Analysis of Truck Weight Limit Regulations

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Kentucky Transportation Center
College of Engineering, University of Kentucky, Lexington, Kentucky

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Kentucky Transportation Cabinet
Commonwealth of Kentucky

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176 Raymond Building • Lexington, KY 40506 • 859.257.6898 • www.ktc.uky.edu

University of Kentucky

Research Report
KTC-21-15/SPR19-570-1F

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P. Gayle Marks, Ph.D.
Research Scientist

Jon Wilcoxson, P.E.
Research Engineer

Bryan Gibson, Ph.D.
Program Manager

Chris Van Dyke, Ph.D.
Research Scientist

Jennifer Walton, P.E.
Program Manager

and

Doug Kreis, Ph.D., P.E.
Associate Director

Kentucky Transportation Center
College of Engineering
University of Kentucky
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16. Abstract

In the United States vehicle weight limits are set by laws and regulations enacted at the state and federal levels. On interstates the maximum allowable gross vehicle weight is 80,000 lbs. States use different rules for permitting overdimensional and overweight (OD/OW) vehicles, and most have carve outs that exempt specific commodities from standard weight limits. This results in a complex legal and regulatory landscape that enforcement personnel can find difficult to negotiate. This report discusses strategies that can be adopted in the state of Kentucky to improve enforcement and mitigate infrastructure damage caused by OD/OW loads. After presenting a thorough review of laws pertaining to vehicle weight limits at the national and state levels, the report presents the results of a nationwide survey administered to agency staff directly involved in weight limit enforcement. Survey respondents reported that OW trucks inflict a disproportionate amount of damage on pavements and bridges that permitting fees and fuel taxes are insufficient to ameliorate roadway damage caused by these vehicles, and that commodity exemptions and staff shortages make enforcement a challenging proposition. In addition to sharing many of the opinions of agency staff elsewhere, Kentucky personnel said that many bridges and roadways are not designed to withstand repeated loads of 80,000 lbs. of gross vehicle weight, heavier vehicles with commodity exemptions are especially damaging to collector and local roads, and that enforcement efforts need to be redoubled. Recommendations for improving weight limit enforcement in Kentucky cover areas such as legislation (e.g., reducing the number of commodity exemptions, using axle-based weight limits), highway design, enforcement and judicial practices, and permitting and fees. Implementing these recommendations can help Kentucky modernize and standardize its enforcement efforts.

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Executive Summary

In the United States (US) vehicle weight limits are set by laws and regulations enacted at the state and federal levels. On interstates the maximum allowable gross vehicle weight (GVW) is 80,000 lbs. In most states — including Kentucky — some commodities receive exemptions, meaning that vehicles hauling these commodities can legally exceed normal GVW limits. Some exemptions require a permit but others do not. This produces a complex regulatory landscape that complicates enforcement of weight limits. This report discusses strategies the Kentucky Transportation Cabinet (KYTC) and the state of Kentucky can adopt to improve enforcement and mitigate infrastructure damage caused by overdimensional and overweight (OD/OW) loads. After synthesizing laws at the national level, the report delves into Kentucky Revised Statutes (KRSs) and Kentucky Administrative Regulations (KARs) which govern the movements and permitting of OD/OW vehicles.

Researchers also conducted a survey of state departments of transportation and law enforcement agencies about truck weight limit policies and regulation. The survey yielded 40 responses. Survey participants observed that despite OW vehicles being far outnumbered by regular vehicles, they are responsible for a disproportionate amount of infrastructure damage. Agencies are receiving more permit applications for OD/OW loads, but fuel taxes and permitting fees are not sufficient to fix roadway damage. And pavement designs typically do not factor in OD/OW vehicles. Enforcement personnel also confront difficulties inspecting vehicles and issuing citations because of commodity exemptions. Enforcement tends to be most robust when states combine weigh station operations with road patrols. Advanced technologies such as virtual weigh-in-motion stations and automated permitting and routing systems facilitate more targeted enforcement on bridges and highways.

KYTC district staff share many of the concerns expressed by personnel in other states. They do not feel like the state's bridge and highway network can support OW vehicles, and many roadways are not designed to withstand repeated GVWs of even 80,000 lbs. Permit fees are not high enough to mitigate infrastructure damage, and given the number of posted bridges, identifying structures that are able to carry heavy loads is difficult. Enforcement activities that were inconsistent to begin with are growing more sporadic due to staff shortages and funding concerns. Drivers also tend to ignore postings and circumvent weight stations. Staff are united in their view that strong enforcement of weight limits is necessary.

Taking the literature review, in-depth analysis of regulatory and statutory provisions, and survey data as a point of departure, several possible action items for KYTC consideration are proposed to mitigate problems associated with weight limit exemptions, permitting, OW trucks, and illegal loads. Table E1 summarizes these strategies by domain. Kentucky's General Assembly should revisit KRSs and KARs that are obsolete, contain ambiguous language, or which contradict one another.

Table E1 Strategies to Improve Weight Limit Enforcement

Domain	Action Item
Legislation	• Reduce the number of commodity exemptions; standardization across industries • Investigate basing limits on axle weights
Enforcement and Judicial	• Increase law enforcement staffing and resources • Create specialized enforcement units that focus on OW vehicles • Enhance training efforts for law enforcement officers • Increase the number of citations issued through targeted enforcement • Prosecute citations and increase fines for violations • Implement advanced technologies to improve tracking of OW vehicles
Highway Design	• Factor OW loads into pavement design
Bridges	• Install advanced signage • Use special enforcement units to target bridges
Permitting and Fees	• Raise permit fees
Data Management	• Improve data collection to prioritize bridge maintenance and repair

Chapter 1 Introduction and Background

1.1 Overview

In the United States (US) vehicle weight limits are set by laws and regulations enacted at the state and federal levels. On interstates the maximum allowable gross vehicle weight (GVW) is 80,000 lbs. In some states, GVW can exceed this figure based on grandfathered laws which pre-date federal weight limits. Federal and state laws prohibit vehicles from exceeding posted weight limits on structures as heavier vehicles can damage infrastructure. States must abide by federal weight limits on interstates or jeopardize federal appropriations. But states can establish weight limits for roads and bridges under their authority. These are typically set based on maximum GVW or the weight per vehicle axle. States also establish statutes, regulations, and policies that let some vehicles exceed legal limits, either through special overweight permit issuance or statutory exemptions.

Nearly all states have weight limit exemptions that cover particular commodities (e.g., those integral to a state's economy), vehicle types, routes, or season. These may increase cargo efficiency, bolster safety, and reduce traffic congestion and pollution (National Research Council (US) 1990; Luskin and Walton 2001; Adams et al. 2009; Ali et al. 2020). Grandfathered weight limit laws also create challenges. Data on the impacts of increasing weight limits or modifying truck configurations are too scarce to make policy recommendations (e.g., TRB 2002). US Secretary of Transportation Undersecretary Peter Rogoff reiterated this point in 2015:

> "At this time, the Department believes that the current data limitations are so profound that the results cannot accurately be extrapolated to predict national impacts. As such, the Department believes that no changes in the relevant truck size and weight laws and regulations should be considered until these data limitations are overcome" (Rogoff 2015).

States do not collect or share enough data to clarify the scope of issues related to weight limits (e.g., impacts to infrastructure, public safety, enforcement, and agency costs). Despite a lack of data, a 2002 Transportation Research Board (TRB) committee concluded that federal weight limit exemptions make standard limits less effective and motivate heavy trucks to bypass interstates for less restrictive roads. Most states maintain two sets of weight limits — one for interstates and one for state highways. States use different tactics to comply with federal standards and prevent the federal government from withholding funds, such as writing federal weight limit compliance clauses into state statutes or allowing state legislatures to modify limits when federal limits change (FHWA 2016a).

GVW limits or axle weight limits may differ between neighboring states. Because states adopt incommensurate definitions for commodities and what constitute divisible and non-divisible loads, a legal load in one state may be illegal in another. Variations in weight requirements between states complicate route coordination.

Despite being underrepresented compared to other vehicle types, heavier trucks inflict a disproportionate amount of damage on pavements and bridges, reducing life-cycles and increasing maintenance costs (Ali et al. 2000). Despite this — and limited crash data — states still opt to raise weight limits above 80,000 lbs. (Luskin and Walton 2001; Neeley and Richardson 2009; FHWA 2015; FHWA 2016a; TRB 2018). The number of overweight (OW) trucks on roads has increased and states are issuing more overdimensional/overweight (OD/OW) permits for longer, wider, taller, heavier loads (Adams et al. 2013). Many US infrastructure assets now exceed their design lives, and heavy trucks are contributing to faster deterioration even as governments cannot afford repairs (TRB 2019). Permitting fees collected by states are insufficient to cover the costs of infrastructure damage from heavy trucks.

Exemptions and the complex structures of weight limit laws can prevent states from knowing the maximum weights carried by particular vehicles. OD/OW permits have been issued for decades, but the percentage of OW vehicles using state highways is not well documented (Dey et al. 2015). Siekmann et al. (2011) found that 16.8% of trucks in Tennessee were over the legal GVW and 54% exceeded axle weight restrictions. Weigh-in-motion (WIM) data from South Carolina revealed 8.3% of trucks were OW (Dey et al. 2015), while a study of Arizona found that up to 30% of vehicles in that state exceed weight limits (Straus and Semmens 2006). Complex or opaque weight limit rules can

push heavy vehicles onto lower class state roads or local roads whose pavement designs are not intended to carry heavy weight consistently.

Overweight trucks are not factored into pavement or bridge design even though they reduce service lives (Prozzi et al. 2012). Yet they can reduce pavement service life between 30 and 50 percent (Rys et al. 2016). In the US, local roads account for 80 percent of road miles and carry 15 percent of combination truck miles (TRB 2018). Because local roads usually have fewer pavement layers than major roads, heavy vehicles inflict greater damage. Most local governments have fewer resources for maintenance and enforcement than state governments (TRB et al. 2018). Trucks frequently take detours to circumvent obsolete and substandard bridges, which increases transportation costs and diminishes business productivity (Dey et. al 2015; Middleton and Li 2013). Once a bridge's condition deteriorates to the point that the structure lacks the carrying capacity for maximum weight loads, federal statute and regulations mandate increasing inspection frequency along with posting weight limits or reducing weight limits.

Enforcement activities are impeded by the volume of heavy trucks on roads and the complexity of commodity-based exemptions. Because limited staffing and resources hamper enforcement, many states issue fewer OW citations — including Kentucky. Local courts issuing few penalties and convictions also diminishes enforcement. The nationwide patchwork of weight limits, regulations, exemptions, and permitting generates a complex system linking together federal, state, and local governments; industries; law enforcement; and judicial systems. The impacts of heavy vehicles on infrastructure are wide-ranging (Chowdhury et al. 2013).

1.2 Research Objectives

This report explores regulations and policies related to Kentucky's truck weight limits. Kentucky Transportation Center (KTC) researchers reviewed federal standards, state requirements (Kentucky Revised Statutes [KRS] and Kentucky Administrative Regulations [KAR]), and state exemptions; documented Kentucky's weight limit laws; and identified discrepancies or ambiguities. KTC also looked at how other states approach truck weight limits through a national survey of state departments of transportation (DOTs), motor carriers, and law enforcement. KTC also identified methods for streamlining Kentucky's weight limit policies.

1.3 Report Structure

The rest of this report is organized into four chapters. The contents of each chapter are summarized in Table 1.1.

Table 1.1 Report Contents

Chapter	Content
2	• Describes the history of weight limit regulations in the US • Reviews current federal legislation and bridge rating requirements • Summarizes key findings from recent studies on weight limits
3	• Reviews Kentucky statutes and regulations on weight limits
4	• Presents the results of a national survey on weight limit policies
5	• Proposes best practices and strategies for improving KYTC's weight limit policies

Chapter 2 Literature Review

2.1 Background on Vehicle Weight Limit Laws

Until 1956 states regulated truck size and weight limits independently but the Federal Aid Highway Act of 1956 set national weight limit standards for vehicle weights operating on the interstate system. Until 1975, the GVW limit on interstates was 73,200 lbs., with limits of 18,000 lbs. on a single axle and 32,000 lbs. on tandem axles. In 1975, pursuant to the Federal-Aid Highway Act Amendments of 1974 the GVW limit increased to 80,000 lbs.; single and tandem-axle load limits increased to 20,000 pounds and 34,000 pounds, respectively. The Surface Transportation Act of 1982 (STAA) authorized the National Network (NN) of Highways, which encompasses roughly 65,000 miles beyond the National Highway System. STAA contains several length provisions for tractor-semitrailer and tractor-semitrailer-trailer combinations and limits commercial motor vehicle widths to 102 inches. Because the federal government does not mandate height limits, states may establish their own regulations. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) placed a freeze on longer combination vehicles (LCVs) — they are prohibited except where grandfathered by states where they were operational on or before June 1, 1991. As part of the Federal-Aid Highway Act Amendments of 1974 Congress also adopted the Federal Bridge Formula (FBF), or Bridge Formula B. The FBF establishes the maximum weight a set of axles may carry on an interstate.

2.1.1 Current Federal Vehicle Weight Limit Law

23 USC 127 describes federal statutes that regulate vehicle weight limits on interstates as well as state-level exemptions. States must enforce vehicle weight limits on interstates or incur federal budget withholding. The US Secretary of Transportation may withhold 50% of a state's transportation fiscal year apportionment if it does not abide by the following GVW limits for interstates and defense highways:

- 20,000 lbs. on a single axle (including enforcement tolerances)
- 34,000 lbs. on a tandem axle (including enforcement tolerances)
- 80,000 lbs. on 5 axle combinations or more

The GVW limit is 80,000 lbs. on all interstates. Four exceptions allow states to impose a different weight limit: (1) states with laws or regulations grandfathered in place prior to federal limits enacted in 1956 or 1974; (2) segments of Interstates 29 and 129 in Iowa, (3) non-divisible loads that cannot be divided or dismantled (including fluid milk); and (4) operating in compliance with special permits under state laws.

The Fixing America's Surface Transportation Act (FAST Act) (P.L. 114-94) ushered in several changes, including weight standards and exemptions for emergency vehicles. The legislation also redefine fluid milk products as non-divisible loads, which lets states permit these commodities above federal limits pursuant to state laws and the FBF. The law authorizes vehicles that run on natural gas to exceed the weight limit on the power unit by up to 2,000 lbs. on interstates. The Consolidated Appropriations Act, 2019 extends this provision — it includes the same exemptions for vehicles that run on natural gas or an electric battery. The FAST Act also sanctions unrestricted operations of covered heavy-duty tow and recovery vehicles. Title 23 allows vehicles with higher GVWs on interstates in some states (e.g., Idaho, North Dakota).

Kentucky has exemptions for some interstate segments. In 2019, Title 23 amended subsection (i) to include the Consolidated Appropriations Act, 2019. The Act designates sections of the William H. Natcher Parkway as part of Interstate 65 and the Jullian M. Carrol Parkway as Interstate 69. If a vehicle operated legally on a road segment before it was integrated into the Interstate Highway System it may continue to operate there irrespective of federal weight limit requirements in subsection (a). On the segments listed below and in Figure 2.1, vehicles need not adhere to federal weight limits as long as they do not exceed a GVW of 120,000 lbs.

- I-69 from the Interstate Route 24 interchange, near Eddyville, to the Edward T. Breathitt (Pennyrile) Parkway interchange

- I-69 along the former Edward T. Breathitt (Pennyrile) Parkway from the Wendell H. Ford (Western Kentucky) Parkway interchange to near milepost 77, and on new alignment to an interchange on the Audubon Parkway, if the segment is designated as part of the Interstate Highway System
- I-165 Spur along the former William H. Natcher Parkway from Interstate 65 in Bowling Green to United States Route 60 in Owensboro
- I-69 along the former Julian M. Carroll (Purchase) Parkway from the Tennessee state line to the interchange with Interstate 24 near Calvert City
- I-169 Spur along the former Wendell H. Ford Parkway from the interchange with I-165, formerly the William H. Natcher Parkway in Ohio County, west to the interchange of the Western Kentucky Parkway with the Edward T. Breathitt (Pennyrile) Parkway
- I-169 Spur along the former Edward T. Breathitt (Pennyrile) Parkway from Interstate 24 north to Interstate 69

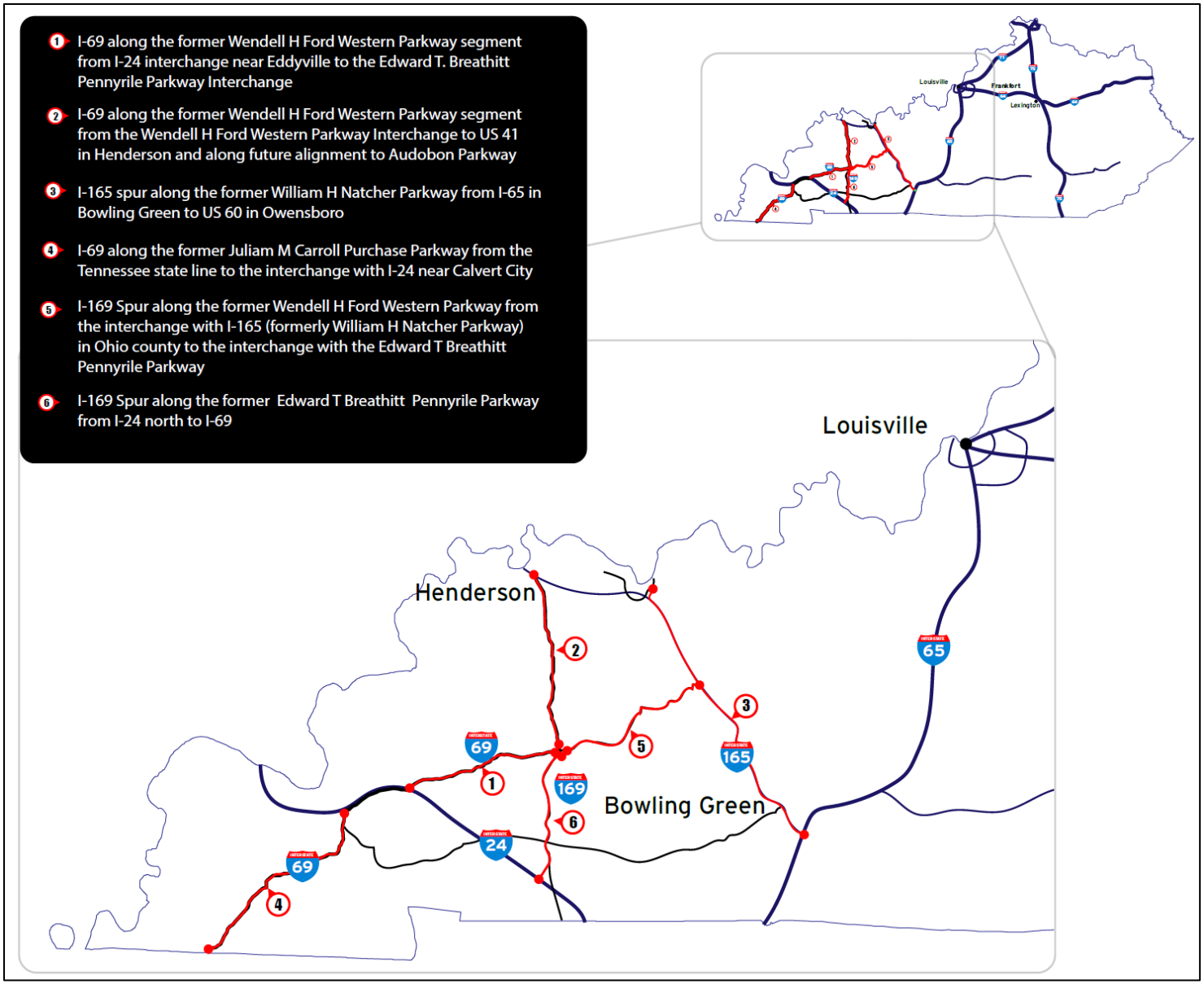

Figure 2.1 Kentucky Interstate Exemptions

Kentucky can issue permits for non-divisible loads or GVWs exceeding 120,000 lbs.

Federal code prohibits exceeding weight limits on interstates and requires states to provide reasonable access to conventional vehicles on the NN. The reasonable access rule holds that states may not create or enforce laws that prohibit vehicles from accessing food, fuel, repairs, and rest to or from interstate terminals and facilities. 23 CFR Part 658 identifies the highways on the NN and prescribes policies governing truck and bus size and weight on the network.

Several proposals have been advanced to increase federal interstate weight limits above 80,000 lbs. Multiple federal studies have investigated the impacts of weight limit changes on US roadways. Policymakers and stakeholders have also wrestled with raising federal limits. In 2010 Congress debated allowing states to increase the GVW limit to 97,000 lbs. for six-axle trucks (Cornish 2010). Congress rejected legislation to raise federal limits to 91,000 lbs. in 2015 after the U.S. Department of Transportation (USDOT) advised against higher limits. The agency cited as concerns significantly higher crash rates in test states, higher out-of-service brake violations, and higher estimated bridge costs (Coalition Against Bigger Trucks). In 2017 manufacturing groups again requested a federal GVW limit increase to 91,000 lbs. However, some trucking organizations have asked Congress to not increase limits because heavier trucks significantly damage local roads and bridges and repair costs would be levied on motor carriers.

2.1.2 Purpose of the Federal Bridge Formula

Congress established the FBF to limit the weight-to-length ratios of vehicles crossing bridges. According to the FHWA, complying with weight-to-length ratio limits is done by spreading weight over additional axles or increasing the distance between axles (Bridge Formula Weights 2019). The FBF is calculated with the following equation:

$$W = 500\left(\frac{LN}{N-1} + 12N + 36\right)$$

where:

- W = overall gross weight on any group of two or more consecutive axles to the nearest 500 lbs.
- L = distance in feet between the outer axles of any group of two or more consecutive axles
- N = number of axles in the group under consideration

Allowable weight depends on the number of axles and the distance between axles (Sivakumar et al. 2007). The FBF allows for higher vehicle weights if the load is spread across more axles. But multiple axles make turning and cornering more difficult. Industry has attempted to rectify this problem by adding lift axles. Operators may also use dummy axles and spread tandems to comply with the FBF. Heavy operators will add lift axles to optimize payloads (Sivakumar et al. 2007).

Motor carriers can use the Federal Bridge Formula Weight Table to verify compliance with the FBF. Many states, however, produce their own weight tables to account for grandfathered rights. Bridges are assigned a load rating during inspection and when required, they must be posted or restricted to the maximum allowable weight (FHWA 2016a).

2.1.3 Bridge Load Ratings

The National Bridge Inspection Standards (NBIS) establish safety inspection and evaluation protocols for highway bridges conforming to 23 USC 144 and 23 CFR 650 Subpart C. They cover publicly owned highway bridges on public roads whose lengths exceed 20 feet. States are required to inspect all public highway bridges not owned by the federal government or American Indian tribes. Inspections are done a minimum of every 24 months unless the FHWA approves a different cycle. Some bridges may require special inspection based on age, traffic, structural deficiencies, or precipitating events (i.e. floods).

The NBIS requires load ratings on all public highway bridges. States use methods in *The Manual for Bridge Evaluation* (MBE) and other bridge inspection references to determine the safe maximum live load capacity and assess safety under particular loading conditions. Load ratings are calculated using data on structural conditions, material

properties, loads, traffic conditions, environmental factors (e.g., temperature, wind, hydraulics, creep), and what vehicle types routinely use a bridge. In Kentucky, the following conditions can initiate a bridge load rating:

- Newly inventoried structure that does not have a load rating
- Damage to or deterioration of structural components
- Changes in configuration (e.g., widening of bridge, bridges made continuous)
- Changes in dead loads (e.g., overlay, barrier changes, utility attachments)
- Changes in live loads (e.g., upgraded roadway classification, overweight vehicles)
- Changes in rating or posting policy

The *MBE* describes typical load rating procedures but may vary based on state statutes and regulations. The evaluation of live loads consists of three assessments — design live load, legal loads, and permit loads. The design live load ensures that a bridge meets performance measures for current HL-93 loading and LRFD design standards. Legal load ratings ensure bridge safety for AASHTO and state legal loads based on a given truck configuration and traffic conditions. A bridge must adhere to AASHTO legal loads and the National Rating Load or state legal loads. Bridge load ratings must also ensure the bridge load capacity for special permitted vehicles is above legal weight limits.

Bridges are typically screened using three AASHTO truck types. Bridges that pass screening with an HL truck meet the capacity for all state and AASHTO legal load specifications. Bridges meeting HL-93 screening may not pass all legal state loads, in particular vehicles significantly heavier than AASHTO trucks.

AASHTO legal vehicles representative of typical truck configurations are denoted Type 3, Type 3S2, and Type 3-3. Types are used for load ratings and may be used for load postings. They satisfy the FBF. Specialized hauling vehicles typically use FBF in design load ratings due to their shorter wheelbases.

Inspectors evaluate a bridge for overall condition and load capacity. A bridge receives an inventory rating, operating rating, and sufficiency rating. The FHWA determines which methods are used to calculate inventory and operating ratings. KYTC prescribes the rating method to calculate posting ratings as these are based on state weight legal limits. Bridge condition is rated as good, fair, or poor. A structure classified as poor is considered structurally deficient. In Kentucky, a bridge is designated as substandard if it meets any of the following criteria listed in the *Kentucky Bridge Inspection Procedures Manual* (400-3):

- Posted for load less than the legal limit based on road classification, except when posted for below legal Extended Weights limits.
- Vertical clearance of less than 14 feet for a through-truss
- Horizontal roadway clearance of 18 feet or less for a through-truss, through-girder, or pony truss.

Posted bridges are not necessarily substandard but require more frequent inspection. When bridges are defined as substandard based on weight (or vertical and horizontal for any truss bridge), Kentucky inspects the bridge every 12 months. KYTC uses the Load Analysis and Rating System (LARS) and Complex Truss software to evaluate bridges. The Chief Load Rating Engineer reviews the calculations for quality assurance.

2.1.4 Posting

Structures no longer able to safely carry legal loads are recommended for posting. Pursuant to the NBIS, bridges must be posted or restricted in accordance with the AASHTO Manual or state law when “the maximum unrestricted legal loads or State routine permit loads exceed that allowed under the operating rating or equivalent rating factor” (§650.313).

In Kentucky bridges are recommended for posting when the load rating falls below specified thresholds. Initially, structures are rated at 75% of the structure’s yield strength. If they are below legal limits they are rated again at 69% of yield strength and posted at those levels. AASHTO type HS20 and HL-93 trucks are used for load ratings, and

Kentucky Truck Types 1-4 are used for posting (see 603 KAR 5:066 Section 1(2)). Kentucky also posts bridges for specialized hauling vehicles (SHVs) and emergency vehicles (EVs) to comply with FHWA mandates. Under 23 CFR 650.313(c) bridges are categorized into two groups based on load rating requirements for EVs. Bridges in Group 1 do not require immediate load ratings but must be rated when a re-rating is warranted. Group 2 bridges require a rating at their next inspection.

2.1.5 SHVs and EVs

The FHWA requires that load ratings be completed for SHVs and Group 2 EVs by 2022. As of September 2020, KYTC posted limits for SHVs on 15% of its bridges. Although Kentucky is only required to post bridges for EVs on interstates, the National Highway System, and bridges with one-mile access to interstates, the Cabinet is posting bridges across the state to comply with state and local statutes and regulations. KYTC still has to post limits for EVs on 31% of its bridges (FHWA 2020). Thresholds for posting bridges in Kentucky are as follows:

- *Interstate Bridges*: AAA limits on KY Type 1-4 trucks
- *Other State-Maintained Bridges*: 44 tons
- *Non-State-Maintained Bridges*: 40 tons

Table 2.1 provides the rating type for each vehicle type, the GVW threshold, and number of axles. If the load rating is at or below the equivalent of a Type 1 truck (40 tons) GVW limits should be posted for all truck types.

Table 2.1 Rating Type by Vehicle, Gross Weight, and Axle

RatingType	Vehicle Name	# of Axles	Gross Weight (lbs.)	Gross Weight (tons)
Inventory & Operating	HS20	3	72,000	36.00
	HL93	HS20 truck with 640 plf lane load		
Posting	Type 1	2	40,000	20.00
	Type 2	3	56,700	28.35
	Type 3	4	73,500	36.75
	Type 4	5	80,000	40.00
	SU4	4	54,000	27.00
	SU5	5	62,000	31.00
	SU6	6	69,500	34.75
	SU7	7	77,500	38.75
	EV2	2	57,500	28.75
	EV3	3	86,000	43.0

Source: Kentucky Bridge Inspection Procedures Manual (2020, pp. 400-9)

2.2 Past Studies

The federal government has commissioned many studies of truck size and weight (see TRB 2019 for a complete list). Researchers have looked at alternative vehicles and the impact of raising GVW limits based on truck configurations. For example, the Turner Proposal recommended increasing the number of axles on trucks as this would reduce axle loads even as GVW increased, therefore cutting down on pavement wear and enabling increased freight operations. Walton (1991) compared four Turner-proposed prototype truck types to baseline trucks, including seven, nine and eleven-axle truck configurations. This study resulted in a TRB committee recommending weight increases for some configurations along more axles. Stymied by data limitations, federal research committees have not been able to put forward weight limit policy recommendations. In response they have called for systematic research, monitoring, and data collection programs.

