Oversize/Overweight Trucks

Testimony of

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Introduction

The federal government enacted and administers legal size and weights of commercial motor vehicles in an effort to facilitate interstate commerce and preserve (i.e., prevent damage to) the highway and road infrastructure. While industry clearly benefits from more productive (i.e., heavier) trucks, these benefits have to be balanced against the costs to rehabilitate and maintain a state's highway and road infrastructure, safety, and emissions impacts. Currently, federal regulations limit trucks to a maximum gross vehicle weight of 80,000 lb. Texas enforces the federal allowable size and weight limits on both the federal (e.g., interstate) and state funded highway systems.

States may, however, grant special use permits to commercial vehicles for being oversize/overweight (OS/OW) on the non-interstate highway system. For example, in Texas, cotton (not baled) qualifies as an agricultural commodity under HB 1547. As such, trucks transporting cotton are allowed to have a gross vehicle weight of 84,000 lb. The trucking company must, however, purchase an over-axle/over-gross weight tolerance permit to take advantage of this exemption[1]. A state may also issue an OS/OW permit for a non-divisible load to travel on a federally funded route (interstate). In these cases, the state will route the vehicle along specific highways to minimize pavement and bridge consumption and to limit safety risks.

Safety Data

The impacts of OS/OW vehicles have been the subject of numerous state and national legislative sessions and studies. States face many challenges related to these types of vehicles, including roadway preservation, capacity, safety, environmental, industry productivity, and economic impact. However, the literature reveal numerous studies that address and assess the impact of OS/OW vehicles on pavements and bridges, but that crash and exposure data to support policy decisions on OS/OW vehicles is typically lacking.[2] An AASHTO synthesis reported that, in general, crash rates decrease but crash severity increases as vehicles become larger and heavier. The study, however, indicated that no existing truck crash data set had sufficient information for

[1].Texas Department of Public Safety Commercial Vehicle Enforcement. *A Texas Guide to Farm Vehicle Compliance.* August 19, 2014. http://www.texasfarmbureau.org/Commodity/CVE-13.pdf.

[2] FHWA 2009. *Highway Safety and Truck Crash Comparative Analysis, Comprehensive Truck Size and Weight Limits Study, Final Draft Desk Scan.* Washington, DC: U.S. Department of Transportation, Federal Highway Administration. Retrieved from http://www.ops.fhwa.dot.gov/freight/sw/map21tswstudy/deskscan/safety_dksn.pdf

a scientific analysis of this issue.[3] More recently, the U.S. Department of Transportation (U.S. DOT) reported that a lack of size and weight data on State crash reports prevented a comparison of the crash rates of trucks "operating at and below current Federal size and weight limits and trucks that operate above those limits." ***"No State crash data system includes the operating weight of trucks at the time of the crash."***[4]

TTI Research

TTI hosted the **Oversize/Overweight Vehicle Industry Forum** in 2014 to gather input on OS/OW research needs and priorities. In total, 58 stakeholders participated, representing the OS/OW haulers, Texas Department of Motor Vehicles, the Texas Department of Transportation's (TxDOT) Maintenance and Bridge Divisions, and law enforcement agencies. Participants were asked to provide input and respond to the challenges, including safety, associated with OS/OW vehicles. The following safety themes emerged:

- Federal law prevents carriers to move overweight divisible loads on the Interstate System (e.g., over-axle/over-gross weight tolerance permitted loads). Stakeholders pointed out that Interstates are built to higher design standards, but the carriers have to use roads that were not built to handle OS/OW loads. Furthermore, TxDOT Districts can put limitations/restrictions on the roads that can be used by OS/OW vehicles. OS/OW vehicles are often diverted to Farm-to-Market roads. Farm-to-Market roads tend to be narrow (typically 18 feet wide) and often times have no shoulders. A truck is 10 feet wide from mirror to mirror. Two trucks thus have difficulty passing on a Farm-to-Market road, which presents a safety issue.
- Need for programs to educate public on sharing the road with OS/OW vehicles. Passenger car drivers do not recognize the stopping distances that OS/OW vehicles require. The speed differential between these vehicles and passenger vehicles was also concern.
- Texas does not require pilot car/escort driver certification. It was recommended that Texas has a statewide policy and certification program for OS/OW escorts.[5]

TTI also hosted the "**Oversize/Overweight Corridors in Texas**" Workshop in 2016. The objective of the workshop was to gather input on (a) potential metrics that can be used for

[3] AASHTO 2009. *A Synthesis of Safety Implications of Oversize/Overweight Commercial Vehicles.* Washington DC: American Association of State Highway and Transportation Officials. Available for purchase at https://bookstore.transportation.org/item_details.aspx?id=1559

[4] U.S. Department of Transportation: Federal Highway Administration. 2016. *Comprehensive Truck Size and Weight Limits Study*, Report to Congress, April. https://ops.fhwa.dot.gov/freight/sw/map21tswstudy/ctsw/ctswls_rtc_2016.pdf

[5] Prozzi, J. et al. 2014. *Oversize/Overweight Vehicle Research Priorities.* Texas A&M Transportation Institute: Transportation Policy Research Center, PRC 14-10F, October. tti.tamu.edu/tti.tamu.edu/documents/PRC-14-10-F.pdf

designating OS/OW corridors and (b) metrics for monitoring the performance of the corridors once designated. The Workshop was attended by academic subject matter experts in infrastructure consumption, economics, safety, and operations, as well as TxDOT, the Texas Department of Motor Vehicles, the Texas Department of Public Safety, the Texas Trucking Association, and the BNSF Railway.

Workshop participants considered safe operations the second most important criteria in the designation and monitoring of OS/OW corridors. As mentioned earlier, data on OS/OW vehicle collisions are not available or reliable. In the designation of OS/OW corridors, it was, however, proposed that the crash rates on the proposed OS/OW corridor be considered. If high crash rates are experienced, the corridor should only be designated once conditions are improved (e.g., signal timing, curb radii, etc.). Other safety factors that workshop participants felt needed consideration included the schools and residential areas impacted by the proposed OS/OW corridor and the safety record of the companies operating along the corridor (i.e., habitual violators of safety rules). In the absence of robust OS/OW vehicle crash data, crash rates can be monitored to provide insight into the safety of the OS/OW corridors once designated.[6]

85th Texas Legislature

The 85th Texas Legislature passed significant legislation regarding oversize and overweight vehicles. Bills passed addressing corridors in Matagorda County (HB 4156), Chambers County (SB 1291), and Hidalgo County (SB 2227). Legislation also passed addressing the weight of fluid milk trucks (SB 1383).

Notably, the Legislature passed SB 1524, which became effective January 1, 2018. "Senate Bill 1524 amends the Transportation Code to authorize the Texas Department of Motor Vehicles to issue an annual permit for the movement of a sealed intermodal shipping container moving in international transportation by a six-axle or seven-axle truck-tractor and semitrailer combination. The bill sets out permit conditions, requirements, and route restrictions and requires the Texas Department of Transportation to conduct a biennial study concerning vehicles operating under the permit."[7]

As of this writing there is insufficient information to draw any conclusions regarding the implementation of SB 1524.

[6] Prozzi, J. 2016. *Potential Metrics for Designating and Monitoring Oversize/Overweight Corridors.* Texas A&M Transportation Institute: Transportation Policy Research Center, PRC 16-10F, November. tti.tamu.edu/documents/PRC-16-10-F.pdf

[7] *Summary of Enactments, 85th Legislature, Regular Session and First Called Session*. Texas Legislative Council, 2017

Conclusion

The safety impact of OS/OW vehicles is an important, but complex and challenging topic. It is often raised as a concern by stakeholders, but a lack of complete and accurate data, methodologies, models and research, prevent a robust scientific analysis of the safety impacts of OS/OW vehicles.