

TECHNICAL SUMMARY

Designing a Comprehensive Model to Evaluate Outsourcing of DOTD Functions and Activities

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INTRODUCTION

A key issue in public policy today involves the consideration of outsourcing functions and activities. While political climates may drive this trend, decisions to outsource must be based on a logical, systematic process that considers costs, need for expedition, peak work volumes, unique skills, training and retaining, human resource aspects, and the retention of strategic core competencies within the public agency. The research reported in this study involves development of a model that incorporates as many of these features as possible.

OBJECTIVES

The purpose of this project was to develop a comprehensive model that addresses the warrants of outsourcing any function within the Louisiana Department of Transportation and Development (LADOTD), and to apply that model to one or more targeted functions for which outsourcing potential is envisioned by the Department. The specific objectives of the study were:

1. to identify LADOTD strategic functions representing core activities that are vital to the organization,
2. to develop a decision model of analysis of outsourcing opportunities and alternatives,
3. to consider qualitative factors that are relevant to the outsourcing decision, and
4. to apply the decision model to one or more LADOTD functions for which outsourcing potential is envisioned by the administration.

METHODOLOGY

The first step in the methodology employed in developing an outsourcing model for use by the LADOTD was to identify the core activities of the organization. This step was done in collaboration with LADOTD officials, and activities essential to outsourcing were determined in the process. Simultaneously, a review of the different types of outsourcing arrangements commonly made by public agencies was conducted, and the procedures used by other state DOTs to evaluate outsourcing potential was included in the review. Some of the more promising outsourcing assessment procedures were subjected to a trial test with the District Administrators of the LADOTD. This test led to development of a hybrid model incorporating the best features of several existing procedures. The model was computerized for ease of operation and was tested using the activities of rest area maintenance, highway striping, and installation of highway markers. The results were in line with the intuitive assessments of officials in LADOTD who have contracted out these activities in the past.

The model developed in this study consists of both a qualitative and quantitative assessment component. Rating-and-weighting performed by the user quantifies the qualitative assessment to produce an index that ranges from 0 to 1, with low values favoring insourcing, high values favoring outsourcing, and values in the vicinity of 0.5 indicating a region of uncertainty. A similar index is produced in the quantitative assessment by comparing the relative cost of outsourcing to insourcing. The results from both analyses must be assessed in arriving at an appropriate decision for the activity.

The model uses default values for labor, benefits, and overhead costs for insourcing, although the option exists to alter them. Outsourcing costs are determined by the bid as well as by estimates of other costs associated with outsourcing such as contract preparation, supervision, and administration. All costs are identified through a series of questions in the program.

CONCLUSIONS

The outsourcing model developed in this study has attempted to build upon the strengths of existing outsourcing procedures while at the same time establish a balance between ease of use and comprehensiveness. Computerizing the process contributes to the ease of use through default values, the calculations performed automatically within the program, and the graphics that facilitate input and interpretation of the results. The computer program allows a comprehensive assessment to be conducted with manageable effort. The program ensures that the identical process is followed in each application. It also provides a convenient record of the input and evaluations of each application so that they can subsequently be reviewed and edited. The model results are intended to be advisory, not prescriptive. That is, the model is an aid to decision-making rather than a decision-making tool itself.

RECOMMENDATIONS

It is recommended that officials in the LADOTD be given instruction on how to use the program and how to interpret the results. Instruction could be provided by means of a training session or in providing technical and operational support on request.

The program should be field tested by applying it to cases in the LADOTD. This will allow assessment of the usefulness and accuracy of the process.

The model currently operates on a single computer at a time. No provision is made for group input other than to establish consensus before input is provided. It is recommended that consideration be given to extend the program to allow multiple user input where provision is made for input comparison, debate, revision, and the establishment of group-representative values.

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