



North/West Passage Corridor-Wide Commercial Vehicle Permitting

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16. Abstract <p>The efficient movement of freight is a key to the economic success of any state, region, or nation. Rising transport costs will tend to make products from the region more expensive and less competitive in the national and global markets. This trend can be addressed by adding capacity, a very expensive and long-term solution; improving the management of the highway and rail systems; and by easing the regulatory burden on carriers.</p> <p>Some states have organized themselves into compacts or coalitions to issue permits for these routine loads on a regional basis. While permitting is one of the issues often raised by truckers as a costly and frustrating process, a number of concerns over exactly how individual state rules can be harmonized to facilitate regional permitting must be resolved before multi-state agreements can be put into place. To better understand the nature of regional permitting processes, existing compacts or agreements must be reviewed and their rules, processes, and administrative procedures documented. In addition, members of those compacts must be interviewed to measure their perceptions of the costs and benefits entailed in regional agreements.</p> <p>This project team aims to identify how the North/West Passage states might pursue a regional permitting agreement, what such an agreement would mean for each state's Department of Transportation, and the level of industry demand in the eight states of the North/West Passage Corridor for regional permitting services.</p>			
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Introduction and Summary

The states along I-90/94 from Washington to Wisconsin have organized the North/West Passage Corridor Coalition. It is dedicated to integrating traveler information, promoting cross-border cooperation and coordination of the operations, maintenance of ITS infrastructure, and the integration of ITS projects for planning and programming.

Figure 1: The Northwest Passage Corridor



The states of the North/West Passage Corridor recognize the importance of the efficient movement of freight-hauling trucks along this corridor. To evaluate one potential method of improving that movement, the states have begun to review the available methods for establishing a regional process for issuing permits for the movement of oversize and overweight (OSOW) trucks.

After review of the literature and the experiences of other regional permitting groups, it is clear that those involved feel strongly that benefits can be found in regional permitting, both in terms of customer service and in terms of workload reduction for participating agencies. The evidence for these benefits is impressionistic and anecdotal because no one has kept comparable data for before and after analysis. Similarly, members of the trucking industry seem to find some hope for improvement in the idea of regional permit issuance.

There are at least three technically feasible approaches to regional permitting to consider:

- **Expand WASHTO.** The Western Association of State Highway and Transportation Officials (WASHTO) is a regional permitting compact made up of 12 states in the west and south, including three of the eight states in the North/West Passage Corridor. While this is clearly the most immediately feasible approach, the non-WASHTO states have raised a number of concerns about the approach used by WASHTO. For some, it would be a step backward technologically. For others it may have an impact on workload. For still others, the envelope approach to allowable loads is too restrictive. In short, none of the five non-WASHTO states seem willing to embrace this approach in its current form.
- **Use a common system,** such as the Bentley GOT Permits system, used by South Dakota and Nebraska (as well as Alabama, New Jersey, and West Virginia). While this is by far the most technologically elegant option because it allows self-issued permits for a wide range of loads, it also comes with a high cost. A reasonable estimate puts that cost at \$1–3 million per state.
- **Use a virtual system,** such as the approach being taken by Minnesota and Wisconsin in their effort to better share resources between states. This effort centers upon an open-

source interface that would allow carriers to apply for permits from several states simultaneously. The states would then process the permits individually and return them to the applicant. The drawback of this system is that it has not yet been developed; as such, the cost cannot be accurately determined.

While all of these options seem to be in danger of rejection for various reasons, some positive actions could still be taken. All involve improved communication and planning among the states. Currently the AASHTO Subcommittees on Highway Operations in each AASHTO region foster communication among the states of the region on a range of issues. Unfortunately, the North/West Passage Corridor encompasses parts of two AASHTO regions, WASHTO and the Mississippi Valley. Some effort should be made to bridge the gap between the two regions in order to:

- **Harmonize permitting systems.** Currently, permitting systems in the corridor range from very sophisticated to manual, with several versions in between. Some states are also now considering options for improving their systems. Some efforts to share information across state borders as investments are evaluated might allow the problem of regional permitting to become more tractable over time. This need not mean allegiance to a single vendor, but rather to a common set of capabilities. This would be in keeping with the ITS component of the mission of the North/West Passage Corridor.
- **Harmonize permit regulations.** A common issue raised by truckers dealt with disparate requirements across state lines for signing, escorts, and hours of operation. Some of these differences may be legitimate, based on different urban and rural characteristics, but some may also be artifacts of another era. Reviewing and standardizing some of the issues raised could provide a significant benefit to some truckers.