2.2.1 Compilation of Existing State Truck Size and Weight Limit Laws

The *Compilation of Existing State Truck Size and Weight Limit Laws* documents for each state (and Washington, D.C.) laws and regulations governing truck size and weight, a list of regular operational limits, provisions (if any) for

exceeding federal limits, exemptions or special operations, and routes. Exemptions have been carved out for specific commodities, emissions reduction or special fuels, and certain vehicle types or licenses. Although exemptions do not typically apply to interstates, some allowances exist (Table 2.2).

Table 2.2 Common State-Level Exemptions

Vehicle Type/Commodity	Number of States With Exemption
Aggregate Products (Rock, sand, gravel, road base, etc.)	15
Agricultural/Farm Products & Commodities	41
Construction Equipment/ Highway Machinery	28
Emission Reduction Equipment[10]	40
Fire Trucks	29
Government-owned Vehicles	16
Implements of Husbandry	20
Snowplows	10
Solid Waste/Rubbish/Trash	28
Timber Products & Commodities	22
Tow Trucks	22

Source: FHWA (2016a)

2.2.2 Comprehensive Truck Size and Weight Study

FHWA's *Comprehensive Truck Size and Weight Study* (FHWA 2016b) presented several recommendations. One was restarting the Vehicle Inventory and Use Survey (VIUS). The Bureau of Transportation Statistics (BTS) pursued this idea and will conduct the survey of truck owners electronically in 2022. The goal of this survey is to collect data on the physical and operational characteristics of the US truck population as well as the movement of goods.

Future research needs identified by TRB (2018, 2019) include generating information about truck weights through a coordinated weigh-in motion (WIM) database, modeling the impacts of weight changes on vehicle configurations, establishing methods to analyze the impacts of heavier vehicles on pavements and bridge service lives, evaluating crash risks of heavier trucks, and measuring the frequency of overloads and enforcement efforts.

2.2.3 Bridge Deck Deterioration

While a low percentage of trucks operate above maximum legal weight limits, they cause a disproportionate amount of damage (Luskin and Walton 2001; Liu 2007; Dunning et al. 2016). No standards exist for assigning maximum loads on bridges as most states have grandfathered laws under the FBF. Dey et al. (2014) contended the FBF benefits multi-axle trucks to the detriment of small trucks by letting them carry more weight. Studies looking at the impact of OW trucks on steel and concrete bridges have found steel deterioration is slower than concrete. Fatigue damage caused by OW trucks gradually accumulates on steel highway bridges but few studies account for the cumulative impacts of damage (Dicleli and Bruneau 1995, Lou et al. 2017).

Concrete bridge decks deteriorate more quickly than other bridge components because they are directly exposed to vehicle traffic, environmental conditions, and deicing salts (Lou et al. 2016, 2017). The service lives of prestressed concrete girder bridges diminish when subjected to OW trucks, with the principal modes of deterioration being the corrosion of prestressing tendons and mild reinforcement at beam ends. Once cracking begins in prestressed concrete girders, deterioration may accelerate and require corrective action. OW trucks can also exacerbate bridge damage when fatigue cracks corrode reinforcements (Jaffer and Hansson 2009), although fatigue failures are unlikely to be an issue if OW trucks make up a small proportion of all trucks (Reisert and Bowman 2005). Lin et al. (2012) found that heavy axle loads and high GVW may trigger microcracking in concrete and, combined with freeze-thaw cycles, reduce bridge deck service life. However, Altay et al. (2003) and Dey et al. (2014) wrote that increasing the allowable GVW on prestressed concrete bridges does not significantly impact fatigue life. On some steel bridges, however, with very high traffic volumes and very poor fatigue design, fatigue may be a safety concern. Roberts et

al. (2005) found that increasing the number of axles on high GVW trucks moving commodities spreads out weight and reduces pavement damage.

2.2.4 Pavement Deterioration

Pavement damage increases exponentially as axle loads and vehicle weights increase (Dey et al. 2014). Distributing weight over more axles, however, can reduce equivalent single-axle loads (ESALs), a measure of how heavy vehicles impact pavements (Adams et al. 2009). Over time, pavement structures deteriorate after repeated exposure to heavy loads, although deterioration rates vary based on design parameters and the thickness and types of materials used. Few attempts have been made to correlate exposure to overweight vehicles and repair costs for bridges and pavements (TRB 2018). Estimating damages is not easy because some types of deterioration (e.g., microcracking) may not cause problems initially, but compromise structural integrity over the long-term (Bae and Olivia 2012; see also TRB 2002, 2018).

2.3 Permitting, Routing, and Enforcement

2.3.1 Automated Permitting

The FHWA (2018) investigated state-level OD/OW permitting practices, automated routing systems, and escort driver certifications to identify industry standards and best practices. Most infrastructure damage, the study found, results from vehicles deviating from a permitted route, operating without a permit, or operator error. But shifting to automated permitting can reduce incidents and confers other benefits such as greater administrative efficiency and accuracy, increased revenues, lower costs, and improved safety.

2.3.2 Bentley for Routing in Kentucky

KYTC has automated its OD/OW permitting using Bentley software, which analyzes a truck's dimensions and weight to verify it can clear a bridge. Districts which oversee portions of the Extended Weight Coal or Coal Byproducts Haul Road System (EWCHRS) contact the Bridge Preservation Branch's Load Rating Section, which determines the maximum capacities of bridges listed on the Certified Transportation Plan. Bridge capacities are then calculated and returned to the district, completing the request.

2.3.3 Enforcement

The federal government mandates that states enforce vehicle size and weight laws (23 CFR § 657.5). Each year, states certify their enforcement and compliance to the FHWA administrator. Information submitted to the FHWA includes penalties and citations, number of OW permits issued, number of vehicles weighed on fixed scales, and vehicles with shifted loads or loads that had to be off-loaded. TRB (2018) recommended research on enforcement, especially the relationship between weight enforcement efforts and the frequency of weight violations.

2.3.4 Kentucky Enforcement

Kentucky State Police-Commercial Vehicle Enforcement (KSP-CVE) staff declined by 4.76% between 2015 and 2019 (FHWA 2020). Fewer vehicles are being weighed (down 1.8%). And while citations increased from 1,629 in 2018 to 2,110 in 2019, the four-year rolling average is down. Despite KYTC's efforts to load rate bridges only three bridge citations were issued using the FBF in 2018 and 2019. The FHWA suggested that KSP-CVE boost enforcement efforts on load-posted bridges and that bridge and pavement data (along with complaints) be used to target enforcement activities.

2.3.5 Judicial Adjudication

Fines and court costs are often not used to pay for road and bridge damage caused by overweight vehicles. Nor are those funds provided for enforcement (FHWA 2019). Some other states have adjudication programs that fund enforcement agencies. These states issue fines which carriers must pay as restitution for wrongdoing. Many states are hampered by a lack of judicial vigilance, with citations dismissed or reduced.

Chapter 3 Kentucky's Weight Limit Statutes and Regulations

3.1 Kentucky's Regular Operational Weight Limits

KRS 189.221 establishes basic weight limits on Kentucky's state-maintained highway system, while KRS 189.222 authorizes the Secretary of Transportation to increase weight limits at their discretion. KRS.189.222 authorizes the creation of administrative regulations to establish a highway classification system with different weights on each system. Thus, KRS 189.222(11) authorizes 603 KAR 5:066, which establishes weight limits for trucks using the state-maintained highway system. Various exemptions are present in KRS and KAR that sanction weights above those specified in KRS 189.221 and KRS 189.222.

KRS 189.221(4,5) set a 36,000-pound limit on all highways for any truck, semitrailer, truck, or truck and trailer unit — including the load — except those designated in KRS 189.222 or locally maintained highways (see KRS 189.222(11) or 189.230(4)).

KRS 189.222(11) refers to regulations in KRS Chapter 13A (those related to the implementation of 23 C.F.R. Part 658 on the National Network (NN) and highway classifications as established in 603 KAR 5:066. No KRS or KAR explicitly defines *locally maintained highway*. KRS Chapter 13A defines *local government* as a "city, county, urban-county, charter county, consolidated local government, special district, or a quasi-governmental body authorized by the Kentucky Revised Statutes or a local ordinance" (KRS 13A.010). KRS Chapter 178 defines *county roads* as those formally accepted by a county's fiscal court as part of a county road system, or private roads, streets, or highways acquired by the county when they are generally used openly by the public for a period of 15 years per KRS 178.405-178.425 ((KRS 178.010)(1)(b)). KRS 189.230(4) pertains to highway segments where fiscal courts have entered into cooperative agreements with permit holders for certain cargo types (per KRS 189.212), including but not limited to agricultural products, minerals, and natural resources. KRS 189.221, requires definition through multiple statutes, establishes a baseline 36,000-pound, or 18-ton, limit on all state highways and locally maintained highways, where local highways include county highways. The relevant language of the statute follows:

> "A person shall not operate on any highway, except those highways designated by the secretary of transportation under the provisions of KRS 189.222, or those locally maintained highways under the provisions of KRS 189.222(11) or KRS 189.230(4), any of the following trucks, trailers, manufactured homes, or vehicles…(4) Any truck, semitrailer truck, or truck and trailer unit which exceeds 36,000 pounds gross weight, including the load"

KRS 189.280(3) stipulates that cities may not establish ordinances or set maximum limits on weight, width, and length of trucks and trailers in city limits less than those specified in KRS 189.221 or those established in 189.222(1). 603 KAR 5:066 Section 7(2) reiterates that city ordinances may not impose lower limits than specified by the KARs unless allowed to do so by the Secretary.

KRS 189.221(5) restricts trucks, semi-trailers, and tractor trailers to 600 pounds per inch of combined tire width on the same roadways described above, all state-maintained highways in KRS 189.222, where administrative regulations are established through KRS 189.222(11), and local highways (including those where fiscal courts have cooperative agreements for special permits. The Secretary, however, may increase this limit above 600 pounds per inch of combined tire width.

KRS 189.222(1) authorizes the Secretary to increase the maximum height, length, and gross weight above what is prescribed in KRS 189.221 as long as the highways in question would not be exposed to unusual damage. Also, the Secretary cannot set new limits that exceed those specified in federal law or which would jeopardize the state's allotment of Federal-aid funds.

On state-maintained AAA highways[1], the GVW limit is 80,000 lbs. (KRS 189.222(1c)). A tolerance of 5% per axle load is permitted on all state-maintained highways except interstates. Maximum axle weights and axle spacing (pursuant to the FBF) are as follows:

- 20,000 lbs. per single axle, with axles less than 42" apart
- 34,000 lbs. on 2 axles in tandem axles spaced 42" apart
- 48,000 lbs. on 3 axles spaced 42" or more apart and less than 102" apart
- No single axle in any arrangement may exceed 20,000 lbs. or 700 lbs. per inch of the aggregate width of all tires on a single axle, whichever is less

Kentucky allows 48,000 lbs. on a tridem, or triaxle, which is an exception to federal law, which uses the FBF for two or more consecutive axles. KRS 189.222(11) directs KYTC to create administrative regulations and gives the Secretary authority to establish road classifications and set different weight maximums for each classification. KRS 189.222(11) states that law enforcement officers are not responsible for enforcing weight and dimensional limits on locally maintained roads unless a local government submits a written request for help. Per KRS 189.272, when operators are issued citations the district court where the offense occurred handles the case — it is the venue and jurisdiction for prosecuting violations of statutory weight limits.

603 KAR 5:066 establishes GVW limits for trucks on state-maintained highways. It refers to KRS 189.222(10) as the designating portion of the statute; it is KRS 189.222(11) that authorizes the regulation. Another inconsistency worth noting is that while 603 KAR 5:066 states that "All state-maintained roads are assigned a classification in 603 KAR 5:301," this regulation was repealed by 43 Ky.R. 684 in 2016. Currently, 603 KAR 5:066 is the controlling regulation for assigning highway classifications. 603 KAR 5:066 defines three classes of trucking highways: AAA, AA, and A. Maximum GVWs for each are listed below:

- *Interstates*: 80,000 lbs.
- *AAA*: 80,000 lbs.
- *AA*: 62,000 lbs.
- *A*: 44,000 lbs.
- *Local*/*County*: 36,000 lbs.

Table 3.1 lists and describes the four truck types defined by 603 KAR 5:066. Table 3.2 lists for each truck type the maximum GVW allowed on roads of different classifications.

Table 3.1 Kentucky Truck Types

Truck Type	Axles
Type 1	Single unit truck with 2 single axles
Type 2	Single unit truck with 1 steering axle; 2 axles in tandem
Type 3	1 steering axle; 3 axles in tridem
Type 4	Tractor-trailer combination consisting of 5 or more axles

[1] KYTC maintains a database of truck weight limits on state maintained routes: https://apps.transportation.ky.gov/HIS_Reports/TruckWeightLimitsParam.aspx as well as a map of Truck Weight Classification: https://transportation.ky.gov/Planning/Pages/Truck-Weight-Classification.aspx.

Table 3.2 Kentucky Truck Type and Weight Limit by Roadway Classification

Truck Type	Roadway Classification			
	County	A	AA	AAA
Type 1	18	20	20	20
Type 2	18	22	27	27
Type 3	18	22	31	34
Type 4	18	22	31	40

Source: Kentucky Bridge Inspection Procedures Manual (2020, pp. 400-7)
*Note: Weights for each classification are given in tons

603 KAR 5:066 abolished an old class B highway system with a maximum gross weight of 30,000 lbs. per a 1976 Statement of Affirmative Consideration provided by the Kentucky Legislative Research Commission[2]. Yet a statute from 1942 (KRS 189.210) that limits vehicles other than a motor truck or semitrailer to 30,000 lbs. on highways remains in effect. According to KRS 189.210(2) the county judge/executive or the county road engineer must issue an approval for a truck to exceed weight limits on highways in the county. This statute apparently restricts operation to limits below those prescribed by KRS 189.221(4,5), KRS 189.222, and federal limits. It thus warrants legislative review.

KRS 189.212(1-2) let fiscal courts issue special permits for hauling materials whose GVW or dimensions exceed those specified in KRS 189.210 but are less than those specified by KRS 189.222 (80,000 lbs.). The statute applies to divisible and non-divisible loads consisting of agricultural products, minerals, or natural resources. KRS 189.265, which limits GVW for motor busses to 40,000 lbs., conflicts with KRS 189.210. Charter buses often have GVWs above 50,000 lbs., therefore, the weight limits on KRS 189.265 may also require legislative review.

Another law from 1942 (KRS 189.200), which prohibits more than 400 lbs. per inch width of tire for iron or steel tires and 600 lbs. per inch for solid rubber or rubber compounded tires, conflicts with 603 KAR 5:066 and merits legislative review. Through its truck classification, 603 KAR 5:066 not only stipulates gross weight, axle weight, and axle spacing, but it prohibits tire weight from exceeding 700 lbs. multiplied by aggregate tire width. Although statutes trump KARs, here the older statute does not align with current commercial transportation practices. States (e.g., Michigan) in which weight laws are based on axle weight — not GVW — pay special attention to tire weight because it impacts pressure applied to road and bridge surfaces. Pounds per tire inch width of tire may be critical given Kentucky's axle weight exemptions.

KRS 189.2301 carves out an axle weight exemption on class AAA non-Interstate highways for vehicles registered with a declared weight of 80,000 lbs. or less — including a towed unit — if (1) the vehicle is hauling 79,999 lbs. or less and (2) has written verification of the GVW. This exemption does not apply on highways where the load would exceed posted bridge limits. The absence of axle weight provisions may result in excess pavement degradation and trucks exceeding the FBF when more weight is loaded onto fewer axles. While KYTC already is required to post bridges along these routes, the axle weight exemption requires more posting when the analysis for Type 1-3 trucks indicates a max GVW of 40 tons or less per KRS 189.222(3).

Regular operating weight limits may be lowered for limited periods when public safety and convenience require doing so. KRS 189.230(1) authorizes the Department of Highways on state and federal highways to reduce loads and speed limits below limits set out in KRS 189.221(4) to prevent trucks and trailers from damaging infrastructure. County judges/executives may take the same action on county highways. Weight limits may be similarly reduced on the EWCHRS to prevent damage, destruction, or catastrophic failure (KRS 189.230(2,3)). KRS 189.280(1) exempts government-owned motor trucks, semitrailer trucks, or trailers from normal operating limits set by KRS 189.221-189.230. Table 3.3 below details weight limits by truck classification across roadway types.

[2] Available upon request.

Table 3.3 Weight Limits by Truck Classification

	Interstate (Including Class AAA Highways Part of Interstates)					AAA Highways Except Interstates					AA					A				
Truck Type	Axle Spacing	Weight per axle	Maximum Gross Weight of Vehicle and Load	Tolerance	Notes	Axle Spacing	Weight per axle	Maximum Gross Weight of Vehicle and Load	Tolerance	Notes	Axle Spacing	Weight per axle	Maximum Gross Weight of Vehicle and Load	Tolerance	Notes	Axle Spacing	Weight per axle	Maximum Gross Weight of Vehicle and Load	Tolerance	Notes
Overall			80,000	Not allowed	Tire weight not to exceed 700 pounds times the aggregate width from the manufacturer. Cannot exceed posted bridge weights			80,000	No tolerance on gross weight. 5% on axle weight allowed.	Tire weight not to exceed 700 pounds times the aggregate width from the manufacturer. Limited by a bridge posted at less than 80,000 pounds.			62,000	No tolerance on gross weight. 5% on axle weight allowed.	Tire weight not to exceed 700 pounds times the aggregate width from the manufacturer. Cannot exceed posted bridge weights.			44,000	No tolerance on gross weight. 5% on axle weight allowed.	Tire weight not to exceed 700 pounds times the aggregate width from the manufacturer. Cannot exceed posted bridge weights.
Single axle	axles <42" apart	20,000									axles <42" apart	20,000				axles <42" apart	20,000			
Tandem	axles <42" apart	34,000									axles >42" and < 96" apart	34,000				axles >42" and < 96" apart	34,000			
2 consecutive tandem axles	1st and last axles >= 36' apart	34,000																		
Tridem	axles 1 and 3 of tridem <= 96" apart	34,000									axles 1 and 3 of tridem <= 96" apart	34,000								
Tridem	axles 1 and 3 of tridem > 96" and < 120" apart and 2 adjacent axles >= 42"	48,000	73,280								axles 1 and 3 of tridem > 96" and < 120" apart and 2 adjacent axles >= 42"	48,000								

Any other configuration			Uses the bridge weight formula: W= 500 (LN/N-1 + 12N + 36); W=gross weight, L=distance between extreme axles (feet), N=number of axles										Uses the bridge weight formula: W= 500 (LN/N-1 + 12N + 36); W=gross weight, L=distance between extreme axles (feet), N=number of axles					Uses the bridge weight formula: W= 500 (LN/N-1 + 12N + 36); W=gross weight, L=distance between extreme axles (feet), N=number of axles		

City ordinances cannot allow heavier loads unless specifically allowed by the Secretary of Transportation.

3.2 Tolerances

Kentucky has several exemptions based on cargo types and routes which authorize vehicles to exceed GVW and axle weight tolerances.

3.2.1 Axle Weight Tolerance

KRS 189.222(1d) allows a 5% tolerance per axle load on state highways (excluding interstates). KRS 189.222(10) allows a 10% tolerance on axle weight for vehicles hauling the following materials: crushed stone, fill dirt and rock, soil, bulk sand, coal, phosphate, muck, asphalt, concrete, solid waste, tankage or animal residues, livestock and agricultural products. Like KRS 189.222(1d), KRS 189.222(10) excludes interstates.

3.2.2 Gross Weight Tolerance

KRS 189.222(3) allows a gross weight tolerance of 10% for vehicles carrying materials specified in 189.222(2)(a-c) as well as livestock or poultry feed.

3.2.3 Axle or Gross Weight Tolerance

KRS 189.222(6) allows an axle weight or GVW tolerance of 10% for vehicles moving primary forest products when the vehicle is registered pursuant to KRS 186.050(3)(b). Materials covered by this provision include sawdust, wood chips, bark, slabs, or logs.

3.2.4 No Axle Weight Provisions

The following vehicles are excluded from axle weight provisions, except on interstates:

- Vehicles that only transport farm or primary forestry products and registered under 186.050(4) or 186.050(9)
- Vehicles that exclusively haul ready-mix concrete
- Vehicles designed for and engaged exclusively in collecting and hauling refuse and registered under KRS 186.050(3)(b)

Registration fees for vehicles over 10,000 lbs. are structured based on declared GVW. Registration with a declared weight of 80,000 lbs. is $1,410 per year. KRS 186.050(4) sets the fee structure for farm vehicles based on gross weights, and KRS 186.050(9) sets a 75% exception for fees on transporting primary forest products over 18,000 lbs. Kentucky's GVW and Axle Weight Exemptions are listed in Table 3.4.

Table 3.4 Kentucky GVW and Axle Weight Exemptions

Cargo Type	Description	Authority	Language
Primary Forest Products	Includes (but not limited to) sawdust, wood chips, bark, slabs, or logs.	KRS 189.222(2)(c),(3)	Vehicles with a gross weight of up to 80,000 pounds may travel on any state highway without obtaining a special permit if transporting primary forest products, including, but not limited to, sawdust, wood chips, bark, slabs, or logs originating from their points of origin to first market. Vehicles engaged exclusively in the transportation of such products may exceed the gross weight provisions by a weight tolerance of ten percent (10%), except on the interstate highway system.
Agricultural Products	Meats or crops, livestock or poultry from origin to first market.	KRS 189.222(2)(a)(b),(3),(10)	Vehicles with a gross weight of up to 80,000 pounds may travel on any state highway without obtaining a special permit if transporting meats, agricultural crop products, poultry, or livestock (cattle, sheep, swine, goats, horses, alpacas, llamas, buffaloes, or any other animals of the bovine, ovine, porcine, caprine, equine, or camelid species) from their point of origin to first market. Vehicles engaged exclusively in the transportation of such products may exceed the gross weight provisions by a weight tolerance of ten percent (10%), except on the interstate highway system.
Farm Supplies	Farm supplies, materials, or equipment.	KRS 189.222(2)(d)	Vehicles with a gross weight of up to 80,000 pounds may travel on any state highway without obtaining a special permit if transporting supplies, materials, or equipment necessary to carry out a farming operation engaged in the production of agricultural crop products, meats, livestock, or poultry.
Livestock and Poultry Feed	Feed for livestock or poultry; a subset of Farm Supplies.	KRS 189.222(2)(d),(3)(b),(10)	Vehicles with a gross weight of up to 80,000 pounds may travel on any state highway without obtaining a special permit if transporting supplies, materials, or equipment necessary to carry out a farming operation engaged in the production of agricultural crop products, meats, livestock, or poultry. Vehicles engaged exclusively in the transportation of feed for livestock or poultry may exceed the gross weight provisions by a weight tolerance of ten percent (10%), except on the interstate highway system.
Ready-Mixed Concrete	Ready Mixed concrete.	KRS 189.222(5)	Vehicles engaged exclusively in the transportation of ready-mixed concrete shall be excluded from the axle weight provisions, except on interstate highways, and subject only to total gross weight provisions.
Refuse (Garbage Trucks)	Vehicles engaged exclusively in the collection and hauling of refuse.	KRS 189.222(7)	Vehicles designed for and engaged exclusively in the collection and hauling of refuse and registered under KRS 186.050(3)(b) shall be excluded from the axle weight provisions, except when in operation on the federal interstate system, and subject only to total gross weight provisions.
Building Materials	Equipment or materials associated with new home construction.	KRS 189.2226(2),(3)	Vehicles hauling building materials to a home, shall be allowed to travel on any state road if the weight is within the axle limits for the vehicle and is no further than 15 miles from a state road classified to carry the registered weight of the vehicle. If a vehicle is traveling a road classified by the cabinet as a single "A" highway, the vehicle or its load cannot exceed ninety-six (96) inches in width.

Cargo Type	Description	Authority	Language
Other Exceptions	Crushed stone, fill dirt, rock, soil, bulk sand, coal, phosphate muck, asphalt, concrete, solid waste, tankage or animal residues.	KRS 189.222(10)	Except on the interstate highway system, KRS 189.222(10) provides a 10% axle weight exemption to vehicles engaged exclusively in the transportation of crushed stone, fill dirt and rock, soil, bulk sand, coal, phosphate muck, asphalt, concrete, solid waste, tankage or animal residues, livestock, feed for livestock or poultry, and agricultural products. However, this exemption does not apply to the gross weight limit of the vehicle.

3.3 Cargo Exemptions

KRS 189.222(2)(a-d) allow vehicles transporting the following commodities with a GVW of up to 80,000 lbs. to travel anywhere on a state highway without a permit if they do not exceed federal limits, posted bridge limits, or normal operating limits for size and weight under 189.222(1)(c):

- Meat or agricultural crop products from farm to first market
- Livestock or poultry from their point of origin to first market[3]
- Primary forest products, from point of origin to first market[4]
- Farming supplies, materials or equipment for the production of agricultural crop products, meats, livestock, or poultry

KRS 189.2226(2) allows vehicles hauling building materials to travel on state roads without a permit if the vehicle weight is (1) within the limits of the vehicle's registration and (2) within the vehicle's axle limits. Here, *state roads* exclude county roads and interstates. These vehicles may not exceed posted bridge weights or widths without a permit. KRS 189.2226(3) holds that a vehicle hauling building materials can travel the most direct route to its destination as long as the route is not more than 15 miles from a state road classified to carry the registered weight. Some building materials covered by KRS 189.2226 fall under the 10% axle weight tolerance allowed by 189.222(10). KRS 189.221(6) allows a truck hauling building materials pursuant to KRS 189.2226, or to a road construction project, to haul up to 80,000 lbs. gross weight, including load, without a permit. However, vehicles may not exceed limits on a highway rated less than the maximum in KRS 189.222 (i.e., 80,000 lbs.), or locally maintained highways under KRS 189.222(11) or 189.230(4) (i.e., cooperative agreements).

KRS 189.2225 pertains to OD vehicles but makes allowances for weight based on length requirements. In counties with less than 10 miles of roadways designated for vehicles 102 in. wide, GVWs of 80,000 lbs. are permissible on state highway segments with lane widths of 10 feet if the vehicle meets the length requirements in KRS 189.222(1) or are 102 inches wide (KRS 189.2225(1)). KRS 189.2225(3-4) allow vehicles hauling agricultural commodities from a farm or transporting materials used to produce agricultural commodities which do not exceed length or width limits in KRS 189.222(1)(b) or 102 in. to operate on any public road. However, vehicles may not exceed weight limitations of any highway or bridge. KRS 189.222(2)(d) authorizes GVWs of 80,000 lbs. for vehicles transporting farm supplies for agricultural production on any state road without a permit. A permit is not required for transporting OD/OW farm equipment or moving self-propelled farm equipment from one farm to another or from a farm to a repair shop or dealer (601 KAR 1:019). Some regulations impose specific route restrictions (e.g., 603 KAR 5:077 restricts vehicles with particular characteristics or which are transporting hazardous materials on part of US 60 in Frankfort).

3.4 Mileage Rules

KRSs and KARs, pursuant to STAA, allow heavier weight limits on a limited number of roadway miles with specific highway classifications to foster reasonable access. KRS 189.222(1)(f) allows a vehicle or combination of vehicles 102 in. wide or less and with a GVW less than 80,000 lbs. on any state highway up to 15 miles from an interstate or parkway exit. To implement the provisions of 23 C.F.R. Part 658 regarding the NTN, KRS 189.222(11) authorizes the enforcement of rules related to vehicle size and weight.

603 KAR 5:070 establishes dimensional requirements. In so doing it reiterates the 1982 STAA reasonable access rule, authorizing vehicles with GVWs up to 80,000 lbs. on highway segments within 15 miles, 5 miles, or 1 mile — depending on road type — of the National Truck Network (NTN) without a permit. 603 KAR 5:070 Section 4 details exceptions to OD/OW permit requirements (excluding busses and combination vehicles). Permits are not required on the NTN or when they allow reasonable access to vehicles within certain mileage of the NTN given the road type. Section 4(2) outlines where permits are required on the NTN for motor vehicles, combination vehicles, and towed

[3] In KRS 189.222 (2)(b) "livestock" means cattle, sheep, swine, goats, horses, alpacas, llamas, buffaloes, or any other animals of the bovine, ovine, porcine, caprine, equine, or camelid species.

