

Interstate Access Improves Timber Trucking Safety and Efficiency: Central WI Case Study

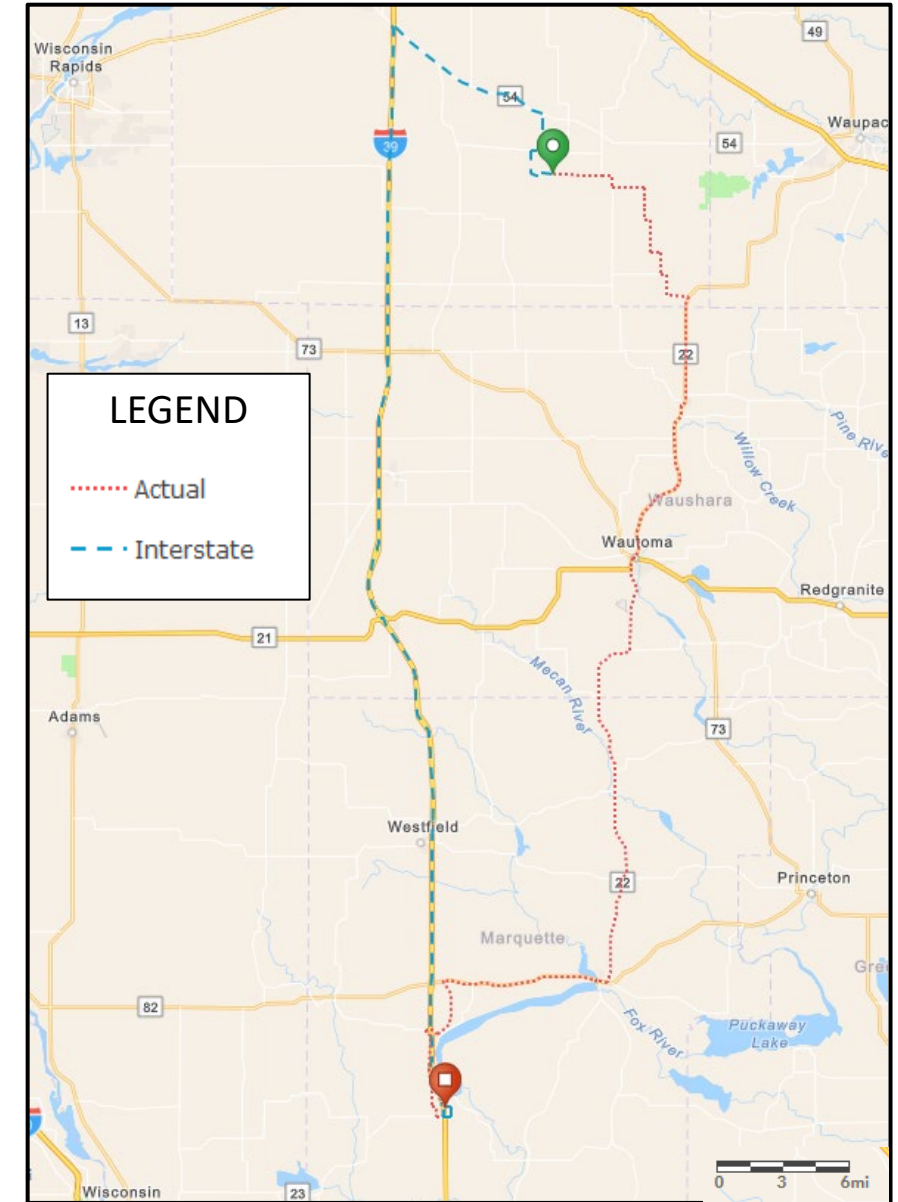
Prepared* by Charlie Blinn¹, Michael Carson¹, and Tim O'Hara²

Summary: In Minnesota and Wisconsin, weight limits for log trucks are typically higher on state and US highways than on interstate highways. Consequently, loaded log trucks must reduce load sizes or avoid traveling on interstate highways. Applying state weight tolerances to interstate highways would likely reduce accident risk, fuel consumption, CO2 emissions, and transportation costs.

The example below is from an actual timber delivery from a harvest in Portage County, WI to a mill in Endeavor, WI. To comply with current regulations, the log truck traveled Wisconsin Trunk Road 22 rather than I-39. Traveling on I-39 would allow the state-legal, loaded log truck to bypass Wild Rose, Wautoma, and Montello. The interstate route has 78% fewer intersections, 83% fewer towns, and avoids 4 school zones.

	Interstate Route	Actual Route	
Variable	I-39	WIS-22	Interstate Benefit
Travel Time (minutes)	1hr 05min	1hr 24min	22%
Distance (miles)	61.4	62.5	2%
Average Travel Speed (mph)	56	45	24%
Number of Intersections	28	127	78%
Stop Signs/Lights	4	11	64%
Towns/Cities	1	6	83%
School Zones	0	4	100%
Hard Brakes/Turns	-	0	-
Fuel Consumption	11.3 gal	13.1 gal	14%

Figure 1. Map of timber delivery routes contrasting interstate route (dashed blue) with actual route traveled (dotted red) in central Wisconsin.



¹University of Minnesota Department of Forest Resources. ²Forest Resources Association. *Results are preliminary at time of publication: 3/18/2021.