Methodology

To evaluate the potential for regional permitting the research team did the following:

- Websites for the WASHTO (Western Association of State Highway and Transportation Officials), SASHTO (Southeastern Association of Transportation Officials), and NETC (New England Transportation Consortium) permitting compacts were reviewed to better understand the workings of each compact.
- Interview questions were developed and used both for telephone interviews with participants in each of the compacts and for an online survey of other participants. The project team surveyed a total of 14 states to understand the details of permitting practices from an agency perspective, while focusing on legal, administrative, and technical aspects of participation in a regional permitting compact. A survey was given to individual states participating in WASHTO, SASHTO, and NETC. Interviews by phone were scheduled and completed. For the SASHTO compact, Texas, Florida, and Louisiana completed the phone interview/survey. For the NETC compact, Massachusetts completed the interview/survey, New Hampshire completed the survey by email, and Rhode Island was contacted but did not complete the survey, because they are no longer participating in the NETC compact. WASHTO states were interviewed in-person as well as by telephone. Missouri was also interviewed, and provided a perspective of a state that doesn't participate in a compact. The survey was also entered into an online survey tool and sent to the remaining states in each of the compacts. We received 9 responses to the online survey. The information from the interviews and online survey were then compiled into a quantitative summary.
- An effort was made to include to all of the states in the North/West Passage Corridor. Six of the eight states were visited, and staff members from those agencies were interviewed. The other two states were interviewed over the telephone. Questions were geared to better understand the permitting processes of the states as well as their concerns about change.

- Truckers or trucking associations were contacted in all of the states. Questions were designed to elicit a better understanding of the truckers' views of the current permitting process, including areas that are working well and where there are opportunities for improvement.
- Monthly conference calls were held with the entire research advisory committee, which represented all eight of the states in the North/West Passage Corridor, to keep them informed of the progress of the study and to get feedback on the work.

Based on what the research team learned using this process, they developed potential strategies for the implementation of regional permitting and recommendations for next steps.

Experience of Existing Compacts

Regional permitting compacts operated under WASHTO, SASHTO, and NETC encompass more than 30 states.

Figure 2: Regional Permitting Compacts

WASHTO

Western Regional Permit: WA, OR, ID, MT, AZ, NM, LA, UT, CO, OK, NV, and TX

- Approximately 10,000 permits issued under the compact annually.
- WASHTO permitting compact has been the most successful agreement to date.



SASHTO

Multi-State Permit Agreement: AL, AR, FL, GA, KY, LA, MS, NC, PR, SC, TN, TX, VA, and WV

- Rarely used amongst Southeastern states.
- Regional permits represent only a small fraction of each state's overall permit issuances.



NETC

CT, MA, ME, NH, RI, and VT

- Currently infrequently used by Northeastern states.
- Never more than 10-20 regional permits daily.



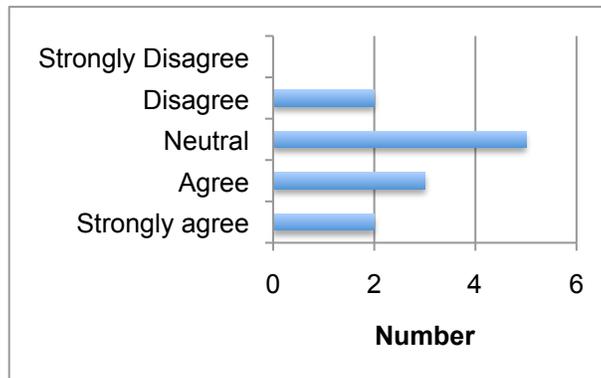
Existing compacts are not widely used. Our first questions dealt with the percentage of state permits issued through the compact. Only one state answered that between 20–30 percent of its permits were issued through the compact. Eleven answered that less than 10 percent of their permits were issued in this manner; two states answered none. The answers for WASHTO were well within this overall range. Explanations for this small rate of use included the need for greater advertising of the availability of regional permits, the need for stronger leadership in the compact, and the need for greater participation in the compact, both in terms of states that are members and member states fulfilling all of the functions of membership.

Despite these low use rates, 10 of the 14 states noted benefits to be found in participation. Increased satisfaction from the carrier industry was the most noted benefit (7 of 14 responses). Two states said that they had a reduction in state-issued permits. One noted better interstate communications. Four found no benefit, but one of these replied that greater use and a greater commitment of the members could produce benefits in all of the categories listed.

Some drawbacks accompanied these benefits, including: loss of control over the process (3 responses); increased complexity in collection and disbursement of fees (3 responses); and increased complexity in maintaining corridor maps (4 responses). Respondents' comments provide added insights into these issues:

- “Not enough states are issuing; many are in the program as pass through only.”
- “No real drawbacks or costs, but we sell few SASHTO permits.”
- “All are drawbacks, but they are minimal.”
- “Have to have an agent to distribute funds. Collecting and distributing permit revenue can be a hassle.”
- “One state said that a drawback to WASHTO is that there is no way to verify the permit since the issuing state does not fax copies to each state.”
- “Currently the costs are low, but as the use of the WASHTO compact grows, some further drawbacks or costs may arise.”

Figure 3: Is being a compact member beneficial?



When asked to agree or disagree with the statement: “Being a member of a multi-state permitting compact is a significant improvement over individual state permitting,” 2 of 14 skipped the question, but the remainder of the responses were marginally positive, as shown in Figure 3. Of the 5 WASHTO respondents, 4 agreed or strongly agreed, while 1 was neutral.