[4] In KRS 189.222(2)(c) primary forest products include but are not limited to sawdust, wood chips, bark, slabs, or logs.

units whose widths exceed 102 in. Vehicles are subject to the 80,000 lbs. gross maximum weight and are not subject to enforcement tolerance.

603 KAR 5:250 establishes procedures the Department of Highways can use to select new segments for inclusion on the NTN. It reaffirms that STAA vehicles will be given access to terminal and service facilities up to 5 driving miles from the NTN on state-maintained routes and up to 1 mile on nonstate-maintained routes, except where use of a route is prohibited. A route cannot be included in the NTN if it contains a structure with a bridge weight allowance less than 80,000 lbs. for a tractor-semitrailer combination with five for more axles or if it is less than 73,500 lbs. for straight trucks with four or more axles. NTN designations on Kentucky highways are described in KAR 603 5:070 Section 3 and Appendix A to 23 CFR Part 658.

3.5 Permitting and Decals to Exceed Limits

Several regulations and statutes address special permits to increase weight limits.

3.5.1 Extended Weight Coal or Coal By-Products Haul Road System (EWCHRS)

KRS 177.9771 established the EWCHRS, which includes all state-maintained toll roads, or toll roads that were previously maintained by the state, and public highways on which 50,000 tons or more coal or coal by-products were hauled in the previous year. The Secretary certifies public highways or portions of highways each year based on reported tonnage (KRS 177.977). The Secretary may also add or delete roads from the system after consultations with stakeholders. Vehicles registered at 80,000 lbs. or more that transport coal or coal by-products on the EWCHRS pay a decal fee. Table 3.5 lists weight limits and decal fees. Table 3.6 presents weight limits (in tons) for all roadway classifications, including the EWCHRS.

Table 3.5 Vehicle Types, Weight Limits, and Decal Fees

Vehicle Type	Weight Limit	Annual Decal
Single-unit: one steering axle and two axles in tandem	90,000 lbs. and 5% tolerance	$160
Single-unit: one steering axle and three axles in tridem	100,000 lbs. and 5% tolerance	$260
Tractor-semitrailer 5 or more axles	120,000 lbs. and 5% tolerance	$360
Tractor-semitrailer 5 or more axles; Vehicles allowed to register above 80,000 lbs. operating 20,000 lbs. per axle and 12,000 lbs. for the steering axle	Unlimited	$840 plus $10 per 1000 lbs. over 80,000 lbs.

Table 3.6 Kentucky Truck Type and Weight Limit by Roadway Classification Including Extended Weight Coal Haul

Truck Type	Roadway Classification				
	County	A	AA	AAA	Extended Coal Haul
Type 1	18	20	20	20	20
Type 2	18	22	27	27	45
Type 3	18	22	31	34	50
Type 4	18	22	31	40	60

Source: Kentucky Bridge Inspection Procedures Manual (2020, pp. 400-7)

603 KAR 5:230 establishes requirements for the EWCHRS and associated bridge weight limits. Vehicles must not be operated above GVW limits for bridges, including bridges on the EWCHRS. Section 2 requires an evaluation of bridges on the system to determine which bridges may be damaged or destroyed to the point of catastrophic failure and provides the type of method for analyzing bridges. The Department of Highways must post weight limits on bridges on the EWCHRS.

3.5.2 Unrefined Petroleum Products Haul Road System

KRS 177.985 establishes an extended weight unrefined petroleum products haul road system that remains in effect until June 30, 2028. The system consists of state-maintained highways on which at least 50,000 tons of unrefined petroleum are transported annually, beginning January 1, 2022 (KRS 177.986). Vehicles registered above 80,000 lbs. that transport unrefined petroleum on the system using approved axle configurations can obtain a permit to operate over weight limits on state or county systems (up to 120,000 lbs. with a 5% gross weight tolerance). The permit fee is $2,000 per year. KRS 177.985 requires the installation of global positioning system (GPS) technology in each vehicle operating on the system to assist with mileage reporting.

3.5.3 Other Exceptions with Permit

KRS 189.270 authorizes issuing OW permits to vehicles carrying non-divisible loads. Fees vary depending on the permit type (see Appendix A). For loads with a GVW of up to 160,000 lbs. and a height of less than 13.5 feet, haulers may request an annual permit that is valid for one year. Single-trip permits are required for loads greater than 160,000 lbs. In 2020, KRS 189.270(7) was amended to allow transporters of manufactured housing to apply for annual permits with a GVW of 160,000 lbs. and a height limit of 15 feet. KRS 189.2717 authorizes special permits for non-divisible loads on permitted routes up to 120,000 lbs. GVW with the following axle weight restrictions:

- Single axle, steering axle with one wheel on each side of the axle less axles than 42” apart = 15,000 lbs.
- Tandem, with axles spaced 42”-96” apart = 40,000 lbs.
- Tridem, with axles spaced 42”-120” apart = 65,000 lbs.
- Dual axle, 1 axle with 2 wheels on each side of the axle = 20,000 lbs. each

On routes with weight limits less than 80,000 lbs., KRS 189.271 authorizes issuing special permits for industrial materials in excess of weight limits, but vehicles still may not exceed 80,000 lbs. GVW (KRS 189.222). 601 KAR 1:020 provides details on permits for hauling industrial materials. Permitted vehicles must comply with legal bridge weights unless granted an exception by KYTC. KRS 189.2716 authorizes issuing permits for transporting steel products in divisible or non-divisible loads on state highways to a riverport (GVW may not exceed 80,000 lbs.). Annual and single-trip permits are issued for transporting metal commodities in divisible or non-divisible loads weighing 80,001 to 120,000 lbs. to or from a manufacturing or storage facility in the state (KRS 189.2713).

601 KAR 1:018 sets procedures and requirements for single trip or annual permits of OD/OW vehicles and loads, escorts, houses/buildings, and ocean-going container cargo (601 KAR 1:018(9)(a-e) defines overweight). Non-divisible loads cannot be separated into smaller loads or vehicles without compromising the vehicle, destroying the load’s value, making the load unusable, or requiring more than 4 or 8 hours to dismantle and reassemble the load based on the route (Section 1 (7)(a-c)). Section 7 establishes permitted weight limits. Vehicles are not issued an OW

permit unless the vehicle is registered with a weight of at least 80,000 lbs. or is a towing vehicle with enough horsepower to safely transport the load. The maximum weight is not permitted unless bridges and roads on the route can accommodate the load. The following lists provide specific OW permit weight limits:

Single axle weight shall not exceed 700 lbs. times the aggregate width in inches of all tires on the axle or the following axle group weights — whichever is less:

- Single wheel axle = 24,000 lbs.
- Steering axle = 20,000 lbs.
- Tandem dual-wheel axle group combination with 5 axles = 45,000 lbs.
- Tandem with 6 or more axles = 48,000 lbs.
- Tridem axle = 60,000 lbs.
- 5 axle combination units = 96,000 gross weight
- 6 axle combination units = 120,000 lbs.
- Seven axle combination = 160,000 lbs.
- Trunnion axle group determined by route and bridge analysis performed by Cabinet's Bridge Preservation Branch

Limits on self-propelled mobile equipment are as follows:

- Single axle = 23,000 lbs.
- Tandem axle group = 46,000 lbs.
- Tridem axle group = 69,000 lbs.
- 4 axle self-propelled specialized mobile equipment = 92,000 lbs.
- 5 axle self-propelled specialized mobile equipment = 115,000 lbs.
- An annual permit may be issued to manufacturer of self- propelled construction equipment not more than 10" width and 160,000 pounds.

Sections 15, 16, and 17, respectively, discuss permit requirements for house moving and building permits, building materials, and vehicles moving a sealed, containerized, ocean-going cargo unit.

601 KAR 1:019 establishes requirements for single trip and annual OD/OW farm equipment permits. Some farm equipment is exempt from permit requirements. Section 2(1) specifies exempt vehicles, including OD/OW vehicles transporting farm equipment or self-propelled farm equipment (1) from one farm to another, (2) from a farm to a repair shop or dealer, or (3) from a repair shop or dealer to a farm. Nonexempt farm vehicle permits require a declared weight of at least 80,000 lbs. and must be for a combination unit with at least five axles. Weight limits on a single axle in a combination unit are the same as in 601 KAR 1:018 except where a trunnion group in the former KAR requires a route and bridge analysis performed by KYTC's Bridge Preservation Branch. Maximum gross weight on a trunnion axle group in 601 KAR 1:019 is determined using the FBF (Section 10 (5)(a-i).

Chapter 4 Survey of State Weight Limit Policies and Issues

KTC surveyed other state DOTs and enforcement agencies about truck weight limit policies and regulations, including weight limit exceptions and extended weight programs. Survey questions focused on:

- Legislation
- Enforcement and citations
- Safety
- Roads and Bridges
- Permitting and fees
- Specific routes, corridors, or networks (especially extended weight routes)
- Specific commodities (i.e., commodity-specific weight exceptions)

Contact information for prospective respondents was obtained from KYTC, state DOT and motor carrier directory searches, MAASTO's Motor Carrier committee[5], and FHWA's Truck Size and Weight State Division representatives. The survey was also distributed to the Commercial Vehicle Safety Alliance's lead agency contacts. KTC received 36 completed surveys. In some cases, multiple personnel in a state coordinated to submit a unified response. In other cases, KTC received more than one response from individual states. KTC also accepted responses submitted via email. Between online survey responses and email submissions, KTC received 40 responses (Figure 4.1). Appendix B includes all of the original responses, although multiple non-responses were culled.

Many states documented challenges and successes. Key obstacles related to vehicle weight limits include:

- Infrastructure: road damage, posted bridges, routing
- Legislation: low permit fees and commodity exemptions
- Enforcement: staffing and resources
- Judicial: lack of convictions

[5] KTC also sought contacts from NASTO, WASHTO, SASHTO, and Specialized Carriers & Rigging Association (SC&RA) where applicable, although websites typically did not provide contact information for state DOT members.

Table 4.1 Survey Responses by State

Arkansas
Colorado
Connecticut
Delaware
District of Columbia
Idaho
Illinois
Indiana
Iowa
Kansas
Louisiana
Michigan
Minnesota
Missouri
Montana
Nebraska
New Hampshire
New Jersey
New York
Ohio
Oregon
Other: British Columbia, Canada
Rhode Island
Tennessee
Texas
Virginia
West Virginia
Wisconsin
Wyoming

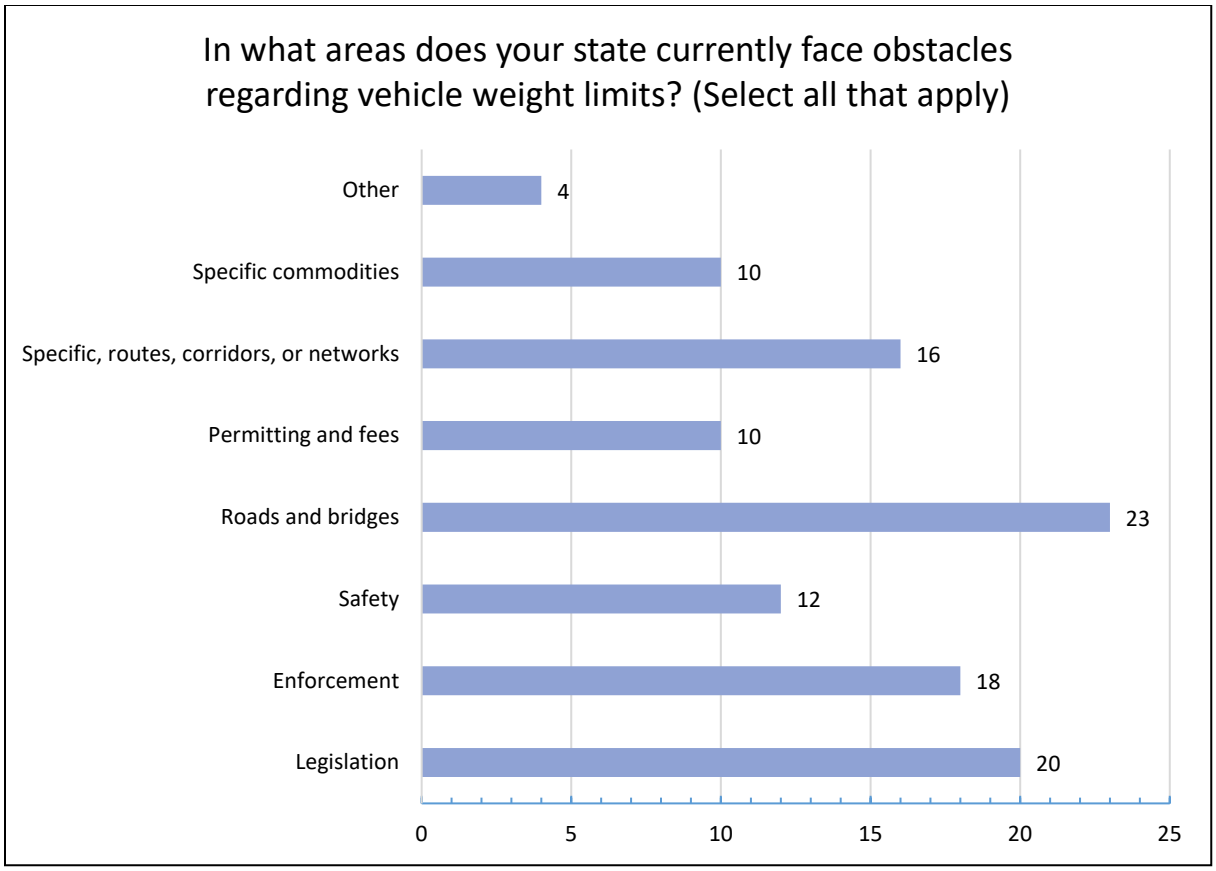

Figure 4.1 Obstacles Regarding Weight Limits

Although regular vehicles far outnumber OW trucks, the frequency and severity of collisions involving OW trucks are primary concerns. Another critical issue is infrastructure damage caused by OW vehicles as this generates safety concerns. Despite roads and bridges continuing to deteriorate, states collect insufficient revenue from fuel taxes and permitting fees to cover maintenance and repairs.

Respondents noted that loads are getting heavier. Pavement and bridge life cycles are shortened through exposure to overloaded vehicles and may fail prematurely. But pavement designs fail to account for OW trucks and calculating pavement consumption for annual OD/OW permits is challenging. States are receiving more permit requests for commodity-specific loads and for more heavy loads and superloads that require special engineering analysis. Agencies have been strained trying to service these requests. And due to a general lack of knowledge about the need for escorts or specific routes, many OD/OW vehicles travel on routes that are not intended to carry heavy loads.

Another problem confronting agencies is aging or historic bridges unable to accommodate heavy loads and older bridges in need of strengthening. One respondent commented, “There have been 2 or 3 local bridge collapses under heavy loads, typically agricultural movements…bridge inspectors are closing local bridges at the rate of about one a week, due to age and deterioration.” Routing around load-rated bridges poses obstacles for many states and have impacted freight movements. Due to weight limitations or infrastructure limitations, a state can offer limited access and OD/OW vehicles may need to travel more miles to circumvent restricted routes.

4.1 Legislation

Following the USDOT’s MAP 21 Comprehensive Size and Weight Study, many states enacted new vehicle weight policies. Legislative progress on weight limit issues can be slow. And while specialized carriers often successfully lobby for special permits, states face many issues enforcing weight limit exemptions and maintaining infrastructure in acceptable condition. Inconsistencies between statutes and administrative codes also challenge enforcement.

Legislation and enforcement are intertwined. In some cases, legislatures are reluctant to increase fines for weight limit violations, increasing the difficulties of enforcement. One respondent noted, “With the current fine structure for overweight vehicles, specifically gross and axle, carriers are engaging in a cost-benefit analysis business model where it is better to pay the fines and fees associated with those few times [they are] caught under enforcement and haul heavy [loads] those other times [to make] up for any lost revenue.” Other challenges include ensuring fine amounts are consistent with neighboring jurisdictions, citing repeat offenders, and fees that are insufficient to pay for damage caused by OW vehicles.

Law enforcement can find it difficult to enforce weight limits when laws exempt some commodities, as one respondent said, “current laws allow different legal weights (and weight tolerances) for different commodities. Since commodity definitions are never clear, it creates issues for industry and enforcement on what can be hauled at what legal weight. Plus, the road doesn't care what product is being hauled, weight is weight. I wish state and federal legislators would think about it and make legal weights the same across the board.” Thus, sometimes a vehicle cannot be cited even if it damages infrastructure. For example, in Arkansas citations can only be issued for vehicles which exceed gross weight limits, but not those that are overweight on axles. Other weight limit statutes met with controversy, further complicating enforcement (e.g., allowing extra gross weight on some vehicles during specific times of the year, such as when crops are harvested).

4.2 Legislative Actions

There has been action on the legislative front over the past couple years. Some states suspended weight restrictions during the COVID-19 pandemic to facilitate delivery of medical supplies (Lamb, 2020). For example, New Jersey raised divisible load limits from 80,000 lbs. to 92,000 lbs.

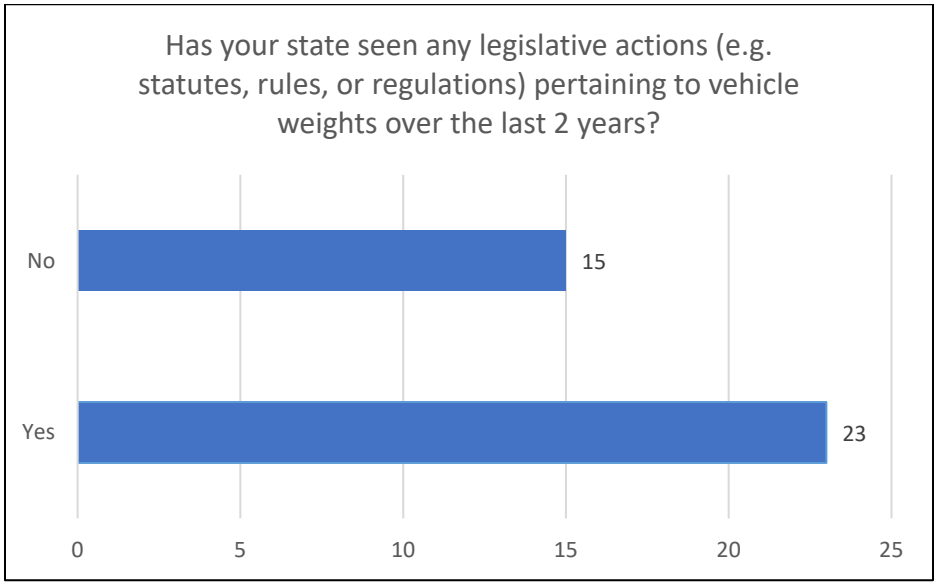

Figure 4.2 Legislative Action

Most legislative changes have focused on commodities: creating new permits, eliminating the need for special permits, and increasing gross weight or tolerances on permits for specific commodities. Table 4.1 lists examples of actions pursued by state legislatures and industry in the past two years. In addition to these examples, a few states updated regulations to comply with federal codes related to automobile transporters and covered heavy-duty tow and recovery vehicles (e.g., Delaware, Michigan).

Table 4.2 Proposed and Enacted Legislation for OD/OW Vehicles

State	Legislative Action
Louisiana	• Introduced an OW permit for transporting earthen materials on government-funded levee projects • Classified bulk soil as a construction aggregate, eliminating the need for a special permit • Amended the timber forest permit to allow a total gross weight of 90,200 lbs.
Wisconsin	• Timber industry lobbied to add weight and size to existing permits • Added municipal wastewater treatment plant sewage to the scrap/recycled materials commodity permit • New agricultural implements added to the husbandry permit • Producers of hemp, maple syrup, and farm-raised fished lobbied to add their commodities to an existing farm goods annual permit
Montana	• Added a 10% gross weight tolerance on wintertime permits
Texas	• Placed several bills under consideration, including route designations for permits of OD/OW in certain counties and weight limits on over-the road buses
Nebraska	• Drafted a rule and regulation to allow up to 46,000 lbs. on tandem axles on specified highways
Indiana	• Added an electric co-op to divisible load permits
Missouri	• Passed a law on fees and regulations for self-propelled cranes
Ohio	• Passed legislation mandating study of its OD/OW fees
Colorado	• Multiple pieces of legislation enacted related to transporting hazardous materials and fees • Created a single annual fleet OW permit for commercial vehicles operating with a quad axle or trailers with two or three axles • Failed to pass legislation to create a permit for divisible agricultural produce
New Hampshire	• Legalized heavy recovery vehicles
Tennessee	• Amended legislation on tow trucks to increase axle weight limits on the heaviest recovery trucks and raise permit fees

4.3 Enforcement Challenges

Seventeen respondents said their states have enjoyed successes with vehicle weight enforcement, while 24 reported confronting challenges. Just four respondents said they've had neither successes nor challenges. Law enforcement throughout the US is experiencing resource and personnel shortages. Lack of staff prevents the enforcement of weight limits. Respondents attributed staff losses to budget cuts and low entry pay, especially at weigh stations. Several respondents said their states need updated scale facilities. For example, the Ohio State Highway Patrol has asked the Ohio DOT to build upgraded weigh stations with advanced technologies. Estimated costs for this project exceed $300 million.

Enforcing weight limits is most successful when weigh station operations are combined with road patrols. When a high number of commercial vehicles move through a weigh station, limited staff face burdens attempting to inspect, measure and compare permitted loads to permits. Law enforcement in some states feel they lack adequate weigh station infrastructure. Many weigh stations are often either closed or operate on intermittent schedules. Many enforcement personnel believe they lack the locations for portable scales. One respondent commented, "The saturation of commercial vehicles in comparison to limited mobile enforcement officers allows for only a sampling of CMV's in commerce. Some fixed weigh stations are easily (and often) bypassed."

Law enforcement also lacks resources to monitor bridge loadings. According to one respondent, "Directly speaking with law enforcement, they do not have the resources to sit by the bridge and monitor passing loads. There is a very small penalty for illegal load passing over bridges." One challenge both industry and stakeholders deal with — and which complicates enforcement — is confusing signage. This can impede enforcement activities. Environmental or

geographic factors can also influence enforcement. For example, in Colorado where a load can travel is dictated by topography (especially for liquid commodities). In some cases, inadequate space along highway shoulders may hamper pullouts and therefore enforcement. Technical obstacles also exist which make it difficult to use portable WIM scales (e.g., weighing a commercial vehicle's axles simultaneously).

Staff may lack knowledge about permit rules and regulations. Enforcing weight limits fairly and consistently is fraught due to commodity or industry weight-limit exceptions, especially when weight limits are increased for one industry but not others. Most states do not track loads with specific commodities along a given route or collect data on the commodity being hauled when a truck is cited.

4.4 Enforcement Successes

States have met with success enforcing weight limits. For example, Arkansas has found that improving the visibility of enforcement increases compliance with weight limits. Even with reduced staffing, interagency collaboration can enhance enforcement operations (e.g., state, county, and/or local law enforcement work together and share data and facilities). A respondent from Connecticut noted that "The DMV and CT State Police both enforce overweight vehicle laws. They work well together and do an excellent job despite low staffing. Both agencies collaborate frequently with the DOT [OD/OW] Permit Unit and Engineering staff." In Louisiana, a Mobile Weight Enforcement Unit brings together Louisiana State Troopers and DPS Officers in a cohesive unit to enforce weight and size laws. Some states have benefited from using commercial vehicle enforcement divisions that are responsible for staffing scale houses and patrolling roads. Even with specialized OW vehicle enforcement, however, units struggle to maintain sufficient personnel.

4.5 Advanced Technology

The implementation of advanced technologies (e.g., virtual WIM stations, automated electronic permitting and routing systems, tire anomaly systems) results in more targeted enforcement. Commenting on Idaho's decision to install WIM systems at ports of entry, a respondent said, "These systems are allowing for better observation of weight, and only calling in vehicles that show a weight issue, or that don't have a permit for the weight they are hauling." Adopting WIM systems is beneficial because it helps with assigning patrol officers to routes with OW vehicles. Officers can also log in to these systems to pinpoint OW vehicles, thus improving identification of non-compliant vehicles.

4.6 Bridges

Some states have limited options for monitoring and enforcement on bridges, such as posting ordinary signs, issuing overweight permits with route restrictions, and conducting normal weighing and enforcement activities. In Michigan, most posted bridges fall within local jurisdictions and weighmasters may focus on these locations. But ordinary signs are the principal countermeasure.

Other states strictly enforce bridge postings and increase fines assessed to violators. Automated permitting systems are becoming more common. Permits list restricted routes and reduce human error. More sophisticated signage is emerging as well. And some states are moving toward increased or targeted enforcement initiatives at specific locations and using portable scales. In a few states like New Jersey, specially assigned units monitor particular routes and bridges.

4.7 Permitting and Fees

Most states now rely on automated permitting systems, but updates are still required in places. Many respondents commented that their states do not collect enough in permit fees to repair the damage OW vehicles inflict on pavements and bridges. Fees have not increased in decades in some states. Due to low fees and the small number of citations issued, OW trucks can benefit from running heavy. New Hampshire is a case in point — it has the lowest fine structure in the country and only 20 troopers who perform enforcement activities.

4.8 Citations

Among states that provide data on OW citations issued between 2015 and 2019, Arkansas, Illinois, Missouri, Ohio, Oregon, and Virginia issued the most. States issuing the fewest citations were Delaware, Louisiana, West Virginia, and Wyoming.

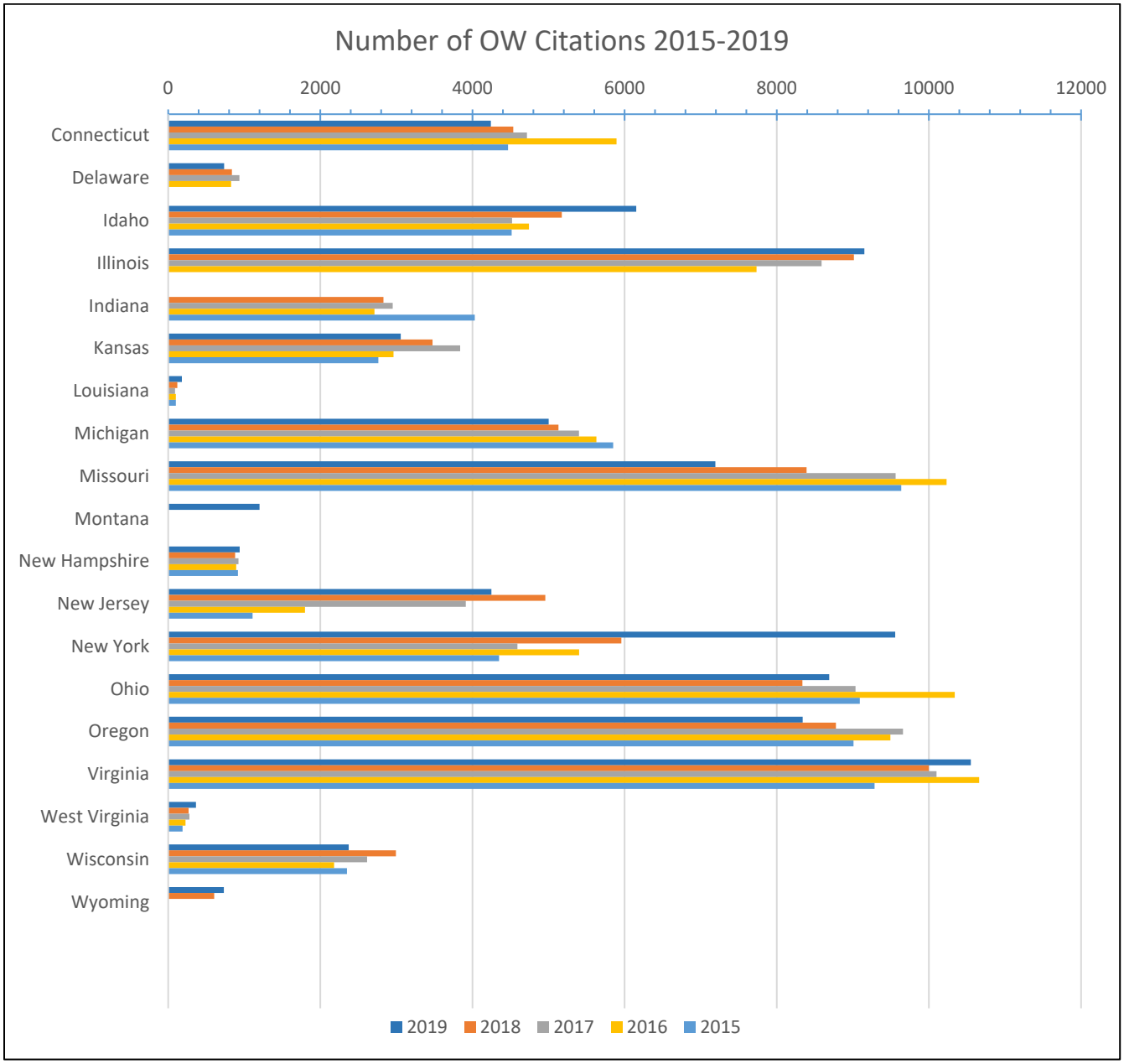

Figure 4.3 Citations

When citations are issued, local courts often dismiss citations or reduce penalties. This cuts down on funds that can be used to repair damaged infrastructure. Truck drivers know that citations often do not lead to convictions, so they will run heavy knowing that the likelihood of paying a penalty is low. Respondents offered several proposals to mitigate this issue: (1) consistent adjudication of citations statewide to ensure carriers are held accountable, (2) educational outreach to prosecutors and judges, and (3) hearing all cases about commercial vehicle infractions at a central location to boost conviction rates.