Interstate Access Improves Timber Trucking Safety and Efficiency: Eastern WI Case Study

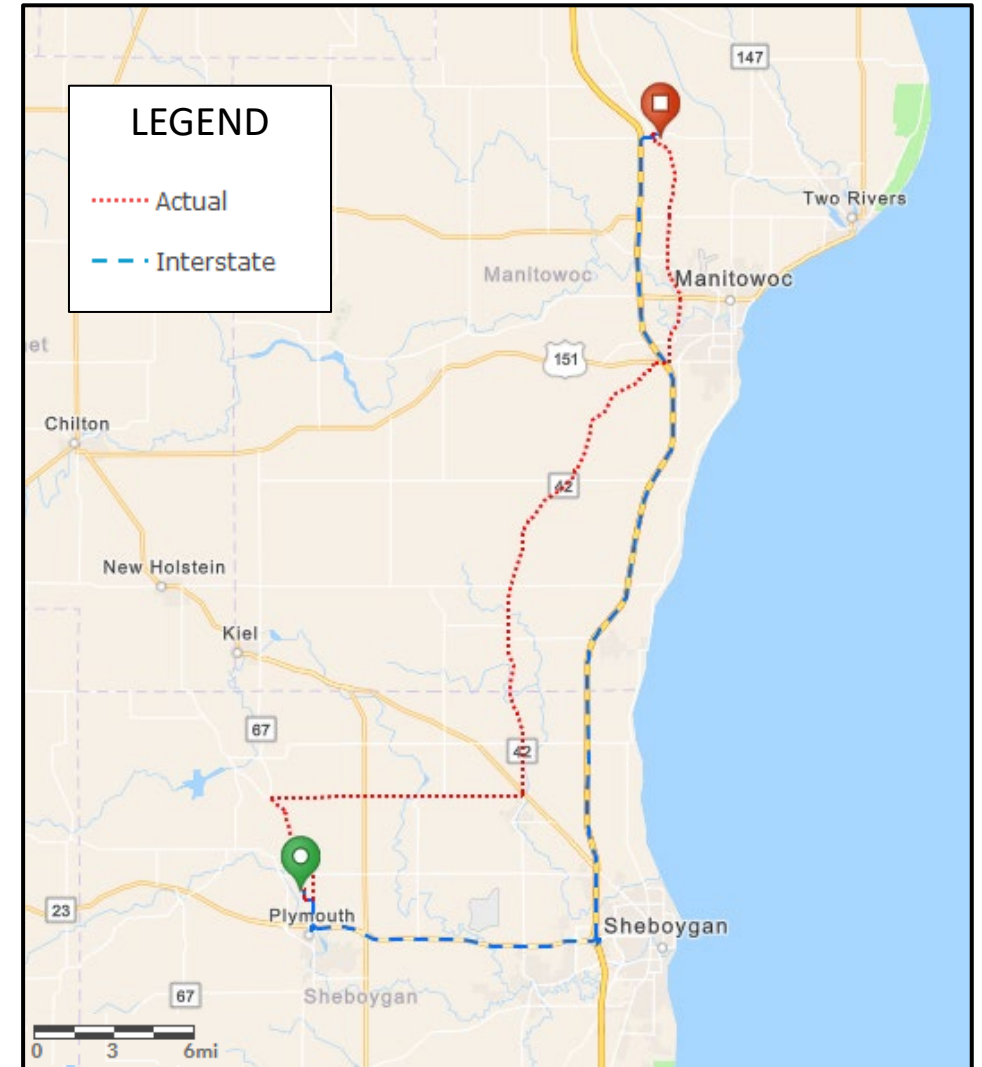
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Summary: In Minnesota and Wisconsin, weight limits for log trucks are typically higher on state and US highways than on interstate highways. Consequently, loaded log trucks must reduce load sizes or avoid traveling on interstate highways. Applying state weight tolerances to interstate highways would likely reduce accident risk, fuel consumption, CO2 emissions, and transportation costs.

The example below is from an actual timber delivery from a harvest in Sheboygan County, WI to a mill in Manitowoc, WI. To comply with current regulations, the log truck traveled Wisconsin Trunk Road 42 rather than I-43. Traveling on I-43 would allow the state-legal, loaded log truck to bypass Manitowoc, Kellners Corner, Howard's Grove, and Elkhart Lake. The interstate route has 88% fewer intersections, 83% fewer towns, and avoids all school zones.

Variable	Interstate Route	Actual Route	Interstate Benefit
	I-43	WIS-42	
Travel Time (minutes)	43 min	58 min	26%
Distance (miles)	46.6	44.3	-5%
Average Travel Speed (mph)	65	46	41%
Number of Intersections	13	110	88%
Stop Signs/Lights	4	16	75%
Towns/Cities	1	6	83%
School Zones	0	1	100%
Hard Brakes/Turns	-	0	-
Fuel Consumption	8.8 gal	9.4 gal	6%

Figure 1. Map of timber delivery routes contrasting interstate route (dashed blue) with actual route traveled (dotted red) in eastern Wisconsin.



¹University of Minnesota Department of Forest Resources. ²Forest Resources Association. *Results are preliminary at time of publication: 3/18/2021.