An open-ended question asked for advice they would give to states considering joining a permitting compact. The responses included:

- “Be careful not to design a permit system that looks like the way each state already does business. Be careful not to work from a lowest point of uniformity. Look beyond the current paradigms to find solutions that have mutual benefit to the participating states and their customers. Be progressive and creative.”
- “It is a benefit to the trucking industry. If you can overcome the technology issues and banking issues [ex. if one state hosts a computer program, does it bear all the associated credit card costs of issuing the permits?]
- “Reduces admin burden on state permitting agency and on carriers.”
- “The logistics are very lengthy. Road conditions such as restrictions must be updated and available on a real time basis. The variation in fees from state to state can cause difficulties as well.”
- “If your compact is no more demanding or popular than our SASHTO permit is, the costs and benefits will be very minimal.”
- “Establish and maintain an interstate team that meets (can be virtual) regularly to discuss issues, communicate impacts, proposed changes to state laws. Maintaining all states to current status is imperative.”
- “The states should do a better job of marketing the compact to get more use of it.”
- “Each state should have their own credit card system to collect fees. This would make it easier.”
- “Work for more uniform standards across states, define the envelope vehicle for the region, and communicate effectively.”

The needs for legislative change or changes to existing standards are issues that have been raised by many states. Two separate questions dealt with these issues; the answers to both questions were nearly evenly divided. Some states required legislative action; some did not. Some required changes in standards and some did not. Clearly legal staff in each state considering joining a compact would have to evaluate the laws specific to their state.

Another question dealt with the involvement of the industry in the activities of the compact. Only eight states answered this question. Two said that industry was not involved; four said it was involved on an ad hoc basis; and two pointed to regional meetings as the method of involvement. Conversations with the states in the North/West Passage Corridor also explored industry involvement. Many responded that they had primarily issue-related contact, but not ongoing defined contacts.

The final question was also open-ended: “What other insights would you offer states that may be considering joining a permitting compact?” The answers listed below are from the WASHTO states only:

- “The Western Regional Permit Agreement has proved to be a very successful program. We enjoy our relationship with this group and believe that this is one way to demonstrate and continue to work toward uniformity.”
- “This program is essentially in place, look into WASHTO’s regional permit system rather than reinventing the wheel.”
- “It hasn’t hurt or helped much. There could be benefits for the carriers. You need a decent sized envelope vehicle.”
- “Synergy can be very good, but some states aren’t good participants.”
- “Factors holding the compact back are inadequate cooperation, weak governance, and inconsistent regulations across states.”

From these responses, the research team drew the following conclusions:

- Any successful regional permitting effort will require the dedication and full participation of all of its members. Several of the responses to open-ended questions dealt with the passive members and how they tend to reduce the synergy of the entire effort.
- A successful compact has to have some strong leadership. Respondents from NETC and SASHTO noted this as a reason for their less successful operations.
- As illustrated in Figure 3, many members of compacts found some benefit in their participation. Because of some of the problems noted, that response was not overwhelming, but it was strong.
- One of the benefits noted is better communications across state borders. Clearly improved communication will be required if increased services are to be provided to carriers.
- The results also hint at the benefit of improved industry communications. One survey respondent noted that some type of defined industry involvement might be a way of improving their compact. If a primary benefit of a compact is improved service to the industry, which half of those responding said it was, better communications would seem to be a requirement.

Finally, it’s worth emphasizing one of the responses:

“Be careful not to design a permit system that looks like the way each state already does business. Be careful not to work from a lowest point of uniformity. Look beyond the current paradigms to find solutions that have mutual benefit to the participating states and their customers. Be progressive and creative.”

If the regional effort attempts to be the least disruptive to current operations, it is doomed to reach the least common denominator, which will likely satisfy few.

Motor Carrier Concerns

Even in the best of economic times motor carriers operate in a highly competitive environment. In the current economic climate, competition is even fiercer. This reality framed many of the motor carriers' responses to issues and opportunities in oversize and overweight permitting.

One trucking executive cited three issues they look for in permitting: accessibility, speed, and routing. He noted that in the current economic environment, truckers are often asked to respond to a load on short notice. To be able to respond reasonably and legally, they need to have access to a permitting system that operates 24 hours a day, 7 days a week. If they do not have that access, if they have to wait until office hours, or if they have to wait for days before a permit issued, they run the risk of losing the job to a competitor who may not be as careful about permitting issues. In this regard the permitting process may also have an impact on compliance, putting truckers who try to comply at a disadvantage to those who are willing to risk a fine.

Another perspective on the accessibility issue came from a small trucker. He noted that a driver sometimes gets a backhaul that requires a permit. Without reasonable access to permitting sites, that driver may not be able to respond in a timely manner.

Many truckers echoed the routing issue, noting the problems of getting single permits from multiple states. As one put it: "It's not unusual during the construction season to get a permit from one state only to find the route is restricted in a neighboring state." Another told the story of a move over several states that took a number of routing iterations before it could be completed.

Another trucking executive took a more global approach. He noted that our European and Chinese competitors are making progress in reducing the regulatory barriers between political subdivisions, while the US seems to be sliding backward. He suggested defining freight corridors, which might become models for streamlined operations between states.

Another trucker carried on with some of the broader issues, noting that many states allow long combination vehicles but limit length of the cargo area to 100 feet. Since a standard trailer is 53 feet long, the carriers have to run non-standard equipment to trim six feet from the standard configuration.

Yet another trucker looked at some of the details of permitting when he lamented the complexity of having to learn many systems. Each state is different and truckers have to learn to interact with all of them. Different system structures and different data requirements make the process much more complex than it should be. On the positive side, it's possible that years of experience learning multiple systems have resulted in something of a competitive advantage.

