

NDDOT Truck Harmonization Study - Update

Killdeer Roundtable Meeting
November 29, 2016

**North Dakota
Truck Harmonization Study**



North Dakota Local Technical
Assistance Program

Truck Harmonization Study - update

- ND Legislature - HB 1012 (NDDOT Budget)
 - Directed the Department of Transportation to collaborate with the Upper Great Plains Transportation Institute to **study** the impacts in this state of harmonizing truck size and weight regulations with surrounding states
 - Commercial Truck Envelope Limits :
 - 129,000 LBS. Gross Vehicle Weight
 - 110 feet Overall Length
 - 100 foot cargo carrying length (A-train)

Truck Harmonization Study - update

- Executive Steering Committee
 - Local and State government entities
 - Assoc. of Counties, Township Officers Assoc., League of Cities, Dept. of Trnsp., Highway Patrol,
 - Industry Representatives & Stakeholders
Agriculture, Motor Carrier Industry, Freight
- Other Contributors
 - Agriculture, Motor Carrier Industry, AGC of ND, UGPTI team

Truck Harmonization Study - update

- Primary Components of the Study
 - 27+ Tasks in NDDOT/UGPTI Study Process
 - 10 Generalized Areas/Tasks
 - Past relevant studies
 - Adjacent jurisdictions - vehicle size and weight regulations
 - Identification of Key Trucks to Analyze—8 selected
 - Data mining and costing analysis of key trucks
 - Outreach to Various Entities
 - Local Road Intersection (accessibility analysis)
 - Safety Analysis
 - Economic Benefits Analysis
 - Pavement Analysis
 - Bridge Analysis

Truck Harmonization Study - update

- Identified Two Categories of Trucks for Study
 - Trucks that might lose GVW with Full Harmonization
 - Trucks that might gain GVW with Full Harmonization



Truck Configurations Identified as Important to Study



Key Findings

- Changing from ND's existing exterior bridge formula to the interior/exterior bridge formula would:
 - Reduce the allowable legal loads on a triple axle up to 4500 pounds on non-interstate
 - Increase law enforcement time required to verify a vehicles legal weight
 - Use of the interior/exterior bridge formula would reduce confusion and improve efficiency of interstate trucking.

Key Findings

- Stakeholder Outreach
 - commercial shippers would upgrade their fleets to take advantage of increases in allowable truck size and weights.
 - Agricultural producers may be slower to upgrade their fleets for various reasons
 - Townships expressed concerns about costs to local roads and bridges.
 - Cities and counties expressed similar concerns

Key Findings

- Local Road/Street Connectivity Issues
 - Inadequate roadway intersection geometry to accommodate longer trucks that require larger turning radii
 - County and township road intersection geometric needs analysis yielded from \$130 million to \$306 million of impacts statewide??
 - Increased traffic delay in urban areas and signalized intersections
- Intersections
 - Cost impact
 - Significant - dependent on right of way and vehicle configuration

Key Findings

- Completed analysis of DOT Bridge System
 - Used VIRTIS software to analyze bridges
 - Similar procedure to USDOT study
- Analysis on County Bridge System
 - Unable to complete at this time
 - Limited bridge data available
 - Use Load Testing to determine bridge strengths
 - DOT in the process of entering data and creating bridge load ratings
 - Currently entering data on steel bridges
- Bridges – costs significant

Key Findings

- Relevant Study
- Idaho Study
 - 105,500 to 129,000 pounds GVW
 - 10 year pilot
 - 38 routes were approved for testing with industry
 - All users had to submit trip summary info
 - IDOT reviewed bridge and pavement deterioration and found little difference between test and control routes

Key Findings - Relevant Study

- Idaho Implementation/Legislation
- State System
 - Select US routes were raised to 129,000 lbs.
 - Additional routes considered on case by case basis through public submission process
- County/Local Roads System
 - Routes considered on case by case basis through public submission process
 - Authorization granted only through county/local official approval
 - Typically road segment
- Interstate System
 - 2015 December Omnibus Appropriation
 - Congress gave Idaho authority to go to 129,000 lbs.

Executive Steering Committee

- Potential Comments
 - Does not endorse entire system increase to 129,000 lbs. GVW
 - Select corridors
 - Divisible load movements
 - GVW: 105,500 lbs. and less
 - No change with current law
 - GVW: 105,501 lbs. – 129,000 lbs.
 - Legislation similar to Idaho business model
 - Already allow longer combination vehicles on corridors.
- Work with Legislators

Comments

<http://www.ugpti.org/downloads/truck-harmonization/>

December 1, 2016

North Dakota Truck Harmonization Draft Study



This effort responds to the North Dakota Legislature's direction to North Dakota Department of Transportation (NDDOT) to collaborate with the Upper Great Plains Transportation Institute (UGPTI) to study the impacts in North Dakota of harmonizing truck size and weight regulations with states in the western states transportation alliance regarding standard commercial truck envelope limits of 129,000 pounds gross vehicle combination

weight or 100 foot cargo carrying length and potential implications. The study was done in cooperation of various state agencies, producers, suppliers, shippers and associations that have an interest in the trucking regulations and the infrastructure of North Dakota.

For question or comments on the report, contact truckharmonization@ugpti.org

Downloads

- [Executive Summary \(PDF, 328K\)](#)
- [Draft Report \(PDF, 2588K\)](#)