Need Statement Title: MnDOT Haul/Detour routes - impacts on local roads

Need Statement: Describe the problem or the opportunity. Include background and objective.

Currently, MnDOT, via their Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities between MnDOT and Local Units of Government, will develop an agreement with local agencies to temporarily use local roads for haul roads or detour routes. The compensation resulting from current methodology does not appear to be adequate from a local perspective and does not compensate a local agency when using a roadway that has higher than a 9-ton posting. Methodology has not been updated and local agencies are investing more local property and sales tax dollars into their systems beyond the gas tax.

Local agencies would like a process that better defines the road life consumed by the traffic added from detours/haul routes. Is there a newer, better, definitive way to measure ESALs; are MnDOT’s calculations based on factors that are outdated?

There have been numerous studies and synthesis done over the years and MnDOT is currently evaluating alternatives (FWD method, Gas Tax method, and ESAL method) to include with the Pavement Design Manual.

The focus of this study should:
- Synthesize the past and current information (including what other States are doing).
- Work with stakeholders to develop an agreed upon approach for measuring/assessing road life consumed and determine “equivalent compensation.”
- Develop a web-based program for state/cities/counties to use to uniformly assess and compensate for local road authorities from use as MnDOT Haul/Detour routes.

Suggested Deliverables:
- Synthesis of past information
- New policy/procedure
- Web-based tool
How does this project build upon previous research (include title or reference to a completed research effort)?

- LRRB 2015 – Synthesize Benefits and Costs of Increasing Truck Load Limits (how to calculate)
- LRRB – Traffic Generating Development and Roadway Life Consumption
- Cost Participation Policy for Detours
- FHWA and NRRA - Flooded Road Project The University of New Hampshire is developing the tool, which looks at damage calculations and costs related to loading of roadways.
- MnDOT (Tim Andersen) is working FWD method, Gas Tax method, and ESAL method. Chapter 10 of the pavement manual. Ongoing

Provide names to consider for a Technical Advisory Panel:

MCEA OSOW Committee Members
Cory Slagle, Washington County
Gerritt Bangma, Washington County
John Pratt, Detroit Lakes
Kristine Elwood, MnDOT State Aid
Chris Kufner, MnDOT State Aid
Guy Kolinhofe, Dodge County
Tim Andersen, MnDOT Pavement Office
Tom Styrbicki, MnDOT’s Agreement Office