The issue of the complexity and confusion associated with the varying permit systems was made more specific by a trucker who told of applying for a permit in a state that only accepted online applications. He noted that his permit application was rejected several times until he discovered the very specific formatting requirements of the system. No guidance was provided for applicants before or during the application process. The system's quirks had to be learned by trial and error.

Many truckers mentioned curfews and holidays. Some standardization would be helpful. Each state seems to have small variations in these regulations that make interstate operations difficult. One trucker noted that the first day of fishing season in Minnesota was a holiday, which is similar to long weekend restrictions in many states that have a major tourist industry. Issues of night and daylight movements were also raised. Some major urban areas (e.g., the Twin Cities and Denver) require oversize loads to move at night, but adjoining states restrict such movements to daylight hours. One trucker noted that his crews often include 7 workers and 3 vehicles. When those workers and vehicles have to sit idle, costs are significant.

Issues of consistency and predictability were raised relative to escort requirements. An extreme example involved a load through two states, one park, and a reservation. The load required four

different escort arrangements. Some truckers noted that it was not always clear when an escort, or what type of escort, would be required. Similar loads might or might not require an escort. The result was sometimes a costly loss to the carrier, who bid the job assuming no escort was required and then found that one was needed.

The importance of accessibility and predictability of curfews was echoed by another trucker. He was asked to move a large crane weighing 180,000 pounds. The move was within an urban area, a matter of miles almost entirely on freeway-quality routes. They applied for the permit first thing in the morning. The load was loaded, and they waited for the permit. The permit was not approved until late afternoon, near sunset. Moving at night required additional escorts. Between the time delays and the added escorts, a move that should have cost about \$1,200 cost about \$2,000.

Signing, lighting, and flagging were also raised as issues that cause increased costs and confusion. One trucker said that his drivers routinely carried three different signs, either with different words or different dimensions, and changed them at state lines.

Many discussed the use of permitting services. Some used them extensively and found them to be a reasonable tool to reduce the complexity of getting permits from multiple states. Others said that it took longer to explain the permit requirement to a service than it did to do it in-house. Most truckers interviewed seemed to rely on dedicated, or partially dedicated, in-house staff to deal with permits.

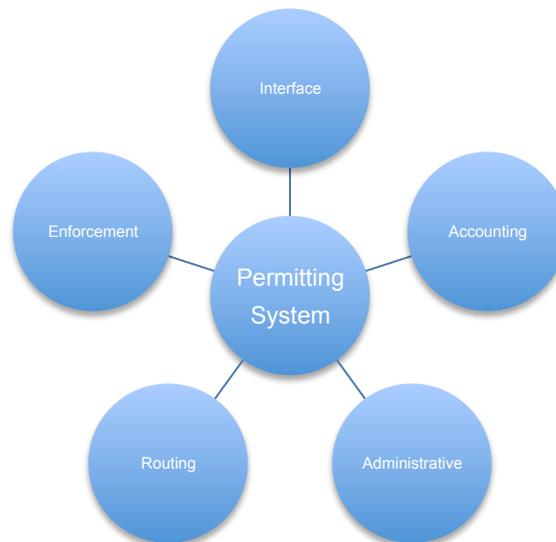
One interviewee summed up the feelings of most of the truckers interviewed:

“Anything that can be done to make the process work better is welcomed, but the actual permit is probably the smaller issue. Many truckers either use specialized in-house staff or permit services, so the people know the processes. The larger issues deal with uniformity in the requirements for the permits. If a trucker could get a permit for the entire corridor that had the same requirements for the entire corridor, that would be great, but differing rules on signing, lighting, flagging, and escorts make the process very difficult.”

The Feasibility of Regional Permitting

Before we discuss the feasibility of a regional permitting system, we will provide a conceptual overview of the component parts of a permitting system and how it functions. Ideally, at least five functions have to be a part of any permitting system.

Figure 4: Permitting System Components



Every agency that issues permits carries out these five functions:

- **Interface.** The interface is the method by which the customer interacts with the permit issuer. This may be an interactive website, a one-way online window, a fax number, or over a counter. The interface allows the customer to provide information and funds to the issuing agency.
- **Accounting.** The accounting function calculates fees, records receipts, and interfaces with agency or state accounting systems.
- **Administrative.** The administrative function hosts the rules of permitting, what can be permitted, and what requirements are attached to the permit. It also records transactions and provides management information.
- **Routing.** Routing applies the characteristics of a load to the physical dimensions and condition of the highway and bridge network to select a route that will safely accommodate the load. In practice, routing may be done with an intelligent system that evaluates the load against roadway characteristics using a variety of safety and capacity calculations. It may also be done manually, based on the issuer's experience and stored knowledge of the highway system.
- **Enforcement.** The enforcement function is the communications link to field enforcement personnel. It makes them aware of the permit and the conditions attached to it so that appropriate enforcement actions can be taken. It should also provide feedback from the field on enforcement actions to inform the permit issuers about the actions of carriers using permits. This may be an automatic link to and from enforcement information systems; it may be by phone inquiry; or it may be conducted on a more ad hoc basis.

Given this conceptual model, there are three feasible approaches for regional permitting. Each has both benefits and drawbacks.