Most states (22 of 33) do not collect data on the type of commodity being hauled when a truck receives an OW citation. A few respondents gave more detailed information. This is summarized below.

4.8.1 Indiana

Indiana designates routes for heavier vehicles, including a toll road that runs across the northern part of the state. The Indiana Toll Road accommodates three types of toll vehicles across 15 miles of toll gates. The maximum gross weight for a single vehicle is 90,000 lbs. Other vehicle configurations can carry more weight — a tractor-trailer-trailer may weigh up to 127,000 lbs. (a four-combination vehicle has a gross maximum weight of 127,400 lbs.). The Extra Heavy Duty Highway in the northwest part of the state allows special weight permits for Michigan Train trucks (up to a maximum gross weight of 134,000 lbs.). Statewide, exemptions are in place for some commodities (although they are not applicable to interstates). These include a 10% tolerance on gross weight only (e.g., farm commodities). Other exemptions include a 10% tolerance on both gross and axle weight for vehicles moving logs, wood chips, bark, and sawdust. Garbage trucks are exempt from weight restrictions as well.

In 2021 (following our data collection), a new law — IN HB1190[6] — passed related to OW vehicle permits. It clarified the definition of an OW divisible load, removing a list of commodities from the definition. INDOT can now issue OW permits for certain resources on designated highways (but not local roads unless otherwise allowed by the local jurisdiction), and weight limits increased from 80,000 lbs. to 120,000 lbs. The law also changes permitting fees, increases violation penalties for citations by $500, requires a study of the fee structure and impact of the OW divisible loads on roads by 2023, and directs Indiana police to issue annual reports on the number of accidents involving OW divisible load permit holders.

4.8.2 Colorado

Recently, Colorado established a new program to prioritize repairs on weight-restricted structures and implemented multiple initiatives related to enforcing weight limits (e.g., training, updating technology to improve accuracy and efficiency). Enforcement of weight limits is complicated by environmental factors, particularly for liquid commodities. The state's electronic OD/OW permitting facilitates commodity routing across difficult terrain or weather conditions. The Colorado DOT (CDOT) launched a new website in 2020 for the freight industry as well as an advanced government message delivery system that provides to OD/OW permit carriers alerts on route restrictions, closures, weather conditions, or other important information. The agency's Freight Routing Resiliency project uses OD/OW route data, visualization, and analytics to identify and prioritize the repair and replacement of weight-restricted structures. Using this approach, in 2020 CDOT prioritized repairs to a structure in southern Colorado as it would open up over 200 new OD/OW routing options and improve corridor resiliency and safety.

Although enforcement personnel attend standardized trainings, prosecuting citations is hampered by a lack of training within the judicial system. CDOT offers training in district attorneys' offices and advocates that attorneys consult with officers and the agency's subject-matter experts. CDOT provides, as well, virtual training for non-compliant carriers tailored to the specific violations (e.g., curfews, bridge strikes, LVC routing).

The Colorado State Police (CSP) is replacing semi-portable scales with wireless-compatible semi-portable scale systems to increase accuracy and eliminate downtime resulting from faulty equipment. The state has also added electronic WIM weight communication software (Drivewyze), which gives POE officers access to real-time data on load weights transported by individual carriers. CSP is also converting two sprinter vans to portable weigh stations that can monitor areas needing targeted enforcement.

4.8.3 Michigan

Michigan bases its truck weight laws on maximum axle loadings, not gross vehicle weight, citing research that demonstrates pavement damage results from axle loading. Compared to most states, Michigan allows more axles combined with axle loadings, increasing overall gross weight. Vehicles with up to 11 axles may use roadways, although each axle is limited to 13,000 lbs. (up to 164,000 lbs. GVW). The Michigan DOT believes this weight-structure reduces pavement damage and corresponding repair costs, economically benefits the state, and enhances

[6] https://legiscan.com/IN/bill/HB1190/2021

safety due to fewer vehicles on the road. Michigan publishes an annual Truck Operator's Map that marks designated highways which are open throughout the year to trucks up to 102" wide, trucks weighing up to 80,000 lbs. with five axles, and all legal Michigan vehicles. These include the NN, but some routes have weight limits imposed in the spring.

4.8.4 Ohio[7]

Key challenges in Ohio include coal trucks in the southern portion of the state, agriculture trucks in the northwest during harvest season, and trucks associated with the fracking industry in the east. Road User Maintenance Agreements (RUMAs) forged with these industries are used to mitigate damage to pavement and bridges. The Ohio DOT describes the state's manufacturing operations of very large loads (e.g., generators for oil platforms and wind turbines) that are cost-beneficial to transport as non-divisible loads "as one unit rather than breaking them down and reassembling them." Although manufacturers prefer getting their goods onto the water for transport as quickly as possible, fewer routes are available to heavier and OD loads, especially those which avoid old rail bridges.

4.8.5 Wisconsin

The complexity of Wisconsin's weight laws, combined with limited State Patrol inspectors (100) limits enforcement. Permitted and non-permitted weight limits vary by commodity, vehicle type, and time of year. And the state issues 25 commodity-specific permits whose scope and applicability are divergent. Permitting fees have not increased in 40 years and only account for weight, not distance travelled. Although local governments can reduce weights on some roads, state laws exempt certain vehicles from local postings. Signage for reduced posting on local roads is often outdated compared to modern vehicle configurations, which creates confusion. In light of commodity-specific exemptions, for bridges the state opts for a single standard weight limit posting. Doing so eliminates the need to install new weight-limit postings when one commodity-based exemption is responsible for over-stressing a bridge.

4.9 KYTC District Survey

KTC's survey of KYTC district staff who work in permitting, planning, and maintenance, and who handle issues related to OW vehicles and extended weights, found that many harbor the same concerns of agency personnel in other states. Specific concerns include pavement and bridge maintenance and damage to lower class A and AA routes. Respondents feel that Kentucky's highway and bridge network cannot support routine OW vehicles, with many roads being unable to accommodate even 80,000 lbs. Staff also expressed worry that the asphalt quality negatively impacts pavement designs.

Permit fees are too low to cover damages. Given that revenue is insufficient to maintain existing roadway conditions, OW vehicles and extended weights will continue to pose problems. Due to the number of posted bridges, identifying bridges able to carry heavy loads is difficult. Drivers also ignore postings and dodge scale houses. Enforcement activities that were inconsistent to begin with are declining because of reduced staffing. Nonetheless, staff believe that robust enforcement is necessary, especially on some of the state's remaining narrow truss bridges.

Staff are worried about some commodities traveling at heavier weights on all roads, including lower class roads. Tanker trucks going to and from oil reserves have damaged rural secondary roadways as well as KYTC- and county-maintained roads. Respondents also feel that vehicles carrying timber are especially damaging and that farmers tend to run heavy (e.g., 100,000 lbs.) without obtaining a permit or paying extra fees. District staff agree on the importance of establishing a level playing field for all industries and commodity producers — these stakeholders should pay for damages they cause to roads, not taxpayers.

[7] ODOT has recently completed an overhaul of its website. Web links provided in email correspondence to KTC are no longer active.

Chapter 5 Best Practices and Recommendations

5.1 Recommendations from National Studies

TRB's 2018 research roadmap for height and weight studies concludes evaluating and improving truck size and weight regulations require critical data about truck traffic characteristics (i.e. weights, volume, and changes over time), pavement and bridge conditions, safety (e.g. highway crashes and casualties), and agency costs for state and locally maintained roads.

Key challenges include increasing data collection on the weights of trucks involved in crashes, the impacts of truck traffic on bridge deck deterioration, and weight enforcement costs. States can also benefit from data on the number of OW vehicles and enforcement efforts to understand the costs of illegal loads on pavements and bridges. TRB recommended several research areas to pursue: investigating the effects of increased axle weight limits on pavement repair costs, using historical data on historical truck traffic bridge condition data to statistically validate deterioration rates based on loads, and coordinating data collection and sharing between states. Building models that quantify the impact of implementing coordinated policies across states will also prove valuable. Size and weight studies should also adopt a holistic perspective when assessing the implications of policy changes, beyond merely looking at the effects of increased size and weight limits. Any new regulations bring uncertainties, so systematic monitoring is a critical piece of evaluating their impacts.

Just as automatic permit and routing software platforms and advanced WIM systems now facilitate routing and enforcement, future technologies and data management systems will play a critical role in reducing the number of illegal loads on US highways. Advanced technologies available will significantly improve tracking and analysis of heavy trucks, and allow more coordinated data sharing between states on truck configurations, truck gross and axle weights, cargo loads, routes, and safety issues.

Although national-level studies have proposed data collection schemes to apply in future work, weight limit exemptions and special permits result in inconsistent rules between states, which challenges law enforcement and freight shipping. To minimize complications arising from incommensurate policies and regulations, Kentucky should continue to work with its neighboring states and MAASTO members to coordinate routing, share exemption information and special permitting requirements, and consider aligning fees and regulations to assist interstate freight operations.

5.2 Best Practices

Based on this research, KTC has compiled a list of best practices and recommendations KYTC can use to mitigate difficulties arising from weight limit exemptions, special permits, OW trucks, and illegal loads:

5.2.1 Legislation

- Reduce the number of commodity exemptions and aim for standardization across industries
- Investigate basing limits on axle weights

5.2.2 Enforcement & Judicial

- Increase law enforcement staffing and resources
- Create specialized enforcement units that focus on OW vehicles
- Enhance training efforts:
  - Provide standardized training for law enforcement
  - Train district attorneys to increase prosecutions
  - Provide training for violators to reduce repeat offenses
- Increase the number of citations through targeted efforts, especially on posted bridges
- Prosecute citations
- Increase fines for violations
- Implement advanced technologies to improve tracking OW vehicles (e.g., scale houses, advanced WIM, mobile unit automated systems, GPS)

5.2.3 Roads and Pavement

- Factor OW vehicles into pavement design

5.2.4 Bridges

- Install advanced signage
- Use special enforcement units to target bridges

5.2.5 Permitting and fees

- Raise permit fees

5.2.6 Data Collection and Management

- Improve data collection to prioritize bridge maintenance and repair (and pavements if applicable)

5.3 Strategies to Improve Application of Kentucky's Current Regulations and Improvements

Several aspects of Kentucky's weight limit statutes and regulations warrant legislative review. The purpose of this review would be to (1) ensure state statutory limits do not impose restrictions on interstates that would jeopardize federal funds, (2) update or remove obsolete statues, (3) resolve inconsistencies between KRSs and KARs, and (4) reduce ambiguities that muddy interpretations.

Ensure state statutory limits do not impose restrictions on interstates that would jeopardize federal funds

KRS 189.210 dates to 1942, prior to federal weight limit standards. Although KRS 189.221 and KRS 189.222 are the two primary statute that set truck weight limits, KRS 189.210 apparently restricts all other vehicles to 30,000 lbs. School buses and charter buses exceed this weight. Other vehicle combinations may also exceed limits. If state limits restrict vehicles below federal standards Kentucky would be subject to federal appropriations withholding. The General Assembly may want to revisit this statute to determine whether it needs to be revised.

Update or remove statutes that no longer adhere to current transportation practices

KRS 189.200 also dates to 1942 and may be obsolete. This statute places limits on how much weight per inch of width of tire that can be in contact with the roadway surface — 400 lbs. for iron or steel tires or 600 lbs. for solid rubber or rubber compounded tires. But iron and steel tires are no longer used in the trucking industry. These restrictions are inconsistent with other statutory and regulatory language.

Pursuant to 601 KAR 1:018(b), gross or axle overweight may not be permitted on a towing vehicle whose horsepower or breaking capacity is insufficient to safely transport an OD/OW load. But horsepower is not necessarily an issue for towing. For example, a car may have high horsepower and be unable to pull a heavy load. Torque may be a better indicator. The General Assembly may want to consider if metrics other than gross and axle weight are necessary.

Resolve inconsistencies between KRS and KARs

KRS 189.200 limits pounds per inch of tire weight to 600 lbs. for rubber tires. KRS 189.222 establishes the maximum at 700 lbs. per inch of the aggregate width of all tires on a single axle. 603 KAR 5:066 and 601 KAR 1:018 reiterate the 700 lbs. limit. Thus, the older statute is at odds with current Kentucky standards.

603 KAR 5:066 contains inconsistent language. Its introduction states that KRS 189.222(10) authorizes the Secretary to establish weight limits on the state highway system. But KRS 189.222(11) authorizes the promulgation of the KAR to establish weight limits and on different road classifications in the state. Section 1 of 603 KAR 5:066 refers to Trucking Highways classified as such in 603 KAR 5:301. This administrative regulation was repealed in 2016 so the reference is no longer relevant.

601 KAR 1:018 also contains a reference no longer relevant. The KAR makes multiple references to repealed statute KRS 189.2715, which previously authorized an annual OW permit for transporting steel products. The statute was repealed in 2017.

KRS 189.212(2) allows fiscal courts to issue special permits to haul specified materials, including agricultural products, minerals, or natural resources above the weight or dimensional limits in KRS 189.210 (i.e. 15 tons) but below weight limits 189.222. KRS 189.221 sets the weight limit on county roads at 36,000 lbs. The two statutes provide inconsistent weight limits for county roads. The statute also references a dimensional limit for KRS 189.210 where there is none provided. The General Assembly may want to revisit this statute to streamline the language and resolve inconsistencies between statutes.

Reduce ambiguities that obscure interpretations

Interpreting KRS 189.221 can be quite complex. In establishing basic height, width, length, and weight limits for trucks, trailers, manufactured homes, or vehicles readers must engage in a multi-step interpretive process — which includes obtaining definitions from other statutes — to grasp that the baseline weight limit for Kentucky state roads is 36,000 lbs. and that the statute establishes limits for county roads at 36,000 lbs. The General Assembly may want to streamline statutory language to make sure intentions are clear.

Several statutes that refer to commodities or special cargo loads invoke the phrases either *registered to haul* or *exclusively hauling*, which can result in misinterpretations. In this case, a vehicle can only haul as much as it is registered for. However, when commodity exemptions allow a 10% grow tolerance a vehicle may exceed its registered GVW. Thus, for exempted commodities, the commodity takes priority over registration. A vehicle cannot haul more than it is registered for unless it exclusively hauls certain commodities pursuant to KRS 189.222(3), in which case a vehicle is granted a 10% tolerance. Statutes require cumbersome interpretation to determine which vehicles are operating at legal limits and which are operating illegally based on whether the vehicle is exclusively hauling commodities listed in 189.222(3).

Strategies for KSP-CVE: Commodity/Cargo Citation Data & Citation Efforts

Our survey indicated that most states do not collect data on what type of commodity an OW vehicle is hauling when it is issued a citation. Even where states gather these data, they are not readily available. If citations do not list data on cargo, Kentucky cannot know whether trucks operating with exemptions exceed their higher limits, and if heavier trucks pose greater safety issues. KSP may want to add this information to future citations and maintain a database that supports data sharing.

The Kentucky FHWA Office's 2020 *Commercial Vehicle Size and Weight Enforcement Program* evaluation recommended increasing enforcement on posted bridges. To generate more accurate cost estimates for pavement and bridge repairs, Kentucky needs to improve enforcement through WIM and scale houses to accurately count the number of legal and illegal loads.

Strategies for KYTC

KYTC's website publishes several interactive maps, including the Metal Commodities Hauling Network.[8] That map's splash page references an outdated version of KRS 189.270 that was modified in 2020. KRS 189.2713, created in 2019, provides the statutory language for metal commodities permits. KYTC may want to revise this website and include a disclaimer like the one on the splash page for the Bridge Weight Limits Map.[9]

The Cabinet can benefit from integrating its GIS mapping products (e.g., interactive bridge maps, commodities maps) into a single tool that includes inputs for truck weight, cargo, and route. KTC created two tools to facilitate this process. The first is an interactive Excel spreadsheet which lets users enter routing information via dropdown selections (e.g., highway classification; proximity to an interstate exit, parkway exit, or AAA route; cargo type; registered vehicle weight; registration type). As a user adds input data, they can view — based on the cargo and registered truck weight — the maximum GVW and axle weight exemption allowed on a route. The spreadsheet includes statutory and regulatory language used for determining the maximum weights. Using the output from this

[8] https://kytc.maps.arcgis.com/apps/webappviewer/index.html?id=2b1e0d64e9c643ffb1c17ba15a96f8ec
[9] https://maps.kytc.ky.gov/bridgeweightlimits/

spreadsheet, KTC developed a flowchart that illustrates the decision-making process for determining gross weight limits for loads without a permit (Figure 5.1). This tool is a proof of concept which can help KYTC communicate with policymakers, the commercial trucking industry, and other stakeholders about weight limit exceptions. Following Figure 5.1 are notes that describe the authority for each of the gross weight and axle weight results. Figure 5.2 is a second flowchart for determining bridge weight limits. It is worth nothing that these do not include the Extended Weight Hauling Programs and the complexities that accompany trucks utilizing that system.[10]

[10] For a detailed report on Kentucky's Extended Weight Hauling Programs see Marks et al. (2021).

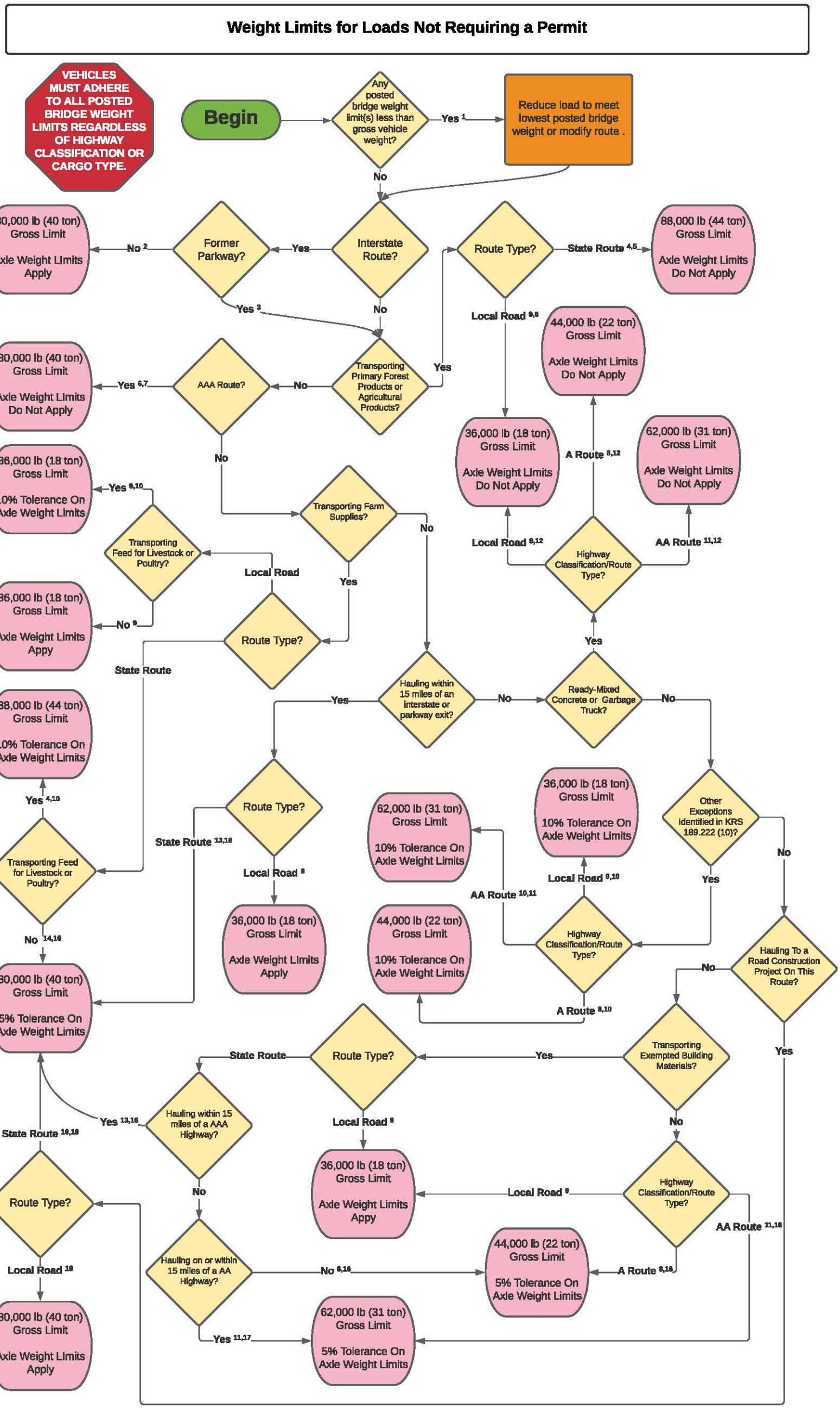

Figure 5.1 Method for Calculating Weight Limits for Non-Permitted Loads

1. All statutes governing weight limits include language stating that vehicles may not exceed any bridge weight limits regardless of any higher limits that may be allowed based on the highway classification or cargo type.

2. Per 23 USC 127(2), the maximum gross weight on interstate highways is 80,000 pounds. Axle weight limits are 20,000 per axle, with tandem axles allowed up to 34,000 pounds.

3. Per 23 USC 127(I), loads on certain interstate routes in Kentucky are allowed to carry gross weights in excess of 80,000 pounds and are allowed tolerances on axle weights. These routes consist of former Kentucky Parkway routes that were converted to interstates.

4. Per KRS 189.222(2), vehicles transporting feed for poultry or livestock; or meats, agricultural products, livestock, poultry, or primary forest products from their point of origin to first market; are allowed to carry up to 80,000 pounds on any state highway, excluding interstates. Further, KRS 189.222(3) allows such vehicles an additional 10% tolerance on gross weight limit.

5. Per KRS 189.222(5), vehicles engaged exclusively in the transportation of farm or primary forestry products are subject only to gross weight provisions, and are excluded from axle weight provisions, except on interstate highways.

6. Per 603 KAR 5:066(1)(a), class “AAA” routes shall have a maximum allowable gross weight of 80,000 pounds.

7. Per KRS 89.2301, vehicles operating on any “AAA” highway (excluding interstates) shall be exempt from any axle weight provisions.

8. Per 603 KAR 5:066(1)(c), class “A” routes shall have a maximum allowable gross weight of 44,000 pounds.

9. KRS 189.221(4) establishes a 36,000 pound weight limit for all routes. This limit applies to all routes that are not posted or provided higher limits elsewhere in statute.

10. KRS 189.222(10) allows vehicles engaged exclusively in the transportation of crushed stone, fill dirt and rock, soil, bulk sand, coal, phosphate muck, asphalt, concrete, solid waste, tankage or animal residues, livestock, feed for livestock or poultry, and agricultural products to be permitted a tolerance of ten percent of the axle weight provisions, except on interstate highways.

11. Per 603 KAR 5:066(1)(b), class “AA” routes shall have a maximum allowable gross weight of 62,000 pounds.

12. Per KRS 189.222(7), garbage trucks shall be excluded from axle weight provisions except on the interstate system. Per KRS 189.222(5), vehicles transporting ready-mixed concrete shall be excluded from axle weight provisions, except on the interstate system.

13. KRS 189.222(1)(f) allows any vehicle hauling within 15 miles of an interstate or parkway exit to carry up to 80,000 pounds on any state road.

14. Per KRS 189.222(2)(d), vehicles with a gross weight of 80,000 pounds may travel on any state highway if transporting supplies, materials, or equipment necessary to carry out a farming operation. However, the additional 10% tolerance for gross weight provided for in KRS 189.222(3) does not extend to farm supplies.

15. Per KRS 189.222(1)(f), vehicles travelling on any state route within 15 miles of an interstate or parkway exit may carry a gross weight of up to 80,000 pounds.

16. 603 KAR 5:066(6) provides for a tolerance of up to five percent on axle weight provisions for all state-maintained highways which are not a part of the interstate system.

17. KRS 189.2226(3) allows vehicles carrying building materials associated with new home construction, home remodeling, or home maintenance to travel up to 15 miles from a state road that is classified to carry the registered weight of the vehicle.

18. KRS 189.2221(6) allows vehicles hauling building materials to a road construction project on a highway rated less than 80,000 pounds to haul up to 80,000 pounds gross weight.

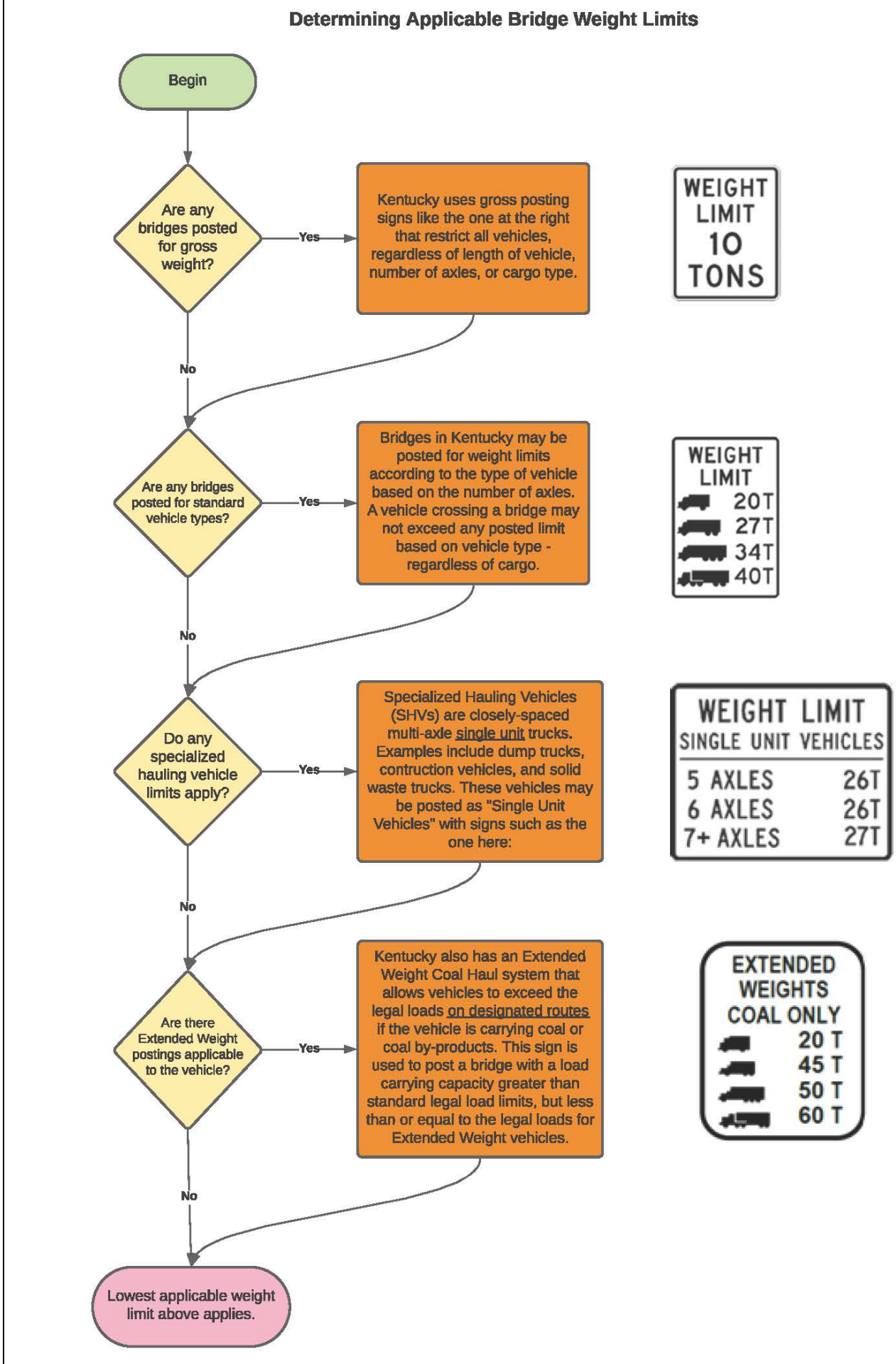

Figure 5.2 Method for Determining Bridge Weight Limits

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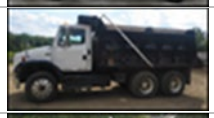
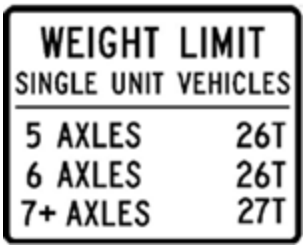
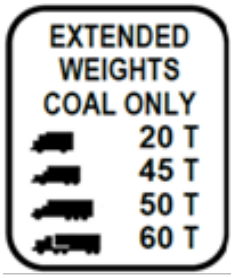
Appendix A Definitions of Kentucky Truck Types, Examples, and MUTCD Bridge Posting Signs

Truck Type	Axles	Axle Description	Example	Bridge Posting Sign
Type 1	Single Axle	single unit truck with 2 single axles		
Type 2	Tandem	single unit truck with 1 steering axle + 2 axles in tandem		
Type 3	Tridem	1 steering axle + 3 axles in tridem		
Type 4	Tractor-trailer	tractor-trailer combination consisting of 5 or more axles		
Specialized Hauling Vehicle (SHVs)				
SU5				 *weight-posted as "Single Unit Vehicles"
SU6				
SU7				
Emergency Vehicles (EVs): Examples include commercial and custom chassis pumpers, industrial foam pumpers, aerial ladders, aerial platforms, firetrucks, tow trucks, and ambulances"				
EV2	Single Axle	single rear axle		 *weight-posted for interstate or bridge within reasonable access limits for Emergency Vehicles
EV3	Tandem	tandem rear axle		

Extended Weight Coal Haul				
Type 1	Single Axle	single unit truck with 2 single axles		
Type 2	Tandem	single unit truck with 1 steering axle + 2 axles in tandem		
Type 3	Tridem	1 steering axle + 3 axles in tridem		
Type 4	Tractor-trailer	tractor-trailer combination consisting of 5 or more axles		

***Overweight defined as exceeding the gross and axle weight limits in 603 KAR 5:066; KRS 177.9771 for coal for coal or coal byproducts; bridge weight in 603 KAR 5:066 or posted bridge limits.

