

# 2016 UDOT RESEARCH PROBLEM STATEMENT

\*\*\* Problem statement deadline is March 14, 2016. Submit statements to Tom Hales at [tahales@utah.gov](mailto:tahales@utah.gov). \*\*\*

**Title:** Project Management in Transportation Engineering - National Best Practices

**No. (office use):** 16.04.01

**Submitted By:** Jim Golden

**Organization:** UDOT - Project Development

**Email:** jimgolden@utah.gov

**Phone:** 801-360-0052

**UDOT Champion (suggested):** Jim Golden

**Select One Subject Area**

Materials/Pavements

Maintenance

Traffic Mgmt/Safety

Preconstruction

Planning

**1. Describe the problem to be addressed.**

UDOT is looking for the best practices used nationally for Project Management in Transportation Engineering including systems for the management of contracts and invoicing.

**2. Explain why this research is important.**

In anticipation of changes to ePM and Contract Management, UDOT is interested in discovering the best practices and lessons learned from other state DOT's with respect to systems in place to manage consultant contracts and invoices.

**3. List the research objective(s):**

1. How are consultant contracts and invoices managed? Paid?
2. How do other state DOT's track the project delivery process?
3. Percentages of In-house vs Consultant Pre-Construction Engineering
4. What do other states consider for on-time delivery?
5. How do other states manage Local Government projects?
6. What certification or training is required for Project Managers? What methods have proven most effective?

**4. List the major tasks:**

1. Literature search for any information currently available
2. National Survey of DOT's – could join with other states or combine with another survey
3. Summarize findings
4. Develop a list of suggested "Best Practices"

**5. List the expected results:**

1. Summary Report including any metrics available that show Benefit/Cost improvements and/or savings.

**6. Describe how this research will be implemented.**

1. Match up best practices with current training efforts to enhance the preparation of UDOT Project Managers and those desiring project management training and/or experience.
2. If, for example, a good option for managing consultant invoices is discovered, look to implement this as a time saver for PMs.

**7. Requested from UDOT:** \$20,000 - 25,000

**Other/Matching Funds:** \$

**Total Cost:** \$

**8. Outline the proposed schedule, including start and major event dates.**

Anticipate about 6 months to complete this work.