Expanded WASHTO Compact

The WASHTO permitting compact is used by twelve states in the West and South. Three of the eight states of the North/West Passage Corridor are already members. The compact could be expanded to include the other five states quickly and with minimal costs.

WASHTO carries out the functions outlined above in the following manner:

- **Interface.** An online facility hosted by the Texas Department of Transportation provides the interface to the permitting system. The site provides details on permit requirements for a regional permit and state-specific requirements for all the member states. It also allows the applicant to apply for the permit online. Permits can also be acquired from most of the participant states.
- **Accounting.** Accounting is done within each state with the fee rules for every state built into each state's system. Fees are then remitted to each state.
- **Administrative.** Administrative functions are also done within each state's system. Applying the rules for obtaining a permit is fairly simple since the compact uses an envelope load system. If a load falls within the defined limits, it can get a regional permit (Figure 5).

Figure 5: WASHTO Envelope Vehicle Limits

Dimension	Maximum
Width	14 feet
Height	14 feet
Weight	160,000 pounds gross
Length	110 feet

- **Routing.** Routing is also done through a predefined system of routes that each state has determined are capable of handling the envelope vehicle. Restrictions to that defined system are reported regularly to one member state, which in turn compiles them and distributes an electronic document to all the members. As permits are issued, the issuing agency must check for any restrictions that might exist for the chosen route. If a load must deviate from the defined routes (e.g., if its destination is off of the route), either the applicant or the issuing agency must check with the state where the deviation will occur to determine if the proposed route is adequate.
- **Enforcement.** Enforcement functions are handled on an ad hoc basis within the WASHTO system. Inquiries must be submitted to the issuing agency.

This option could be implemented with minimal costs to the states. They would have the choice of modifying their permitting systems to include the fee rules for the other states and to capture the fees due to other states; or, if their laws allow it, they might use a system hosted by another of the WASHTO states.

A system of routes capable of handling the envelope loads would have to be defined. Updates to that system would have to be reported to WASHTO. For some of the states, the definition of a super load would have to be changed (some have a 150,000-pound definition; WASHTO uses 160,000), or the WASHTO standard envelope would have to be decreased. Some states may need enabling legislation to join.

Participation in WASHTO meetings held twice a year would provide an immediate benefit for some states. This would improve communications and assist in dealing with uniformity issues.

This is the only option that is available for immediate implementation. It is also the least costly option. However, there are some drawbacks and issues to be addressed.

1. Some of the states object to the relatively conservative load envelope defined by WASHTO. They feel strongly that it is not sufficiently attractive to bring much support or interest from the industry. This feeling is strongest among the states with stronger commercial ties to the Midwest and East.
2. Some states object to the WASHTO load envelope for precisely the opposite reasons. They now define a more restrictive superload and are reluctant to increase that standard.
3. Some states are concerned about the potential impact on workload. They note that several WASHTO members are passive and fear that more workload will fall to them. Several noted the difficulty they have in maintaining accurate records of restrictions on routes for a single state and feel that the complexity will be increased if they are part of a regional process. Some states are also concerned about the workload associated with contacting other states (some of which are not responsive by phone or fax) for clearance on the last miles off the approved system. Nearly all the states are concerned about the impact of transition on workload.

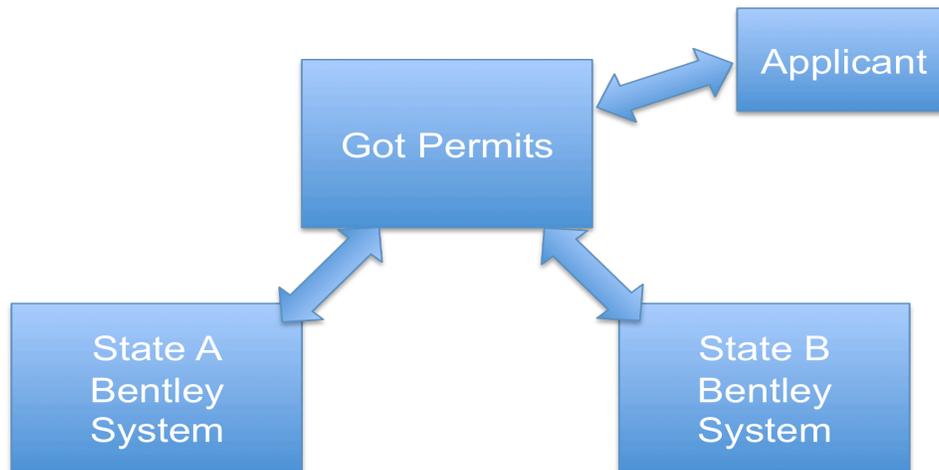
4. At least one state is concerned about taking a step backward technologically. This state has most of its permits authorized through a self-issued, automated process. Very few permits require manual review. They fear that a WASHTO system would add to the number of permits requiring manual intervention. They also expressed concerns about the enforcement system supported by WASHTO. That state's current automated information flow for permits to enforcement staff would not be replicated for WASHTO permits.
5. At least one state has a very high level of enforcement for permit provisions. They fear that they would not have sufficient information on WASHTO permits to carry out similar enforcement efforts. They also fear that a disproportionate share of the enforcement effort might fall to them.
6. One state also raised a basic question of whether the North/West Passage Corridor states would really do them, or their industries, much good as regional permitting partners. They note that I-90/94 accounts for relatively little truck traffic. Their real truck challenge is on I-80.