Appendix B State DOT Survey

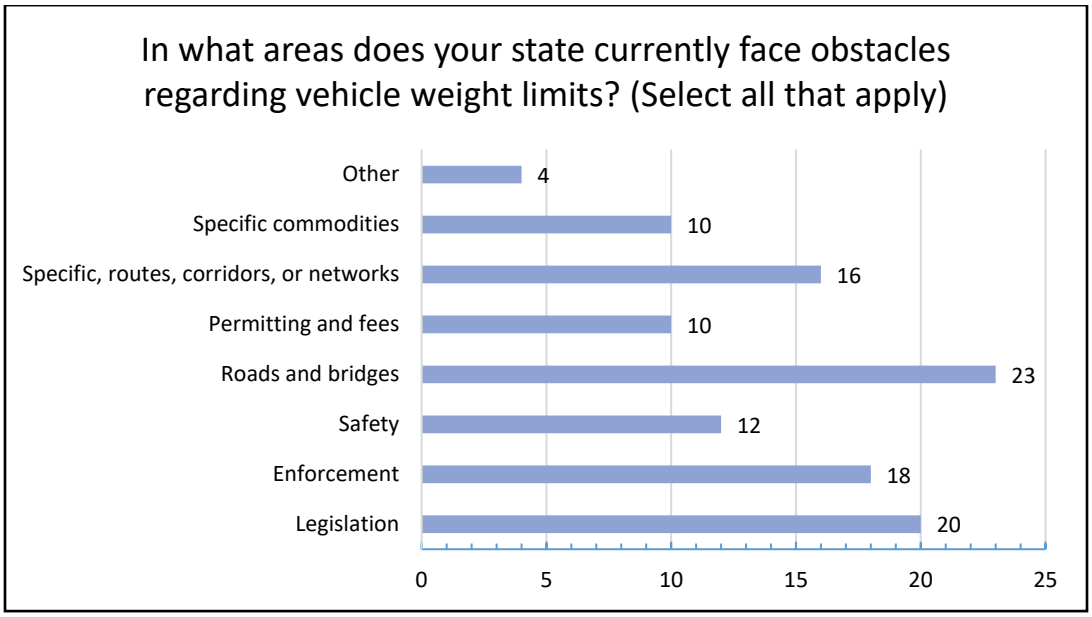
Number of Responses per State, including the District of Columbia and British Columbia.

Alabama	0
Alaska	0
Arizona	0
Arkansas	1
California	0
Colorado	1
Connecticut	2
Delaware	1
District of Columbia	1
Florida	0
Georgia	0
Hawaii	0
Idaho	1
Illinois	1
Indiana	2
Iowa	1
Kansas	1
Louisiana	2
Maine	0
Maryland	0
Massachusetts	0
Michigan	2
Minnesota	1
Mississippi	0
Missouri	3
Montana	2
Nebraska	2
Nevada	0
New Hampshire	1
New Jersey	1
New Mexico	0
New York	1
North Carolina	0
North Dakota	0
Ohio	3
Oklahoma	0
Oregon	1
Pennsylvania	0
Rhode Island	1
South Carolina	0
South Dakota	0
Tennessee	1
Texas	2
Utah	0
Vermont	0
Virginia	1

Washington	0
West Virginia	1
Wisconsin	1
Wyoming	1
Other: British Columbia, Canada	1
Total	40

50 STATES, D.C. AND PUERTO RICO	IN WHAT AREAS DOES YOUR STATE CURRENTLY FACE OBSTACLES REGARDING VEHICLE WEIGHT LIMITS? (SELECT ALL THAT APPLY)
BRITISH COLUMBIA, CANADA	Enforcement, Roads and bridges, Permitting and fees, Specific commodities
ARKANSAS	Legislation
CONNECTICUT	Other
COLORADO	Legislation, Enforcement, Safety, Roads and Bridges, Permitting and Fees, Specific, routes, corridors, or networks, Specific commodities
CONNECTICUT	Legislation, Roads and bridges
DELAWARE	
DISTRICT OF COLUMBIA	Legislation, Enforcement, Roads and bridges, Specific, routes, corridors, or networks
IDAHO	Legislation, Roads and bridges, Permitting and fees, Specific, routes, corridors, or networks
ILLINOIS	
INDIANA	Legislation, Enforcement, Safety, Roads and bridges, Permitting and fees, Specific, routes, corridors, or networks
INDIANA	Legislation, Enforcement, Safety, Roads and bridges, Permitting and fees, Specific, routes, corridors, or networks, Specific commodities
IOWA	Legislation, Enforcement, Roads and bridges, Specific, routes, corridors, or networks
KANSAS	Enforcement, Safety, Roads and bridges, Specific, routes, corridors, or networks, Specific commodities
LOUISIANA	
LOUISIANA	Enforcement
MICHIGAN	
MICHIGAN	Enforcement
MINNESOTA	Legislation, Enforcement, Roads and bridges, Specific commodities, Other
MISSOURI	Safety, Roads and bridges, Specific, routes, corridors, or networks
MISSOURI	Legislation, Enforcement, Roads and bridges, Permitting and fees, Specific commodities
MISSOURI	Legislation, Enforcement, Safety, Roads and bridges ,Permitting and fees
MONTANA	Legislation, Safety, Roads and bridges
MONTANA	Roads and bridges
NEBRASKA	Legislation, Enforcement, Safety
NEBRASKA	Legislation, Roads and bridges, Permitting and fees ,Specific, routes, corridors, or networks, Specific commodities, Other
NEW HAMPSHIRE	Legislation, Safety
NEW JERSEY	
NEW YORK	Legislation, Enforcement ,Safety, Roads and bridges
OHIO	Roads and bridges, Specific, routes, corridors, or networks
OHIO	Legislation, Other

OREGON	Roads and bridges, Specific, routes, corridors, or networks
RHODE ISLAND	Legislation
TENNESSEE	Legislation, Enforcement, Safety, Specific, routes, corridors, or networks
TEXAS	Roads and bridges
TEXAS	Specific, routes, corridors, or networks
VIRGINIA	Enforcement, Safety, Roads and bridges, Permitting and fees, Specific, routes, corridors, or networks
WEST VIRGINIA	
WISCONSIN	Legislation, Enforcement, Roads and bridges, Permitting and fees, Specific routes, corridors, or networks, Specific commodities
WYOMING	Specific commodities



50 STATES, D.C. AND PUERTO RICO	IF YOU ANSWERED OTHER, PLEASE BRIEFLY EXPLAIN.
BRITISH COLUMBIA, CANADA	
ARKANSAS	
CONNECTICUT	Judicial (court) follow through for charges issued.
CONNECTICUT	
COLORADO	
DELAWARE	
DISTRICT OF COLUMBIA	
IDAHO	
ILLINOIS	
INDIANA	
INDIANA	
IOWA	
KANSAS	
LOUISIANA	
LOUISIANA	
MICHIGAN	
MICHIGAN	
MINNESOTA	More related to commodity specific issues, but current laws allow different legal weights (and weight tolerances) for different commodities. Since commodity definitions are never clear, it creates issues for industry and enforcement on what can be hauled at what legal weight. Plus, the road doesn't care what product is being hauled, weight is weight. I wish state and federal legislators would think about it and make legal weights the same across the board.
MISSOURI	
MISSOURI	
MISSOURI	
MONTANA	
MONTANA	
NEBRASKA	
NEBRASKA	
NEW HAMPSHIRE	
NEW JERSEY	
NEW YORK	
OHIO	
OHIO	Scale facilities are outdated and not to current industry standards.
OREGON	
RHODE ISLAND	
TENNESSEE	
TEXAS	
TEXAS	
VIRGINIA	

WEST VIRGINIA	
WISCONSIN	
WYOMING	

50 STATES, D.C. AND PUERTO RICO	PLEASE EXPLAIN WHY YOU CHOSE THOSE AREAS (LEGISLATION; ENFORCEMENT; SAFETY; ROADS AND BRIDGES; PERMITTING AND FEES, SPECIFIC ROUTES, CORRIDORS, OR NETWORKS; SPECIFIC COMMODITIES)
BRITISH COLUMBIA, CANADA	Enforcement: Superloads move at night and we have issues trying to staff for enough night enforcement. Roads and bridges: The volume of requests for weights heavy enough to require custom analysis has risen to the point that we are challenged to keep up. Permitting and fees: Our permit system is at end of life and efforts are under way to replace it. Specific commodities: We consistently receive requests for more weight for natural resource loads, beyond what road safety or infrastructure protection would allow.
ARKANSAS	We currently can't issue a citation penalty for over weight on axles, only on gross weight.
COLORADO	Like any other state, Colorado faces challenges in each of the specified areas, but not so much to say or interpret any single one as an “obstacle” to effective size and weight enforcement. Typical challenges include agency budgets and state allocations, availability of FTE, political trends and policies, and addressing multiple municipalities who, having the obligation to not regulate contrary to state law, also have regulations affecting oversized and overweight vehicles within their municipalities. One additional challenge that Colorado would like to include, however, are those environmental in structure. Environmental/Weather-related factors have substantial impact upon and present great challenges to enforcement overall within Colorado, including those efforts more focused upon oversized or overweight vehicle operation. With respect to commodity type, the most prevalent challenge is presented by carriers transporting liquid commodities. Liquid-based loads present their own challenges with regard to safety and load securement and road engineers designing, refining or designated roadways must remain vigilant regarding road grades, types, and area where the road exist, since the topography in Colorado very much dictates what types of roads can go where. This is important regarding any size load or road type but even more so for oversized or overweight loads transporting liquid commodities. The Colorado Department of Transportation Freight Program is currently working on Freight Routing Resiliency projects which identify and prioritize replacing or improving weight-restricted structures existing along freight routes. In 2020, CDOT completed repairs on two structures using this approach. Structure P-18-BP, which is located on I-25 in Southern Colorado, had been weight restricted since 1996. Upon review, P-18-BP was prioritized for repairs using oversize/overweight route data visualization and analytics. The CDOT Freight Office was able to effectively communicate the immediate return on investment for this project by demonstrating the benefits of improved routing efficiency and GHG reduction. Part of this was showing that the repair of P-18-BP would result in 200+ new routing options for oversized and overweight loads while also improving resiliency/redundancy on this corridor, offering a safer alternative to vehicle operators when entering Colorado from its southern border.
CONNECTICUT	
CONNECTICUT	Legislation - the legislation process is very slow and frequently commercial vehicle weights are not a priority Roads and Bridges - We have older bridges in CT that can only accommodate up to certain weights. More strengthening needs to be performed.
DELAWARE	

DISTRICT OF COLUMBIA	Legislation: Challenges to ensure citation fines are in line with neighboring jurisdictions and authorize sufficient enforcement, especially repeat offenders Enforcement: Challenges to ensure sufficient resources and personnel to support enforcement efforts Roads & Bridges: The District encompasses many historic bridges and roadways with limited capacity for weight or larger dimensioned vehicles Specific Corridors: There is limited right-of-way, even along interstates within the District, to pull vehicles over and inspect for weight or equipment infractions
IDAHO	Legislation was chosen, because Idaho is slowly increasing road limits to 129k from the 105k that is allowed by statute. Also every local highway jurisdiction (all 284) have to approve 129k for routes if they want. This is a slow an tedious process. It would be less of an obstacle if 129k was more widely accepted by legislature. Roads and Bridges was chosen, because Idaho has some infrastructure issues with some of our bridges which is limiting the weight that can travel across the state safely. As Idaho has only one road that connects northern Idaho to Southern Idaho, is there are rock slides, or snow, this connection can be closed causing a major disruption to the movement of goods. Permitting and Fees was chosen, because 1) Idaho doesn't have final mile permitting, and it is a slow process to get local highway jurisdictions to on board so that permits can be issued to the last mile. And 2) Idaho's new permitting system still doesn't have weight analysis automated yet. Specific Routes, because of reasons listed above under roads and bridges. Corridors was chosen because of above reasons listed under roads and bridges.
ILLINOIS	
INDIANA	
INDIANA	Our issue in legislation is our Indiana code and Administrative code are inconsistent. For the area of enforcement, there are not enough resources. Safety is the continued concern of overweight truck collisions and the severity of collisions. For our roads and bridges, the overweight vehicles cause damage and the useful life of the infrastructure. There is a gap between our permitting fee revenue and the cost to the damaged infrastructure. We currently do not have a way to track loads for specific routes, corridors, or networks and specific commodities. Also, the general assembly made certain commodities available for divisible load permits.
IOWA	
KANSAS	Enforcement-keeping staff numbers Safety-locations to inspect specific routes corridors and networks Roads & Bridges-age/deterioration Specific routes corridors and networks-structures/roads/intersections/ramps/parking/fueling not designed to handle technology advanced loads related to length and weights (non-divisible loads are getting longer, wider, & heavier) Specific commodities-i.e. windmill tower & blades and volume of new windmill farms emergency vehicles and posting of bridges for loads that are considered Superloads in the state of Kansas. Kansas does not have a freight corridor, though it has been discussed.
LOUISIANA	LA State Police/ Dept of Public Safety Weight Enforcement has seen a dramatic loss in personnel since 2012 when the Stationary Scales were legislatively mandated to the DSP from LA DOTD. The positions have been difficult to fill due to state budget constraints and a low entrance salary being offered to new employees.

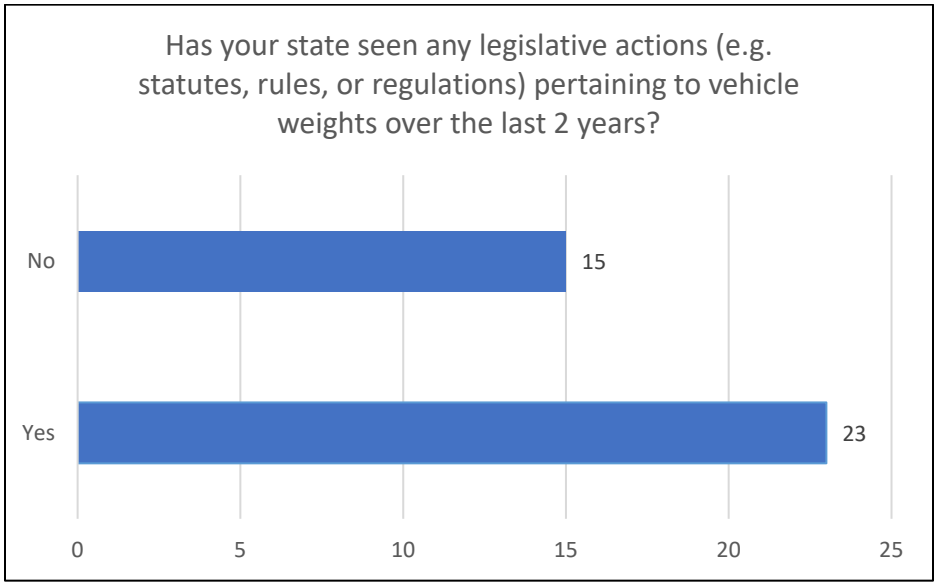
MICHIGAN	
MICHIGAN	The Commercial Vehicle Enforcement Division is responsible for the staffing and operation of 14 scale facilities and conducts road patrol activities focused on commercial vehicle enforcement.
MINNESOTA	Legislation: No matter how hard you try to educate legislators on the ramifications of passing (or not passing) a certain law, they still vote party lines. Later, they want to know why the money they spend on building roads isn't lasting and the roads are in bad shape. Enforcement: We do not have enough staff to adequately enforcement size/weight laws.
MISSOURI	Safety is MoDOT's number one priority. Weight restrictions prevent carriers from certain roadways and bridges. Aging infrastructure and roadways.
MISSOURI	The legislature wants to increase weights or exempt certain entities from weight limits. This makes it difficult for enforcement when legislation is so inconsistent with weight limits. Our fuel tax is so low and we do not have the funding to maintain current infrastructure such as roads and bridges. Our permit and fee costs are very low for the damage overweight vehicles cause.
MISSOURI	Specialized carriers have been successful in getting legislation passed to allow special permitting consideration. Likewise, increased weight limits are routinely a topic of discussion. The increased stresses on Missouri's highway system increases the cost for maintenance and reduces overall expected life cycle of infrastructure. Permitting fees have not increased in several decades, so the fees collected do not cover the cost of the damage being done.
MONTANA	Legislative changes are needed but it is always an uphill battle. The safety of our officers enforcing size and weight regulations on the shoulder of a highway is always a concern and more pullouts on highways are always needed. With the Feds changing the way bridges are rated, Montana has numerous obstacles in routing CMV's around load rated bridges.
MONTANA	FHWA Mandate for SHV reclassification of bridge structures has significantly limited trucking.
NEBRASKA	We have a controversial clause in State Statue allowing 15% extra gross weight for during harvest time. Despite that these loads should not pass through posted bridges, it would overload some non-posted bridges that their load carrying capacity is near legal loads. - Law Enforcement simply does not have the resources to monitor loads on bridges. - It becomes a safety concern as overloading/overstressing becomes an issue.
NEBRASKA	
NEW HAMPSHIRE	New Hampshire has the lowest fine structure in the country, we charge 2 cents per pound or if you are on an interstate highway $124 or $310 fine no matter how much you weigh. With a fins structure this low and only 20 Troopers across the state it makes financial sense to run heavy. We have made strides to revoke registration privileges but the overweight issue still exists out there. Feel free to look at our weight laws at NH.gov. They are RSA 266:18-266.26.
NEW JERSEY	
NEW YORK	
OHIO	Due to infrastructure restrictions and impediments, Ohio has fewer OD/OW routes that are suitable for vehicles. This sometimes requires vehicles to route additional miles to get to their destination.

OHIO	Portable scales must weigh a commercial vehicle axles simultaneously.
OHIO	Enforcement and citations [OHDOT: Bridges in Ohio are posted for reduced loads if they cannot carry full legal loads. The heaviest legal truck is gross 80,000 pounds on 5 axles. The enforcement is done by state troopers and local law enforcement agencies.] · Fee structures and permitting [OHDOT: please see the permitting fee schedule at this URL, https://www.transportation.ohio.gov/wps/portal/gov/odot/working/permits/special-haulingpermits/ permit-information] · Special issues related to maintenance of pavements and bridges along extended weight routes or corridors [OHDOT does not have extended weight route or corridors] · Special issues that arise due to commodity-specific weight exceptions [OHDOT: please see below for additional weight provisions for coal trucks, farm trucks, log trucks and solid waste haul vehicles.}
OREGON	Roads and Bridges: Current load ratings impact the movement of freight in the state Specific Routes, Corridors, or Networks: Areas of state with limited access due to weight limitations
RHODE ISLAND	
TENNESSEE	Legislation takes time and these types of legislative issues generally do not make it to the top of the list for priorities. Enforcement: Lack of resources and lack of knowledge of permit rules and regs. consistently, Safety: this is basic lack of industry knowledge.. escorts ect.... lack of specific routes leads to many traveling on routes that are less than optimal for OD/OW loads.
TEXAS	Large volumes of overweight truck traffic do tend to fail the pavements prematurely
TEXAS	My Branch handles the review of superheavy moves that exceed a GVW > 500,000 lbs or 6,000 lb tire loads. We have routes with weight restrictions of 58,420 lb GVW that we need to evaluate if the move needs to travel along them.
VIRGINIA	
WEST VIRGINIA	

WISCONSIN	• Enforcement and citations Wi State Patrol has 400 Troopers and 100 State Patrol Inspectors. In WI, Inspectors are basically Troopers but have extra training in Motor Carrier Enforcement. Due to the complexity of our weight laws an extremely large percentage of the weight enforcement is conducted by the Inspectors even though these laws could be enforced by the Troopers and local agencies. This spreads weight enforcement pretty thin around the state as the Inspectors are tasked with multiple other areas of enforcement. • Fee structures and permitting- WI processes over 70k permits annually on the state/interstate systems. WI DOT does not issue permits for local/county systems. The basis for how WI charges for permits emanates from a four decades old philosophy that the fee should only recover the administrative costs to issue the permit. The fees have not been increased in forty years. WI convened an evaluation of neighboring states to evaluate how our fees aligned with those states. It was shown that WI could double our fees and still be competitive with all neighboring states, however, there is no political support to do so. The OSOW permitting operational and administrative costs have risen dramatically in the past forty years due to staff wage/benefit costs, software licensing/support costs, etc. Furthermore, the fees are structured on weight brackets rather than system infrastructure exposure and related system degradations: A 500k permit costs just as much to travel 50 miles as one that travels 500 miles. (see attached permit fee schedule). • Special issues related to maintenance of pavements and bridges along extended weight routes or corridors WisDOT's current policy is that freight needs (bridge weight limits or clearances) shall not drive the initiation of a bridge rehabilitation or replacement project. However, bridge conditions are the primary driving factors for bridge improvement projects, and heavily traveled freight corridors would accelerate bridge deck deterioration. WisDOT participates in and reviews research related to freight impacts on pavements and bridges, such as TPF 5(283): The Influence of Vehicular Live Loads on Bridge Performance. • Special issues that arise due to commodity-specific weight exceptions- WI administrates about (25) commodity specific annual/multi trip permits that have developed over decades of industry driven exceptions from legal size/weight loads. None of these are identical in scope and applicability. Very few of them align with federal bridge formulas. The permits are governed by a wide array of administrative code and statue which makes administration of these permits and related enforcement extremely complex and challenging. There are (72) counties in WI each with its own sheriff
WYOMING	Defining what a divisible load, when a carrier or company considers the load to be in operational configuration.

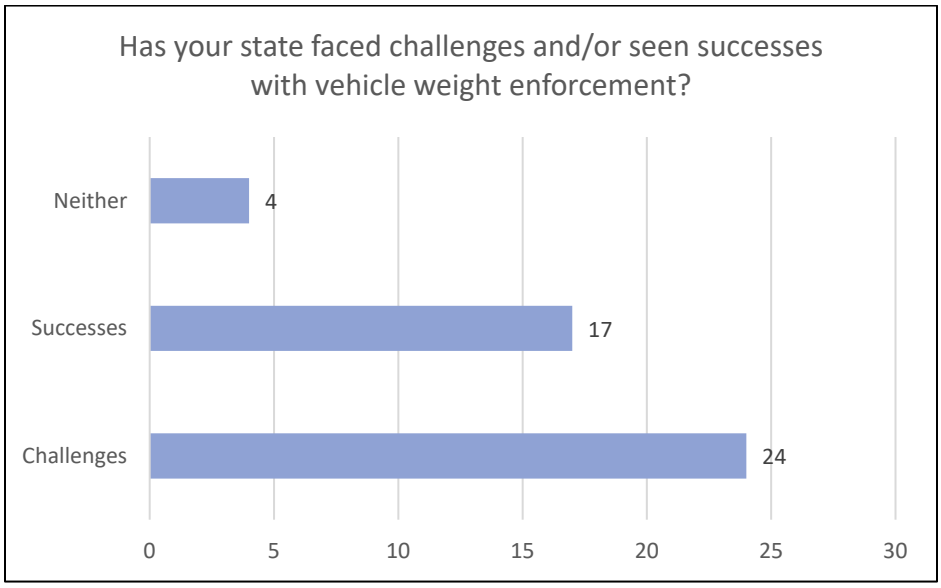
50 STATES, D.C. AND PUERTO RICO	HAS YOUR STATE SEEN ANY LEGISLATIVE ACTIONS (E.G. STATUTES, RULES, OR REGULATIONS) PERTAINING TO VEHICLE WEIGHTS OVER THE LAST 2 YEARS? THESE MAY INCLUDE GROSS VEHICLE WEIGHT OR AXLE WEIGHTS, SPECIFIC ROUTES, COMMODITIES, PERMITTING, AND/OR ENFORCEMENT.
BRITISH COLUMBIA, CANADA	No
ARKANSAS	No
COLORADO	Yes
CONNECTICUT	No
CONNECTICUT	No
DELAWARE	Yes
DISTRICT OF COLUMBIA	No
IDAHO	Yes
ILLINOIS	No
INDIANA	
INDIANA	Yes
IOWA	
KANSAS	No
LOUISIANA	No
LOUISIANA	Yes
MICHIGAN	Yes
MICHIGAN	No
MINNESOTA	Yes
MISSOURI	Yes
MISSOURI	No
MISSOURI	Yes
MONTANA	Yes
MONTANA	Yes
NEBRASKA	No
NEBRASKA	Yes
NEW HAMPSHIRE	Yes
NEW JERSEY	Yes
NEW YORK	No
OHIO	Yes
OHIO	No
OREGON	Yes
RHODE ISLAND	No
TENNESSEE	Yes
TEXAS	Yes
TEXAS	No
VIRGINIA	Yes
WEST VIRGINIA	Yes
WISCONSIN	Yes

WYOMING	No


Has your state seen any legislative actions (e.g. statutes, rules, or regulations) pertaining to vehicle weights over the last 2 years?
No
15
Yes
23
0
5
10
15
20
25

Has your state faced challenges and/or seen successes with vehicle weight enforcement?

