



TECHSUMMARY *June 2013*

State Project No. 30000840 / LTRC Project No. 13-9SS

Investigation into the Impact of Privatizing Civil Engineering Operations in Louisiana DOTD

INTRODUCTION

This report documents an investigation into the possibility of privatizing the civil engineering operations in the Louisiana Department of Transportation and Development (DOTD). The study was conducted in response to House Resolution 105 of the Louisiana House of Representatives in which DOTD was requested to "study the possibility of privatizing civil engineering operations in the Department." This resolution follows a recommendation of the Louisiana Governor's Commission on Streamlining Government in 2009 that at least 80 percent of DOTD's design activities be outsourced and a more recent suggestion by Honorable Maurice McTigue of the Mercatus Center at George Mason University that the whole civil engineering activity at the DOTD "be subjected to a privatization study and sold off as a stand-alone business."

OBJECTIVE

The objective of this study was to estimate the consequences of privatizing all civil engineering operations within DOTD. The evaluation involved comparing the cost and non-cost factors associated with the status quo versus privatization of the civil engineering operations in the Department.

SCOPE

The scope of this study was limited to investigating the privatization of civil engineering operations in DOTD and therefore excluded the management, financial, and operational aspects of the Department. It is assumed that the Office of the Secretary and the Office of Management and Finance will continue to function as they currently do, providing policy, management, and fiscal direction to the Department, whether the engineering functions are provided in-house or through the private sector. In addition, the administrative and accounting services provided to civil engineering activities in the Offices of Engineering, Multimodal Planning, and Operations are assumed to remain in effect and provide the same support to a privatized engineering operation as they currently do.

METHODOLOGY

The methodology applied included identifying the nature and extent of civil engineering operations within DOTD, conducting an extensive literature review, and executing a cost analysis. In identifying the civil engineering operations in the Department, the work conducted by technicians was included with those of civil engineers although the work of administrative and accounting support staff was not. The literature review included a review of national and international experience, involving a review of publications, reports, internet postings, and personal interviews. The cost comparison evaluated the cost of providing all civil engineering operations in DOTD during calendar year 2011 with the estimated cost of providing the same services by the private sector during the same period. This was accomplished by assuming civil engineering personnel in the private sector are able to perform the same operations in the same time as public sector personnel at the same grade level and then conducting the following analysis:

1. In-house costs:
 - a. Sum the salaries paid to all civil engineering staff in DOTD in 2011.
 - b. Multiply the amount by the in-house overhead rate.
 - c. Sum values from (a) and (b) to provide the public sector cost of providing civil engineering operations in DOTD in 2011.
2. Private sector costs:
 - a. Determine number of CE staff in DOTD by grade level.
 - b. Identify equivalent grade levels in the private sector to those in DOTD (e.g., engineer grade 9 in DOTD = principal engineer

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- in private sector).
- c. Assign the number of staff in (a) to the equivalent grade levels in (b).
 - d. From audits conducted by DOTD among consulting engineers who conduct contract work for DOTD, determine the average wage rate (\$/hr.) for each private sector grade level identified in (b).
 - e. Multiply the number of persons in each grade level in (c) with the wage rate in (d) of each equivalent grade level and sum over the grade levels.
 - f. Multiply the total in (e) by an estimate of the number of productive hours that will be worked by the average private sector staff person in 2011. An estimate of productive hours is used because private sector companies apply their charge-out rate on billable hours (on cost-plus contracts) or estimate a fixed cost of the project based on the time required to complete each task in a project multiplied by the charge-out rate for all persons involved.
 - g. Multiply the total in (f) by the private sector overhead rate, profit margin, and cost rate of preparing and managing the privatization contract.
 - h. Add the values in (f) and (g) to provide an estimate of the cost of privatizing all civil engineering operations in DOTD in 2011.

Comparison of the values in 1(c) with those in 2(h) above provides an estimate of the comparative cost of providing civil engineering operations in DOTD using internal versus external staff.

CONCLUSIONS

The estimated cost of providing civil engineering operations with internal staff in the DOTD during calendar year 2011 was \$259,606,739. The estimated cost of providing the same services by the private sector for the same period was \$262,703,482. Thus, no savings are expected from privatization of the civil engineering operations of DOTD.

The review of operations conducted by DOTD revealed how comprehensive and diverse the civil engineering operations of the Department are and how some operations cannot be privatized. For example, preparing, evaluating, awarding, and managing contracts that privatize civil engineering operations in DOTD must be conducted in-house. Further, establishment and maintenance of standards and regulations is an activity that must reflect the values of the public, be open to review, and ensure adherence to standards. An agency that is answerable to the public through elected officials and authorized through legislation to enforce compliance is necessary to carry out this activity. Last, responding to queries from the legislature, public, state and national agencies, is an activity that would be difficult to privatize because it involves being able to call upon any unit in the Department, integrate information from multiple sources, and handle the queries with discretion and confidentiality.

Besides operations that cannot be privatized, there are those that can only be privatized with difficulty. Among these are operations established by law that do not lend themselves to privatization because of the way they are set up, or the way

they operate. For example, the Louisiana Revised Statute 34:3113 stipulates that the Louisiana Oil Terminal Authority (LOTA) in DOTD is responsible for environmental monitoring of the Louisiana Offshore Oil Port (LOOP) pipeline. LOTA contracts out the monitoring activity in a competitive bidding process every 3 years but retains oversight of the monitoring exercise by a committee selected to provide an objective assessment of the results. Privatization of this activity would require altering the law and would provide no savings as independent oversight will always be required. Another example is the Louisiana Transportation Research Center, which was established as a joint DOTD/Louisiana State University (LSU) entity in 1986 with specific operating rules and responsibilities related to DOTD and LSU. To operate LTRC as a private organization would require terminating the agreement with LSU or altering it entirely.

The literature review revealed that the majority of agencies that have privatized their transportation activities are positive about the experience. This is true of efforts in New Zealand, Australia, Britain, Finland, and Canada. Only Sweden terminated its privatization venture, due to labor union opposition from public employees. However, most of the reporting is from persons involved in the privatization effort and their assessments lack knowledge of what conditions would be if the agency remained a public institution. Objective assessors note both positive and negative aspects of privatization but subjectively suggest that privatization generally has a net beneficial effect.

The one thing that stands out in regard to experience in other countries and the experience that could be expected in the U.S. is the size of transportation agencies in the U.S. versus those in countries that have privatized their operation. As shown in the cost analysis, the annual budget for civil engineering operations in DOTD alone is \$262 million. It would be difficult to assemble enough firms that could handle budgets that high to establish a competitive environment. Another concern is the manner in which state DOTs function in the U.S. and the difficulties that could emerge if one state DOT privatized while the others remained public. State DOTs collaborate with regard to research, planning, and construction; they are subject to the same federal legislation; and collectively fund hundreds of consulting and research projects. Dismantling the cooperative operation of state DOTs by introducing privatized departments among the public state DOTs could be disruptive.

Considering the information above, it is concluded that privatizing civil engineering operations in DOTD will not lead to significant cost savings and that non-cost factors associated with privatization do not, on balance, justify privatization either.