#### NCHRP 20-68A - "US Domestic Scan Program"

Scan 07-01 Best Practices in Project Delivery Management

### **Description of Scan**

The purpose of this scan is to examine programs and practices employed domestically to outsource DOT functions and programs. A related international scan tour was conducted in 1997 and is summarized in "Emerging Models for Delivering Transportation Programs and Services." Since that international scan, State DOTs are under continued pressure to do more with less. Over the last 10 years, FHWA and many State DOTs have seen a significant growth in highway program funding while staffing has either remained constant or been reduced. However, despite the increase in funding, the need and associated costs for rehabilitation/replacement, expansion and maintenance of our highways systems are escalating drastically.

Transportation agencies have developed their own practices of providing the engineering and project management for a broad spectrum of transportation improvement proposals. Project development may be accomplished by using a combination of in-house staff and consultant services. Seldom do the design and other functional unit staff get a clear understanding of how their organizational structure and approach to the design process compares to that of other transportation agencies. Some agencies may have unique approaches to the utilization of in-house staff and consultant resources. By visiting and reporting on a variety of approaches, the observations can be shared and efficiencies identified. Improving the efficiency of how agencies address programs with decreasing staffing levels is timely and essential.

This scan will consider particularly organizational factors (e.g., degree of centralization or decentralization in agency management) that influence agencies' abilities to reliably deliver projects on time and within budget. The states of Washington and Virginia, for example, have been engaged in efforts to redistribute risk among project participants and to otherwise improve flexibility of project teams to respond to evolving conditions. The scan will also include innovative approaches to identifying and evaluating measures of effectiveness for highway projects to supplement the more traditional cost analysis and timeliness statistics.

The scan would review an agency's "division of labor" (who does what) including, but not limited to, the responsibilities of the various functional units of in-house staff and the use of engineering consultants. Typical project development from programming through letting would be explored. The items of interest range from development of project scope and schedule to identifying the human resource requirements to completing the work on schedule. An understanding of the workload and its relationship to resources would be of particular interest. The scan might also compare program size and staff size for similar work from authorization through the project letting stage. Through investigation of lessons learned, this scan tour will facilitate implementation of proven practices while minimizing time and financial resources needed for startup and transition. Specific products from the scan will include a written report; presentations at conferences and other venues; and research statements/projects that will examine specific tools and/or practices in greater depth to assess their applicability in the U.S.

#### **Original Scan Proposal Title(s):**

- 1. 10 Years Later A Look At The Implementation Of Models For Delivering Transportation Programs And Services
- 2. Organizing For Efficient Project Development
- 3. Best Practices Within Top Performers Of Program Delivery
- 4. Best Management Practices In Environmental Clearances Including Managing Responsive Resource Agencies

Last Reviewed/Revised October 26, 2010

### **Scan Team Membership**

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## **Execution Schedule**

Milestone	Anticipated Date
Chairs and Team Members Identified	July, 2008
Desk Scan Completed	September, 2008
Pre-scan Meeting Held	September, 2008
Scan Conducted	Feb- Mar, 2009
Draft PowerPoint submitted by SME	April, 2009
Draft Report Delivered to NCHRP and Panel	July, 2009
Final Report Delivered to NCHRP	December, 2009

# **Estimated Scan Cost and Funding**

Actual cost and duration: \$ 175,500, 1.5 week Anticipated fund from FHWA: \$45,000.

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