All of these concerns are valid. Some may be difficult to overcome while others might be addressed with discussion and compromise. If the states of the North/West Passage Corridor choose to pursue this option, a meeting of the eight states is the first order of business.

A Common System

Bentley, one of the major suppliers of permitting software systems, offers a product and a service known as GOT Permits. South Dakota and Nebraska currently use this application.

Figure 6: Common Permit System Structure



The applicant applies online through the GOT Permits system. The system then sends the information to the appropriate states. Each state system treats the application in much the same way that it would had the application come directly from the applicant. It applies the rules for permits and selects the appropriate actions. It calculates fees and analyzes the characteristics of the load and the highway network, making route selections. The permits and routes are returned to GOT Permits, which performs a route compatibility check. If the routes are incompatible, the permit is returned to one or more of the states for recalculation. The revised materials are then returned to GOT Permits. If they are now compatible, the permit is sent to the applicant. For this service, GOT Permits imposes a service fee, which varies by state.

Figure 7: GOT Permits Convenience Fees

State	Less than Superload (14' H, 14' W, 110,000 lbs.)	Superload
Nebraska	\$10	\$16
South Dakota	\$10 + \$.002 per ton-mile	\$16 + \$.002 per ton-mile

This option is clearly the most technically elegant. The permitting systems do nearly all the calculations for permits of nearly any dimension. State rules of manual review are imposed as each state determines to be appropriate. If the experience of South Dakota is used as a guide, the threshold can be fairly high and few permits will require manual intervention. South Dakota reports a major workload reduction as a result of implementing the basic system that supports GOT Permits. Its field personnel, who had previously issued most of the permits, are now free to engage more fully in enforcement and safety activities. At a time when all of the states in the corridor report significant workload increases without any commensurate growth in staffing, this could be a benefit beyond accommodating regional permitting.

While it is elegant, the system does have some concerns. The biggest of these is the cost. South Dakota spent just under a million dollars for its system early in this decade. Duplicating the system in other states could be expected to cost each state between one and three million dollars, depending upon the exact capabilities and the computing environment.

Another concern that has been raised is that GOT Permits is in many ways a permitting service, which competes directly with other permitting services. This causes some concerns about a level playing field. In some states, it may also raise political issues as those permitting service firms see their businesses threatened.

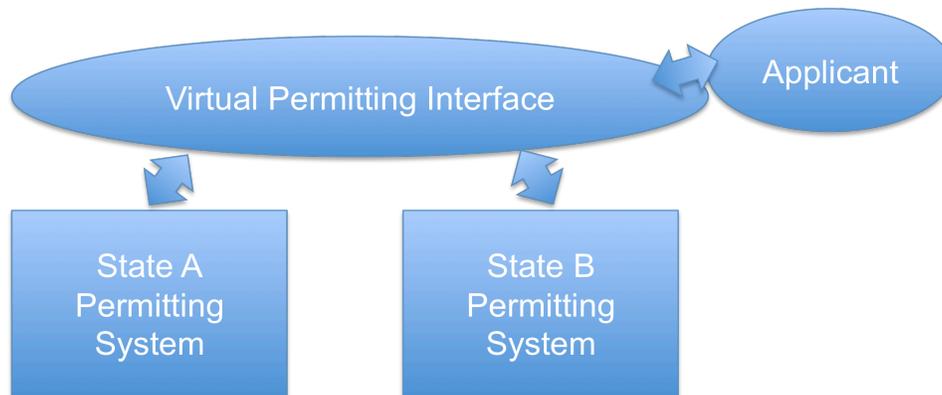
A Virtual System

Wisconsin and Minnesota are engaged in an effort to better coordinate service across state lines. In part this is an effort to improve customer services. In larger part, it is an effort to reduce the total cost of state governments. The governors of these two states began the initiative and it applies across a range of agencies and state services. One of the areas under review was oversized and overweight truck permitting. The long border shared by Wisconsin and Minnesota and the nature of the highway networks in the two states made permitting an ideal area for cooperation.

The states began by trying to share information and honor permits issued by each state on major North-South routes that serve industries in both states. They are also looking at ways of harmonizing some of the regulations that govern oversized and overweight loads, such as curfews and signing. The effort is still relatively new; as such, progress has been limited thus far.

Wisconsin and Minnesota are attempting to implement a virtual permitting system. Conceptually, this looks very much like the Bentley approach, but it is different in a number of ways. The interface is intended to be an open-source system that can work with any underlying system. Minnesota has an older Bentley system. Wisconsin has a homegrown system, but uses the Bentley routing software. The goal is to build a system that will work with both underlying systems. Each state would have to build the bridge between the virtual permitting interface and their existing systems. The role of the interface is to collect and deliver information and retrieve information from states and deliver it to applicants. In the extreme case of a state with a manual system, the interface would serve as an electronic document delivery system.

Figure 8: Virtual Permitting System Structure



Like Bentley GOT Permits, this system would rely on the system of each state to analyze applications, determine eligibility, impose rules, calculate fees, and determine routes. One of the major shortcomings of this approach is that it will rely on existing systems, which generally do not have the intelligence of the Nebraska or South Dakota systems. Therefore, many permits would require manual intervention, which would not reduce state workload. Each state would continue to issue permits in exactly the same manner as they do now. Only the customers applying for permits using the single permit application portal would realize the improvements.