BRITISH COLUMBIA, CANADA	CHALLENGES
ARKANSAS	Challenges, Successes
COLORADO	Challenges, Successes
CONNECTICUT	Challenges
CONNECTICUT	Challenges, Successes
DELAWARE	Neither
DISTRICT OF COLUMBIA	Challenges
IDAHO	Successes
ILLINOIS	Challenges, Successes
INDIANA	
INDIANA	Challenges, Successes
IOWA	
KANSAS	Challenges
LOUISIANA	Challenges
LOUISIANA	Successes
MICHIGAN	Neither
MICHIGAN	Challenges, Successes
MINNESOTA	Challenges
MISSOURI	Neither
MISSOURI	Challenges
MISSOURI	Challenges
MONTANA	Challenges, Successes
MONTANA	
NEBRASKA	Challenges
NEBRASKA	
NEW HAMPSHIRE	Challenges, Successes
NEW JERSEY	Challenges
NEW YORK	Challenges, Successes
OHIO	Challenges
OHIO	Challenges
OREGON	Challenges
RHODE ISLAND	Successes
TENNESSEE	Challenges
TEXAS	Successes
TEXAS	Successes
VIRGINIA	Challenges, Successes
WEST VIRGINIA	Neither
WISCONSIN	Challenges, Successes
WYOMING	Successes


Has your state faced challenges and/or seen successes with vehicle weight enforcement?
Neither
4
Successes
17
Challenges
24
0
5
10
15
20
25
30

50 STATES, D.C. AND PUERTO RICO	PLEASE EXPLAIN THOSE SUCCESSES BELOW.
BRITISH COLUMBIA, CANADA	
ARKANSAS	With more visible enforcement we gain a lot of compliance.
COLORADO	COOPR: CDOT launched COOPR, the electronic OSOW permitting issuance portal during FFY 2015. Since the launch in 2015, the system has been updated so that: o WASHTO permits can be issued (FFY 2016); o Permits for Denver county can be issued (FFY 2020); and o A semi-automated portal access for SRP applications issued by the CSP POE Branch. • Continued CDOT Electronic Community Engagement: CDOT developed and launched a new Freight website specifically for members of the CMV industry. CDOT launched this site during FFY 2020 along with an enhanced and improved government message delivery system for OSOW permit carriers. Over 6500 carriers have signed up for this message delivery system. Delivery of these messages to carriers can occur over any smartphone, tablet, or laptop. Messaging alerts carriers to OSOW restrictions, road closures, weather conditions, and more. CDOT is committed to continuing to grow the number of carriers using this messaging system during FFY 2021 and beyond. The new messaging system improves upon the prior text delivery system, allowing users to pick specific routes to get messages tailored to their routes and needs to avoid being flooded with unnecessary and inapplicable information. • CDOT Industry Training Outreach: CDOT has maintained its industry training efforts and intends to build and maintain a more robust online training curriculum for members of the CMV industry via COOPR and its Freight Website. This includes continuing with the CDOT online Pilot Car Certification Program that has resulted in much success since its launch in FFY 2018. • Custom CDOT Training for Non-Compliant Carriers: Throughout FFY 2020, CDOT continued to deliver customized on-site virtual training to non-compliant OSOW carriers, tailored explicitly to each carrier's violations and needs. CDOT has developed several presentations for different categories of violations, including curfews, bridge strikes, pre- 5 trip planning, LVC routing, etc., that can be updated to further address individual carriers and their specific compliance deficits. CDOT and CSP POE have coordinated where possible to find opportunities to present in tandem or, at the very least consistent in information communicated, to carriers and are continuing to work together to implement practices to better identify non-compliant carriers and address violating behaviors sooner. Addressing issues sooner can help correct the course of a carrier and potentially allow the state to avoid future damage to infrastructure or traffic incidents adverse to both life and property. COVID -19 has affected FFY 2021 efforts in this arena, but CDOT and POE have both harnessed virtual meeting technologies to continue to host and provide safety presentation and webinars virtually. • CDOT Vertical Clearance Design Initiative Challenges, Redesign and Resolution. CDOT hired a vendor to help design and install vertical clearance signage at every critical road structure in Colorado having a clearance of 16'0" or less. CDOT also determined to improve roadside signage of weight-restricted bridges to support S/W regulation enforcement. The project started in FFY 2018 and continued through the end of FFY 2019. Funding to continue this project as originally envisioned was no longer available at the beginning of FFY 2020 and the CDOT had to reevaluate how to achieve the objectives of

this project through other means. Reassessing, CDOT entered all of the vertical clearance and bridge weight information into the COOPR system to support the accurate issuance of permits. Doing this has achieved many of the same goals of the original project at less expense. With COOPR able to use and relay this information, permit applicants and holders are better informed and have the opportunity to become more aware of weight and size restrictions and restricted structures that may be along their route or that they are prohibited from using. Having this opportunity provides better notice to the public who make use of these permits and provide a better foundation from which enforcement to occur.

• Launch of the new CSP POE Business System, POES: The CSP POE, together with a vendor, designed and launched a proprietary custom operating system to replace its prior platform across all operations in FFY 2018. This system is continually updated so as to not only remain current with changes in statutes and federal regulations, but to correct and fine tune existing program features to provide expanded or additional customization. POE relies upon this system for all of its daily operations across the entire state of Colorado at each of its fixed scale houses and for each mobile operations unit.

• Purchase of New Wireless-Compatible Semi-Portable Scale Equipment: The CSP POE has been replacing its active inventory of semi-portable scale equipment with updated, wireless-compatible Intercomp semi-portable scale systems. Replacing aging-out units mitigates down time due to age-related system repairs and increases accuracy by using updated and newer, more reliable technology.

• Addition of Permanent and Mobile Virtual Weigh Stations to Colorado S/W Enforcement Program. The CSP POE is renovating its Platteville facility to work as a virtual weigh station, which will enhance S/W enforcement efforts along Hwy 85 which is a major corridor used by both agricultural and oversized loads. The CSP POE is also completing the outfit of two sprinter vans that will be operated as portable virtual weigh stations

6

having the ability to travel throughout the state of Colorado to areas of identified interest or high violation corridors to support S/W enforcement.

• Addition of Drivewyze to electronic WIM Weight Communication: At the end of 2019, Colorado approved for Drivewyze to communicate commercial vehicle weigh information for its participating members when operating in Colorado, using smartphone and other technology similar to the other Preclearance provider approved for use in Colorado, PrePass. This is a significant and important improvement as it allows for POE officers to receive real-time, current information about the weight of the loads transported by a participating commercial carrier, rather than having to rely upon older information previously reported to Drivewyze. The reliable and accurate communication of vehicle information for effective S/W enforcement operations cannot be understated.

• CSP POE Community Engagement: Although impacted by COVID, the CSP POE continues to engage the communities within which they exist to the extent that social distancing and public health directives allow. This has resulted in events where mask, water, and snacks have been handed out and hopefully will be able to expand to compliant inspection day events hosted by the CSP POE, where issues with an operator's commercial vehicle (s) can be identified to be corrected prior to a citation and even provide the opportunity to obtain a Level 1 inspection sticker. These type of outreach and engagement events enrich the relationship with S/W enforcement personnel and the

	regulated industry, cultivating trust, respect, knowledge and ultimately increased compliance with applicable S/W laws, rules and regulation. • Increased Standardization of Enforcement Among Personnel through Training: Since relocating from the Colorado DOR to the CSP in August 2012, the POE has developed CALEA-compliant training and update training for both POE Academy cadets and existing POE uniformed and professional personnel. This training helps support consistent knowledge and policy messaging throughout the branch and the patrol and ultimately with other law enforcement agencies in Colorado and regulated industry. • Continued Work Towards WIM Scale Status, Maintenance, Replacement and Data: One ongoing challenge that continues to be experienced is that upon the subject of WIMs and their ownership and maintenance between the CSP POE and the CDOT ITS (Intelligent Transportation Systems) group. Turnover of FTE, aging of equipment, need to better identify sources for information and communication have all affected the use and maintenance of WIMs at POE facilities as part of the Colorado S/W program. Both CSP POE and CDOT are committed to the continued improvement of these communications and the relationship between in order to better manage and address the purchase, use, and maintenance of WIMs. Again, the value of accurate, reliable and current vehicle weight and rating information to ensuring compliance with applicable law and to support S/W enforcement operations cannot be understated.
CONNECTICUT	
CONNECTICUT	The DMV and CT State Police both enforce overweight vehicle law. They work well together and do an excellent job despite low staffing. Both agencies collaborate frequently with the DOT OD/OW Permit Unit and Engineering staff.
DELAWARE	
DISTRICT OF COLUMBIA	
IDAHO	Our Port of Entry locations are being equipped with Weight-in-Motion (WIM) Systems. These systems are allowing for better observation of weight, and only calling in vehicles that show a weight issue, or that don't have a permit for the weight they are hauling. This means our POE staff are more targeted in their enforcement.
ILLINOIS	We have tried to incorporate new technology to advance our enforcement of size and weight laws. We are currently building a new inspection building at one weigh station. We are in the process of testing out a new Oversize/Overdimension measurement system at another weigh station. We also have implemented Tire Anomaly Classification Systems (flat tire sensors) at 11 Interstate weigh stations.
INDIANA	
INDIANA	Our successes are our pilot sites for virtual weigh in motion. We have been able to prove that the technology works.
IOWA	
KANSAS	

LOUISIANA	In 2017, LSP created a Mobile Weight Enforcement Unit combining both LSP Troopers and DPS Officers as a cohesive unit to enforce weight and size laws.
MICHIGAN	The CVED has had successes and faced challenges when addressing vehicle weight enforcement. One of our successes is the development of Safe Enforcement Sites. These sites allow us to weigh a vehicle in a non-weigh station setting in a safe manner. Furthermore, the development and deployment of advanced screening technologies at the weigh stations and roadside have increased our accuracy identifying overweight vehicles.
MINNESOTA	
MISSOURI	
MONTANA	With the use of virtual weigh stations and/or WIM data, patrol officers can be utilized on routes with overweight vehicles and in some cases can login virtually to see specific vehicles operating overweight. We are also in the process of rolling out an Automated Routing System to coexist with our permit system. The testing has shown that this will have a positive impact to the routing of oversize or overweight loads.
NEBRASKA	
NEW HAMPSHIRE	Suspending registrations to gain compliance.
NEW JERSEY	
NEW YORK	
OHIO	
OREGON	Successes have included organized and collaborative operations with county and local law enforcement, with agreements in place for shared data and facility use.
RHODE ISLAND	Newly established weight enforcement unit
TENNESSEE	
TEXAS	I know TxDMV and TxDPS have had successes with OD/OW weight enforcement but would defer to those agencies for details. See https://www.txdmv.gov/motor-carriers/oversize-overweight-permits/compliance
VIRGINIA	
WEST VIRGINIA	
WISCONSIN	SUCCESSES: Law enforcement has been fortunate in that our DOT has been very supportive in the area of weight enforcement. The DOT is committed to updating our permanent Size Weight Enforcement Facilities and have been adding virtual weigh in motion technology on our by pass routes around those facilities. When funding major roadway projects funding is included for additional portable scales to be used to protect the new infrastructure.
WYOMING	We were legislatively given money to put into place an electronic permitting system, along with necessary maintenance funding of the program. We are currently in the bid state with vendors

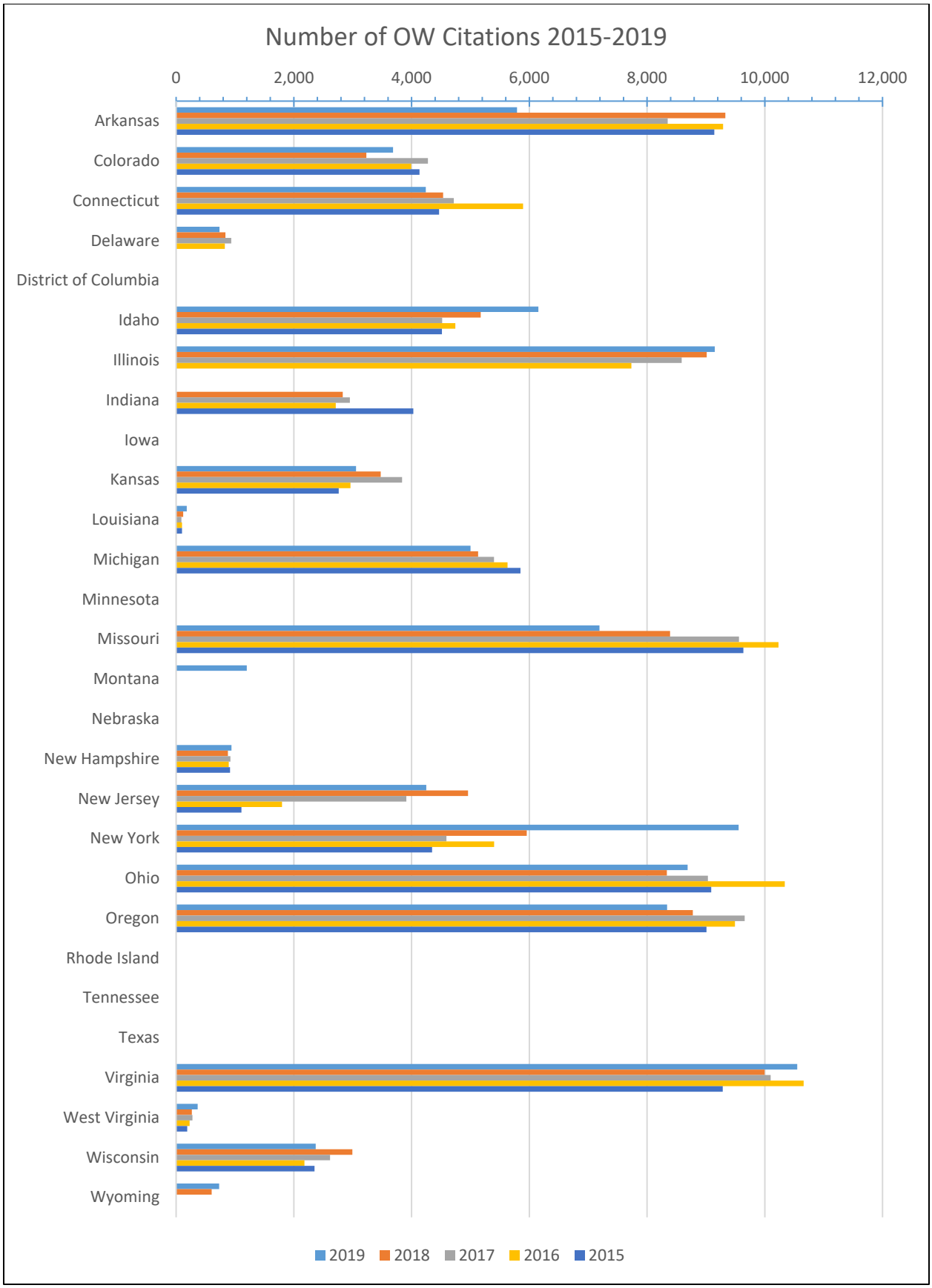
50 STATES, D.C. AND PUERTO RICO	PLEASE EXPLAIN THOSE CHALLENGES BELOW.
BRITISH COLUMBIA, CANADA	Superloads move at night and it is difficult to get a sufficient volume of enforcement staff out at night for that enforcement considering the volume pressures during the day.
ARKANSAS	Not having as many locations as needed to set up portable weighing operations.
COLORADO	The CSP POE has 10 mobile operations units that are able to be deployed throughout the state, including to in the proximity of bridges where road shoulder allowance is sufficient for safe S/W enforcement operations. Previously discussed, CDOT has not only incorporated road and bridge size and weight information into its automated permitting system, but also has launched and continues to update new interactive bridge map which is publicly accessible at https://ft-cdot.opendata.arcgis.com/pages/bridge-weight-limit. CDOT also refrains from issuing single trip overweight load permits for vehicles to cross these structures, communicating and permitting alternate routes to redirect operators of overweight and oversize loads around or away from these areas.
CONNECTICUT	Lack of personnel.
CONNECTICUT	The state police staffing overall is very low and the specialized unit that handles overweight vehicle enforcement is struggling to maintain staff with statewide budget cuts.
DELAWARE	
DISTRICT OF COLUMBIA	Constrained right of way to pull trucks over for inspection, Constraints on weigh station infrastructure/investments, Resource constraints for enforcement efforts, especially during the public health emergency.
IDAHO	
ILLINOIS	Some challenges include staffing the weigh stations to maximize enforcement. The pandemic caused us to lose 2 and a half months of enforcement with everyone having to stay at home.
INDIANA	
INDIANA	Not enough Indiana State Police resources. Weigh stations are not often open.
IOWA	
KANSAS	Increased enforcement when/where issues arise.
LOUISIANA	A couple of years ago, we had to handle 1.7million pound load to cross one of our bridges in Louisiana. We managed to handle this. Also for one of the heavy super load we used crabbing method to approve the permit.
LOUISIANA	
MICHIGAN	Our biggest challenges is fluctuation of personnel and the cost of advanced technology.

MINNESOTA	Lack of staffing, lack of funding to support weight enforcement efforts.
MISSOURI	
MISSOURI	Challenges include fair and consistent enforcement for all segments of the industry. That difficult when you increase weights for one industry, but not the other, i.e increased weights for farmers, loggers, etc.
MISSOURI	The saturation of commercial vehicles in comparison to limited mobile enforcement officers allows for only a sampling of CMV's in commerce. Some fixed weigh stations are easily (and often) bypassed.
MONTANA	The new bridge postings which are various stages of being rolled out have signs that are confusing to both industry and enforcement personnel. Montana has seen a shift towards weighing vehicles in safe locations instead of the shoulder of the road, but this presents a problem on routes with very few pullouts or areas to get the CMV off the shoulder of the highway.
NEBRASKA	Directly speaking with law enforcement, they do not have the resources to sit by the bridge and monitor passing loads. There is a very small penalty for illegal load passing over bridges.
NEW HAMPSHIRE	A reluctance by the legislature to increase the weight fines.
NEW JERSEY	Challenges: With the current fine structure for overweight vehicles; specifically gross and axle, carriers are engaging in a cost-benefit-analysis business model where it is better to pay the fines and fees associated with those few times caught under enforcement and haul heavy those other times making up for any lost revenue.
NEW YORK	
OHIO	The Ohio State Highway patrol asked ODOT to construct upgraded and expanded static weigh stations. Discussions are still ongoing about whether the state upgrades the static weigh stations on Interstate's, or a combination with new and advanced technology. Costs exceed $300 million. COVID-19 disrupted those agency discussions, but they will likely resume again soon.
OHIO	Updating platform scale facilities.
OREGON	Budget cuts and looking for new ways to do more with less is always challenge number one. We are challenged with being able to do S&W enforcement in all areas of the state due to staffing levels. We are also challenged with aging systems that require maintenance with increasing repair costs year after year, requiring us to prioritize needs based on mainline systems, traffic and known bypass routes throughout the state.
RHODE ISLAND	
TENNESSEE	Again the challenges with enforcement derive from resources to do the enforcement. Weight stations have a high level of regular commercial truck traffic that to inspect, measure and compare permitted load to actual permit is to time consuming.
TEXAS	
VIRGINIA	
WEST VIRGINIA	

WISCONSIN	CHALLENGES: Wi State Patrol has 400 Troopers and 100 State Patrol Inspectors. In WI, Inspectors are trained as Troopers but have extra training in the area of Motor Carrier Enforcement. Due to the complexity of our weight laws an extremely large percentage of the weight enforcement is conducted by the Inspectors even though these laws could be enforced by the Troopers and local agencies. This limits the amount of weight enforcement around the state. When citations are issued for weight violations it is very common to have local district attorneys either significantly reduce the fine or dismiss the citation all together. Local haulers know this and make a calculated business decision to haul heavy knowing that it is unlikely they will be stopped and checked for weight violations. If they do get stopped, the carrier knows that even if they pay the full fine they will be still be money ahead due to all the previous heavy hauls they have made without being stopped. Another challenge is related to the complexity of the weight laws. WI has a multitude of different permits and different non permitted weight limits. The weight laws can very due to commodity, vehicle type and time of the year. Locals can post their local roads for reduced weights but the signage used is outdated and has not kept up to the modern vehicle configurations so it is confusing as to what the posted signs actually imply. Due to the local governments placing weights limits on a select number of their roads, some state laws regarding weight have now exempted certain vehicles from local postings.
WYOMING	

How many overweight citations has your state issued over the past 5 years (if available)?

50 States, D.C. and Puerto Rico	2019	2018	2017	2016	2015
Arkansas	5,791	9,329	8,351	9,291	9,143
Colorado	3,685	3,231	4,277	3,993	4,134
Connecticut	4241	4536	4716	5,893	4,468
Delaware	736	838	936	827	not available
District of Columbia					
Idaho	6153	5174	4520	4743	4515
Illinois	9151	9014	8589	7733	
Indiana		2830	2951	2712	4030
Iowa					
Kansas	3,056	3475	3838	2961	2762
Louisiana	180	120	90	100	100
Michigan	5002	5130	5400	5629	5850
Minnesota					
Missouri	7192	8391	9562	10,232	9636
Montana	1200	na	na	na	na
Nebraska					
New Hampshire	940	879	923	894	916
New Jersey	4249	4958	3911	1798	1109
New York	9,556	5,956	4,591	5,402	4,349
Ohio	8689	8337	9034	10339	9091
Oregon	8341	8778	9659	9494	9009
Rhode Island					
Tennessee					
Texas					
Virginia	10,551	9,997	10,100	10,660	9,286
West Virginia	365	268	278	228	188
Wisconsin	2372	2994	2614	2180	2350
Wyoming	731	604			


Number of OW Citations 2015-2019
0
2,000
4,000
6,000
8,000
10,000
12,000
Arkansas
Colorado
Connecticut
Delaware
District of Columbia
Idaho
Illinois
Indiana
Iowa
Kansas
Louisiana
Michigan
Minnesota
Missouri
Montana
Nebraska
New Hampshire
New Jersey
New York
Ohio
Oregon
Rhode Island
Tennessee
Texas
Virginia
West Virginia
Wisconsin
Wyoming
2019
2018
2017
2016
2015

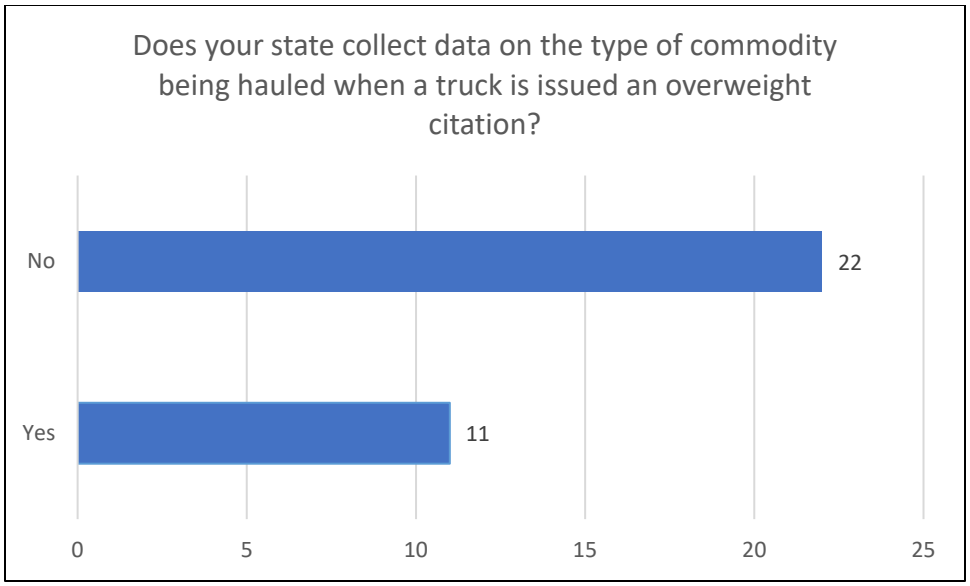
50 STATES, D.C. AND PUERTO RICO	WHAT ACTIONS HAVE BEEN UNDERTAKEN TO ENSURE OW/OD VEHICLES ARE NOT CROSSING POSTED BRIDGES OR TRAVELING ON ILLEGAL ROUTES (ADVANCED SIGNAGE, WEIGH SCALES, INCREASED ENFORCEMENT, ETC.)?
BRITISH COLUMBIA, CANADA	Superload permits often include specific bridge crossing conditions (cross down centre line, and/or cross at 10 km/hour, and/or cross with no other traffic on the bridge). Failure to comply can lead to a requirement for a set number of loads to be escorted by a professional engineer at carrier expense.
ARKANSAS	The Chief has work very well with the Commission to add addition enforcement (units and officers).
COLORADO	The CSP POE has 10 mobile operations units that are able to be deployed throughout the state, including to in the proximity of bridges where road shoulder allowance is sufficient for safe S/W enforcement operations. Previously discussed, CDOT has not only incorporated road and bridge size and weight information into its automated permitting system, but also has launched and continues to update new interactive bridge map which is publicly accessible at https://ft-cdot.opendata.arcgis.com/pages/bridge-weight-limit. CDOT also refrains from issuing single trip overweight load permits for vehicles to cross these structures, communicating and permitting alternate routes to redirect operators of overweight and oversize loads around or away from these areas.
CONNECTICUT	Oversize/over weight permits list restrictions and provide specific routing. Enforcement personnel are able to verify permits through our State CVIEW. Annual permit holders are provided routing restrictions when their annual permits are issued.
CONNECTICUT	Truck enforcement assigns officers to these specific locations to stop this activity. Also the enforcement agencies work closely with DOT permit office staff to collaborate on targeted location enforcement. Advanced signage is posted in many locations, 5 weigh stations are located on major interstates. The first virtual weigh station pilot is also being actively planned for CT.
DELAWARE	Signage and Enforcement Patrols
DISTRICT OF COLUMBIA	Advanced signage, mandatory routes generated for OSOW-permitted vehicles, upgrades to weigh-in-motion system to better monitor behavior, updates to route/restriction maps online and in PDF form
IDAHO	Idaho, has advanced signage, for posted bridges as well as low bridges. We moved to an online permitting system, so now it is easier for people to obtain permits, and the permit routing is now automated which removes human error.
ILLINOIS	Advanced Signage has been erected to hopefully notify drivers.
INDIANA	
INDIANA	There have not been any specific action taken.
IOWA	
KANSAS	Use of an automated permitting system; K-TRIPS I don't have information about enforcement. that is handled by Kansas Highway Patrol which is separate from Department of Transportation. We have bridge posting signs.
LOUISIANA	When we analyze the permit, we make sure no posted bridges in that route before we approve the permit.
LOUISIANA	LSP works closely with LA DOTD to ensure proper signage is positioned to ensure proper notice is given with the opportunity to take an alternate route prior to a posted bridge. Enforcement details are performed periodically on posted bridges to ensure compliance.

MICHIGAN	Most posted bridges are under local jurisdiction (83 counties, 533 villages and cities). Local weighmasters may be orienting enforcement toward those locations, but ordinary signs are the principal countermeasure. There have been 2 or 3 local bridge collapses under heavy loads, typically agricultural movements. MDOT bridge inspectors are closing local bridges at the rate of about one a week, due to age and deterioration.
MICHIGAN	Weigh station operation remains a top priority. Weigh station operations need support from active road patrol for maximum effectiveness. Port-of-entry scales on the interstate (northbound Monroe and eastbound New Buffalo) are open five-days per week, 16-24 hours per day, with intermittent weekends. The remaining scales on interstates are operated on a fluctuating schedule. This allows our enforcement efforts to be responsive towards industry trends. Non-interstate scales (Cambridge, Powers, and Telegraph) operate on a fluctuating schedule based on district needs and available personnel. The CVED conducts daily enforcement in and around its weigh station facilities. CVED's goal is to provide maximum enforcement capability, while assigning personnel to known bypass routes. Motor carrier officers assigned to post locations without a scale facility conduct mobile weight enforcement utilizing portable scales. This allows the CVED to be more fluid with industry trends. The CVED continues to recognize the value of mobile enforcement operations and assigns personnel to WWIMs across the state to promote the use of safe enforcement sites, when available.
MINNESOTA	nothing. Lack of staffing makes it difficult to monitor specific routes on a regular basis.
MISSOURI	There are posted weight limits, weigh stations, and regular enforcement.
MISSOURI	MoDOT places advance signage and my agency does enforcement on these routes.
MISSOURI	Focused enforcement initiatives at specific locations by the Missouri State Highway Patrol.
MONTANA	The bridge postings are placed onto our website and in cases of high CMV traffic routes there has been information sent out through the media as well as brochures that have been distributed. There is no advanced signage, other than the sign directly prior to the bridge. We have not increased enforcement but on occasions where violations are found, warnings and education has been the approach.
MONTANA	
NEBRASKA	We recommend to local bridge owners for advanced signage for all posted bridges where it is possible. - We only have weight scale for I-80. - There have been no increased law enforcement.
NEBRASKA	If a carrier has an OW &/or OD load, they are to submit a permit application using the on-line permit system. The system analyzes their proposed route for size & weight. If there are failures on the route for weight or dimensions, rerouting is required.
NEW HAMPSHIRE	None
NEW JERSEY	NJ has several means, in and out of the state, by which to attempt to curb OW/OD from crossing its bridges and non-permitted routes. Besides signage posted on the border with other states, NJ has five fixed scale facilities, road-embedded Weigh-in-Motion sensors, as well as geo-fencing contractors. Also being explored, is leveraging the state-border license plate reader (LPR) systems to populate list-serves with the most frequent violators / carriers.
NEW YORK	Advanced signage, targeted/coordinated enforcement and increased fines assessed to violators.

