs by predicting use or ridership.

The first phase of the project involved Sections 5310 and 5311 of the Federal Transit Act 49 USC for which DOTD had existing data.

Phase II will address Section 5307 which covers urbanized areas. Data for this phase will come from the state's fourteen transit agencies.

The first step in developing the Phase II database management system is to re-review the guidelines mandated by ISTEA. The researchers will identify the measures and standards to be used by the urban transit authorities for evaluating the condition of transit assets.

They will also identify the data collection and system monitoring process that must be applied to PTFMS. For each type of asset in the inventory, information collected will include age, condition, remaining useful life, and replacement cost. Number of vehicles and ridership data will also be included.

In addition, researchers will assure that the proposed database management system be compatible with associated systems, such as the National Transit Geographical Information System.

## Implementation Potential

A new computerized database management program for the Public Transit Facilities Management System capable of being implemented will be delivered to DOTD the urbanized areas.