

Truck Weights in Michigan



Presentation for the
House Appropriations Transportation Subcommittee
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Trucks & Michigan's Economy

- Trucks are essential to Michigan's economy.
 - 67% of all freight tonnage moving in Michigan.
- Carry the great majority of Michigan freight by value.



Michigan Legal Weight History

- Pre-WWII
 - No number of axle limits.
- 1942-1967
 - Limits on overall length.
 - Limited to 13 axles.
 - 169,000 pound Gross Vehicle Weight (GVW).
- 1967
 - Limited to 11 axles.
 - 164,000 pound GVW.

Michigan Truck Weight Laws

- Michigan truck-weight law is based on maximum axle loadings, not gross vehicle weight (GVW).
- Michigan allows more axles.
 - With lower weight per axle.
 - At a greater gross vehicle weight.

Federal Weight Law

- 1982
 - 80,000 pound GVW.
- Specifically
 - Allowed on the Interstate system and other designated highways.
 - For certain distances off these highways to terminals.

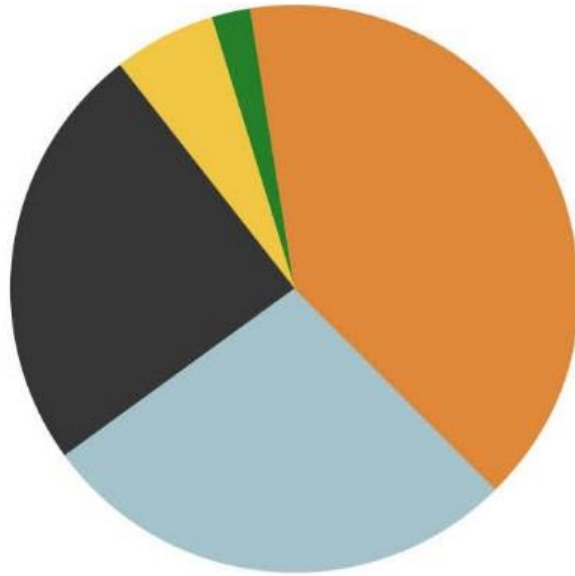


Federal Grand Father Clause

- Greater than 80,000 pounds GVW.
- Spread over more than five axles.

Comparison to Federal Law

- Maximum GVW allowed on a “federal-weight-law truck”
 - 80,000 pounds.
 - Four of its five axles carrying 17,000 pounds each.
 - Steering axle carrying 12,000 pounds.
 - Standard “18 Wheeler”
- Maximum GVW on the heaviest “Michigan-weight-law truck”
 - 164,000 pounds.
 - Eleven properly-spaced axles.
 - Most of these axles carry only 13,000 pounds each.



How Much Do Trucks Weigh?

Most trucks weigh under 26,000 pounds and only a small fraction are over 80,000 pounds. The theoretical maximum is 164,000 pounds on two trailers, but very few trucks can carry this much.

111,470 Trucks Registered in Michigan

- 41%** 46,150 medium trucks under 26,000 lbs. GVW
- 28%** 31,575 in interstate commerce (International Registration Plan, or IRP)
- 25%** 27,360 other trucks between 26,000 and 80,000 lbs.
- 6%** 6,385 able to carry more than 80,000 lbs.
- 2%** (2,649 of those registered to carry over 145,000 lbs.)

Michigan Law – Engineering Impact

- The alternative to a single Michigan combination carrying 160,000 lbs. on 11 axles is two standard trucks carrying 160,000 lbs. on 10 axles.
- Pavement research has shown that these two smaller trucks.
 - Cause about 60 percent more pavement damage than does the single heavier truck.
 - Due to their higher axle loadings.
 - Extra weight of an additional tractor

Michigan Law – Economic Impact

- Michigan industries and businesses are more competitive.
- Freight rates are lower for commodities that can use our heavier vehicles.
- Less fuel is burned to transport the same weight of cargo.
- Less traffic congestion.

Michigan Law – Safety Impact

- Vehicle braking capability and resistance to overturning are improved.
- Fewer trucks on the road.
 - Each 164,000-pound truck can carry the cargo of a little over two 80,000-pound trucks.
 - Congestion on Michigan's highways is reduced because fewer trucks are required to move our freight.
 - Without Michigan's axle weight law

Summary

- The Michigan Department of Transportation believes that Michigan's truck weight law is based on sound research and results in:
 - Less highway damage.
 - Improved safety.
 - Benefits the economy by being able to transport their goods more efficiently and economically.