
**COLUMBIA RIVER CROSSING
CROSS-JURISDICTIONAL LAWS, GOVERNANCE AND FUNDING**

TECHNICAL REPORT

Prepared for:
The Washington State Legislature

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COLUMBIA RIVER CROSSING

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Introduction

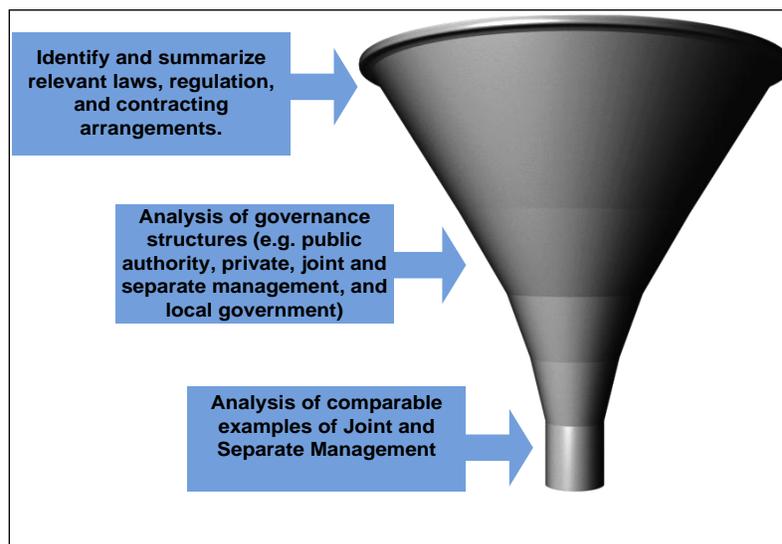
The states of Washington and Oregon plan to use tolling as a source of funds for the construction of a new bridge to replace the existing Columbia River Crossing (CRC) along I-5. The proposed CRC project includes replacing the two existing side-by-side bridges and extending light rail service to Vancouver.

During the 2010 legislative session, the Washington State Legislature (pursuant to ESSB 6381), directed the Washington State Department of Transportation (WSDOT) to work with the Washington State Transportation Commission, the Oregon State Department of Transportation, and the Oregon State Transportation Commission to analyze and review potential options for a bi-state, toll setting framework for the Columbia River Crossing (ESSB 6381). The Legislature required that the analysis include a review of statutory provisions and the governance structures of toll facilities in the United States that are located within two or more states and a review of relevant federal law regarding transportation facilities that are located within two or more states. The Legislature also directed WSDOT to consult with the two State Treasurers regarding the appropriate structure for issuing debt for toll facilities that are located in two or more states.

Approach to Analysis

As directed by the Legislature, this report first reviews relevant federal laws and funding regarding transportation facilities that are located within two or more states; and the statutory provisions and the governance structures of toll facilities in the United States that are located within two or more states. As illustrated in Figure 1, this report provides information and examples of various governance structures that include toll road authorities; multi-modal transportation authorities; private entities; and joint and separate management of non-toll bridges. Then the report hones in on the joint and separate management structure and provides information for seven example projects.

Figure 1: Analysis of Governance Structures for the Columbia River Crossing



I. Relevant Federal Law

(A) Interstate Compacts

An interstate compact is an agreement between two or more states that may or may not require the consent of Congress. That determination depends on the nature of the agreement. While the Interstate Compact Clause of the U.S. Constitution provides that any agreement between states requires Congressional consent, federal courts have held that such approval is only required if the agreement tends to increase the political powers of the states or to encroach on the supremacy of the national government. Notwithstanding the same, while Congressional approval may not be required, federal agency approval is required when a bridge facility spans state lines, some type of interstate agreement or compact is appropriate and often necessary to ensure, at a minimum, the maintenance of the facility.

According to the Council of State Governments, more than 200 interstate compacts have been created and are in effect today. The first interstate compact was for the construction of bridges and transportation facilities in the states of New York and New Jersey and resulted in the creation of the Port Authority of New York and New Jersey in 1921. The purpose of an interstate compact may range from implementing common laws to exchanging information about common problems to authorizing the establishment of multi-state regulatory bodies. The extent of the authority granted, nature of the relationship between the parties and/or ownership of assets, if any, can be stated with great specificity or in generalizations. The compact also may further provide for the later development between the parties of more detailed agreements or memorandums of understandings regarding such matters as funding, operations, administration, roles and responsibilities for project development.

To be effective, the compact must meet the same principles of contracting. There must be an offer and acceptance which is evidenced by the adoption by both states of identical compact language. If Congressional consent is required, it may be explicit or implied. The Interstate Compact determining the Oregon-Washington boundary on the Columbia River is the result of explicit Congressional authorization. States also may initiate the process for developing an interstate compact or may enter into a compact in response to congressional direction. The Columbia River Gorge compact is an example of a compact formed in response to specific congressional authorization through the Columbia River Gorge National Scenic Area Act. The development of the Woodrow Wilson Bridge between Maryland and Virginia is another example. Congressional consent may be conditional, limited, or temporary, and is always subject to modification or repeal. Congress and the courts can compel compliance with the terms of the compact.

The U.S. Transportation Code has two provisions explicitly authorizing states to enter into agreements or compacts. Those provisions are for (1) highway safety, and (2) multistate transportation planning and coordination. Under the Interstate System Construction Toll Pilot Program, the USDOT Secretary may permit a state or an interstate compact of states to collect tolls on a highway, bridge, or tunnel on the interstate system. This program, which is not applicable to all federally-approved toll programs, recognizes the possibility of agreements between states to advance a toll project. This is reasonable given the inherent nature of the interstate system, and in at least one instance has been interpreted as implicit authority to contract between states. Specifically, the Virginia enabling legislation for the Virginia-North Carolina Interstate Toll Road Compact states that the compact was established pursuant to the invitation to toll interstate facilities under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Although subsequently repealed in 2009 by legislation of the Commonwealth of Virginia, the purpose of the compact was to establish tolling on two separate Interstate highways, I-85 and I-95.

Ultimately, any question regarding the need for Congressional consent is a legal matter, which makes it imperative that the states seek legal counsel as to whether explicit Congressional approval is required or may be implied by the passage of the Interstate System Construction Toll Pilot Program. In any case, any effort to toll an interstate facility will require federal approval. For this reason, the federal laws regarding the tolling of the interstate are relevant to the decisions of Washington and Oregon.

(B) Tolling Authority

The traditional rule has been that highways constructed or improved using federal aid may not be tolled. **23 U.S.C.A. § 301.** Nonetheless, Congress has authorized several exceptions that allow the USDOT to approve tolling on certain federal-aid and interstate facilities in accordance with specific programs and conditions. These exceptions are considerably broad, particularly for bridges and tunnels, and often require the tolling entity to enter into an agreement with USDOT. **23 U.S.C.A. § 129.** The three categories of exceptions under which tolling might be authorized are described below.

(1) Section 129 Toll Agreements

As an interstate facility that received federal aid, the toll exception that is most likely applicable to the CRC project is the provision regarding the reconstruction or replacement of free bridges or tunnels and conversions to toll facilities. Under 23 U.S.C. §129, federal participation is allowed in the following five types of toll activities.

- Initial construction (except on the Interstate System) of toll highways, bridges, and tunnels, including the approaches to these facilities;
- Reconstruction, resurfacing, restoration, and rehabilitation of any existing toll facility;
- Reconstruction or replacement of free bridges or tunnels and conversion to toll facilities;
- Reconstruction of a free Federal-aid highway (except on the Interstate system) and conversion to a toll facility; and
- Preliminary studies to determine the feasibility of the above toll construction activities.

If Federal-aid funds are to be used for the construction of or improvements to a toll facility or the approach to a toll facility, or if a state plans to reconstruct and convert a free highway, bridge or tunnel previously constructed with Federal-aid funds to a toll facility, then a toll agreement must be executed. There is no limit to the number of agreements that may be executed. The toll agreement must require that all toll revenues are first used for any of the following: operation and maintenance, debt service, and a reasonable return on private investment. The agreement may also include a provision regarding the use of toll revenues in excess of those needed for the required uses outlined above. However, excess revenues may be used only for highway and transit purposes authorized under federal law if the state certifies annually that the toll facility is being adequately maintained. The issue of whether to remove tolls when the debt is retired or at some other future point in time is a state decision. Decisions regarding the amount of tolls charged are made by the tolling authority subject to requirements of state or local laws. These decisions require no review or input from the FHWA. However, FHWA must approve a tolling agreement with the state DOT for tolling or pricing on an Interstate facility.

(2) The Transportation Equity Act for the 21st Century (TEA-21)

TEA-21 permits the collection of tolls on three existing Interstate facilities for the purpose of reconstruction and rehabilitation on Interstate highway corridors that could not otherwise be

adequately maintained or functionally improved without the collection of tolls. Each of the three facilities must be in a different state. There was no special funding authorized for this program. Currently, only one slot remains open for this pilot and is available to the states as an open-ended solicitation. Candidates are accepted on a first-come basis. (The applicable provisions are attached as Appendix D). The two slots that have been reserved for I-81 in Virginia (approved March 2003, but withdrawn in January 2011 and substituted for I-95, which application is still pending) and I-70 in Missouri (approved July 2005).

(3) Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

The SAFETEA-LU legislation provides four opportunities for states and other public authorities including private entities designated by a state, to toll motor vehicles to finance the construction or reconstruction of Interstates, promote efficiency in the use of highways, reduce traffic congestion or improve air quality. SAFETEA-LU created three new programs, and modified an existing program to allow for interstate tolling in the following ways:

- Permit the conversion of HOV lanes into HOT lanes;
- The Value Pricing Program;
- The Express Lanes Demonstration program, which permits tolling for up to 15 demonstration projects on existing HOV facilities or where toll capacity is added; and
- The Interstate System Construction Toll Pilot program which authorized up to three toll pilot facilities on the Interstate system for the purpose of constructing new Interstate highways. Presently, one of the three available slots has been reserved for new construction of I-73 in South Carolina.

Under the Interstate System Construction Toll Pilot Program, there is no requirement that the facilities be in different states, which is a requirement of TEA-21. The state or states applying under this program must demonstrate that tolling is the most efficient and economical way to finance the project, but it does not have to be the only way. The state must submit a facility management plan which includes the use of automatic toll collection. Revenues may be used only to pay debt service as well as operation and maintenance costs and to permit a reasonable return on investment of a private entity, if applicable. The state may not enter into an agreement with a private entity that prevents it from improving or expanding capacity of adjacent roads to address conditions resulting from diverted traffic. Interstate maintenance funds may not be used on the facility while it is tolled. Regular audits must be conducted.

II. Representative Governance Structures

State statutes provide the enabling authority or framework that will determine the governance structure for a toll facility. The governance structure will also determine the financial requirements of the entity or entities developing the facility and can significantly impact the financial performance of the bridge facility. The statutory provisions can be very broad or very prescriptive depending on the powers and limitations of the board or department charged with operating the facility. If the statutes create a separate authority, then that authority is often given additional powers to develop bylaws, policies, rules and procedures to fund, operate and maintain the facility.

To date, there have been a number of governance structures that have been used to develop tolled and non-tolled road, bridge, or tunnel facilities that cross over state or international lines. Governance structures

have been developed through the creation of specific purpose governmental entities, such as toll road authorities and transportation authorities and commissions; joint and separate management agreements; private (non-profit and for-profit) companies; and local government agencies.

(A) Toll Road Authority

This structure involves the establishment of a separate political entity that is managed by a board of directors normally comprised of representatives from the major founding participants, local governments, and possibly other stakeholders (hereinafter for purposes of simplicity, referred to as “states”). The states’ role is generally limited to developing the compact that enables the authority, providing seed capital and/or full financing, and appointing the board members who thereafter govern the entity. Within this governance structure, the compacting states have indirect control over the management and administration of the tolled facilities. Board representation can be allocated equally or as a percentage of capital contributions provided for facility development. The toll road authority may fund, finance, operate and maintain a single toll facility, a system of toll facilities or more than one transportation mode. Once established the entity adopts bylaws and additional governance policies, rules and procedures. An administrator or executive director may be hired to manage day-to-day operations. As a public entity, it may be required to comply with or develop procurement or open government rules consistent with the states’ rules.

From a financial perspective, an advantage of this governance structure is that it facilitates the pooling of revenues, which can be used to finance ongoing operations and maintenance (O&M) costs. Another potential advantage is that the authority has greater autonomy with respect to raising tolls and managing costs. A potential disadvantage is that depending on how the board representation is structured, the states may no longer have direct control over the management and administration of the tolled facilities, and as non-elected officials, the board and toll authority are perceived as less accountable to the public.

The governing body is responsible for policy decisions. Each of the states appoints members to the governing body of the new authority. While the authority is often created as an independent governmental entity, the board members may be expected to be accountable to their respective appointing body, or act in the interest of their state as opposed to acting within the interest of the toll authority. Generally, the appointing body or person is given broad discretion in determining who may be appointed. Any qualifications or limitations to that authority are usually based on residency or tied to a defined pool of potential candidates. For example, members of the now defunct Virginia-North Carolina Interstate Toll Road Compact Commission were appointed relative to their membership in their respective state legislatures. The Louisville and Southern Indiana Bridges Authority consists of 14 members, with an equal number from each state. The Indiana governor appoints all seven; the Kentucky governor appoints three; and the city of Louisville mayor appoints four who must be residents of the city. Each member serves without compensation for a term of two, three or four years, depending on term limit established at the time of his or her appointment. The Board of Commission for the Port of Hood River in Oregon is comprised of elected public officials. They must reside in within the boundaries of the port district and as stated in the Port’s mission and rules, act in the best interest of the public.

(B) Transportation Authority

This governance structure is very similar to a toll road authority except that it involves the administration, management, operation, and maintenance of multiple transportation modes. Examples of non-highway modes that can be included are airports, ports, commuter rail, and ferries. Similar to toll road authorities, transportation authorities are normally governed by a Board of Directors with varying degrees of

representation by each project participant. The Port Authority of New York and New Jersey is an example of such an agency that was created to coordinate transportation and other facilities of commerce in and about the port of New York. It operates toll bridges, tunnels, and transit facilities. Its board is jointly headed by the governors of New York and New Jersey. Each governor, with the approval of his or her state senate, appoints six members to the board of commissioners, who serve overlapping six-year terms without pay. A governor can veto actions by the commissioners from the same state. The Port Authority may only proceed with projects approved by both states.

(C) Joint and Separate Management.

Under this governance structure, the participating entities agree to share in the costs to design, construct, operate and maintain the facilities relative to its ownership and/or jurisdiction. A potential variant could involve both parties sharing in the initial development costs, and then designating one of the participating entities to have the primary responsibility for operations and maintenance and debt service with terms established for allocating toll revenues. This general governance structure would allow each participant more direct involvement in the development and operation of the facility.

This approach has several implications with respect to the administration, management, and financial performance of the facility. First, each party to the agreement could have the option to toll or not toll its respective section. If both sides are tolled, (1) there may be separate policies regarding the magnitude and timing of toll increases; (2) the states could agree to “harmonize” rate increases based on independent studies, particularly if they were necessary to meet bond covenants; or (3) the states could agree that the tolling of the facility will be administered by only one of the states. Second, each party may be required to finance the capital costs related to the development of its section although various arrangements might be possible depending on the tolling point locations. Third, each party might carry out operations and maintenance activities for its section in accordance with agreed upon standards contained in the agreement although both could agree to jointly contract for such services. Yet, another hybrid structure can involve one party establishing a toll agency for its portion, while the other participant manages its section through an existing state agency or governmental entity, as is the case with the Blue Water Bridge which connects Michigan to Ontario, Canada. Similar governance structures are used on non-tolled bridges, which can provide insight with respect to how O&M costs are shared for a multi-jurisdictional bridge facility.

This governance structure has the advantage of allowing each participant more direct involvement in the development and operation of the facility. The inherent disadvantages related to this governance structure are: (1) portions of the bridge may be subject to varying (or no) tolling rates which may jeopardize the availability of sufficient funds for operations and maintenance ; (2) the facility may be maintained at different standards with one agency exceeding the minimum standards while the other just meeting contractual requirements; and (3) traffic management policies may conflict which could undermine the collection and enforcement of tolls and violation fees. As a result, close coordination between the participants is critical.

(D) Private

There are a small number of private toll bi-state bridges in the United States. Most were developed in support of industrial transport and freight movements, as franchises with county or municipal governments, and prior to laws that enabled the interstate system. There are two basic variants of this approach which involve for-profit and not-for-profit entities.

- 1. Private For-Profit Entity.** Under this governance structure, a private entity or entities partially or fully fund the project. In return, the private entity is given significant authority to operate and

maintain the facility as well as generate enough revenue to obtain a suitable rate of return on its investment. This approach requires the participating states to have the legal authority to execute such agreements. The public entities continue to own the facility. The private entity is responsible for providing equity capital, obtaining debt, design and construction, operations and maintenance for a defined term. Contract duration is specified in the concession agreement and is subject to Federal and State laws. Typically, private facilities are administered, managed, operated and maintained by a special purpose venture established by the private participants. These entities tend to be at “arms length” of the equity participants and may involve the formation of a Limited Liability Company. An advantage of this approach is that it transfers design, construction, financing, and operational risks to the private sector. These contracts generally require the services of Independent Engineer (IE) who evaluates construction, O&M activities, and schedule with respect to contractually defined standards.

- 2. Private Not-for-Profit Entity.** This involves the establishment of a Public-Benefit Corporation (also known as a 63-20 corporation), which is responsible for the construction, finance, operation, and maintenance of single toll facility. Typically, the title to the asset is held by the 63-20 corporation until bonds are repaid. From the research, there are no specific examples of stand-alone toll bridges that have been developed using this governance structure. Non-bridge projects include Pocahontas Parkway (Virginia), Greenville Connector (South Carolina), and the Las Vegas (Nevada) Monorail. To date, the financial performance of these facilities has not been strong. These projects encountered difficulties in meeting debt service with both the Greenville Connector and Las Vegas Monorail entering into bankruptcy proceedings while the Pocahontas Parkway was converted to a long-term concession agreement to improve financial sustainability. Due to tax-exempt debt restrictions, a 63-20 corporation cannot enter into long-term, full-risk operation, maintenance and rehabilitation agreements with the private sector. That restriction combined with the non-profit board structure often leaves the facility without a party with a vested interest in its long-term financial success.

(E) Local Government

Another potential governance structure involves city or county governments assuming responsibility for developing, managing, operating, and maintaining a multi-jurisdictional bridge. Although the facility is formally part of the city or county government, it is typically administered under a separate enterprise fund. This type of segregation facilitates the ability to ensure that toll revenues are used first for operations and maintenance, to repay debt service, and/or to reinvest in the facility rather than mixing the revenues generated by the facility into the general fund. It also insulates the general fund from obligations of the toll facility. This structure is common along the U.S.-Mexico International Border. A variant of this approach could involve the formation of a county or multi-county toll authority or district, or regional authority comprised of various local governmental entities which is responsible for managing all or part of the tolled facility.

III. Examining the Joint and Separate Management Structure

The joint and separate management structure allows entities to retain ownership of a project, and remain involved in the daily operations, planning, and oversight. It also can include a variety of arrangements between the entities that can more readily be adapted to accommodate changing circumstances. While more commonly used on cross-jurisdictional, non-toll facilities, there are a few examples of such arrangements used to develop and operate toll facilities.

When two or more entities decide to collectively develop a project, coordination between the parties may be required or desired during one or more of the phases that cover the project lifecycle – planning, funding/financing, construction, operations and maintenance. The parties must determine how the project will be funded, who needs to contribute, and the timing of the investments. They also must determine and assign the responsibility for planning, construction, operations and maintenance (O&M). Policies must also be developed that address toll policies, debt obligations, capital improvements and the mechanism for distributing toll revenues. In this manner, the appropriate governance and funding structure often will be a by-product of the assignment of responsibilities, risks, and control.

The seven projects that have been identified represent some form of a joint and/or separate management arrangement across state or international borders. The projects include three toll bridges, two toll roads and two non-toll bridge projects. These facilities are in various stages of development and operations as well as involve varying levels of coordination and relationships between the parties. In most cases, the public entities retain ownership of their portion of the facility. Some agreements between entities have resulted in the formation of a separate institutional mechanism to make policy and major decisions, such as toll rates and capital improvements, and to oversee operations and maintenance. In contrast, one toll bridge has two owners, was funded and constructed separately, and is operated and maintained with little to no coordination. The jointly and/or separately managed projects identified were:

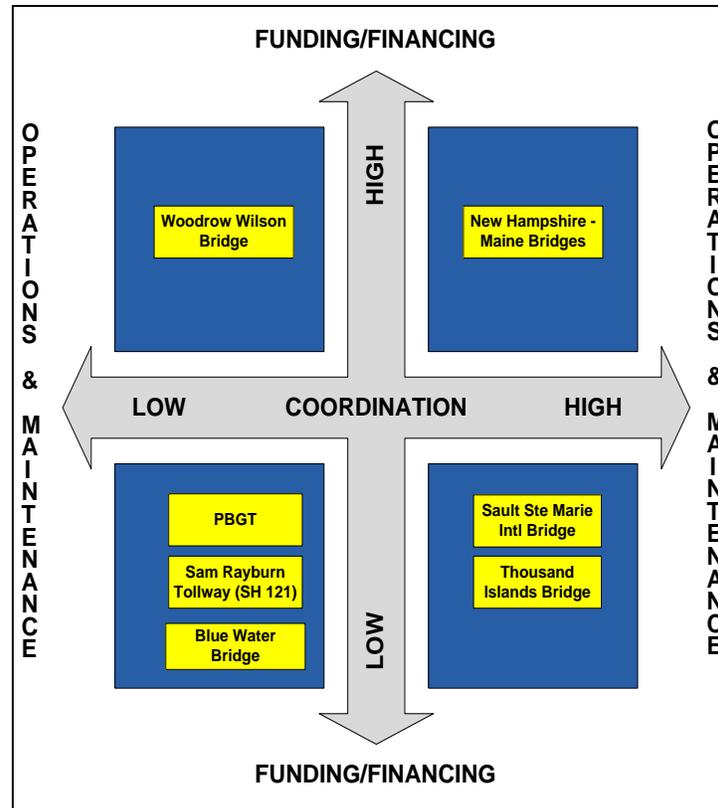
- Blue Water Bridge between Michigan and Canada; financed individually and governed by two project owners with very limited coordination.
- President George Bush Turnpike in the Dallas-Fort Worth metropolitan area; financed predominately and governed solely by one of the initial partnering entities.
- Sam Rayburn Tollway in the Dallas-Fort Worth metropolitan area; financed and governed solely by one entity subject to some contractual requirements negotiated by both entities.
- Thousand Islands Bridge between New York State and Canada; financed by one of the partnering entities and governed by a board created by the owners with representation by each owner.
- Sault Ste. Marie International Bridge between Michigan and Canada; financed by one of the partnering entities and governed by a board created by the owners with representation by each owner.
- Woodrow Wilson Bridge, a non-tolled bridge between Maryland and Virginia; financed jointly and governed by the two main project entities with extensive coordination between the entities involved.
- Maine-New Hampshire Bridges, including Memorial Bridge, the Sarah Mildred Long Bridge, and the I-95 High Level Bridge; a proposed joint finance and governance structure through a board re-created by the owners and with equal representation by each owner.

Once the assignment of responsibilities and control is in place, then the entities must continue to work cooperatively and coordinate efforts to ensure the overall success of the project. As the project moves into the construction phase, if one entity is assigned responsibility for construction management, then both entities must coordinate work efforts to ensure that the project meets the expectations of planning groups; is built to federal and state engineering standards; and is delivered on-time and within budget. Toll responsibilities may fall to one entity, but both parties must cooperate to develop an agreed upon funding plan and secure financing. By way of example, when the North Texas Tollway Authority (NTTA) assumed responsibility from the state DOT for the financing of two separate toll facilities, the DOT agreed to provide support as necessary and reasonable to facilitate the project's bond financing.

Figure 2 below demonstrates the level of coordination and responsibility of the individual entities with respect to funding/financing and O&M of a project. This representation attempts to capture the current

status of these facilities, as some of these facilities have exhibited greater or less coordination at different periods.

Figure 2: Coordination Levels of Joint and Separate Management



The summaries below of the seven projects evaluated demonstrate how the assignments of different responsibilities and risks have shaped different approaches to governance. More detailed information about each project is included in [Appendix F](#) – Project Case Studies. Table 1 below compares the advantages and disadvantages of the governance arrangements and the levels of coordination between the entities.

(A) Blue Water Bridge

The Blue Water Bridge is an example of a separately financed, constructed, operated, maintained, and governed project. It is owned by the Blue Water Bridge Corporation in Ontario, Canada and the Michigan Department of Transportation. Although coordination was required for the design and construction, both entities retained their own engineers and construction contractors. Both entities separately financed the project, and today after 72 years of operations, it continues to be separately operated and maintained with coordination efforts limited to snow removal. The bridge is tolled at the Canadian border and U.S. border and toll rates are set by both owning entities. While the owner’s websites provide links to each other’s facility, there is no information provided about the other. For example, to determine the toll rates for the Canadian side, you must log onto its website and vice versa. Each has its own governance body.

This separate arrangement is not considered the most optimum particularly as related to O&M and funding capital improvements. This lack of coordination or unity in the maintenance of the bridge creates risks to

both owners. They essentially must trust that the other is properly maintaining the bridge, so not to jeopardize its overall operations and structural integrity. The owners recognize this and have been in discussion to develop a formal agreement to coordinate O&M and capital improvements, but still do not anticipate a final arrangement in the near future. The ability of the Blue Water Bridge owners to secure individually revenue bond financing can be considered an anomaly, perhaps indicative of different standards and appreciation of risks during the time period when the bridge was constructed.

(B) President George Bush Turnpike

The President George Bush Turnpike was open for tolling in 2000. It is an example of a circumstance in which one entity had the authority to toll but the other did not. In this case, the Texas Department of Transportation owned the road as a state highway. The road also was located within the four-county jurisdiction of the North Texas Tollway Authority, a regional toll road authority. At the time, the DOT did not have the financial ability to construct the road nor the authority to toll roads. Because the toll road authority had the legal purview to assess tolls, the DOT transferred ownership of the facility to the Authority. However, the projected revenues from tolling were still insufficient to construct and operate the road. In order to develop the project, the DOT provided a \$115 million loan to the Authority. As part of the transfer, the Authority gained the exclusive rights of ownership and control over the PGBT, in perpetuity. It is operated and maintained at the direction of Authority's nine-member board of directors, which consists of two members appointed by each of the counties and one by the governor. The DOT and the Authority worked cooperatively to secure right-of-way as well as to design and construct the major interchanges. Ultimately, this arrangement is an example of a joint project that is separately managed, financed, and governed project.

(C) Sam Rayburn Tollway

The Sam Rayburn Tollway is another variation of a separately managed project. The toll road is owned by the Texas DOT, which obtained has tolling authority in 2003 and is operated by North Texas Tollway Authority. The toll road is located within the jurisdiction of the Authority and was initially slated for development by a private entity, which was awarded a concession contract for the project. Prior to contract execution, the Authority submitted an alternative proposal to the DOT that exceeded the private proposal to purchase the rights to operate and maintain the road, and share the revenues with the DOT. The Authority financed the project and operates and maintains the road subject to a 50-year lease agreement.

By retaining ownership of the road, the DOT retained the right to share in the toll revenues and the parameters for setting and raising tolls. In order to secure the project, however, the Authority assumed all of the risks, including major declines in traffic and revenue that required an unscheduled toll increase. The issuance of this debt has negatively impacted its credit rating. At the end of the lease, the project will be returned to the DOT and presumably, the Authority will have collected revenues sufficient to realize a net return above its initial financial outlay, O&M, debt payments, and other costs.

(D) Woodrow Wilson Bridge

The Woodrow Wilson Bridge is not tolled. The project involved the development of a new bridge facility to replace the bridge crossing over the Potomac River between Maryland and Virginia. The project also involved improvements to the interchanges and connecting facilities to the new bridge. Because the federal government owned this aging bridge, the Federal Highway Administration (FHWA) petitioned Congress for funds to replace it, with both Maryland and Virginia being major players in this effort. An advisory body was developed to facilitate coordination efforts. Although largely financed using federal resources, the

current owners (Maryland and Virginia), and other major stakeholders (the District of Columbia) contributed to the construction financing. Each party constructed their respective segments. Where appropriate, the states have executed cost reimbursement agreements in which one state has been performing work on behalf of the other. Each of the main project elements is managed separately by the transportation agency in the state in which the project is located.

The project demonstrates the success that can be had with equal contribution and participation. However, its relevance in suggesting a viable governance and finance structure for a toll facility may be limited because tolling requires different financial and operational challenges and obligations, such as the issuance and repayment of revenue bonds secured by tolls. When the entities were considering tolling the bridge, a compact between the states and the District of Columbia was drafted to create an independent authority to finance and manage the bridge. The compact was not enacted. The experiences of the Thousand Islands Bridge and Sault Ste Marie International Bridge demonstrate how the tolling component can make a difference in financing and governance.

(E) Thousand Islands Bridge

The Thousand Islands Bridge is jointly owned by Federal Bridge Corporation Limited of Canada, and the Thousand Islands Bridge Authority, a New York public benefit corporation. The Canadian and U.S. governments each developed separate entities to finance the construction and operation of the toll bridge. When they went to the bond market to finance the project, the capital markets were not willing to separate the financings. As a result, the entities agreed to give the Thousand Islands Bridge Authority the right to own and operate the bridge spans for the duration of the bonds. The Authority's governing body included representatives from the U.S. and Canada. The initial agreement and statutory authority for the bridge project provided that when the bonds were repaid, the Authority would be dissolved, the tolls would be removed, and the bridge span and facilities would revert to Canada and the U.S. along jurisdictional lines. However, when the bonds were repaid, the U.S. passed legislation to permit the Authority to continue to operate and toll the U.S. side of the bridge. While Canada elected to remove toll, it quickly realized that it would need funds to cover the ongoing operations and maintenance. As a result, the entities entered into a 10-year agreement allowing the Authority to manage both U.S. and Canadian sections.

The entities have continued to extend or renew the operating agreement since the 1970s; and the Authority continues to have a governing body with representation from Canada and the U.S. The board is responsible for developing policies, setting tolls and approving major expenditures. Under the agreement, the toll revenues go first to pay for O&M costs. The owners meet periodically to develop a schedule of capital improvements and to determine which owner is responsible for the related costs. Special projects are those which the owners contribute to equally and coordinate design and construction. Any excess revenues are divided equally between entities.

(F) Sault Ste Marie International Bridge

The Sault Ste Marie International Bridge has a complex history. It has had multiple layers of corporate and governance structures, management arrangements, and ownership. It had an initial governance structure similar to the Thousand Island Bridge. In 1935, the State of Michigan created the International Bridge Authority to develop an international crossing to Canada. In 1955, the Canadian Parliament created the St. Mary's Rivers Bridge Company giving it the right to construct an international crossing. Like the Thousand Islands Bridge, Canada assigned its development rights to the U.S. Authority. Once the bonds were paid in 2000, the bridge properties reverted back to the original owners, Michigan and the Canadian federal government, the Authority was dissolved, and a new entity created to operate the bridge.

The bridge was financed by two series of bonds: one sold to private investors and paid off in 1983; and the other bought by the Province of Ontario and retired on September 1, 2000 using bridge revenues. In accordance with the intergovernmental agreement, neither owner is required to provide financial support for the bridge, but may elect to provide support in the event of a deficit. Revenues from bridge tolls cover the administration, operations and maintenance expenses of bridge. Any excess bridge revenues are shared equally by the owner. Based on the most recent data available, the bridge generated \$5.1 million in 2003. Potential surpluses are used to fund capital projects.

Since 2000, the owners have created two different governance bodies to oversee bridge operations. In 2009, the owners executed a 40-year operating agreement that created the Sault Ste Marie Bridge Authority which consists of four members appointed by the Governor of Michigan and four appointed by the Canadian Bridge Company. The Authority is responsible for:

- Approving bridge tolls, operating budgets and business plans;
- Making rules for the use of the bridge and related properties;
- Approving property purchases and capital investments; and
- Overseeing the investment of the bridge reserve fund.

Under the agreement, the DOT is responsible for carrying out the policies and operations and maintenance of the bridge as directed by the Authority. Within the DOT is a division that actually performs the day-to-day operations needed to keep the bridge open to traffic, including administration, toll collection and capital improvements. Its staff is composed of an equal number of Canadian and American residents, who are DOT employees.

(G) Maine-New Hampshire Bridges

The governors of Maine and New Hampshire created a Bi-State Bridge Funding Task Force to recommend a 30-year funding strategy for the rehabilitation and management of three cross-state bridges. The Task Force's recommendations for improving the bridges include joint financing, joint operations, creating a sinking fund, and resurrecting the joint bridge authority that had once owned and operated one of the three bridges as a toll bridge. The joint bridge authority was dissolved in 2008 as it had no operational funds to maintain the bridge once the tolls were removed. The task force recommended the resurrection of the authority to manage the sinking fund. The six-member task force (three from each state) also identified potential partners, and required legislation for implementation. Although operational agreements are still being worked out, it is anticipated that separate but coordinated operations of the bridges will continue.

Table 1: Joint and Separate Management Projects

Facility	Governance Arrangement	Level of Coordination	Toll Policy	Funding & Financing	Advantages	Disadvantages
Blue Water Bridge	The bridge is jointly owned and managed by a DOT (US) and a public bridge company. (Canada). Each owner holds the rights to its portion of the facility. Separate operations except snow removal.	Low. Limited to snow removal	Each agency is responsible for setting and collecting tolls on its section. Bridge spans have been tolled and non-tolled at different times during operations.	<ul style="list-style-type: none"> • Separate financings were undertaken by the parties to develop their sections. • Each owner funds O&M from toll revenues • Tolls used to secure bonds. • Tolls were removed once the bonds were repaid and later reinstated. • Limited potential for system financing. 	<ul style="list-style-type: none"> • Each party assumes costs and debt in accordance with the selected design requirements for their portion of the facility. • Risks assumed are relative to ownership percentage. 	<ul style="list-style-type: none"> • Loss of operational and financial efficiencies. • Difficult to ensure and verify that bridge is adequately maintained and structurally sound. • Failures by one party can adversely affect the facility and the other party.
President George Bush Turnpike	DOT transferred ownership and operations of the facility to a toll road agency in perpetuity. The toll road agency owns and manages road in accordance with its internal policies.	Low. Snow removal on facility and O&M on the frontage roads & interchanges on DOT property.	Toll road authority sets and adjusts toll rates.	<ul style="list-style-type: none"> • Toll road agency issued revenue bonds. • DOT loaned toll road agency funds for construction and transferred ROW at no cost. • Limited potential for system financing. 	<ul style="list-style-type: none"> • Efficient operations as the toll road authority responsible for facility. • DOT doesn't take on operations and doesn't assume O&M risks. • Owner has exclusive control over facility subject to minor contract provisions. 	<ul style="list-style-type: none"> • Toll road agency took on all revenue and O&M risks. • Limited control by DOT. • Agreement may not be equitable to all parties. The DOT contributed to construction and ROW, but does not share revenues.
Sam Rayburn Tollway – SH 121	DOT owns the facility. DOT transferred operations and management to a toll road agency through a long-term lease. Toll road to be handed back to the DOT at the end of the lease agreement.	Limited. Roles/responsibilities defined through contract executed during project development.	Tolls set by the agreement and subject to toll road authority's board approval. Toll increases based on 2-year changes in CPI.	<ul style="list-style-type: none"> • Toll road agency issued revenue bonds secured by existing toll road system. • Toll road agency sharing revenues with the DOT via an upfront payment and annual payments during lease term. Revenue shared based on contract formula. • Toll road agency assumed most of the construction and O&M costs. DOT assumed some ROW cost and O&M on frontage roads/connecting facilities. 	<ul style="list-style-type: none"> • Efficient operations as the toll road authority responsible for facility. • Financing responsibilities assumed by a single entity which can allow for more favorable lending terms, especially if the entity can leverage the strength of its entire toll system. • Entity not taking on operations doesn't assume O&M and financing risks, yet retains some control through performance requirements. • Agreement extensively defines roles and responsibilities and apportions excess revenues. 	<ul style="list-style-type: none"> • Toll road agency takes on construction, revenue and O&M risks. • Agreement may not be equitable to all parties. • Toll road agency's credit rating downgraded by all 3 credit ratings agencies. • Determining appropriate "value" of the facility and apportionment of revenues can be politicized and contentious.

Facility	Governance Arrangement	Level of Coordination	Toll Policy	Funding & Financing	Advantages	Disadvantages
Sault Ste. Marie Intl Bridge	The bridge is jointly owned and managed by the DOT (US) and a public bridge company (Canada). Each owner holds the rights to its portion of the facility. Owners created bridge authority through an intergovernmental agreement. Bridge authority makes policy decisions, sets tolls, and oversees operations that are then carried out by the DOT. The authority has an eight-member board with equal representation for the owners.	Limited. Bridge authority is responsible for managing the facility.	Uniform toll policy. Toll rates are adjusted every 6 months to account for differences in exchange rates.	<ul style="list-style-type: none"> • Separate financings were undertaken by the owners to develop their respective sections of the facility. • Owners responsible for capital costs on their sections of the bridge. • Limited potential for system financing. • Bridge is financially self-sufficient; tolls are adjusted to cover O&M costs. • Bridge is operated on a not-for-profit basis. • Neither party required to financially support bridge 	<ul style="list-style-type: none"> • O&M costs shared. Revenues cover O&M and DOT staff costs. • Each owner assumes capital costs for their portion of the facility • Revenues distributed equally and semi-annually. • Revenues are deposited in each owner's reserve account. Either owner can waive its distribution to pay for O&M. • Bridge authority's board allows for greater coordination and oversight. • At the end of the agreement, the portions of the bridge located within their jurisdictions revert back to the owners. Assets and liabilities shared equally. • Shared revenue risk. 	<ul style="list-style-type: none"> • Governance structures through a separate authority provides "arms-length" control by owners • DOT effectively takes operational risks. • DOT can be sued for operational activities; owners equally share in the cost of defending against the claim • Facility ownership and management has been characterized by organizational changes by both owners. This has resulted in the recurrent need to amend the intergovernmental agreement—a cumbersome process that also creates operational uncertainties.
Thousand Islands Bridge	The bridge is jointly owned and managed by a bridge authority (US) and a public bridge company (Canada). Each owner holds the rights to its portion of the facility. US bridge authority operates bridge and its board provides oversight. US owner has majority representation on the bridge authority's board.	Significant.	Bridge authority board sets and collects tolls. Mutual consent is required for changes in toll rates.	<ul style="list-style-type: none"> • Tolls set to meet O&M, capital improvements of both parties, and reserves. • Bridge authority's board makes major decisions on project expenditures and capital improvements. • Limited potential for system financing. • Each owner is financially responsible for capital improvements on its section. 	<ul style="list-style-type: none"> • Operator is self-supporting with toll revenues used O&M. • Efficient operations since the bridge authority is responsible for the facility. • Limited political interference from Canadian owner. • Agreement defines roles and responsibilities for capital improvements, operations, toll rates, budget shortfalls, etc. • Owners equally share O&M expenses and cover any operational deficits. • Board structure permits greater coordination 	<ul style="list-style-type: none"> • One owner has less control over day to day operations. • Toll rates subject to political pressures from both sides. • Agreement is for only 10 years. Will need to renew and/or revisit agreement at end of term.

Facility	Governance Arrangement	Level of Coordination	Toll Policy	Funding & Financing	Advantages	Disadvantages
Woodrow Wilson Bridge	Ownership of the bridge was transferred from the federal government to the states in which the bridge is located. Each owner holds the rights to develop and operate portion of the facility in its jurisdiction. Toll authority considered but not enacted.	Significant.	Non-tolled	<ul style="list-style-type: none"> • Separate funding through federal appropriations and state gas tax revenues. • 61% federally funded. Remainder funded by the DOTs for their respective sections and improvements to connecting facilities. 	<ul style="list-style-type: none"> • Owners assume operational responsibilities and risks for their respective sections. • Some pooling of financial and resources. 	<ul style="list-style-type: none"> • Limited pooling of operational costs. • Loss of operational synergies.
Maine - New Hampshire Bridges	Joint ownership of 3 non-tolled bridges by the states. Task Force created to identify strategies to fund rehabilitation of bridges. Task Force recommended reauthorizing dormant bi-state bridge authority to oversee sinking fund for capital improvements.	Significant coordination envisioned. Task Force included participation of the turnpikes in both states.	Non-tolled. Task Force deferred decision to toll these bridges to the state legislatures.	<ul style="list-style-type: none"> • Task force recommended equal sharing of funding and O&M costs. • <u>Memorial Bridge</u> (\$90 million cost). TIGER II Grant (22% of total) with remainder funded equally by each state. • <u>Sarah Mildred Bridge</u> (\$110 million cost). U.S. Dept. of Defense (27% of total). Remainder funded in relation to percentage ownership by each state. • Each states to contribute \$1.7 million per year to the sinking fund. Sinking fund to finance improvements on 3rd bridge. 	<ul style="list-style-type: none"> • Costs allocated 50/50 for truss spans and prorated for approach spans. • Pooled financial resources. • Equal sharing of risks and responsibilities. • States to equally share O&M funds for the bridges. 	<ul style="list-style-type: none"> • No agreement in place yet. • Funding dependent upon commitments and approval of state legislatures. • Bi-state authority would need to be revived

Conclusions

The joint and separate management structure offers a variety of options for Washington and Oregon to consider for the development of the CRC. The projects evaluated have a range of project management assignments for design, construction, O&M and funding, as well as variations with respect to governance responsibilities. This report demonstrates the level of coordination between the parties involved for a project's development and how the assignment of responsibilities and risk can impact the long-term financial and operational management and potential sustainability of the facility. Revenue risk may be the most significant that can be assumed within this governance structure. For this reason, amongst the considerations for the project owners is the level of risk that passes to the party that assumes the revenue risk – should a single party bear that risk alone, and what support should be given if revenues are insufficient to repay the bonds and O&M costs? Should a party not bearing such risk be allowed to determine toll rates, toll policies and other major operational decisions? How are excess revenues shared?

Projects with institutional mechanisms for the ongoing coordination among owners throughout the project lifecycle can provide the public, stakeholders and bond issuers more certainty that the project will be managed to one set of rules and standards and with sufficient attention. Ultimately, as with most joint projects, the parties must decide who is best able to assume responsibilities and risks. Not all tasks can or should be equally shared, and the responsibilities, and risks assumed by one entity for the overall project benefit should be adequately valued and compensated accordingly. An important aspect of this is control – if a party bears greater risk they will require greater control of issues such as toll rates. The appropriate project construction and O&M financing will be influenced by the bond market requirements to make the project financeable and minimize its risks for timely repayment. The appropriate governance structure will be a by-product of the assignment of responsibilities, control and risks.

The Oregon Department of Transportation and the Washington State Department of Transportation will continue to work with the Oregon and Washington Governors, Legislators, Treasurers, Transportation Commissions and local governments to establish the governance framework for the Columbia River Crossing.

APPENDIX A: TITLE 23--HIGHWAYS

CHAPTER 3--GENERAL PROVISIONS

Sec. 301. Freedom from tolls

Except as provided in section 129 of this title with respect to certain toll bridges and toll tunnels, all highways constructed under the provisions of this title shall be free from tolls of all kinds.

CHAPTER 1--FEDERAL-AID HIGHWAYS

Sec. 129. Toll roads, bridges, tunnels, and ferries

(a) Basic Program:

- (1) Authorization for federal participation.— Notwithstanding section 301 of this title and subject to the provisions of this section, the Secretary shall permit Federal participation in:
 - (A) initial construction of a toll highway, bridge, or tunnel (other than a highway, bridge, or tunnel on the Interstate System) or approach thereto;
 - (B) reconstructing, resurfacing, restoring, and rehabilitating a toll highway, bridge, or tunnel (including a toll highway, bridge, or tunnel subject to an agreement entered into under this section or section 119(e) as in effect on the day before the date of the enactment of the Intermodal Surface Transportation Efficiency Act of 1991) or approach thereto;
 - (C) reconstruction or replacement of a toll-free bridge or tunnel and conversion of the bridge or tunnel to a toll facility;
 - (D) reconstruction of a toll-free Federal-aid highway (other than a highway on the Interstate System) and conversion of the highway to a toll facility; and
 - (E) preliminary studies to determine the feasibility of a toll facility for which Federal and in the same manner as in the construction of free highways under this chapter.
- (2) Ownership.--Each highway, bridge, tunnel, or approach thereto constructed under this subsection must—
 - (A) be publicly owned, or
 - (B) be privately owned if the public authority having jurisdiction over the highway, bridge, tunnel, or approach has entered into a contract with a private person or persons to design, finance, construct, and operate the facility and the public authority will be responsible for complying with all applicable requirements of this title with respect to the facility.
- (3) Limitations on use of revenues.--Before the Secretary may permit Federal participation under this subsection in construction of a highway, bridge, or tunnel located in a State, the public authority (including the State transportation department) having jurisdiction over the highway, bridge, or tunnel must enter into an agreement with the Secretary which provides that all toll revenues received from operation of the toll facility will be used first for debt service, for reasonable return on investment of any private person financing the project, and for the costs necessary for the proper operation and maintenance of the toll facility, including reconstruction, resurfacing, restoration, and rehabilitation. If the State certifies annually that the tolled facility is being adequately maintained, the State may use any toll revenues in excess of amounts required under the preceding sentence for any purpose for which Federal funds may be obligated by a State under this title.
- (4) Special rule for funding.--In the case of a toll highway, bridge, or tunnel under the jurisdiction of a public authority of a State (other than the State transportation department), upon request of the State transportation department and subject to such terms and conditions as such department and public authority may agree, the Secretary shall reimburse such public authority for the Federal share of the

costs of construction of the project carried out on the toll facility under this subsection in the same manner and to the same extent as such department would be reimbursed if such project was being carried out by such department. The reimbursement of funds under this paragraph shall be from sums apportioned to the State under this chapter and available for obligations on projects on the Federal-aid system in such State on which the project is being carried out.

- (5) Limitation on federal share.--The Federal share payable for a project described in paragraph (1) shall be a percentage determined by the State but not to exceed 80 percent.
- (6) Modifications.--If a public authority (including a State transportation department) having jurisdiction over a toll highway, bridge, or tunnel subject to an agreement under this section or section 119(e), as in effect on the day before the effective date of title I of the Intermodal Surface Transportation Efficiency Act of 1991, requests modification of such agreement, the Secretary shall modify such agreement to allow the continuation of tolls in accordance with paragraph (3) without repayment of Federal funds.
- (7) Loans.—
- (A) In general.--A State may loan to a public or private entity constructing or proposing to construct under this section a toll facility or non-toll facility with a dedicated revenue source an amount equal to all or part of the Federal share of the cost of the project if the project has a revenue source specifically dedicated to it. Dedicated revenue sources for non-toll facilities include excise taxes, sales taxes, motor vehicle use fees, tax on real property, tax increment financing, and such other dedicated revenue sources as the Secretary determines appropriate.
- (B) Compliance with federal laws.--As a condition of receiving a loan under this paragraph, the public or private entity that receives the loan shall ensure that the project will be carried out in accordance with this title and any other applicable Federal law, including any applicable provision of a Federal environmental law.
- (C) Subordination of debt.--The amount of any loan received for a project under this paragraph may be subordinated to any other debt financing for the project.
- (D) Obligation of funds loaned.--Funds loaned under this paragraph may only be obligated for projects under this paragraph.
- (E) Repayment.--The repayment of a loan made under this paragraph shall commence not later than 5 years after date on which the facility that is the subject of the loan is open to traffic.
- (F) Term of loan.--The term of a loan made under this paragraph shall not exceed 30 years from the date on which the loan funds are obligated.
- (G) Interest.--A loan made under this paragraph shall bear interest at or below market interest rates, as determined by the State, to make the project that is the subject of the loan feasible.
- (H) Reuse of funds.--Amounts repaid to a State from a loan made under this paragraph may be obligated--
- (i) for any purpose for which the loan funds were available under this title; and
 - (ii) for the purchase of insurance or for use as a capital reserve for other forms of credit enhancement for project debt in order to improve credit market access or to lower interest rates for projects eligible for assistance under this title.
- (I) Guidelines.--The Secretary shall establish procedures and guidelines for making loans under this paragraph.
- (8) Initial construction defined.--For purposes of this subsection, the term "initial construction" means the construction of a highway, bridge, or tunnel at any time before it is open to traffic and does not include any improvement to a highway, bridge, or tunnel after it is open to traffic.

(b) Notwithstanding the provisions of section 301 of this title, the Secretary may permit Federal participation under this title in the construction of a project constituting an approach to a ferry, whether toll or free, the route of which is a public road and has not been designated as a route on the Interstate System. Such ferry may be either publicly or privately owned and operated, but the operating authority and the amount of fares charged for passage shall be under the control of a State agency or official, and all revenues derived from

publicly owned or operated ferries shall be applied to payment of the cost of construction or acquisition thereof, including debt service, and to actual and necessary costs of operation, maintenance, repair, and replacement.

(c) Notwithstanding section 301 of this title, the Secretary may permit Federal participation under this title in the construction of ferry boats and ferry terminal facilities, whether toll or free, subject to the following conditions:

(1) It is not feasible to build a bridge, tunnel, combination thereof, or other normal highway structure in lieu of the use of such ferry.

(2) The operation of the ferry shall be on a route classified as a public road within the State and which has not been designated as a route on the Interstate System. Projects under this subsection may be eligible for both ferry boats carrying cars and passengers and ferry boats carrying passengers only.

(3) Such ferry boat or ferry terminal facility shall be publicly owned or operated or majority publicly owned if the Secretary determines with respect to a majority publicly owned ferry or ferry terminal facility that such ferry boat or ferry terminal facility provides substantial public benefits.

(4) The operating authority and the amount of fares charged for passage on such ferry shall be under the control of the State or other public entity, and all revenues derived therefrom shall be applied to actual and necessary costs of operation, maintenance, and \1\ repair, debt service, negotiated management fees, and, in the case of a privately operated toll ferry, for a reasonable rate of return.

\1\ So in original. The word ``and'' probably should not appear.

(5) Such ferry may be operated only within the State (including the islands which comprise the State of Hawaii and the islands which comprise any territory of the United States) or between adjoining States or between a point in a State and a point in the Dominion of Canada. Except with respect to operations between the islands which comprise the State of Hawaii, operations between the islands which comprise any territory of the United States, operations between a point in a State and a point in the Dominion of Canada, and operations between any two points in Alaska and between Alaska and Washington, including stops at appropriate points in the Dominion of Canada, no part of such ferry operation shall be in any foreign or international waters.

(6) No such ferry shall be sold, leased, or otherwise disposed of without the approval of the Secretary. The Federal share of any proceeds from such a disposition shall be credited to the unprogrammed balance of Federal-aid highway funds of the same class last apportioned to such State. Any amount so credited shall be in addition to all other funds then apportioned to such State and available for expenditure in accordance with the provisions of this title.

**APPENDIX B:
INTERSTATE COMPACT DETERMINING OREGON-WASHINGTON BOUNDARY
ON THE COLUMBIA RIVER**

Chapter 43.58 RCW

Washington-Oregon boundary commission

RCW Sections

- [43.58.050](#) Oregon-Washington Columbia River boundary compact -- Ratification.
- [43.58.060](#) Oregon-Washington Columbia River boundary compact -- Terms and provisions.
- [43.58.070](#) Oregon-Washington Columbia River boundary compact -- Transfer of records, etc., to division of archives.
- [43.58.090](#) Oregon-Washington Columbia River boundary compact -- Repeal of RCW [43.58.010](#) through [43.58.040](#), when.

43.58.050

Oregon-Washington Columbia River boundary compact — Ratification.

The interstate compact determining the Oregon-Washington boundary on the Columbia River which was executed on the 21st day of December, 1956 by the Oregon commission on interstate cooperation for the state of Oregon and the Washington-Oregon boundary commission for the state of Washington is hereby ratified and approved.

[1965 c 8 § [43.58.050](#). Prior: 1957 c 90 § 1.]

Notes:

Reviser's note: The effective date of RCW [43.58.050](#) was March 13, 1957. State Constitution, Amendment 33, recognizing the modification of the state's boundaries through appropriate compact procedure, was approved by the voters on November 4th, 1958, and the governor's proclamation relating thereto was issued on December 4th, 1958.

The Oregon legislature has ratified the compact, see Oregon Revised Statutes §§ 186.510 and 186.520, effective April 4, 1957. See also, Article XVI of the Oregon Constitution relating to state boundaries which was adopted by the people November 4, 1958, effective December 3, 1958.

Congressional ratification is contained in Public Law 85-575, dated July 31, 1958.

43.58.060

Oregon-Washington Columbia River boundary compact — Terms and provisions.

The terms and provisions of the compact referred to in RCW [43.58.050](#) are as follows:

INTERSTATE COMPACT DETERMINING
OREGON-WASHINGTON BOUNDARY ON THE
COLUMBIA RIVER

ARTICLE I. PURPOSE

The boundary between the states of Oregon and Washington along the course of the Columbia River has not been easy to ascertain because of changes in the main channel of the river with a result that a state of confusion and dispute exists and the enforcement and administration of the laws of the two states has been rendered difficult.

The purpose of this compact is to fix with precision by reference to stations of longitude and latitude the boundary between the states of Oregon and Washington from one marine league due west of the mouth of the Columbia River to the most easterly point at which the 46th parallel of North latitude crosses said river, at which point the river ceases to form the boundary between the two states.

ARTICLE II. DESCRIPTION

The boundary between the states of Oregon and Washington from one marine league due west of the mouth of the Columbia River to the point at which the last described point number (# 191) of the boundary as herein determined meets the 46th parallel of North latitude at 118° 59'10".12 of West longitude shall be as follows:

Beginning one marine league at sea off the mouth of the Columbia river at north latitude 46° 15'00".00; running thence due east to point number 1 of this description, which point is at north latitude 46° 15'00".00, west longitude 124° 05'00".00; thence from point number 1 continuing upstream in the channel of the Columbia river by a series of straight lines connecting the following numbered and described points in consecutive order.

...

ARTICLE III. RATIFICATION AND EFFECTIVE DATE

This compact shall become operative when it has been ratified by the legislatures of the states of Oregon and Washington and approved by the Congress of the United States and the Constitutions of the states of Oregon and Washington have been amended to authorize the establishment of the boundary as herein provided.

[1965 c 8 § [43.58.060](#). Prior: 1957 c 90 § 2.]

43.58.070

Oregon-Washington Columbia River boundary compact — Transfer of records, etc., to division of archives.

Upon ratification by the state of Oregon and approval by the Congress of the United States of the compact set forth in RCW [43.58.060](#), the secretary of the Washington-Oregon boundary commission is hereby directed to transmit all records, work sheets, maps, minutes and other papers of said commission to the division of archives and records management of the office of the secretary of state.

[1981 c 115 § 3; 1965 c 8 § [43.58.070](#). Prior: 1957 c 90 § 3.]

Notes:

Effective date -- 1981 c 115: See note following RCW [40.14.020](#).

43.58.090

Oregon-Washington Columbia River boundary compact — Repeal of RCW 43.58.010 through 43.58.040, when.

Chapter 27, Laws of 1937, as amended by chapter 6, Laws of 1955 extraordinary session and chapter [43.58](#) RCW [RCW [43.58.010](#) through [43.58.040](#)] each shall be repealed when the compact set forth in RCW [43.58.060](#) has been ratified by the state of Oregon and approved by the Congress of the United States.

[1965 c 8 § [43.58.090](#). Prior: 1957 c 90 § 5.]

Notes:

Reviser's note: See note following RCW [43.58.050](#).

APPENDIX C COLUMBIA RIVER GORGE COMPACT

RCW 43.97.015 Columbia River Gorge Compact — Columbia River Gorge commission.

The legislature of the State of Washington hereby ratifies the Columbia River Gorge Compact set forth below, and the provisions of such compact hereby are declared to be the law of this state upon such compact becoming effective as provided in Article III.

A compact is entered into by and between the states of Washington and Oregon, signatories hereto, with the consent of the Congress of the United States of America, granted by an Act entitled, "The Columbia River Gorge National Scenic Area Act," P.L. 99-663.

ARTICLE I COLUMBIA GORGE COMMISSION ESTABLISHED

a. The States of Oregon and Washington establish by way of this interstate compact a regional agency known as the Columbia River Gorge Commission. The commission established in accordance with this compact shall have the power and authority to perform all functions and responsibilities in accordance with the provisions of this compact and of the Columbia River Gorge National Scenic Area Act (the federal Act), which is incorporated by this specific reference in this agreement. The commission's powers shall include, but not be limited to:

1. The power to sue and be sued.
2. The power to disapprove a land use ordinance enacted by a county if the ordinance is inconsistent with the management plan, as provided in P.L. 96-663, Sec. 7(b)(3)(B).
3. The power to enact a land use ordinance setting standards for the use of nonfederal land in a county within the scenic area if the county fails to enact land use ordinances consistent with the management plan, as provided in P.L. 99-663, Sec. 7(c).
4. According to the provisions of P.L. 99-663, Sec. 10(c), the power to review all proposals for major development action and new residential development in each county in the scenic area, except urban areas, and the power to disapprove such development if the commission finds the development is inconsistent with the purposes of P.L. 99-663.

b. The commission shall appoint and remove or discharge such personnel as may be necessary for the performance of the commission's functions, irrespective of the civil service, personnel or other merit system laws of any of the party states.

c. The commission may establish and maintain, independently or in conjunction with any one or more of the party states, a suitable retirement system for its full-time employees. Employees of the commission shall be eligible for social security coverage in respect of old age and survivors insurance provided that the commission takes such steps as may be necessary pursuant to federal law to participate in such program of insurance as a governmental agency or unit. The commission may establish and maintain or participate in such additional programs of employee benefits as may be appropriate.

d. The commission shall obtain the services of such professional, technical, clerical and other personnel as may be deemed necessary to enable it to carry out its functions under this compact. The commission may borrow, accept, or contract for the services of personnel from any state of the United States or any subdivision or agency thereof, from any interstate agency, or from any institution, person, firm or corporation.

e. Funds necessary to fulfill the powers and duties imposed upon and entrusted to the commission shall be provided as appropriated by the legislatures of the states in accordance with Article IV. The commission may also receive gifts, grants, endowments and other funds from public or private sources as may be made from time to time, in trust or otherwise, for the use and benefit of the purposes of the commission and expend the same or any income therefrom according to the terms of the gifts, grants, endowments or other funds.

f. The commission may establish and maintain such facilities as may be necessary for the transacting of its business. The commission may acquire, hold and convey real and personal property and any interest therein.

g. The commission shall adopt bylaws, rules, and regulations for the conduct of its business, and shall have the power to amend and rescind these bylaws, rules and regulations. The commission shall publish its bylaws, rules and regulations in convenient form and shall file a copy thereof and of any amendment thereto, with the appropriate agency or officer in each of the party states.

ARTICLE II THE COMMISSION MEMBERSHIP

a. The commission shall be made up of twelve voting members appointed by the states, as set forth herein, and one non-voting member appointed by the U.S. Secretary of Agriculture.

b. Each state governor shall appoint the members of the commission as provided in the federal Act (three members who reside in the State of Oregon, including one resident of the scenic area, to be appointed by the Governor of Oregon, and three members who reside in the State of Washington, including one resident of the scenic area, appointed by the Governor of Washington).

c. One additional member shall be appointed by the governing body of each of the respective counties of Clark, Klickitat, and Skamania in Washington, and Hood River, Multnomah, and Wasco in Oregon, provided that in the event the governing body of a county fails to make such an appointment, the Governor of the state in which the county is located shall appoint such a member.

d. The terms of the members and procedure for filling vacancies shall all be as set forth in the federal Act.

ARTICLE III EFFECTIVE DATE OF COMPACT AND COMMISSION

This compact shall take effect, and the commission may exercise its authorities pursuant to the compact and pursuant to the Columbia River Gorge National Scenic Area Act when it has been ratified by both states and upon the appointment of four initial members from each state. The date of this compact shall be the date of the establishment of the commission.

ARTICLE IV FUNDING

a. The States of Washington and Oregon hereby agree to provide by separate agreement or statute of each state for funding necessary to effectuate the commission, including the establishment of compensation or expenses of commission members from each state which shall be paid by the state of origin.

b. The commission shall submit to the Governor or designated officer or officers of each party state a budget of its estimated expenditures for such period as may be required by the laws of that jurisdiction for presentation to the legislature thereof.

c. Subject to appropriation by their respective legislatures, the commission shall be provided with such

funds by each of the party states as are necessary to provide the means of establishing and maintaining facilities, a staff of personnel, and such activities as may be necessary to fulfill the powers and duties imposed upon and entrusted to the commission.

d. The commission's proposed budget and expenditures shall be apportioned equally between the states.

e. The commission shall keep accurate accounts of all receipts and disbursements. The receipts and disbursements of the commission shall be subject to the audit and accounting procedures established under its bylaws. However, all receipts and disbursements of funds handled by the commission shall be audited yearly by the appropriate state auditing official and the report of the audit shall be included in and become a part of the annual report of the commission.

f. The accounts of the commission shall be open at any reasonable time for inspection by the public.

ARTICLE V
SEVERABILITY

If any provision of this compact, or its application to any person or circumstance, is held to be invalid, all other provisions of this compact, and the application of all of its provisions to all other persons and circumstances, shall remain valid, and to this end the provisions of this compact are severable.

[1987 c 499 § 1.]

APPENDIX D
SEC. 1216. INNOVATIVE SURFACE TRANSPORTATION FINANCING METHODS.
TEA-21 - TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY

(b) <<NOTE: 23 USC 129 note.>> Interstate System Reconstruction and Rehabilitation Pilot Program.--

(1) Establishment.--The Secretary shall establish and implement an Interstate System reconstruction and rehabilitation pilot program under which the Secretary, notwithstanding sections 129 and 301 of title 23, United States Code, may permit a State to collect tolls on a highway, bridge, or tunnel on the Interstate System for the purpose of reconstructing and rehabilitating Interstate highway corridors that could not otherwise be adequately maintained or functionally improved without the collection of tolls.

(2) Limitation on number of facilities.--The Secretary may permit the collection of tolls under this subsection on 3 facilities on the Interstate System. Each of such facilities shall be located in a different State.

(3) Eligibility.--To be eligible to participate in the pilot program, a State shall submit to the Secretary an application that contains, at a minimum, the following:

- (A) An identification of the facility on the Interstate System proposed to be a toll facility including the age, condition, and intensity of use of the facility.
- (B) In the case of a facility that affects a metropolitan area, an assurance that the metropolitan planning organization established under section 134 of title 23, United States Code, for the area has been consulted concerning the placement and amount of tolls on the facility.
- (C) An analysis demonstrating that the facility could not be maintained or improved to meet current or future needs from the State's apportionments and allocations made available by this Act (including amendments made by this Act) and from revenues for highways from any other source without toll revenues.
- (D) A facility management plan that includes--
 - (i) a plan for implementing the imposition of tolls on the facility;
 - (ii) a schedule and finance plan for the reconstruction or rehabilitation of the facility using toll revenues;
 - (iii) a description of the public transportation agency that will be responsible for implementation and administration of the pilot program;
 - (iv) a description of whether consideration will be given to privatizing the maintenance and operational aspects of the facility, while retaining legal and administrative control of the portion of the Interstate route; and
 - (v) such other information as the Secretary may require.

(4) Selection criteria.--The Secretary may approve the application of a State under paragraph (3) only if the Secretary determines that--

- (A) the State is unable to reconstruct or rehabilitate the proposed toll facility using existing apportionments;
- (B) the facility has a sufficient intensity of use, age, or condition to warrant the collection of tolls;
- (C) the State plan for implementing tolls on the facility takes into account the interests of local, regional, and interstate travelers;
- (D) the State plan for reconstruction or rehabilitation of the facility using toll revenues is reasonable; and

(E) the State has given preference to the use of a public toll agency with demonstrated capability to build, operate, and maintain a toll expressway system meeting criteria for the Interstate System.

(5) <<NOTE: Contracts.>> Limitations on use of revenues; audits.--Before the Secretary may permit a State to participate in the pilot program, the State must enter into an agreement with the Secretary that provides that--

(A) all toll revenues received from operation of the toll facility will be used only for--

(i) debt service;

(ii) reasonable return on investment of any private person financing the project; and

(iii) any costs necessary for the improvement of and the proper operation and maintenance of the toll facility, including reconstruction, resurfacing, restoration, and rehabilitation of the toll facility; and

(B) regular audits will be conducted to ensure compliance with subparagraph (A) and the results of such audits will be transmitted to the Secretary.

(6) Limitation on use of interstate maintenance funds.-- During the term of the pilot program, funds apportioned for Interstate maintenance under section 104(b)(4) of title 23, United States Code, may not be used on a facility for which tolls are being collected under the program.

(7) Program term.--The Secretary shall conduct the pilot program under this subsection for a term to be determined by the Secretary, but not less than 10 years.

(8) Interstate system defined.--In this subsection, the term "Interstate System" has the meaning such term has under section 101 of title 23, United States Code.

APPENDIX E EXAMPLE PROJECT GOVERNANCE STRUCTURES

The following are examples of the various governance structures including a toll road agency, transportation authority, private special purpose entity, and joint and separate management. Local government agencies have not been included on this list due the fact that the Columbia River Crossing involves the development of a bridge structure along an interstate facility, which may limit the use of this governance structure.

(A) Toll Road Authority: Delaware River Joint Toll Bridge Commission

Description. In 1934, Pennsylvania and New Jersey formed the Delaware River Joint Toll Bridge Commission (DRJTBC) as a joint commission of both states. The DRJTBC currently operates 20 bridges, including 7 tolled bridges and 13 toll supported bridges. The figure below shows a map of the DRJTBC’s tolled and non-tolled bridges.



Source: DRJTBC

Authority. The jurisdiction of the DRJTBC extends 139 miles from Bucks County Philadelphia line to the south, to the New York state border to the north. However, the Burlington-Bristol Bridge and the Dingmans’ Ferry Bridge, and the bridge linking the two state turnpikes are exempted from the DRJTBC’s control. The DRJTBC authority was expanded in 1984 when Pennsylvania and New Jersey agreed to add 13 non-tolled bridges under the control of the agency. The DRJTBC assumed full financial and maintenance responsibilities for these bridges. Prior to this amendment, the costs of

operating and maintaining the non-toll bridges were financed by appropriations and taxes. The DRJTBC has the following powers to:

- Enter into contracts;
- Acquire, own, use, lease, operate, and dispose of real property and interest in real property, and to make improvements thereon;
- Grant the use of, by franchise, lease, etc., and to make and collect charges for the use of any, property or facility owned or controlled by it;
- Borrow money upon its bonds or other obligations, other with or without security;
- Exercise the power of eminent domain;
- Determine the exact location, system, and character of, and all other matters in connection with all improvements or facilities that it be may be authorized to own, construct, establish, effectuate, maintain, operate or control;
- Manage, operate, and maintain those bridges within its jurisdiction;
- Acquire, construct, rehabilitate, improve, maintain, lease and operate port and terminal facilities. This include the authority to dredge ship channels, turning basins, and the filing and grading of land;
- Issue bonds or other obligations; and
- Petition any public service or public utilities commission, or any other federal, state, or local authority for the adoption and execution of any physical improvement, change in method, rate of transportation, system of handling freight, warehousing, docking, or transfer of freight which improves or facilitates the movement or handling of commerce within the district or improve the terminal or transportation facilities located within the district.

Governance. There are 10 commissioners who manage and oversee the DRJTBC with equal representation for both states. The five New Jersey commissioners are nominated by the Governor for a 3-year term and confirmed by the State Legislature. The Pennsylvania commissioners are appointed by the Governor and serve at his/her discretion. The commissioners meet monthly and serve without compensation.

Funding and Financing. The DRJTBC is a self-funded organization that receives no federal or state tax dollars. Funding for the operation, maintenance and upkeep of its bridges and other structures is solely derived from revenues collected at its toll bridges. The tolled bridges support the non-tolled bridges. The DRJTBC can set, collect and increase tolls on its facilities. Toll revenues can be used to: (1) pay the cost of maintaining, repairing, and operating facilities, including the administrative expenses of the Commission; and (2) pay the bonds or other obligations issued on account of these facilities; and (3) provide reserves to cover, over and above, maintenance, repair, and operations. Its bond covenants require that DRJTBC set and collect tolls so that net revenues in each fiscal year is equal to and not less than 130 percent of the principal and interest requirements for that year.

Additionally, DRJTBC has the authority to charge and collect fees, rentals, tolls, and other charges for the use of its port and terminal facilities, so as to provide funds at least sufficient, with other funds available, for such purpose. However, the DRJTBC does not have the legal authority to levy taxes or assessment for benefits.

For FY 2009, the DRJTBC generated approximately \$87 million in revenues and recorded net income of \$13 million. Almost all of its revenues were generated from the collection of tolls. Total debt outstanding was \$434 million in revenue bonds. Debt maturities range from 25 to 30 years.

Design and Construction. The DRJTBC can directly design and construct improvements to existing facilities or new facilities as well as enter into contracts with developers and consultants to undertake these activities.

Operations and Maintenance The DRJTBC can directly operate and maintain its facilities as well as enter into contracts with developers and consultants to undertake these activities. Additionally, the DRJTBC has entered into contract with state police agencies in both states to provide enforcement for the facilities under its jurisdiction.

(B) Toll Road Authority: Louisville and Southern Indiana Bridges Authority

Description. The proposed project would involve the development of two new bridges between the Louisville-Southern Indiana metro area over the Ohio River as well as reconstructing the Kennedy Interchange (a.k.a. Spaghetti Junction) where I-64, I-65 and I-71 merge near downtown Louisville.

Partnership. The Louisville and Southern Indiana Bridges Authority is primarily responsible for the development and financing of the Ohio River Bridges project. The Kentucky General Assembly authorized Kentucky's participation in 2009. Indiana's participation in the Authority was authorized through an Executive Order of the governor dated December 3, 2009.

Authority. The authority does not manage the day-to-day operations of the Ohio River Bridges Project, nor is it charged with defining the scope of the project. The primary role of the bi-state authority is to develop a financial plan for the Ohio River Bridges Project. Once the financial plan has been developed, it will be submitted to the Kentucky Public Transportation Infrastructure Authority for approval. After that approval is obtained, a development agreement may be entered into to establish the terms and conditions under which the project will be completed and to define the responsibilities for the project's construction and operation. At that point, the authority's role may change into that of the primary "developing authority" for the project. To date, the authority has developed the following strategic objectives for moving the project forward:

- Build the Bridges Authority into an effective, long-term project sponsor;
- Execute a financial plan that is fair, sound, and doable
- Manage risk to realize long-term project benefits; and
- Deliver on all expected project benefits.

Governance. The authority is governed by a 14-member board. The Indiana governor appointed seven; the Kentucky governor appointed three; and the city of Louisville mayor appointed four. The mayor's appointees must be residents of the city. Each member serves without compensation for a term of two, three or four years, depending on term limit established at the time of his or her appointment.

Funding and Financing. Funding for the project is currently being sought and a number of alternatives are under consideration. The authority is currently pursuing the following federal approvals and approaches with respect to tolling:

- Position the Downtown Bridges and the East End Bridges for Section 129 Toll Agreement eligibility;
- Submit an application to Interstate Reconstruction and Rehabilitation Pilot Program; and

- Initiate efforts to secure a Value Pricing Pilot slot.

(C) Transportation Authority: Delaware River and Bay Authority

Description. The Delaware River and Bay Authority currently owns and operates one toll bridge, and a number of ferries, airports, and other economic development facilities. These facilities include the Delaware Memorial Bridge, the Cape May-Lewes Ferry, and the Three Forts Ferry, five airports, a business center and a riverfront marketplace.

Partnership. The State of Delaware and the State of New Jersey to entered into a compact to establish the Delaware River and Bay Authority (DRBA) for the development of the area in both states bordering the Delaware River and Bay. The compact was signed on September 20, 1962 and the DRBA was created on February 6th, 1963. It has since been amended in 1990.

Authority. The DRBA's authority is limited to the planning, financing, development, purchase, lease construction, improvement operation, and maintenance of transportation, terminal and other facilities across the Delaware River or Bay. A "crossing" is defined as any structure or facility adapted for public use in crossing the Delaware River or Bay between the States, whether by bridge, tunnel, ferry or other device, and by any vehicle or means of transportation of persons or property. The DRBA has the following authority to:

- Enter into contracts and agreement with either State or with the United States, or with any public body, department, or other agency of either state or of the United States;
- Enter into contracts and agreements with any individual firm or corporation deemed necessary or advisable to exercise its purposes and powers;
- Accept grants, contributions of money, other property, loans, advance, guarantee or other forms of financial assistance from any government or governmental department, agency, or other public or private body;
- Acquire (by gift, purchase, or condemnation), own hire, lease, use, operate, and dispose of property;
- Borrow money and to evidence such loans by bonds, notes or other obligations, either secured or unsecured;
- Procure and keep in force adequate insurance or otherwise provide for the adequate protection of its property as well as to indemnify it or its officers, agents, or employees against loss or liability;
- Grant the use of by franchise, lease, or otherwise, and to make charge for the use of any crossing, facility, or other project or property owned or controlled by the Authority;
- Exercise the right of eminent domain to acquire any property or interest in property; and
- Exercise all other power not inconsistent with the Constitution of the two states or the United States, except the power to levy taxes or assessments.

The authority may not undertake any major project without approval by concurrent legislation of the two states. Public notices and hearings are also required. Additional powers may be granted to the Authority by legislation of either State without the concurrence of the other, but may be exercised within that State.

Governance. A 12-member board governs the DRBA with six members appointed by the State of Delaware and six members appointed by the State of New Jersey. The commissioners must be

residents and qualified to vote in their respective states. Not more than three of the commissioners of each state can be the same political party. The commissioner for each state is appointed in the manner fixed and determined by the law of the respective state. Any commissioner may be suspended or removed from office as provided by law of their respective state. No action of the commissioners is binding or effective unless taken at a meeting at which at least four commissioners from each State are present, and unless at four Commissioners from each State vote in favor of the action. Nonetheless, the vote of any one or more of the commissioners from each State is subject to cancellation by the Governor of such State at any time within 10 days after receipt at the Governor's office of a certified copy of the minutes of the meeting at which such vote was taken.

Funding and Financing. The DRBA has the authority to establish, levy, and collect tolls and other charges as it may deem necessary, proper, or desirable in connection with any crossing, transportation, or terminal facility, commerce facility or development or other project. Toll revenues and charges must be at least sufficient (1) to meet the combined expenses of operation, maintenance, and improvements; (2) to pay the cost of acquisition or construction, including the payment, amortization, and retirement of bonds or other securities or obligations assumed, issued, or incurred by the Authority; and (3) to provide reserves. DRBA is restricted from levying taxes or other assessments.

Additionally, the DRBA is authorized to pledge the tolls and other revenues as security. Bonds or other securities issued must be negotiable instruments. DRBA does not have the authority to pledge the credit or to create any debt or liability for the State of Delaware, of the State of New Jersey or of any political subdivision of these states.

For FY 2009, the DRBA generated \$106 million in operating revenues. Tolls collected on the Delaware Memorial Bridge alone generated \$77 million or approximately 73 percent of operating revenues. Ferry tolls provided an additional \$14 million in revenues. Food and novelty sales, airport lease, and other sources accounted for the remainder of operating revenues. The DRBA recorded an operating income of \$8 million. Total debt outstanding was \$292 million in revenue bonds. Debt maturities range from 13 to 30 years.

Design and Construction. The DRBA can directly design and construct improvements to existing facilities or new facilities as well as enter into contracts with developers and consultants to undertake these activities.

Operations and Maintenance. The DRBA can directly operate and maintain its facilities as well as enter into contracts with developers and consultants to undertake these activities.

(D) Private: Chicago Skyway and Indiana Toll Road

Description. The City of Chicago and the State of Indiana independently procured and entered into long-term leases for the Chicago Skyway and the Indiana Toll Road. The Chicago Skyway is located along I-90 and extends from the Dan Ryan Expressway to the Indiana Toll Road. The figure below provides a map of the Chicago Skyway and shows how the two facilities connect with each other.

The concession contract for the 7.8 mile Chicago Skyway was executed in 2005 between the City of Chicago and the Skyway Concession Company, a joint venture company between the Macquarie Infrastructure Group and Cintra Concesiones de Infraestructura de Transporte S.A. (Cintra). The concession contract has a 99-year term and the facility will be handed back to the City of Chicago at

the end of the contract. The 157-mile Indiana Toll Road (ITR) runs along I-90 and I-180, extending to the Ohio state line. The concession contract for the ITR between the Indiana Finance Authority and the Indiana Statewide Mobility Partners (SMP) was executed in 2006 and has a 75-year term. Macquarie Infrastructure Group and Cintra are the major equity participants in both joint ventures.



Source: Chicago Skyway

Partnership. Prior to the concession agreements, these facilities were independently operated. The Chicago Skyway was owned and operated by the City of Chicago Department of Streets and Sanitation. The Indiana Toll Road was operated by the Indiana Department of Transportation (INDOT) and operated by the Indiana Finance Authority.

Management. ITR Concession Company LLC (ITRCC) operates and manages the ITR during the 75-year lease term. SMP has a 10-member board of directors that oversees ITRCC and the operations of the Indiana Toll Road. There is limited information with respect to the management structure of the Chicago Skyway Concession Company.

Funding and Financing. For the Chicago Skyway, the Cintra-Macquarie consortium agreed to pay \$1.82 billion to the City of Chicago in exchange for the right to operate and receive toll revenues for 99 years. With respect to the ITR, the Cintra-Macquarie consortium agreed to pay \$3.85 billion to the Indiana Finance Authority for the right to operate and receive toll revenues for 75 years. The concessionaires were granted the right to raise toll rates on the existing facilities.

Design and Construction. On both projects, Cintra is responsible for design and construction related to any improvements undertaken the course of the concession contracts.

Operations and Maintenance. Although the facilities are managed by legally separate entities, Cintra effectively conducts operations and maintenance activities on both facilities. This arrangement allows for cost savings and synergies with regard to O&M activities, which improves the financial performance of both facilities.

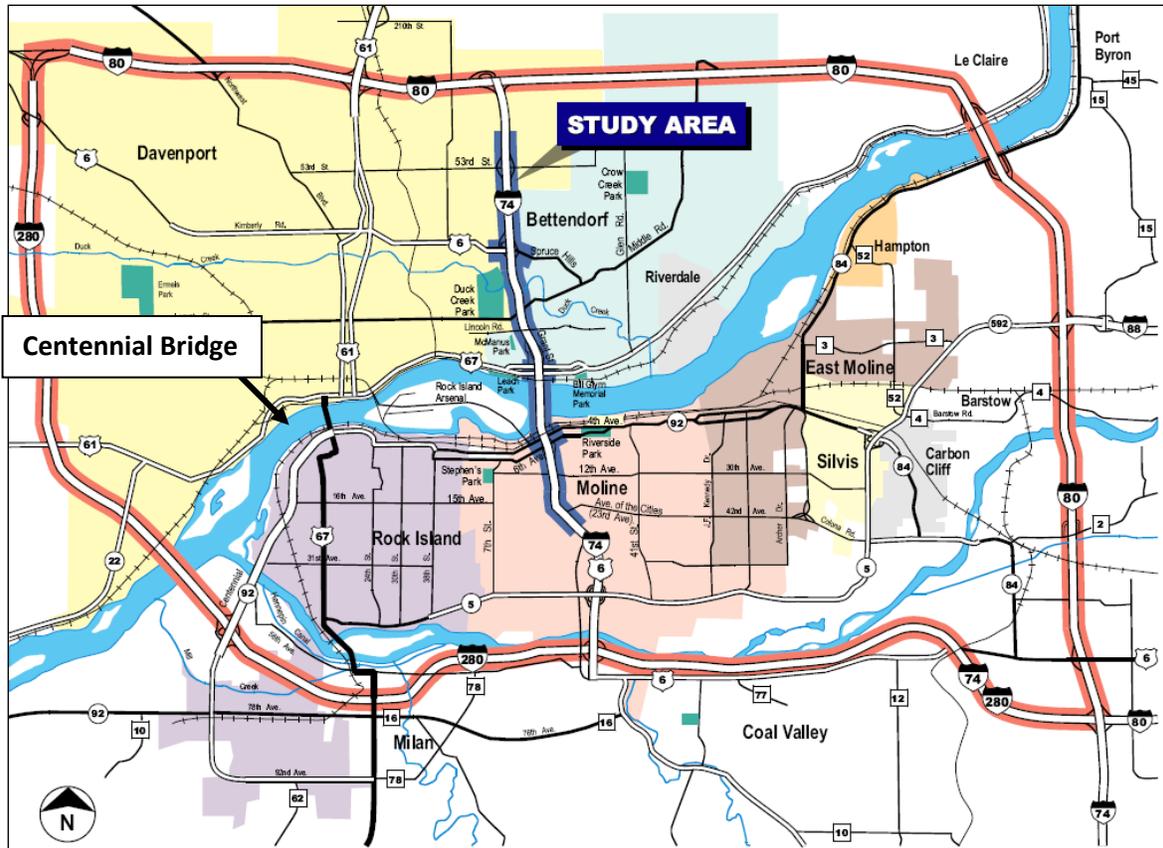
Interoperability. While the systems are interoperable technologically, they are not operationally meaning that the discounted rates for transponder users are not mutually extended. The Chicago Skyway uses the EZ-Pass for electronic toll collection, which is used on many toll roads, bridges, and tunnels in 14 states from Virginia, New York, and Illinois. I-zoom is the electronic toll collection system for the ITR. To avoid paying an interoperability transaction fee, Chicago Skyway users must sign up for an I-zoom account.

(E) Joint & Separate Management (Toll): The Centennial Bridge and I-74 Bridge Iowa and Illinois

Description. To address safety and congestion issues, the state of Iowa and Illinois initiated the I-74 project following a broader regional study of Mississippi River crossing needs in the region. The region consists of the Rock Island Centennial Bridge which crosses the Mississippi River and is located in the Quad City area between Rock Island, Illinois and Davenport, Iowa. The first span of the Centennial Bridge opened in 1935 as a toll bridge. In 1959, an identical twin span was added to satisfy increased traffic. In the mid-1970s, the twin spans were upgraded to carry interstate traffic. These facilities carried approximately 16,000 vehicles per day. It is estimated that the Centennial Bridge, which is the only toll bridge in the Quad City area, could accommodate up to 35,000 vehicles per day. By contrast in 2002, the I-74 bridge carried an average of 78,000 vehicles per day and traffic is forecasted to increase to 100,000 vehicles per day by 2035. Traffic flow on the I-74 bridge is restricted due to design issues, including short acceleration and deceleration distances, roadway curves, limited sight distance, closely spaced ramps, and the absence of shoulders on the narrow Mississippi River bridges. These conditions result in crash rates in parts of the corridor that are almost three times the national average.

The study recommended the following strategy for improving access across the Mississippi River: (1) removal of tolls from the Centennial Bridge; (2) widening the I-74 crossing; and (3) construction of a new bridge connecting Bettendorf and East Moline. The removal of tolls would allow vehicles to shift from the heavily traveled I-74 bridge to the lesser used facilities, such as the Centennial Bridge.

Partnership. The I-74 bridge project was completed by the Iowa DOT and the Illinois DOT In December of 2001, the Illinois DOT, the Iowa DOT, the City of Rock Island, and the City of Davenport entered an agreement to remove the tolls and transfer the facility to the Illinois DOT and the Iowa DOT. Tolls were removed in 2003. The DOTs continue to work on toward the development of the I-74 bridge.



Source: I-74 FEIS, I- 74 Quad Cities Corridor Study

Authority. Permission to build the Centennial Bridge was originally granted by the U.S. House of Representatives and Senate, and signed by President Franklin Delano Roosevelt. The current facility is operated and maintained jointly by the Iowa DOT and the Illinois DOT.

Management. Prior to the transfer of the facility, the Rock Island Centennial Bridge was owned by the City of Rock Island and operated as an enterprise fund. The Rock Island Centennial Bridge Commission, which was comprised of five commissioners, was dissolved once the transfer was concluded.

Funding and Financing. No government funds were used to develop the Centennial Bridge; it was financed totally with toll revenue bonds. Funding arrangements for the I-74 facility are still being determined.

Design and Construction. The Final Environmental Impact State (FEIS) for the I-74 facility was completed in January 2009. Final design is expected to take up to three years. Once funding is secured and final design and right-of-way acquisition is complete, construction can begin on the proposed facility. Cost sharing and construction responsibilities for the new facility have yet to be determined.

Operations and Maintenance. Iowa DOT and the Illinois DOT currently operate and maintain the Centennial Bridge. Operations and maintenance responsibilities as well as cost sharing have yet to be determined for the new facility.

APPENDIX E - TABLE 1

CROSS-JURISDICTIONAL BRIDGE PROJECTS

	Toll Road Authority (toll roads only)	Transportation Authority	Private Special Purpose Entity	Joint & Separate Management (toll)	Joint & Separate Management (non-toll)
Description	<ul style="list-style-type: none"> Establishment of an independent authority 	<ul style="list-style-type: none"> Establishment of an independent, multi-modal authority 	<ul style="list-style-type: none"> For profit or non-profit company established as a result of a public-private partnership 	<ul style="list-style-type: none"> Project-specific arrangement between public agencies for a single facility 	<ul style="list-style-type: none"> Project-specific arrangement between public agencies for a single facility
Purpose & Authority	<ul style="list-style-type: none"> Construct, finance, operate & maintain one or more facilities, including bridges, turnpikes and/or tunnels 	<ul style="list-style-type: none"> Construct, finance, operate & maintain one or more transportation facilities, including roads, ferries, ports and airports. 	<ul style="list-style-type: none"> Construct, finance, operate & maintain a single bridge facility 	<ul style="list-style-type: none"> Construct, finance, operate & maintain a single project 	<ul style="list-style-type: none"> Construct, finance, operate & maintain a single project
Asset Ownership	<ul style="list-style-type: none"> Toll road authority 	<ul style="list-style-type: none"> Transportation authority 	<ul style="list-style-type: none"> Public entity retains ownership during lease period, only. Private entity retains ownership in perpetuity 	<ul style="list-style-type: none"> Defined in agreement. Typically, each participating agency owns the asset located within its jurisdiction. 	<ul style="list-style-type: none"> Defined in agreement.
Financing	<ul style="list-style-type: none"> Toll revenue bonds can be issued through single financing Depending on bond covenants, network financing is possible, especially, once the network matures 	<ul style="list-style-type: none"> Toll revenue bonds can be issued through single financing Depending on bond covenants, cross-subsidization among facilities is possible. 	<ul style="list-style-type: none"> Depends on financial performance of a single facility May desire to limit development of competing facilities Private Activity Bonds Taxable bonds 	<ul style="list-style-type: none"> Depends on financial performance of a single facility Toll revenue bonds issued under separate financings 	<ul style="list-style-type: none"> Toll-backed revenue bonds unavailable requiring other sources of funds
Design and Construction	<ul style="list-style-type: none"> Option #1: Assumes design and construction risks; or Option #2: Contract outs design and construction risk through a design-build contract. 	<ul style="list-style-type: none"> Option #1: Assumes design and construction risks; or Option #2: Contract outs design and construction risk through a design-build contract. 	<ul style="list-style-type: none"> Private sector provides financing for capital costs Private sector assume design and construction risks 	<ul style="list-style-type: none"> Option #1: Capital costs shared equally Option #2: Agencies are responsible for respective its portion Option #3: Contracts out through a design-build contract 	<ul style="list-style-type: none"> Option #1: Capital costs shared equally Option #2 Agencies are responsible for respective its portion Option #3: Contracts out through a design-build contract

	Toll Road Authority (toll roads only)	Transportation Authority	Private Special Purpose Entity	Joint & Separate Management (toll)	Joint & Separate Management (non-toll)
Toll Setting	<ul style="list-style-type: none"> Autonomous toll setting authority 	<ul style="list-style-type: none"> Autonomous toll setting authority 	<ul style="list-style-type: none"> Autonomous toll setting authority within established guidelines 	<ul style="list-style-type: none"> Various approaches to toll setting authority Approvals required of all the participants 	<ul style="list-style-type: none"> N/A
Use of Toll Revenues	<ul style="list-style-type: none"> Revenues reinvested in to the system, including debt service and O&M 	<ul style="list-style-type: none"> Revenues reinvested in to the system, including debt service and O&M Bond covenants and/or Federal/state regulation may limit or restrict the use of revenues across modes. 	<ul style="list-style-type: none"> “Excess” revenues after O&M, debt service, reserve funds can be retained by the private sector Contracts may provide for revenue sharing with public sector 	<ul style="list-style-type: none"> Used to repay bonds Tolls sometimes removed after bonds have been repaid 	<ul style="list-style-type: none"> N/A
Operations & Maintenance	<ul style="list-style-type: none"> Solely responsible for all O&M costs 	<ul style="list-style-type: none"> Solely responsible for all O&M costs 	<ul style="list-style-type: none"> Private sector assume design and construction risks 	<ul style="list-style-type: none"> O&M activities and costs are assumed for the portion of the bridge located in the agencies’ respective jurisdictions Risk of O&M activities not coordinated (e.g. Blue Water Bridge) 	<ul style="list-style-type: none"> Shared costs for asset controlled by each party within the agreement
Reserve Funds	<ul style="list-style-type: none"> Toll road authority manages and maintains reserve funds 	<ul style="list-style-type: none"> Toll road authority manages and maintains reserve funds 	<ul style="list-style-type: none"> Private sector owner or concessionaire is responsible for managing and maintaining reserve funds 	<ul style="list-style-type: none"> Reserves managed and managed by each party 	<ul style="list-style-type: none"> