OS/OW PERMIT HARMONIZATION INITIATIVE

UPT2021 is an SC&RA initiative to advocate for harmonization of oversize overweight (os/ow) configurations issued under automated, auto-issued single trip permits.

**THIS DOCUMENT INCLUDES:**

- **Auto-Issue Single Trip Weight & Dimension Thresholds Map** – Depicts whether states employ automated permit systems capable of analyzing/issuing single trip permits 24/7. Of those states employing automated permit systems, depicts states meeting or exceeding minimum and maximum industry thresholds.

- **Permitted Weight Configurations Chart** – Eleven of the most common used configurations by the specialized transportation industry are identified. The chart depicts whether states will or will not consider the configuration, will analyze through 24/7 automation or manually, and if manually – up to or more than 3 days analysis.

- **SC&R Foundation and American Transportation Research Institute (ATRI) Cost Analysis Studies** – Concluded transportation costs increase 45-82% to move OS/OW permitted loads through and/or around barrier states. ATRI concluded, “As many states will attest, the basis for some states regulations are extremely dated and not based on any empirical data or evidence.” [Click here](#) for the complete ATRI study.

- **U.S. DOT Federal Highway Administration (FHWA) Final Report – Best Practices In Permitting Oversize And Overweight Vehicles** – Concluded states employing automated analysis/permitting systems reported decreased processing/issuance times for permits, increased volume and accuracy of permits, improved roadway and infrastructure safety, increased revenue for states, and reduced headcount for states.

For more information contact Steven Todd, VP of Transportation at stodd@scranet.org or (703) 698-0291.
Auto-Issue Single Trip Weight & Dimension Thresholds

Legend:
- No Automation
- Automation But Does Not Meet Threshold
- Meets or Exceeds Minimum Industry Threshold (14’ wide / 14’ 6” high / 110’ long / 150,000 lbs)
- Meets or Exceeds Maximum Industry Threshold (16’ wide / 17’ high / 125’ long / 250,000 lbs)

Up to 80% increased cost to run through/around barrier states.
### Weight Configurations

**Key:**
- **Y**: Automated 24/7
- **< 3 DAYS**: Will Consider and Respond in 3 Days
- **3+ DAYS**: Will Consider and Respond After 3 Days
- **N**: Will Not Consider Configuration

Note: Assumes minimum 4’6” spacing between axles within a tandem group

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### Details:
- **UPT2021**: UNIFORM PERMIT TRANSPORT
- **OS/OW Permit Harmonization Initiative**
- **SCRA**: Specialized Carriers & Rigging Association
- **Note**: Assumes minimum 4’6” spacing between axles within a tandem group
- **Will Consider and Respond**: Indicates consideration after 3 days
- **Will Not Consider**: Configuration is not considered
### Weight Configurations

**Key:**
- Automated 24/7
- Will Consider and Respond in 3 Days
- Will Consider and Respond After 3 Days
- Will Not Consider Configuration

**Note:** Assumes minimum 4'6" spacing between axles within a tandem group

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## Weight Configurations

**Key:**
- **Y**: Automated 24/7
- **< 3 DAYS**: Will Consider and Respond in 3 Days
- **3+ DAYS**: Will Consider and Respond After 3 Days
- **N**: Will Not Consider Configuration

Note: Assumes minimum 4’6” spacing between axles within a tandem group

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**Examples:**
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- **PA**: Y Y Y Y Y < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS
- **RI**: Y Y N N N N N N N N
- **SC**: N N N < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS
- **SD**: Y Y Y Y Y Y Y Y Y Y
- **TN**: Y Y Y Y < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS
- **TX**: Y Y Y N N Y Y Y Y Y Y 3+ DAYS
- **UT**: Y < 3 DAYS < 3 DAYS N < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS < 3 DAYS
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- **VT**: Y Y N N N N N N N N
- **WA**: N N N N N N N N N N
- **WI**: Y Y Y Y Y Y Y Y Y Y
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31 December 2018

On Behalf of the Board, Officers, Research Committee....

The SC&R Foundation is pleased to present to the SC&RA the Report by ATRI and Paul Ross. The Foundation felt that this study is of high importance to the SC&RA and members, so we could quantify what we already know: Redundant and unnecessary regulation causes unnecessary costs, adversely impacts SC&RA Members, their customers, and associates.

The release of this collaborative report has been timed to coincide with a national distribution of SC&RA’s Uniform Permit Transport 2021 (UPT21) initiative. This distribution to State officials, trucking associations, manufacturers and more will included current state, regional, and national maps and charts illustrating comparisons to our minimum weight recommendations.