Routing could be problematic. Some mechanism would have to be built to perform minimal border compatibility checks. Since many states do not have routing systems, this could be difficult to automate.

Another major disadvantage of this approach is that the interface does not now exist and developing it will take an unknown amount of time and money.

Other Issues

The North/West Passage Corridor was organized to facilitate the flow of traffic on the I-90/94 corridor with the coordinated deployment of ITS tools. This was done to improve the travelling experience of all motorists. For auto drivers this means a safer, more reliable trip. For commercial drivers, it means a safer, more reliable, and more efficient trip. Making commercial trips more efficient improves the competitive position of industries along the corridor. Truckers offered ideas for further improvement of efficiency in the corridor.

Harmonizing regulations among the states could provide a significant savings to specialized carriers that move large loads across the states. Some of the issues at hand seem manageable, not requiring legislative action in most states.

- Harmonizing *curfews and holidays* so that restrictions tend to blend at the state line will prevent crews from sitting idle as they wait for the curfew to pass. This is most obvious in those states adjacent to major urban areas, such as the Twin Cities or Denver. These cities want loads to move at night in off-peak traffic periods. Could those adjacent states provide some exceptions to haulers who are moving through these urban areas?
- Harmonizing *escort requirements* will also save time and money. Consider the load that went through two states, a park, and a reservation, requiring four different escort arrangements. Did this improve the safety of the movement, or did it simply add needless costs?
- Standardizing *signing and lighting* requirements is also manageable. States should be able to agree on the message and the dimension of the signs to best deliver that message.

- Standardizing available *permitting requirements and other information* will also help truckers. Some states now have a large amount of information available online in an understandable language and format. Others have much less information available, and it is often much less understandable.
- A common *user interface* will significantly increase customer comfort and satisfaction. Coupling this with an effort to standardize the required information would go even farther.

These items are the relatively simple issues. Others such as the information required on a permit application may be harder. Harder still are the details of defining acceptable size and weight. Ultimately, transparent borders will make the trucking industry more productive.

Evaluation and Recommendations

Based on this review, the research team has reached a number of conclusions:

1. Truckers feel strongly that some improvements could be made that would benefit the industry. Generally, they favor regional permitting, but they tend to feel more strongly about the need to make permitting rules and regulations and the permitting process more uniform across state lines.
2. While the truckers interviewed were generally adamant on the topic, several state personnel said that truckers had never asked for change, especially for regional permits. This suggests a lack of clear communication between those who issue permits and those who apply for them and use them.
3. Many state staff members reported that they did not have a regular method of staying informed about broader freight-related issues in their agency or state.
4. No forum exists for people along the corridor to share ideas and experiences. Without such a forum, making improvements and increasing uniformity will be difficult.
5. If a state chooses to pursue regional permitting, the only approach that is viable in the short-to-medium timeframe is the expansion of WASHTO. While other approaches are feasible, the current economic climate does not allow sufficient resources for them to be adopted in the near term.
6. Several states recommended an incremental approach to solving these issues. They did not see how they could manage or support radical change.

With these conclusions in mind, it is useful to note that permitting is potentially significant, both for the agencies issuing permits and for the industry. It is not possible to know how much use would be made of a regional permitting system, because we do not have the ability to track whole trips. The answers to a simple survey on the numbers of oversize and overweight permits issued offers some idea of the potential.

Figure 9: Number of OSOW Permits by State

State	All Permits	Interstate Permits	On I-90/94	Superloads on I-90/94
South Dakota	38,000	Unknown	22,000 ¹	Unknown ²
North Dakota	42,772	Unknown	Unknown	4,418 ¹
Wyoming	101,821	61,923	3,779	189

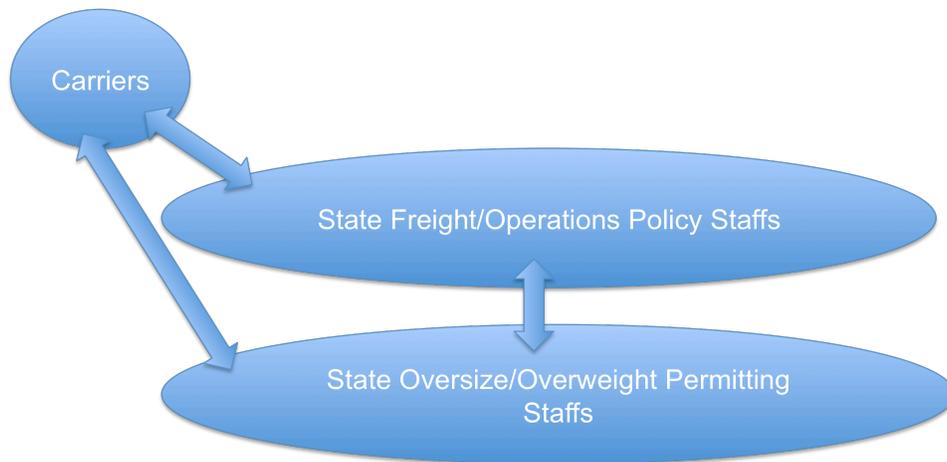
Idaho	19,295	17,365	2,612	120
Washington	71,613	14,538	4,802	135
Wisconsin	37,782	32,330	25,822 ¹	153
Montana	56,294	Unknown	Unknown	1.147 ¹
Minnesota	75,526	3,657	Unknown	630 ¹

1-Intra & Interstate; 2-Superloads not defined.