OHIO	Ohio has portal scales, we monitor traffic counts, post weight restrictions for bridges, signage, local law enforcement keeps an eye on known locations for enforcement etc. OD/OW super loads are escorted by law enforcement.
OHIO	Signage, also portable scale teams work in these posted areas.
OREGON	signing and permitting. advanced signage is on most bridges, as well as permit routing of loads and available tools to help ensure they are not crossing weight restricted structures.
RHODE ISLAND	Strict enforcement
TENNESSEE	
TEXAS	TxDMV and TxDPS coordinate to keep track of all restrictions, limits, etc. and enforce the law.
TEXAS	There is a permitting process that allows us to review the routes
VIRGINIA	Advanced signage, permitted routes with analysis if required, posted structures, scale houses, mobile scale units
WEST VIRGINIA	*Increased Enforcement *Bridge Postings for bridges with weight limits under the limit for the route the bridge is on. *Blanket Permit holders must call and make sure routes listed are still available with no restrictions.
WISCONSIN	Advanced signage is used to indicate posted road and structure weights. Permanent Weigh Stations and virtual weigh in motions devices are used on heavily travels roadways and by pass routes around the permanent weigh stations. The State Patrol will also utilized targeted enforcement details in areas of complaints or concerns.
WYOMING	Engineering has put into place signage for bridges. The State of Wyoming has no designated travel routes. We are limiting oversize loads of 26' or more to travel primarily on interstate highways

50 STATES, D.C. AND PUERTO RICO	DOES YOUR STATE COLLECT DATA ON THE TYPE OF COMMODITY BEING HAULED WHEN A TRUCK IS ISSUED AN OVERWEIGHT CITATION?	COULD YOU PROVIDE US WITH A LINK TO THE CITATION DATA, INSERT THE DATA HERE, OR EMAIL THE DATA TO US?
BRITISH COLUMBIA, CANADA	No	
ARKANSAS	No	
CONNECTICUT	No	
COLORADO	Yes	Sometimes, depending upon circumstances and the violation assessed. Where a roadside inspection happens concurrently with the citation, the roadside inspection will normally indicate generally the type of commodity. After the assessment, where the citation is for a permit violation, the citation can be matched with the carrier's permit which lists the type of commodity hauled by the permit holder. In that way we can determine what type of commodity was likely being hauled at the time of the violation. Otherwise, sometimes the type of commodity is identified in the officer notes; finding these connections requires a manual search of issued citations as officer notes are not sequenced for or electronically cataloged by commodity type information.
CONNECTICUT	Yes	Lt. Bridge of DMV to provide
DELAWARE	No	
DISTRICT OF COLUMBIA	No	
IDAHO	No	
ILLINOIS	No	
INDIANA		
INDIANA	No	
IOWA		
KANSAS	No	
LOUISIANA	No	
LOUISIANA	Yes	There is no link for that information. It would have to be compiled by hand.
MICHIGAN	No	

MICHIGAN	Yes	The Commercial Vehicle Enforcement Division does collect limited data pertaining to commodity being hauled. The Michigan State Police Commercial Vehicle Enforcement Division can provide requested data via an email request.
MINNESOTA	No	
MISSOURI	No	
MISSOURI	No	
MISSOURI		
MONTANA	No	
MONTANA		
NEBRASKA		
NEBRASKA	No	
NEW HAMPSHIRE	No	
NEW JERSEY	No	
NEW YORK	No	
OHIO		
OHIO	No	
OREGON	Yes	
RHODE ISLAND	No	
TENNESSEE	No	
TEXAS	Yes	I'm not privy to citation data. For that I would look to DuWayne Murdock (or perhaps Cliff Nelson) who oversee OD/OW permitting.
TEXAS	Yes	I do not have that information
VIRGINIA	Yes	
WISCONSIN	Yes	Commodity information is collected on the inspection report and is generalized in categories. It is not searchable and is not listed on the citation.
WEST VIRGINIA	Yes	email
WYOMING	Yes	That information is not within my control


Does your state collect data on the type of commodity being hauled when a truck is issued an overweight citation?
No
22
Yes
11
0
5
10
15
20
25

Appendix C Kentucky Revised Statutes and Kentucky Administrative Regulations on Truck Weights

Statute/ Regulation	Title	Effective Date/History	Summary
KRS 177.977	Directory of coal road system.	July 15, 2010	(1) Requires the Cabinet to publish a directory designating the official coal road system in coal impact and coal producing counties that includes all public highways, roads, bridges, and streets over which quantities of coal are carried that significantly impact their condition and repair. The Cabinet must also publish the total county mileage of the official coal road system and total ton-miles for each county in the preceding year. (2) Any producer or processor that is shipping or transporting coal must file with the Cabinet the highways, roads, and streets over which they carry coal and the total quantity of coal transported so the Cabinet can calculate the total ton-miles within each county. A copy of this information must be provided to Energy and Environment Cabinet pursuant to the provisions of KRS 350.0285 and the Department for Natural Resources pursuant to the provisions of KRS 351.070 and 352.420
KRS 177.9771	Extended weight coal or coal by-products haul road system.	Jan 1, 2015	(1) Establishes the Extended Weight Coal or Coal By-products (EWCHS) road system. "Consists of all state-maintained toll roads or state-maintained roads which were previously toll roads and the public highways over which quantities of coal or coal by-products in excess of fifty thousand (50,000) tons were transported by motor vehicles during the period from January 1, 1985, through December 31, 1985." Applies to trucks hauling coal and coal byproducts only and only on the EWCHS. The system must be updated annually. (2) Secretary of the Transportation Cabinet will certify public highways or portions of each year as part of the EWCHS by November 1. (3) The total tons of coal or by-products transported are determined based on the coal or coal by-products report required by KRS 177.977. (4) When registered with a declared weight of 80,000 pounds or more and transporting coal or byproducts on a public road part of the EWCHS, a vehicle may be operated at the weights below in excess of maximum gross weight in KRS 189.221 and 189.222 and any other maximum gross weight by paying a corresponding decal fee: (a) $160 for single unit truck have 1 steering axle and 2 axles in tandem: maximum gross weight = 90,000 pounds with 5% tolerance (b) $260 for single unit truck with 1 steering axle and 3 axles in tridem: maximum gross weight = 100,000 pounds with 5% tolerance (c) $360 for tractor-trailer combination with 5 or more axles: maximum gross weight = 120,000 pounds with 5% tolerance (d) $840 for 20,000 pounds per axle and 12,000 pounds for steering axle can register above 80,000 pounds plus an additional $10 per 1000 lbs. of registered weight above 80,000 lbs. (e) Dimensional requirements must conform to appropriate federal laws and regulations

			(f) Payment of decal fee is in addition to any other state registration fee, user fees, or other decal fee per KRS 186.050(3) (g) Coal trucks operating under a cooperative agreement per KRS 177.979 are exempt from the decal fee in this section and registration fee in 186.050(3) as long as the truck is driven on cooperative agreement roads while full. The Transportation Cabinet will issue license plates for vehicles under cooperative agreements. (h) Fees are scheduled and prorate under KRS 186.051 (i) All revenues from this section will be credited to a special account in the road fund called the "energy recovery road fund." (5) 60% of energy recovery road fund will be used by the Department of Highways for construction, maintenance, and repair of the state-maintained portion of the EWCHS (6) 40% of the energy recovery road fund will be distributed to the fiscal court of those counties in which coal or coal by-products are transported for the sole purpose of construction, maintenance, and repair of the county-maintained portion of the EWCHS. The distribution is based on the proportion of miles of country roads on the EWCHS in each county compared to the total EWCHS and tons of coal or coal by-products transported over county roads on the EWCHS compared to the total tons of transported over county roads in the total EWCHS (7) Vehicles may not exceed limits set in KRS 189.222 on federal interstate highways and this section may not jeopardize federal highways funds (8) Secretary may add or delete roads from the EWCHS (9) Prior to adding or deleting roads from EWCHS the secretary will meet with fiscal courts or local governing bodies to hear concerns about the road segments regarding safety, economic impact, or special conditions. (10) Secretary may establish KARS to administer this section, KRS 177.9772, 177.979, and 189.230.
KRS 177.979	Cooperative agreements between Department of Highways and transporters of coal in vehicles exceeding maximum weight limits on state-maintained system.	July 15, 1996	Sets up process for coal haul agreements, no specific truck weight rules
KRS 177.985	Extended weight unrefined petroleum	June 27, 2019	(1) 1 Effective until June 30, 2028

	products haul road system.		(2) Defines in this section and KRS 177.986 the "extended weight unrefined petroleum products haul road system" as consisting of state-maintained highways where 50,000 lbs. of unrefined petroleum are transported annually starting January 1, 2022. (3) (a) Except as outlined in (b) he Secretary will certify highways on the system on or before November 1, 2022 and annually thereafter. (b) If, during year 2022, a quantity of unrefined petroleum is transported that meets the threshold of section (2) [50,000 tons] then the Cabinet will certify those highways as part of the extended weight unrefined petroleum products haul road system within 30 days. (4) Total tons transported over any public highway will be determined by reports required in KRS 177.986 (5) (a) Vehicles registered of 80,000 lbs. carrying unrefined petroleum on the system may operate in excess of maximum gross weight in KRS 189.221 and 189.222 and any other maximum weight limitations on state- or county-maintained systems if they comply with requirements of this subsection. (b) Trucks with an approved axle configuration may operate up to 120,000 lbs. with a 5% gross weight tolerance. (c) The Cabinet will create KARs on allowable axle configurations (d) Dimensional requirements must meet federal laws and regulations (e) The permit for each truck is $2,000 annually. For renewal of an annual permit the permit holder must report the number of trips made and total miles driven during the previous year. (f) Permit fees are in addition to any registration fee, user fee, or other permit fee including the registration fee in KRS 186.050(3) (g) Each truck operating under a permit in this section is required to be equipped with global positioning system (GPS) technology to keep record of locations travelled. The Cabinet may inspect travel records. (h) Drivers operating a permit under this subsection must have a Class A commercial driver's license and be approved by the Kentucky State Police. (6) Revenues go to the road fund and appropriated to uses of the road fund. (7) (a) May not jeopardize federal funding for highways. (b) (1) Does not authorize operating in excess of limits of KRS 189.222 on federal interstates (2) Department of Highways may prohibit travel on roads and bridges with weight restrictions (8) Secretary will add and delete from the system annually. Deletion of a road or segment will not affect eligibility for highway funds or programs applicable to the extended weight unrefined petroleum products haul road system. (9) Cabinet will notify fiscal courts of counties of eligibility for inclusion in the system. The Secretary will consider fiscal court concerns before adding roads to the system. (10) Cabinet will inspect the routes annually for any degradation of roads and bridges. (11) Cabinet may create KARs to administer this section.

KRS 177.986	Directory of extended weight unrefined petroleum products haul road system -- Publication -- Reporting system.	June 27, 2019	Effective until June 30, 2028. (1) Effective until June 30, 2028 (2) The Transportation Cabinet will publish a directory, including maps and other documents designating the extended weight unrefined petroleum products haul road system, including all state-maintained highways and bridges over which unrefined petroleum in excess of that identified in KRS 177.985(2) [50,000 tons] in the preceding year. The Cabinet will publish the total county mileage of the extended weight unrefined petroleum products haul road system for that preceding year. Publication of this information may be electronic. (3) Beginning January 1, 2022 every person, producer, or processor shipping or transporting unrefined petroleum products over any state-maintained highway or bridge must file information with the Cabinet the highways travelled, and the quantities of unrefined petroleum transported so that the cabinet can accurately calculate the total ton-miles within each county. (4) The Cabinet will create KARs to carry out this section including requirements for publishing information and establishing a reporting system for transporters of unrefined petroleum products.
KRS 177.990	Penalties.	July 14, 2000	(4) Conviction of a weight limit violation in KRS 177.9771 will incur a fine equal to: 3,000 lbs. or less = 3 cents ($0.03) per pound 3,001-3,999 lbs. = 5 cents ($0.05) per pound 4,001-4,999 lbs. = 7 cents ($0.07) per pound 5000 or more = 9 cents ($0.09) per pound. The fine may not be less than $60 or more than $500. (5) Transporting coal and exceeding weight limits of KRS 189.221 and 189.222 without a current decal or transporting coal without a valid cooperative agreement per KRS 177.9771(4)(f) is a fine of $500 and requires purchase of an overweight coal decal per KRS 177.9771(4).
KRS 186.030	Form of application.	January 1, 1960	Provides details for vehicle registration form. (1) defines declared gross weight as the weight of the vehicle and the heaviest load that the vehicle will be used to carry at any time on the highways.
KRS 186.050	Registration fees -- Voluntary donation for wildlife management and conservation activities and the agricultural program trust fund.	June 24, 2015	Establishes vehicle registration fees. (3)(b) provides fee structure for commercial vehicles based on gross weight up to 80,000 lbs. ($1,410) (4) Sets the fee structure for farm trucks based on gross weights (7) Sets the fees for a wrecker crane up to 14,000 lbs. (8) 75% exception for fees on transporting property in city limits up to 18,000 lbs. (9) 75% exception for fees on vehicles over 18,000 lbs. exclusively transporting “primary forest products from the harvest area to a mill or other processing facility where such mill or processing facility is located at a at a point not more than fifty (50) air miles from the harvest area or which are used exclusively” or “concrete blocks or ready-mixed concrete from the point at which such concrete blocks or ready-mixed concrete is produced to a construction site where such concrete blocks or

			ready-mixed concrete is to be used, where such construction site is located at a point not more than thirty (30) air miles from the point at which such concrete blocks or ready-mixed concrete is produced" and except from fees under KRS 281.752.
KRS 186.059	Operation of overweight commercial vehicle -- Ineligibility for exemption -- Department hearing -- Appeal.	July 15, 1996	(1) Operating a commercial vehicle above the registered declared gross weight makes the owner or operator ineligible for reduced registration fees for a year. (2) The department may give notice of ineligibility for reduced fees or revoked privileges for operating above gross declared weight. Information about operating above registered weight but be substantiated by affidavit. The owner or operator may request a hearing within 30 days of notice. (3) If a hearing is requested, then the owner or operator is not eligible for a reduced fee between the time of the application and that hearing or may give bond for $500 per vehicle to be applied to taxes determined during the hearing. (4) The burden of proof of whether the vehicle was operated in excess of its registered weight in KRS 186.050 falls on the department. Final orders are subject to appeal in Franklin Circuit Court and bond posted with the department may be held pended judgment of the highest court of appeal.
KRS 189. 200	Maximum weight on iron and solid tires.	October 1, 1942	No vehicle may have greater weight on any tire per inch of width of tire that makes contact with the highway than 400 lbs. for iron or steel tires or 600 lbs. for solid rubber or rubber compounded tires.
KRS 189.210	Maximum weight permitted on highway.	October 1, 1942	(1) Sets the maximum for any "vehicle, object, or contrivance, other than a motor truck or semitrailer" at 15 tons on highways. It does not apply to vehicles run on tracks or an apparatus used by fire departments. County or city can grant permission on their roads for heavier vehicles. (2) County judge/executive may approve movement of vehicles, objects, or structures above 15 tons in the county and located outside the city. The city engineer or mayor may grant permission on highways in the city.
KRS 189.212	Authority of fiscal court to issue special permits for certain haulers.	July 15, 1998	(1-2) A fiscal court can issue permits for hauling specified materials only, including but not limited to divisible or nondivisible agricultural products, minerals, or natural resources. Loads can be above those in KRS 189.210 *(30,000 lbs*.) but less than 189.222 *(see maximum based on axles not to exceed 80,000 lbs.)* (2) The permit will be issued for specified materials only and designate the portions of the fiscal court-owned road over which the vehicle may operate. A cooperative agreement is required as a condition of issuing the permit under KRS 189.230. (3) Dimensions and load may not exceed limits in KRS 189.222 (4) operator must not violate terms and conditions (5) Fiscal court may: (a) supervise administration and enforcement of this section

			(b) adopt ordinances regulating permits "including but not limited to matters concerning the duration of permits and weight limits for various types of vehicles, materials and highways" (c) adopt rules and regulations about the amounts, terms, and conditions of a bond and the sufficiency of the surety of any bond in this section (d) issue, continue, revoke, modify, or deny permits in this section
KRS 189.221	Basic height, width, length, and weight limits for trucks, trailers, manufactured homes, or vehicles -- Exception.	June 25, 2009	Limits the following trucks, trailers, manufactured homes, or vehicles from travelling on any road other than those highways designated by the secretary of transportation in KRS 189.222 or locally maintained highways in KRS 189.222(11) or KRS 189.230(4): 1) over 11.5' tall or 96" wide, 2) Any truck except semitrailer trucks 26.5' long 3) Any semitrailer trucks 30' long 4) Any truck, semitrailer truck, or truck and trailer over 36,000 pounds gross weight including the load 5) Any truck, semitrailer, or tractor-trailer over 600 pounds per square inch of the combined tire width, but no more than 36,000 pounds 6) Any truck hauling building materials under KRS 189.2226 or to a road construction project on a highway rated less than the maximum above, may haul up to 80,000 pounds gross weight, including load, without a permit.
KRS 189.222	Increased height, length, and weight limits on designated highways -- Exceptions -- Cabinet may promulgate administrative regulations to implement 23 C.F.R. Part 658 -- Restriction of cabinet's enforcement powers on locally maintained roads.	July 14, 2018	1) Secretary may increase maximum height, length and gross weight of KRS 189.221 on state-maintained highways. Cannot exceed federal law or jeopardize qualification for federal funds. a) Increase on height: transporting motor vehicles: 14'; all others up to 13.5' b) Increase on length: 53' for semitrailers, 28' for trailers, 45' for motor trucks not to exceed 2 trailers per truck tractor c) Increase on weight: • 20,000 pounds per single axle, with axles less than 42" apart • 34,000 pounds on 2 axles in tandem axles spaced 42" apart • 48,000 pounds on 3 axles spaced 42" or more apart and less than 120" apart • No single axle in any arrangement may exceed 20,000 pounds or 700 pounds per inch of the aggregate width of all tires on a single axle, whichever is less • Total gross weight of vehicle and load cannot exceed 80,000 pounds. d) Allows tolerance of 5% per axle load except on the interstate; gross weight cannot exceed 80,000 pounds e) Truck tractor, semitrailer, trailer combinations, and other vehicle combinations must operate on the interstate system, federal aid highway, or designated state-maintained system. f) Exception to 1.(e): a vehicle or combination of vehicles 102" wide or less and 80,000 pounds gross weight or less may be driven on any state highway up to 15 miles from an interstate or parkway exit

			2) In addition to KRS 189.2226, vehicles up to 80,000 pounds can travel anywhere on a state highway without a permit if it does not exceed federal limits, and posted bridge limits, weight limits for the size and vehicle type of (1)(c), and transporting: a) meat or agricultural crop products from farm to first market b) livestock or poultry from their point of origin to first market. "Livestock" means cattle, sheep, swine, goats, horses, alpacas, llamas, buffaloes, or any other animals of the bovine, ovine, porcine, caprine, equine, or camelid species. c) primary forest products, including but not limited to “sawdust, wood chips, bark, slabs, or log” from point of origin to first market. d) farming supplies, materials or equipment for the production of agricultural crop products, meats, livestock, or poultry. 3) Vehicles listed below registered under KRS 186.050 may exceed gross weight of (1)(c) by a weight tolerance of 10% except on interstates a) Engaged in transportation of items listed in (2) (a-c) b) Engaged exclusively in the transportation of feed for livestock or poultry 4) Vehicles exclusively transporting unmanufactured tobacco, unmanufactured tobacco products, or motor vehicles attain maximum lengths on state highways 5) Vehicles registered under 186.050(4) or 186.050(9) engaged exclusively in farm, primary forest or ready mix concrete are excluded from axle weight provisions, except on the interstate, and subject only to gross weight in (1)(c). 6) Vehicles registered under 186.050(3) hauling primary forest haulers, “including, but not limited to, vehicles transporting sawdust, wood chips, bark, slabs, or logs,” may exceed the axle or gross weight provisions in (1)(c) by 10% except on the interstate 7) Vehicles registered under 186.050(3) exclusively collecting or hauling refuse are exempt from the axle weight limits, except on federal interstates, and subject only to total gross weight. 8) KYTC Secretary may increase weight and height limits for roads or highways being constructed or reconstructed or repaired by the contractor 9) Secretary may not authorize above the following limits on the federal aid highway system or state parkway system: a) 102" in width, including any part of the body or load b) • 20,000 pounds per single axle less than 42" apart • 34,000 pounds per tandem, spaced 42"-96" apart • 48,000 pounds on triaxles, spaced 42"-120" apart • 80,000 pounds total gross weight • The secretary may increase these limits if federal limits are increased. 10) Except on the interstates, vehicles exclusively hauling crushed stone, fill dirt and rock, soil, bulk sand, coal, phosphate, muck, asphalt, concrete, solid waste, tankage or animal residues, livestock and agricultural products are permitted a tolerance of 10% of axle weight.

			7) KYTC may make administrative regulations to implement 23 C.F.R Part 658 relating to state or locally maintained roads and enforcement is not the responsibility of Cabinet law enforcement officers unless requested by corresponding local government in writing.
KRS 189.2225	Operation of certain overdimensional motor vehicles authorized in some counties -- Operation of certain overdimensional motor vehicles transporting agricultural commodities or materials authorized on all public roads.	July 15, 1996	1) In a county that does not have at least 10 miles of existing highway designated for motor vehicles that have a width of 102", a motor vehicle that does not exceed the length requirements set forth in KRS 189.222(1)(b) or a width of 102" may be operated on the state-maintained highways in that county with lane widths of 10' if those highway segments are designated 80,000 pound gross weight limit. KYTC will establish administrative regulation that lists the counties and highway segments that meet the criteria of this subsection. 2) Once the Cabinet establishes an administrative regulation (KAR) under KRS Chapter 13A designating more than 10 miles of highway in a county capable of accommodating vehicles with these dimensions then they are no longer authorized to operate under the provisions of this statute. 3) Allows vehicles hauling agricultural commodities from a farm or transporting materials for the production of agricultural commodities not exceeding length or width limits in KRS 189.222(1)(b) or 102" to travel on any public road in KY. 4) Does not authorize weight limits to be exceeded on any highway or bridge. 5) Cabinet may establish KARs per KRS Chapter 13A to establish safety criteria for motor vehicles in this section.
KRS 189.2226	Definitions -- Vehicles hauling building materials.	June 24, 2003	1) Definitions; (b) "Building materials" includes: 1. Agriculture products; 2. Asphalt; 3. Concrete; 4. Crushed stone; 5. Excavation equipment; 6. Fill dirt and rock; 7. Glass; 8. Landscaping materials; 9. Lumber or other wood products; 10. Minerals; 11. Roofing materials; and 12. Steel products (d) "State road" means a state or federal highway but does not mean an interstate or county road 2) Contrary to any other statutes, any vehicle hauling building materials to a home is allowed to travel on any state road without a permit if the weight of the vehicle is within the limits of the registration issued to the vehicle and within the axle limits for the vehicle. The vehicle is allowed to exceed gross weight or length, including vehicle and load, without fine. 3) The vehicle is allowed to travel the most direct route, "in the opinion of the operator", no more than 15 miles from a state road classified to carry the registered weight. If travelling on a class A highway the vehicle exceeding 96" wide requires an overdimensional permit. The operator must have a bill of lading. 4) May not exceed posted bridge weight or width without a permit.
KRS 189.223	Measuring or weighing of vehicle	1950	A peace officer may measure or weigh any motor truck, semi, or trailer believed to be over maximum height, length, width, or weight limits prescribed by KRS 189.221, 189.222 Subsection 1, or permitted

	by peace officer -- Unloading of excess weight.		under 189.270. It may be weighed via portable or stationary scales and required to travel to scales if they are within 5 miles of where the truck was directed to stop. The officer may require the operator to unload a portion of the load to decrease the gross weight within legal limits or allow the truck to continue to the nearest city or nearest court with jurisdiction to unload. Refusal to unload is a violation of KRS 189.221 to 189.228.
KRS 189.230	Reduction of load and speed limits -- Fiscal court to require cooperative agreement of persons applying for permit under KRS 189.212.	June 24, 2003	1) Except in KRS 189.221 (6), 189.222, and 189.226, the department has authority on state and federal highways, and county judges/executive on county highways, to reduce load and speed limits lower than KRS 189.221 and KRS 189.390 subsection 4, or prohibit trucks for limited periods for public safety and convenience, on state, federal, and county highways if "if in their judgment any highway may, by reason of its design, deterioration, rain, or other natural causes, be damaged or destroyed by motor trucks or semitrailer trucks, if their gross weight or speed exceeds certain limits." 2) The department may prescribe gross weight limits lower than KRS 177.9771 on the EWCHS when bridge design or deterioration would lead to damage or destruction to the point of catastrophic failure. All bridges must conform to KRS 177.9771(4)(a) to (d). 3) Lowered gross weights must be posted at the termini and intermediate crossroads and road junctions of the highway. 4) Describes cooperative agreements between permit holders under KRS 189.212 and the fiscal court. The agreement must provide equal apportionment of "the incremental costs for design, maintenance, construction, or reconstruction of those roads and bridges on which the person will be operating under the permit issued under KRS 189.212." The fiscal court may require bond as a part of the cooperative agreement to ensure payment of the equitable costs associated with the permit under KRS 189.212. The funds collected from the cooperative agreement or bond must be used on roads covered under the cooperative agreement. 5) Fiscal courts must expend normal routine maintenance on cooperative agreement roads. 5) The person who entered a cooperative agreement with the fiscal court may terminate the agreement by providing written notice to the court. Upon termination of the cooperative agreement the permit will be revoked immediately.
KRS 189.269	Prohibition on new overweight or overdimensional permits -- Exception.	June 27, 2019	After June 27, 2019 no new overweight/overdimensional permits or tolerance will be granted to motor carriers under this chapter except overweight permits established in KRS 177.985 and 177.986 (unrefined petroleum products) may be extended until June 30, 2033.
KRS 189.2301	Axle weight exemption for vehicles on state-maintained AAA highways.	June 29, 2017	A vehicle that has a valid registration of a declared gross vehicle weight, 80,000 pounds or less, including towed unit, is exempt from any axle weight provisions on "AAA" state-maintained highway. Written documentation is required if the vehicle is hauling 79,999 pounds or less. Does not apply to interstates or any highway where the load would exceed posted bridge limits.

KRS 189.270	Special permits to exceed limits.	July 15, 2020	(1) The department may issue permits for motor or recreational vehicles, manufactured homes, boats or other transporting vehicles carrying nondivisible loads with gross weight, load, height, width, or length, exceeds limits of this chapter. Permits may be issues for specified periods, purposes, and unusual conditions as long as the terms are in the interest of public safety and preservation of highways. (2) Except in in subsection (8) a single-trip overweight or overdimensional permit may be issued regardless of type of vehicle or equipment transported for nondivisible loads for $60. (3) (a) Except in in subsection (8) an annual overweight or overdimensional permit may be issued regardless of type of vehicle or equipment transported for nondivisible loads. (b) Vehicle permitted may not exceed 16' wide, 120' long, 13' 6" tall, or 160,000 lbs. (c) Establishes cost of annual permits. Except in sub sections (4), (7), (8) annual permits for loads 14 ft. or less is $250; exceeding 14 ft. is $500. (4) Establishes cost of farming equipment permit. Annual permits for loads 14 ft. or less is $80; exceeding 14 ft. from dealership to farm, farm to dealership, farm to farm, or dealership to dealership is $150. (5) Permits are valid statewide but the department may restrict the overweight/overdimensional vehicle to certain routes, exclude highways, or cancel the permit due to risk of accident or impediment to traffic. The permit applicant agrees to measure all clearances of highway structures and along the specified route and assume sole risk for using the highway. (6) With limitations in subsection (12) the department may set KARs for escort vehicles, safety markings, and other safety restrictions, for overweight/overdimensional vehicles. A copy of all restrictions will be provided to applicant. The department is prohibited from raising the permit fee established in subsections (2) and (3) by levying additional fees on overweight/overdimensional permits through KARs. (7) (a) An overweight/overdimensional permit may be issued for manufactured housing as a nondivisible load (notwithstanding KRS 189.269) (b) Vehicle permitted may not exceed 16' wide, 120' long, 13' 6" tall, or 160,000 lbs. (c) (c)(1) Establishes cost for annual permit for transporting manufactured home as $1,500 for loads greater than 13' 6" tall and (2) $500 for loads 14 ft. or less wide and 13' 6" or less tall. (d) (1) permit holder must abide by escort requirements, markings, and other safety restrictions for overweight/overdimensional vehicles (2) vehicle must have GPS with records open for Cabinet inspection (e) Establishes fine for violations as $1,000 for operating greater than 13' 6" tall in a restricted area. (8) An annual permit will not be issued if the person is eligible for an annual permit under KRS 189.2716 (steel products to KY riverport) or 189.2717 (nondivisible loads with axle weight limitations on specified routes).

