

ABSTRACT

Road Material Payment System

The problem is to design and implement a system that will automate inter-office activities in purchasing road material within the Texas Department of Transportation (TxDot). This system creates and maintains a micro-computer database which enhances its functions as bookkeeper and report generator. This database also provides for the creation of a text file to upload for use by the Financial Information Management System (FIMS) running on the Austin Central Mainframe.

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INTRODUCTION

The Texas Department of Transportation is a state agency. Its main responsibility is to provide the public with safe, convenient, and comfortable roadways.

The Corpus Christi District (District 16) consists of 10 counties: Nueces, Bee, Kleberg, Jim Wells, San Patricio, Live Oak, Goliad, Refugio, Karnes and Aransas. Each County has its own office and maintains the roadways within its territory. The demand for purchasing road materials for each county to use for roadways is very heavy at times, especially in the months of May through October.

The procedure for purchasing road material is as follows:

- 1) The County office sends a material request to TxDot for approval.
- 2) Once the request is approved, the TxDot purchasing division in Austin awards to the lowest bidder and sends the formal requisition to the company awarded.
- 3) The county office contacts the company for delivery.
- 4) Upon delivery at the designated location, the county office forwards a receiving report along with load tickets to the district accounting office.

An overwhelming amount of paper work pours into the Accounting Office. Consequently, the checking of all load tickets can be very exhausting and time consuming. In addition, the manual calculation of delivery tickets and freight charges that fluctuate to comply with Texas Railroad Commission's regulations can be tedious and confusing.

This Road Material Payment System can effectively perform this checking function by tracking the quantity ordered for each county on each requisition, and also will provide customized sectional reports to the manager of each section .

The Road Material Payment system can do the following:

- 1) Check each ticket of the truck load to see if its weight falls within the range that was regulated by the Texas Railroad Commission.
- 2) Check to ensure that the delivery date is prior to the expiring date stated in the requisition.
- 3) Check to ensure that the quantity received is within the quantity contracted plus 10% allowed.
- 4) Convert pounds to tonnage and tonnage to cubic yard.
- 5) Check the location of the delivery to determine if it is the exact location as stated in the requisition. If it is to be rerouted, then a freight rate and fuel adjustment rate should be considered in the total amount paid to the company.
- 6) Print a Billing Statement (Form 132) with a charge to the proper section and the amount that will be paid to the company.
- 7) Transform and write the information needed to the text file for FIMS and upload to the mainframe as required by the department.