Some 25,000 routine loads in Wisconsin and 3,600 routine loads in Wyoming might benefit from regional permitting. Moreover, the number of trips that might be made more efficient through efforts to harmonize regulations across state lines is even more significant.

To address this issue, an incremental approach is recommended. The states should identify a few key issues and deal with them, recognizing that more issues will follow. The first step should be an attempt to improve communications.

Figure 10: Suggested Communication Areas



Several of the states in the corridor reported that their communications with the industry takes place on an ad hoc basis, often as a result of enforcement efforts. Several also said that they had no regular way of keeping in touch with larger freight policy issues. Some reported limited opportunities to share information and ideas with other states. The communications scheme outlined above is attempt to address these problems.

- State permitting staff members need an opportunity to exchange ideas and experiences with each other. This is difficult along the corridor because it includes parts of two AASHTO regions. Better communications at this level is one way to address some of the inconsistencies between states.
- Permitting personnel have conflicting roles. They must be concerned with regulation and enforcement, but for purposes such as regional permitting or greater consistency between states, they also have to be concerned with the efficient movement of freight. To better understand how their primary regulatory and enforcement functions fit within these broader goals, better communications with the public employees who deal with these issues is crucial. In some states this broader view will come from the freight policy staff. In some states it will come from the highway operations staff.

- Freight and operations policy staff members within the states also require some avenue for communications across state borders. As the existence of the North/West Passage Corridor suggest, there is a need for coordinated operations. The North/West Passage Corridor is primarily concerned with the tools of highway management and traveler information. There is a similar need regarding freight policy.
- Both groups would benefit from better-defined, routine communication links with the motor carrier industry.

The communications may take place electronically, given the realities of state travel, but they should begin with clearly defined objectives. We suggest two communication objectives.

First, begin a dialogue to determine if WASHTO permitting could be extended to other states in the region. It is the only option that can be acted upon within a reasonable time frame and at reasonable costs. Several states have concerns about moving in that direction. These concerns are well founded, but can the benefits in carrier productivity offset them to some degree? Can alternative procedures or other steps be taken to reduce or eliminate the concern?

The concerns raised by the five non-WASHTO states are not so great that they defy solution, but solutions will be found only through discussion and a commitment to action. The benefits of regional permitting are, as one of the state representatives noted, to be found in synergy. If the number of participating states never reaches a critical mass, synergy will not be achieved.

For example, if some states feel the load envelope is too restrictive, could a tiered approach be used that would allow regional permits with different envelopes to be used for different combinations of states? Alternatively, can the concerned states be convinced that a significant number of trips could be authorized within the limits that exist?

If the concern is with the technology, could enhancements be made to the WASHTO system, particularly the system that is available for all states to use, that might improve the information flow back to the states in which travel would occur?

Dialogue might resolve some concerns, but this will occur only if the states are committed to some actions. The commitment to action should be seen as an ongoing effort. As technology available for use by the states for permitting changes, the opportunities for more elegant solutions will arise. Expanding WASHTO now could produce the foundations for future actions and more elegant solutions. If action is not taken now, it seems likely change will be even more difficult in the future. The same discussions about the benefit of regional permits will have to be had again, and states will probably have implemented technologies without regard to what is happening in neighboring states, reducing the possibility for better solutions.

Secondly, the same groups should commit to reducing the regulatory differences that exist between states. One or two issues should be identified through discussions with carriers. Curfews and holidays, escort requirements, and signing and lighting are a good starting point. For most states changes could be made without legislative actions. Changes such as these would benefit carriers. Positive actions in these areas would help bring the carriers to the table for the long-term, and facilitate even greater progress.

This should be seen as a continuing effort. All the changes that carriers would like to see cannot be made at once. Indeed, not all of them are likely to be appropriate. If there is effective communication, and if issues related to economic efficiency are factored into the decision process, it is possible to make progress.

There are several ways to facilitate this communication. The easiest way is to leverage the existing structure of the North/West Passage Corridor, which already exists and already seeks to improve traffic flow in the corridor. Some of the participants also overlap; many will have to be added. A subcommittee dedicated to the movement of freight and permitting could be established. Membership would include the people responsible for permitting in each of the states (i.e., the

participants of this study); it should also include traffic operations, freight management, and policy staff who work in the region. This committee could meet regularly, monthly or bimonthly, using web conferencing tools. This committee would also require leadership and some staff support from one or more of the states.

The carrier perspective could be gained by inviting the heads of the eight state motor carrier associations to join the committee. Over time, these association heads might find representatives from among their members who are better able to address these issues. Again, web conferencing could be used to facilitate regular meetings.

We envision a set of parallel activities. In one track, state representatives could begin to discuss the potential for expanding WASHTO and how some of the problems might be addressed. On another track, these representatives could engage carriers in order to identify the regulatory issues where change might have the greatest benefit.

Following these parallel tracks will produce progress over time and lay the groundwork for greater improvements in the future.