UTC Project Information		
Project Title	Safety of Idaho Rural Highways Under 129K Trucks	
University	University of Idaho	
Principal Investigator	Ahmed Ibrahim	
PI Contact Information	aibrahim@uidaho.edu	
Funding Source(s) and Amounts Provided (by each agency or organization)	University of Washington PacTrans \$25,000 University of Idaho \$25,000	
Total Project Cost	\$50,000	
Agency ID or Contract Number	DTRT13-G-UTC40	
Start and End Dates	December 16, 2016 – January 31, 2018	
Brief Description of Research Project	A significant number of local highway jurisdictions in Idaho lack the engineering expertise and financial resources to conduct detailed assessments when requests are received to increase weight allowances for local roadways beyond the current legal limit for gross load weight of 80,000 pounds.	
	The primary objective of this project is to further develop guidance outlining procedures that can be used by local highway jurisdictions to evaluate 129,000-pound route requests. Procedures are expected to vary depending on the characteristics of the roadway. In some instances, full engineering analysis will likely not be required, but the guidance should aid local agencies in determining the level and process of review or engineering study that would be needed to evaluate requests.	
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	<ul> <li>Enhance the current process to include step-by-step procedures that could be used to evaluate truckers requests to increase load limits on local routes. This would include identifying the types of data needed, resources available to perform assessments, and the factors to consider and the criteria to use in evaluating potential impacts. More specifically, the process will be implementable to include:</li> <li>traffic volumes and capacity (AADT, CAADT, design volume, speed limits) and how to obtain that information.</li> <li>roadway geometrics (lane width, shoulder width, road grades, road curvature) and how to obtain that information.</li> </ul>	

	<ul> <li>Consideration of possible truck configurations and dimensions (vehicle length, width, height) under various weight limits, including impacts on axel weights and the extent of off-tracking.</li> <li>Evaluation of available crash data</li> <li>Examination of bridge and highway structure length and capacity for existing and proposed axel weights and truck axel configurations (ITD's Bridge Section can generally perform necessary analysis for structures greater than 20 feet in length) Identification of criteria for determining if an evaluation of structures less than 20 feet in length is required.</li> <li>Review of pavement condition/deficiencies and comparison of axel weights for varying truck configurations expected under current and proposed weight limits. Identification of criteria for determining information on soil characteristics and base materials, is necessary to assess the impact of raising weight limits.</li> </ul>
Impacts/Benefits of Implementation (actual, or anticipated)	The key deliverable of the project is an in-depth guidance document for use by local highway jurisdictions that walks them through procedures necessary for evaluating 129,000-pound route requests. In addition, the document provides guidance on when a full engineering analysis is warranted and the types of work required. The results of this project allow local highway jurisdictions to assess 129,000-pound trucking requests on local roadways which will then connect to the state and federal highway systems allowing for more efficient freight movement. Increasing truck load limits from 80,000 pounds to 105,500 or 129,000 pounds provides significant increase in freight loads and potentially reduces the number of trucks using the highway system. Overall, this increases the economic benefit to the regions businesses while reducing roadway use and congestion. Such actions will ultimately keep Idaho industries competitive in the national and international marketplace.
Web Links <ul> <li>Reports</li> <li>Project Website</li> </ul>	