			(9) Applicant may be required to "give bond, with approved surety, to indemnify the state or counties against damage to highways or bridges resulting from use by the applicant." If the operator has a permit or authenticated copy in possession then the operator is not in violation. (10) Transporting a parade float exceeding dimensional limits requires a permit although a fee will not be assessed for a parade within the Commonwealth. (11) prohibits violations of permit (12) (a) outlines restrictions on daytime travel (b) permit holders may return to place of business after transporting equipment to a worksite; subject to daytime restrictions (c) (1-7) Establishes escort vehicle requirements for farm vehicles and prevents Cabinet from establishing stricter KARs.
KRS 189.271	Special permits for hauling industrial materials -- Renewals -- Overweight and overdimensional vehicles.	2000	1) Cabinet may issue overdimensional permits for hauling industrial materials in excess of limits including the vehicle and load. Requires permits for specified materials and designated routes on the state's primary road system up to three years and renewed pending inspection of the routes listed on the permit. 2) The cabinet may create a system where the permit holder can obtain a new permit for different routes or materials without having to complete a new application or pay a separate application fee. 3) Reasonable fees are required for the permit. An applicant convicted of violating the weight provisions in KRS 189.990 (2)(a) two or more times in 5 years must give bond with approved surety up to $6,000 for each vehicle to "to indemnify the Commonwealth of Kentucky against damage to highways or bridges resulting from the operation of any motor vehicle under the authorization of such permit. A bond acquired under this subsection may be carried forward to another permit if the cabinet has not gone against the bond." 4) Operating with a permit does not constitute violations in this chapter 5) Permit may not exceed allowable maximum gross weight, including vehicle and load in KRS 189.222. 6) Permit may not exceed allowable dimensions in KRS 189.222. 8) Operators must not violate terms of permit. 9) Defines industrial materials: "all cargo, whether divisible or indivisible, which a motor vehicle transports in the usual and ordinary course of business and shall specifically include, but not be limited to, agricultural products, minerals, or natural resources transported by a motor vehicle." 10) Cabinet may: a) Supervise and administer this section b) Make KARs on the limits of permit duration and weights limits for vehicle types, materials, and highways c) Make KARs for bond requirements, allow applicants not required to post surety bond to self-insure.

			d) Issue, continue, revoke, modify, or deny permits under this section.
KRS 189.2713	Annual and single-trip permits for transporting loads of metal commodities weighing between 80,001 and 120,000 pounds -- Administrative regulations.	June 27, 2019	1) Metal commodities defined: "output products from metal producing industries that are transported in their most basic and original form from a mill or storage facility to market for processing." It does not include manufactured parts transported from a manufacturer or supplier to another customer. 2) The department to adopt KARs for annual and single-trip permits for vehicles transporting metal commodities in divisible or nondivisible loads weighing 80,001 to 120,000 lbs. to or from a facility manufacturing metal commodities in the state or metal commodities storage facility. 3) Metal commodities carriers may apply for annual single-trip overweight permits, specific to a single truck and valid 24 hrs. a day. 4) (a) Annual permits are $1,250 (b) Single-trip permits are $100 5) Permits will contain a website hyperlink or other method to provide carriers with approved routes. 6) Requires reporting of number of trips made and total miles driven under the permit in the previous year for permit renewal. 7) KARs may require motor carriers to meet Federal Motor Carrier Safety Administration (FMCSA) safety ratings and measurement system scores prior to permitting.
KRS 189.2716	Annual overdimensional permit for transporting steel products to a Kentucky riverport -- Width and mileage limitations.	July 15, 2016	1) Defines "riverport" 2) Subject to KRS 189.222, KYTC to establish KARs for overdimensional permit for transporting steel products in divisible or nondivisible loads on state highways from a facility manufacturing products in the state to a riverport in the state. 3) Sets maximum width at 10'. 4) Annual permits must identify the route; limited to 7 road miles from the manufacturing facility. It is valid 24 hrs. a day. The annual permit costs $250.
KRS 189.2717	Annual overweight permit for transporting nondivisible loads over specified routes -- Axle-weight limitation.	July 15, 1998	1) Subject to KRS 189.222, KYTC may establish KARs for annual permits of nondivisible loads on specified routes. Gross weight may not exceed 120,000 lbs. 2) The following axle weights may not be exceeded: (a) single axle, steering axle with one wheel on each side of the axle less axles than 42" apart = 15,000 lbs. (b) tandem, with axles spaced 42"-96" apart = 40,000 lbs. (c) tridem, with axles spaced 42"-120" apart = 65,000 lbs. (d) dual axle, 1 axle with 2 wheels on each side of the axle = 20,000 lbs. each 3) Vehicles must comply with safety provisions 4) Sets annual permit fee as $500. 5) Permits are subject to roadway and infrastructure adequacy on a route.
KRS 189.2718	Administrative regulations	July 14, 2018	Does not include weight limit details.

	regarding issuance of annual certificates for transporting feed for livestock or poultry to a farm or other facility housing livestock or poultry.		(1) The department may create administrative regulations to issue annual certificates for motor carriers exclusively engaged in transporting feed for livestock or poultry to a farm or other facility housing livestock or poultry. (2) Feed or poultry carriers transporting in divisible or non-divisible loads may apply for an annual certificate. (a) specific to a single truck (b) valid 24 hrs. a day (c) kept in the vehicle at all times of operation (3) Fee for certificate is $150. (4) KARs may require motor carriers to meet Federal Motor Carrier Safety Administration (FMCSA) safety ratings and measurement system scores prior to permitting.
KRS 189.272	Venue and jurisdiction -- Overweight vehicle cases.	1974	The District Court where the offense occurred shall have venue and jurisdiction for prosecuting violations to weight limits in KRS 189.221, 189.222, 189.226, 189.230, 189.270 and 189.271.
KRS 189.280	Trucks and trailers owned by governmental units -- Regulation of trucks and trailers by cities.	January 1, 2015	1) KRS 189.221 to 189.230 and 189.280 do not apply to motor trucks, semitrailer trucks, or trailers owned by the U.S., Commonwealth of Kentucky, or any of their agencies, any county or city. 2) If a motor truck, semi-truck or trailer is licensed by a city per KRS 186.270, then KRS 189.221 and 189.222(1) will not apply within the limits of the licensing city or 15 miles of the city if the population is equal to or greater than 3,000, or 5 miles if the population is less than 3,000, except state-maintained highways and connecting link streets, designated by the commissioner of highways, or county highways, designated by the county judge/executive, as long as the vehicle does not exceed weight and size limits established by city ordinance. 3) Cities may establish ordinances to set maximum limits on weight, height, width, and length of trucks and trailers in city limits not less than the maximum limits in KRS 189.221 and KRS 189.222(1).
KRS 189.990	Penalties.	June 27, 2019	The statute details the penalty fees assessed for violating weight limits.
KRS 281.605	Exemption of motor vehicles used for certain purposes	June 29, 2017	Provisions of this chapter, except safety regulations, do not apply to: (2) "Except as provided in paragraph (e) of this subsection, motor vehicles, regardless of ownership, used exclusively: (a) For the transportation of agricultural and dairy products, including fruit, livestock, meats, fertilizer, wood, lumber, cotton, products of grove or orchard, poultry, and eggs, while owned by the producer of the products, including landlord where the relation of landlord and tenant or landlord and cropper is involved, from the farm to a market, warehouse, dairy, or mill, or from one (1) market, warehouse, dairy, or mill to another market, warehouse, dairy, or mill. As used in this paragraph and in paragraph (b) of this subsection, "livestock" means cattle, sheep, swine, goats, horses, alpacas, llamas, buffaloes, or any other animals of the bovine, ovine, porcine, caprine, equine, or camelid species;

			(b) For the transportation of agricultural and dairy products, livestock, farm machinery, feed, fertilizer, and other materials and supplies essential to farm operation, from market or shipping terminal to farm; (c) For both the purposes described in paragraphs (a) and (b) of this subsection; (d) For the transportation of agricultural and dairy products from farm to regularly organized fairs and exhibits and return; or (e) Motor vehicles used for the transportation of fly ash, in bags, sacks, or other containers, the aggregate weight of which does not exceed ten thousand (10,000) pounds; or bottom ash, waste ash, sludge, and pozatec which is being removed from the premises of a power generator facility for the purpose of disposal;" (5) "Motor vehicles owned in whole or in part by any person and used by such person to transport commodities of which such person is the bona fide owner, lessee, consignee, or bailee; provided, however, that such transportation is for the purpose of sale, lease, rent, or bailment, and is an incidental adjunct to an established private business owned and operated by such person within the scope and in furtherance of any primary commercial enterprise of such person other than the business of transportation of property for hire;" (7) "Motor vehicles used exclusively for the transportation of coal from the point at which such coal is mined to a railhead or tipple where the railhead or tipple is located at a point not more than fifty (50) air miles from the point at which the coal is mined;"
KRS 281.655	Bonds or insurance policies.	June 24, 2015	Details bonds or insurance requirements for most motor vehicles. See exemptions in KRS 281.605.
601 KAR 1:018	Special overweight or overdimensional motor vehicle load permits.		Conforms with KRS 189.270(6), 189.271(9)(b), 189.2715(1), 189.2716 and 189.2717(1) for the Secretary of KYTC to issue permits for vehicles with divisible or nondivisible loads exceeding legal weight or dimensional limits. Establishes procedures and requirements for single trip or annual permits of overweight/overdimensional vehicles and loads, escorts, houses/buildings, and ocean-going container cargo. Section 1: Provides definitions relevant to overdimensional and overweight vehicles. (7) Defines "nondivisible" load as "a load, cargo unit, or vehicle that if separated into smaller loads or vehicles would: (a) Compromise the intended use of the vehicle, making it unable to perform the function for which it was intended; (b) Destroy the value of the load or vehicle, making it unusable for its intended purpose; or (c) Require more than four (4) or eight (8) work hours to dismantle and reassemble contingent on the route traveled." (8) Defines "overdimensional" as exceeding limits in 603 KAR 5:070. (9) Overweight defined as exceeding: (a) the gross weight in 603 KAR 5:066 (b) the gross and axle weight limits in 603 KAR 5:066 (c) the gross weight limits in KRS 177.9771 for coal for coal or coal byproducts (d) bridge weight in 603 KAR 5:066 or posted bridge limits

			(e) the gross weight limit posted at a bridge or other structure (10) "Permit fee" means the fee established in KRS 189.270, 189.2715, or 189.2717 for the issuance of an overweight or overdimensional trip or annual permit, to cover the cost of processing the permit application, including: (a) A qualification check of the applicant; (b) A statutory compliance check; and (c) An initial bridge and weight analysis. (14) Defines "Steering axle" as “axle or axles of a vehicle or combination of vehicles by which the vehicle or vehicles are guided or steered.” (15) Defines "Tandem" as any two (2) axles with centers forty two (42) inches or more apart but less than ninety six (96) inches apart.” (16) Defines "Tridem" as any three (3) consecutive axles with centers forty two (42) inches or more apart and less than 120 inches apart.” (17) Defines "Trunnion axle" as “an axle configuration with two (2) individual axles mounted in the same transverse plane with four (4) tires on each axle connected at a pivot point that allows each individual axle to oscillate in a vertical plane to provide constant and equal weight distribution on each individual axle.” Section 2: Provides the requirements for an overweight or overdimensional Permit application. Section 3: Permit Validity and Availability. (3) An overweight or overdimensional permit will “not be issued for a divisible load that if reasonably divided, dismantled, disassembled, or rearranged would no longer be overweight or overdimensional except as provided by KRS 189.2715, 189.2716, or 189.2717.” (4) Allows a special overweight or overdimensional annual or trip permit for a motor vehicle with a gross weight or gross dimension in excess of the weights and dimensions established in KRS 189.270, 189.271, 189.2715, and 189.2717 “if the movement is necessary to provide transportation for specified cargo that is in the interest of the health, welfare, or economy of the Commonwealth.” Section 4: Covers changes to overweight or overdimensional Permits. Section 5: Details travel restrictions: Section 6: Details the height requirements for overweight/overdimensional permits. The maximum height of a permit is 13 ft. 6 inches tall. Section 7: Weight. (1) Gross or axle overweight is not permitted on: (a) Unit does not have a registered weight of at least 80,000 or (b) towing vehicle with horsepower insufficient to safely transport the load (2) Single axle weight shall not exceed 700 pounds times the aggregate width in inches of all tires on the axle or the following axle group weights, whichever is less: (a) single wheel axle = 24,000 pounds (b) steering axle = 20,000 pounds (c) tandem dual-wheel axle group combination with 5 axles = 45,000 pounds (d) tandem with 6 or more axles = 48,000 pounds (e) tridem axle = 60,000 pounds

			(f) 5 axle combination units = 96,000 gross weight (g) 6 axle combination units = 120,000 pounds gross weight (h) seven axle combination = 160,000 pounds gross weight (3) trunnion axle group determined by route and bridge analysis performed by cabinet's Bridge Preservation Branch (4) maximum weight not permitted unless the bridges and roads on the route have the capacity to accommodate the load (5) self-propelled specialized mobile equipment may not exceed: (a) single axle = 23,000 pounds (b) tandem axle group = 46,000 pounds (c) tridem axle group = 69,000 pounds (6) 4 axle self-propelled specialized mobile equipment = 92,000 pounds (7) 5 axle self-propelled specialized mobile equipment = 115,000 pounds Section 8: Annual permit may be issued to manufacturer of self- propelled construction equipment not more than 10" width and 160,000 pounds. Section 10. Describes width requirements. Section 11-15 cover safety and escort requirements. Section 16: Building Materials. A vehicle hauling building materials to a home or site may travel 15 miles off a state highway for delivery if the highway is classified to carry the registered weight. 1) Must meet axle weight limits. Vehicle not required to have a permit for overweight/over-length. 2) Bill of lading required. Section 17: (4) A vehicle moving a sealed, containerized, ocean-going cargo unit must meet the limitations of KRS 189.222, 189.270, and Section 7 of this KAR. Bill of lading required.
601 KAR 1:019	Overweight or overdimensional farm equipment.		Establishes the requirements for single trip and annual overweight/overdimensional farm equipment permits. Establishes safety requirements for escort vehicles for farm equipment and exempts some farm equipment from permit requirements. Section 1. Definitions including: (6) "Overweight" means: (a) The gross weight limit established in 603 KAR 5:066; (b) The axle weight limit established in 603 KAR 5:066; (c) The gross weight limits established by KRS 177.9771 for a motor vehicle transporting coal or coal by-products; (d) The bridge weight limit established by 603 KAR 5:066; or (e) The gross weight limit posted at a bridge or other structure. Section 2. Overweight or Overdimensional Permit Not Required. 1) A permit is not required for transporting overweight/overdimensional farm equipment or self-propelled farm equipment from: a) One farm to another

			b) A farm to a repair shop or dealer; 2) Non-permitted moves require compliance with safety requirements of this KAR Section 3. Overweight or Overdimensional Annual or Single Trip Permit Required. 1) A single-trip or annual overweight/overdimensional permit is required from: a) Manufacturer to dealer; b) Dealer to manufacturer; or c) Dealer to dealer 2) A single-trip or annual overweight/overdimensional permit is required on: a) A fully controlled access highway; b) A toll road parkway; or c) Interstate highway; 3) Determination for permit based on the following: a) The strength of bridges and structures on the route; b) Traffic congestion on the route; c) Horizontal and vertical clearance on the route; d) The availability of alternate routes that afford greater safety; e) Urban development in residential and commercial areas on the route; f) The proximity of schools to the route; and g) Another condition that would unduly compromise public safety and convenience. Section 4. Overweight or Overdimensional Single Trip Permits. (1-3) Details issuance and applications for single trip permits. Permits required to move farm equipment or self-propelled farm equipment when the load is non divisible farm equipment exceeding the weight or dimensions established in KRS 189.222 or 189.270(3) and (4). Section 5. Overweight or Overdimensional Annual Permits. (1-3) Details issuance and applications for annual permits as established in KRS 189.270(3) and (4). Section 6. Overweight or Overdimensional Permits for Self-propelled Farm Equipment. 1) Self-propelled farm equipment is prohibited on: a) Toll road; b) Parkway; or c) Interstate highway 2) Self-propelled farm equipment will be issued a permit to operate on a fully controlled access highway if: a) it does not impede traffic; and b) accompanied by an escort vehicle if required by Section 7 Section 9. Travel Restrictions. Adverse weather restrictions on 12 feet wide equipment. Section 10. Height and Weight Requirements. 1) Nonexempt farm vehicle and load exceeding 13’ 6” requires a single-trip permit 2) Maximum height for each single trip permit determined by the cabinet based on bridge and underpasses on the route

			3) Gross or axle overweight will not be permitted a nonexempt farm vehicle with the following configuration: a) A combination unit of less than five (5) axles; or b) A single unit. 4) Must have declared weight of at least 80,000 lbs. 5) The weight on a single axle in a combination shall not exceed the product of 700 pounds times the aggregate width in inches established by the manufacturer's stamped tire measurement of all the tires on the axle, or the following axle or axle group weights, whichever is less a) Single-wheel axle: 24,000 pounds; b) Steering axle: 20,000 pounds; c) Tandem dual-wheel axle group if the combination vehicle has only five (5) axles total: 45,000 pounds; d) Tandem dual-wheel axle group if the combination vehicle has six (6) or more axles total: 48,000 pounds; e) Tridem dual-wheel axle group: 60,000 pounds; f) Five (5) axle combination units not exceeding 96,000 pounds gross weight; g) Six (6) axle combination units not exceeding 120,000 pounds gross weight; h) Seven (7) axle combination units not exceeding 160,000 pounds gross weight; or i) Trunnion axle group maximum gross weight as determined by the bridge weight formula established in 603 KAR 5:066, Section 2(7). The maximum weight will not be permitted, unless all bridges and roads on the moving route have sufficient capacity to accommodate the load.
601 KAR 1:020	Permit for hauling industrial materials; fee; bond.		Empowers the Cabinet to issue special permits to owners, operators, or lessees of motor vehicles for hauling industrial materials whose gross weight or dimensions, including vehicle and load, exceed the limits set by or does not comply with KRS Chapter 189. Section 1. Applications. (2) applications require a transportation plan submitted to highway district office with jurisdiction over the major portion of proposed haul routes (3) transportation plan must indicate ad identify the route number of highways for proposed hauling Section 2. Bond Requirements. (1) Permit holders in good standing are not required to post bond. (2) Applicants are not in good standing and require a performance bond if: (a) Operators deviate from an existing transportation plan or violates safety provisions in Section 5 of this KAR (b) Operators are convicted under KRS 189.990(2)(a) two or more times within a 5 year period. (3) If required to post a performance bond the following apply:

			(a) The applicant is the principal obligor on any industrial haul performance bond and the state will be the obligee. (b) The bond will be determined by the Cabinet and will not exceed $6,000 per vehicle. (c) The applicant may file a surety bond, corporate bond, or self-insured bond subject to the following; 1. Applicants for corporate or self-insured bonds must submit an affidavit from an independent financial institution verifying permanent net assets located in Kentucky with a total value of $500,000 or more. 2. If liability is discharged on a performance bond the Cabinet may require filing a new bond 3. An existing industrial haul permit bond may be carried forward and applied to a revised or renewed industrial haul permit if the Cabinet has not gone against the bond and there has not been a safety violation per Section 5 of this KAR. Section 3. Permit Terms and Conditions. (1) Industrial haul permits are valid for up to 3 years. (2) A separate permit is issued for each vehicle with paid permit fee. (a) There is a $20 annual application fee for each truck. Permits may be purchased for up to 3 years at the time of application. (b) Application fees are paid to the Cabinet (3) Permits meeting terms and conditions may be renewed (4) Industrial haul permit transportation plans may be revised at any time. (5) Permitted vehicles must comply with legal bridge weights. A permitted vehicle may exceed the legal bridge weight limits by approval from the cabinet only. (a) The permit holder who wishes to exceed legal bridge weights on a submitted transportation plan must: 1. submit a written request with the permit application, and; 2. provide details on the specific bridge(s) to be exceeded by route and mile points (b) The cabinet will: 1. Analyze the bridge weight capacity, and; 2. Either issue the permit or notify the applicant it was denied based on bridge weight capacity within 14 days of the date of application in the highway district office Section 4. Weight Restriction. The holder of an industrial haul permit will not allow a vehicle owned or leased by them to exceed the gross weight in KRS 192.222. Section 5. Additional Conditions. Any vehicle allowed to deviate from height, weight, or length dimensions in KRS 189.222 is restricted to using roads set in 603 KAR 5:070 and must comply with KRS Chapter 189, 601 KAR 1:005 and 601 KAR 1:018.

			Section 6. Deviations from the transportation plan submitted by the permit holder without notice to the Cabinet will be cause to revoke the industrial haul permit.
603 KAR 5:066	Weight (mass) limits for trucks.		Establishes weight mass limits for trucks using the state maintained highway system authorized by KRS 189.222(10). [Error: In KRS this is 11] Section 1: Highway Classifications and Truck Types 1. Trucking highways classified in 603 KAR 5:301:[Error this is a repealed KAR} a. AAA: maximum gross weight of 80,000 pounds b. AA: maximum gross weight of 62,000 pounds c. A: maximum gross weight of 44,000 pounds 2. Truck types for posting bridges and listing bridge weight (mass) restrictions: a. Truck Type 1: single unit truck with 2 single axles b. Truck Type 2: single unit truck with 1 steering axle and 2 axles in tandem c. Truck Type 3: 1 steering axle and 3 axles in tridem d. Truck Type 4: tractor-trailer combination consisting of 5 or more axles 3. Other truck types not covered in subsection 2 may be restricted by weight based on axle spacing and weight (mass) distribution per axle per state and federal law. Section 2: AAA Highways Except Interstates: 1. Maximum gross weight of 80,000 pounds 2. Tire weight not to exceed 700 pounds times the aggregate width from the manufacturer 3. May not exceed posted limits if posted load limit is less than 80,000 pounds. Section 3: Interstates 1. Gross weight 80,000 pounds 2. Gross single axle weight 20,000 pounds (axles <42" apart) 3. Gross tandem axle weight 34,000 pounds (axles <42" apart) 4. Gross tridem axle weight 34,000 pounds (axles 1 and 3 of tridem <= 96" apart) 5. Gross tridem axle weight 48,000 pounds, (axles 1 and 3 of tridem > 96" and < 120" apart and 2 adjacent axles >= 42") AND gross vehicle weight <= 73,280 pounds 6. Gross weight on 2 consecutive tandem axles 34,000 pounds (1st and last axles >= 36' apart) 7. Gross weight on any other axle configurations uses the bridge weight formula: W= 500 (LN/N-1 + 12N + 36); W=gross weight, L=distance between extreme axles (feet), N=number of axles. The load on any single axle in any arrangement may not exceed 20,000 pounds. The gross weight may not exceed 80,000 pounds. Requires a steerable axle. 8. tire weight not to exceed 700 pounds time the aggregate width from the manufacturer 9. cannot exceed posted bridge weights 10. tolerances not allowed Section 4: AA Highways. 1. Gross weight <= 62,000 pounds 2. Gross single axle weight 20,000 pounds (axles <42" apart) 3. Gross tandem axle weight 34,000 pounds (axles >42" and < 96" apart) 4. Gross tridem axle weight 34,000 pounds (axles 1 and 3 of tridem <= 96" apart)

			5. Gross tridem axle weight 48,000 pounds, (axles 1 and 3 of tridem > 96" and < 120" apart and 2 adjacent axles >= 42") 6. tire weight not to exceed 700 pounds time the aggregate width from the manufacturer 7. cannot exceed posted bridge weights 8. Gross weight on other axle configurations uses the bridge weight formula: W= 500 (LN/N-1 + 12N + 36); W=gross weight, L=distance between extreme axles (feet), N=number of axles. The load on any single axle in any arrangement may not exceed 20,000 pounds. The gross weight may not exceed 62,000 pounds. Requires a steerable axle. Section 5: A Highways. 1. Gross weight <= 44,000 pounds 2. Gross single axle weight 20,000 pounds (axles <42" apart) 3. Gross tandem axle weight 34,000 pounds (axles >42" and < 96" apart) 4. tire weight not to exceed 700 pounds time the aggregate width from the manufacturer 5. cannot exceed posted bridge weights 6. Gross weight on other axle configurations uses the bridge weight formula: W= 500 (LN/N-1 + 12N + 36); W=gross weight, L=distance between extreme axles (feet), N=number of axles. The load on any single axle in any arrangement may not exceed 20,000 pounds. The gross weight may not exceed 44,000 pounds. Requires a steerable axle. Section 6: Tolerance. On all state-maintained highways not part of the interstate system there is no tolerance allowed on gross weight and a 5% axle weight. Section 7: 1. Classification shall constitute designation by Secretary of Transportation per KRS 189.280 City ordinances cannot allow heavier loads unless specifically allowed by the Secretary of Transportation
603 KAR 5:070	Motor vehicle dimension limits.		Establishes the dimensions and the dimension combinations for motor vehicles travelling on all classes of highways in Kentucky. Section 1: Definitions Section 2: Width Exclusion Safety Devices Section 3: Dimensions of Vehicles Section 4: Exceptions to Permit Requirement. 1. Except for buses, overweight/overdimensional permits are not required when the exceeding length and width limits set in Section 3 on the following highways: a. NTN b. 15 miles access established in KRS 189.222(1)(f) c. 5 mile access established in Section 5(2) of this KAR d. 1 mile access established in Section 5(3) of this KAR 2. Towed unit shall not exceed the following without an overdimensional permit on the National Truck Network

			a. 102” b. 53 feet if a single semitrailer combination c. 28 feet if operated in a tractor-semitrailer-trailer or tractor-semitrailer-semitrailer, do not exceed 2 towed units 3. The length of the rigid frame extension is not included in the length of a double trailer 4. If a second semitrailer is not mounted to the fifth wheel of the rear frame, the length of the extension is included in the length of the semitrailer. 5. Gross vehicle weight limit = 80,000 pounds if meeting the dimensions of this subsection and operating on the NTN 6. Weight and dimensions in this section are not subject to enforcement tolerance Section 5: Increased Dimensions Section 6: Household Goods Transporters Section 7: Increased dimensional vehicles limited in the city of Anchorage in Jefferson County, KY Section 8: Limits the 5 mile and 15 mile automatic access on 4 state maintained road segments based on safety concerns of overdimensional vehicles.
603 KAR 5:115	Coal-haul highway system; reporting requirements.		Designates the procedures and intervals information are reported to the Cabinet by shippers or owners as part of reporting requirements for designating and publishing the official coal-haul highway system.
603 KAR 5:220	Cooperative agreements for transportation of coal.		Allows for Department of Highways to enter into cooperative agreements for coal transportation. The KAR defines procedures, requirements, and limitations for cooperative agreements.
603 KAR 5:230	The extended weight coal or coal by-products haul road system and associated bridge weight limits.		This KAR stablishes requirements for the extended weight coal or coal by-products haul road system and associated bridge weight limits. Section 1. (4) Defines “coal by-product” as, “fly ash, bottom ash, wet bottom boiler slag, scrubber sludge, burned coal waste (red dog), coal slag, or coal cinders.” Section 2. (1) The department will determine the bridges on the extended weight coal or coal by-products haul road system that may be damaged or destroyed to the point of catastrophic failure by operating at the authorized weight in 177.9771 using The Manual for Bridge Evaluation. (2) Stipulates the load factor method of analysis will be used if a bridge was knowingly designed with this method. (3) If the allowable stress method of analysis is used, the maximum allowable stress in steel members is 75% of the yield strength of the steel. (4) If neither the load factor method nor stress method can be used then the Department of Highways will conduct an on-site inspection. Section 3. The department will use The Manual for Bridge Evaluation to set a weight limits for bridge deemed at risk of catastrophic failure per KRS 189.230(2). Section 4. Vehicles operating with an EWCHRS decal mat not exceed dimension limits in 603 KAR 5:070, Sections 3 and 4. Section 5. The Extended Weight Coal and Coal By-product Highway System and Limited Bridges. (1) (a) 1. The EWCHRS must be updated annually by the secretary

			2. (a) available on the Transportation's website at: http://transportation.ky.gov/planning/maps/coalhaul/coalhaul.asp (b) list will be available in paper form by request (c) paper copy may be viewed at the Department of Highways district office or purchased from the Division of Maintenance. (2) The bridges identified on the Transportation website and by order of the secretary will: (a) be bridges determined to be at risk of damage or destruction to the point of catastrophic and; (b) have an established weight limit Section 6. A person may not operate or cause to be operated a vehicle with gross weight limits exceeding the weight limits of a bridge listed on the website and secretary's order. Section 7. Per KRS 189.230(3) the Department of Highways will post the gross vehicle limits for each bridge on the EWCHRS. Section 8. A person may not operate or cause to be operated a vehicle with gross weight limits exceeding the weight limits of a bridge established by notice posted per KRS 189.230 (3). Section 9. refers to resolution of a local governing body making a recommendation to the secretary Section 10. provides details on inspection or request for copies of The Manual for Bridge Evaluation
603 KAR 5:250	Selection of National Truck Network highways and reasonable access to these highways.		STAA routes and access Section 1: "STAA Vehicle" exceeds dimension in 603 KAR 5:070 section 1 but not section 2(2). Section 3: Right of access to terminals and facilities allowed without review for STAA vehicles up to 5-miles from the NTN on state-maintained routes and 1-mile on any non-state maintained route (except where prohibited in Section 5 of this KAR). Section 4: Except where prohibited in Section 5 1. Certified household goods transporters (per KRS Chapter 281) have access between any points for loading and unloading 2. Truck tractor-semitrailer combination with the semitrailer is less than 28.5' has access to any route Section 5: Route prohibited to STAA when significant safety problems exist Section 6: STAA vehicle owner or operators who cannot reach a terminal or service may request a review to operate on a segment of publicly owned highway. This section and Section 7 detail procedures. Section 9(2): A route is disqualified from the NTN if it has a bridge weight allowance less than 80,000 pounds for a tractor semitrailer combination with 5 for more axles or is less than 73,500 pounds for use by a straight truck with 4 or more axles.