

# 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:** Streamlined Traffic Impact Studies for Conditional Access Permits

**No. (office use):** 16.03.16

**Submitted By:** Tony Lau, Blake Unguren

**Organization:** UDOT

**Email:** [tlau@utah.gov](mailto:tlau@utah.gov)

**Phone:** 801-887-3717

**UDOT Champion (suggested):** Tony Lau, Rod McDaniels, Eric Rasband

**Select One Subject Area**

Materials/Pavements

Maintenance

Traffic Mgmt/Safety

Preconstruction

Planning

## 1. Describe the problem to be addressed.

Developers are required to obtain permits from UDOT to change access to their property. As part of the permitting process, they are required to perform a Traffic Impact Study (TIS), which takes time and money. The Department has authority to waive the TIS for smaller applications at the Engineer's discretion. Applicants struggle to understand when a TIS is required and when it will provide value to a development. These unknowns drive up the cost of development and can potentially kill potential development.

## 2. Explain why this research is important.

The results of this research will increase the efficiency of the permitting process, reduce the number of access permits requiring a TIS, and save developers time, money, and risk of the unknown due to the UDOT permitting process when planning developments. The results and recommendations of this study are intended to be "ready to implement" by design so that the research can provide immediate value to the Department. This will provide new information about the TIS and when it may be waived so that the Department can reduce the time to permit an access and improve Department transparency.

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

1. Develop a semi-automated process (using a spreadsheet) that will aid the decision making process for waiving a TIS.
2. Protect UDOT's interest to maintain or improve traffic flow and the safety of the State's roadways.
3. Recommend changes to UDOT's process or rules based on national best practices and latest research.

## 4. List the major tasks:

### 1. Problem Identification

- Identify the key objective criteria in the permitting process that would allow developers to independently demonstrate whether or not a TIS is required for their access.
- Summarize questions/answers UDOT is discussing with developers.
- Gather data on current permitting practices to identify measures of effectiveness that can be used to determine the success of the streamlining efforts implemented as a result of this effort.
- Research best practices for a TIS that can be applied in Utah.

### 2. Process Development

#### *Flowchart*

Recognizing the variability in development access needs, we will create a draft flowchart of the process a developer would use to determine if a TIS is required based on the criteria identified in the previous task. We will include criteria thresholds that will be used to screen out projects that will not require a TIS.

#### *Spreadsheet*

We will then utilize the flowchart to create a simple-to-use spreadsheet that will incorporate the criteria and thresholds to determine whether or not a TIS is required. As part of this process we will perform a series of tests by running various examples through the process to "debug", update and optimize the spreadsheet.

#### *TIS Guidelines*

TIS guidelines based on national best practices and the flowchart and spreadsheet will be developed to guide traffic

engineering professionals to know and understand what information must be included in a traffic impact study.

*Process/Rule Change Recommendations*

This research will also make process and rule change recommendations to further streamline the UDOT conditional access permit program to make the process more efficient and transparent.

**5. List the expected results:**

1. The results will include a flowchart and spreadsheet that will be used by developers to determine if a TIS is required for their access change.
2. Develop “publish ready” TIS guidelines that clearly communicate to a consultant Traffic Engineer what a TIS needs to contain for various levels of intensity of development.
3. Recommendation of changes to current practice that will streamline processes with respect to a TIS.

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

- The spreadsheet will be published on UDOT’s Statewide Access Management website.
- Recommendations will be given to the UDOT permitting team for implementation guidelines
- We will present the results at UDOT Conference.
- We will present the results at a conference targeted to Access Management Professionals to share with a larger audience

**7. Requested from UDOT:** \$50000

**Other/Matching Funds:** \$10000

**Total Cost:** \$60000

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

From NTP (obligation of funding)

- Task 1: 2 months
- Task 2:
  - Flowchart – 2 months
  - Spreadsheet – 3 months
  - Development of Guidelines and recommendations – 2 months
  - Testing – 1 month
- Total Schedule – 10 months