This study focuses primarily on the additional significant costs precipitated and resulting from the lack of minimum permitted weight uniformity in the United States pertaining to a quad trailer configuration. In a much broader sense however, it also clearly illustrates the “over and above” financial implications also directly apply to the economies of movement across a much wider range of equipment configurations moving over dimensional product every day.

We have taken these “hard to measure” cost implications from this study one step further and conducted a member driven survey using duplicate routing and mileage driven scenarios from the ATRI Cost Differential Table section. Based on this recent survey, we have summarized the results into two sections:

- Direct extra costs to customers for circuitous versus direct miles
- Direct extra costs to carriers for circuitous versus direct miles

**In general, average percentage increase to customers ranged from 45 – 82 %, per move. Additionally, average financial increase to customers ranged from $4,245 to $5,440 in aggregate dollars.**

We feel that State and Local operating constraints driven by regulation cause additional “incidental” financial impacts. Depending on a given operator’s location and operating characteristics, there may be additional excess costs in the thousands of dollars per run, for unplanned expenses in wages, detention, escort lodging, law enforcement support, infrastructure management costs (traffic lights, sign relocation, etc.) due to additional overtime, rescheduling, or other ancillary costs driven by state or federal HOS or operating hour constraints driven by extra working days. A confidential survey of several contributing members’ cost data confirmed significant variability, not all of which was reflected in the ATRI work.

These cost analytics not only validate our harmonization driven initiatives but combined with the overall scope of this report, provide us with invaluable resources going forward at all levels as we promote minimum permit weight uniformity across our country.

Sincere thanks to Contributing Members, Steven Todd, Paul Ross, and ATRI for helping us complete the first quantitative look at these unique to our industry impacts, that our members struggle with every day.

Sincerely,

SC&R Foundation Research Committee
Assessing the Cost and Operational Impacts of State Practices for Minimum Quad Axle Weights Granted for Routine Over-Weight Permits

Final Report

Presented to
Specialized Carriers & Rigging Association

By
American Transportation Research Institute

In coordination with
Quetica, LLC

and

In Partnership with
Specialized Carriers & Rigging Foundation
Table 8: Pavement and Total Costs From Circuitous Routing 8-Axle 160K Truck

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Origin - Destination</th>
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Conclusions

The recent TRB-sponsored study of multi state OS/OW permit moves (NCHRP Report 830) identified the numerous differences in regulations for permit moves of non-divisible loads across states. There are differences in axle weight allowances on single, tandem, triple, and quad axle groups, as well as definitions for gross vehicle weight limits, with many of these differences stemming from decades old grandfathered exceptions. In addition, many states differ in defining what constitutes a super load. In the area of dimensions, there are a litany of differences regarding limits for width, height, and length. States also differ in their requirements for escort vehicle requirements of super loads.

The maze of rules and regulations that specialized carriers face in making interstate movements is truly overwhelming. As many states will attest, the basis for some of these regulations are extremely dated, not based on any empirical data or evidence. In 1989, Congress directed the Secretary of Transportation to request a study of federal regulations governing truck size and weight. That study drew an astounding conclusion: present federal standards are for the most part the outcome of a series of historical accidents instead of a clear definition of objectives and analysis of alternatives.\(^{10}\) Special Report 267 went on to state that current truck size and weight regulations are poorly suited for the needs of commerce. While that study examined federal regulations, the same conclusion can be drawn about the myriad state regulations applying to permitted loads: they are often based on little science, and do not reflect current or future transportation needs for domestic commerce.

Congress took no action on the recommendations of the TRB Special Report, and since then has requested several more policy studies on truck size and weight issues. Still, Congress has failed to act on many of the recommended changes to truck size and

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weight policy; instituting changes in special permitting policies at the state level has also proved challenging. The specialized carrier industry has sought greater uniformity in OS/OW regulations for decades, and while some progress has been made, much more needs accomplished. Indeed, the specialized industry continues to strongly advocate and recommend the following steps in addition to harmonization:

- 100% implementation of automated permit systems and raising the imposed issuance thresholds for dimension and weight issued under these systems gradually to acceptable levels.
- Alike pavement and structures analysis, in keeping with AASHTO standards, between states regarding dimensions and weights issued under permit.
- Adherence to regular, scheduled meetings from our four AASHTO regions, allowing critical industry input and exchange of ideas.
- Current and future bridge designs that recognize the industry’s need to transport product more efficiently.
- Policies at the state-level that promote the analysis and study of traditionally prohibited configurations and weight allowances.

Because responsibility for heavy vehicle permitting policies falls to the states, there are also different institutional hurdles that specialized carriers must overcome. Permitting policies for specialized loads in most states are established by individuals or committees within the responsible agency. As a result, it is possible that there may be greater reluctance to implement change in an environment where the risk associated with a policy change falls to individuals.

However, the analysis of regulations across states conducted in this research demonstrate that the costs associated with these regulations are considerable. The added costs strictly due to circuitous permitted routes exceeded $1,000.00 for a haul from Wytheville, VA. To Fort Pierce Fla while these same costs amounted to nearly $2,200.00 for a trip from Shreveport, La. To Kearney, Ne. It is also important to note here that the cost of $2.24 per mile used to calculate the added costs strictly due to circuitous permitted routes may be understated. This per-mile cost figure does not include other peripheral costs, such as time constrains and poor driver and equipment utilization, which can be difficult to measure, but are nonetheless driven directly by these regulatory policies. Adding further to these costs are other considerations that OS/OW loads experience due to state laws requiring the use of nine or ten axle configurations for example. It is clear from this very limited research on the costs associated with differing regulations among the states for just one trailer axle configuration, that these extra costs are considerable and are ultimately borne by the consumers.
1.OVERVIEW

In May 2013, a commercial motor vehicle crossing the Skagit River Bridge along Interstate 5 (I-5) collided with the structure, causing a partial collapse. The subsequent National Transportation Safety Board (NTSB) investigation and U.S. Government Accountability Office (GAO) study identified safety issues and recommended the Federal Highway Administration (FHWA) take certain actions. FHWA, through the “Pilot Escort Vehicle Training Materials and State Certification Harmonization” project, addressed the key NTSB recommendations\(^1\) for action listed below. The GAO report contained a key recommendation for Executive Action:

“To improve stewardship over the nation’s highways and bridges, we recommend that the Secretary of Transportation direct the FHWA Administrator to take the following action:

Conduct a study on State oversize – and overweight-permitting practices, including automated vehicle routing and escort driver certification, to identify areas of best practice and share the results with States.”\(^2\)

This report, summarizing the FHWA-sponsored Oversize-Overweight (OS/OW) Permitting Best Practices Research Project, is intended to respond to the GAO recommendation. The objective was to conduct a study of State OS/OW permitting practices to identify best practices, including the identification of best practices for automated permitting systems and pilot escort certification.

The OS/OW Permitting Best Practices Research Project includes a comprehensive environmental scan of all information available on current permitting practices with an emphasis on conducting research into automated permitting services and on pilot escort vehicle State certification programs. The objectives of this deliverable were to:

- Conduct a comprehensive environmental scan of information available on OS/OW permitting.
- Develop criteria for best practices in OS/OW permitting.
- Develop criteria for best practices in Pilot Escort Vehicle Operator certification.

The environmental scan included the following:

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• A comprehensive web search to identify documents and other relevant information sources.
• A meeting with the FHWA Office of Bridges and Structures to identify National Bridge Inventory data of relevance to the research.
• Interviews with select States currently using automated OS/OW permitting systems.
• Interviews with select vendors who currently offer OS/OW permitting systems.

The study also looked at criteria for best practices. The subsequent report identified the specific criteria that track to enhanced safety, to improved efficiencies, or to both. The criteria were derived primarily from the results of State and vendor interviews.

This final State best practices report summarizes the research above and presents the inventory and identification of the State best practices for OS/OW vehicles.

**Summary of Findings**

As States implement and enhance automated permitting systems at an increasing rate nationwide, a consensus regarding the safety and efficiency benefits has also grown. These benefits, as described by both government officials and industry leaders, include:

- The average permit turnaround time (PTA) decreased from several days and hours to just minutes for most routine and some OS/OW permits.
- Nearly all States (30+) that have implemented automated systems report a moderate increase in total permits applications and issuance.
- Increased automated permit volume has proportionally increased revenues.
- Accuracy of permits has dramatically improved.
- A higher percentage of carriers have ordered, obtained, and traveled on State-issued permits following implementation of automated permit systems.
- Roadway safety for all motorists has improved.
- The infrastructure integrity, including the maintaining of bridges and overhead structures, has improved.
- As a result of moving to automated permitted, States are able to achieve staff efficiencies and reduce costs. Fewer people or less time is needed to review and process OS/OW permits, freeing up employees to handle customer service inquiries.
- States have more flexibility with internal headcount issues.

The lightning speed at which technology develops is creating new opportunities for the industry. Moving forward, specialized transportation will reap the benefits of accurate global positioning system (GPS) data, geo-fencing, and software integration strategies. Similarly, as the technology expands, the cost of using these applications should decrease. This will provide State and local authorities with a broader list of options to serve carriers.