RP 307 – Guidance on Evaluating Quality and Determining Return on Investment for Internal and Third-Party Data

Project Description:

Data is becoming increasingly more available and easier to acquire, improving analytical capabilities with numerous applications for State DOTs. However, the relative ease associated with acquiring large datasets introduces a new set of challenges. If data is not well defined and properly evaluated for accuracy and ROI, it can be misrepresentative and lead to poorly informed decisions. This problem will continue to grow as data availability grows.

Currently, ITD has no consistent means of validating the accuracy of data, defining use cases for data, or establishing an ROI for potential data investments. Without a well-defined assessment methodology that can be applied across data sets of all sizes, internally collected, or obtained from a third-party, there is no consistent mechanism for department staff to assess and prioritize data collection and purchase needs. This project seeks to establish guidelines for ITD to use for evaluating the accuracy and reliability of data, identifying use cases for third party data, and developing a methodology for assessing ROI associated with both internally collected and purchased datasets. The guidelines and methodology will be tested on three sets of data, including two that are commercially available and purchased from third-party vendors, and one that is internally collected by the Roadway Data unit.

- The objectives of this project are:
 - To establish and document a method for vetting potential investments in commercially available data and data collected by ITD to examine ROI and suitability in addressing department information need and for integration with other datasets.
 - 2. To conduct a pilot project that applies the documented method using ITD data as well as two commercially available datasets.
 - 3. To develop practical guidelines that will serve as a resource document that department staff can use in assessing the accuracy and suitability of the data for analysis and decision-making, developing use cases, and estimating ROI.
 - 4. To conduct a workshop to present the guidelines to ITD managers and analysts and to provide training on application of the guidance in an instructional setting.

Estimated Completion Date: July 2024

o Budget: \$60,000

Project Manager: Margaret Pridmore (208) 334-8221 Margaret.Pridmore@itd.idaho.gov

Principal Investigator: Rebecca Van Dyke (240) 252-5111 Ext. 120 vandyke@highstreetconsulting.com

TAC Members:

David Coladner (208) 334-8233 <u>David.Coladner@itd.idaho.gov</u>
Will Thoman (208) 334-8458 <u>William.Thoman@itd.idaho.gov</u>
Carin Pluto <u>Carin.Pluto@its.idaho.gov</u>
Josh Roll Josh.F.ROLL@odot.oregon.gov

FHWA Advisor: Lance Johnson (208) 334-9849 Lance.Johnson@dot.gov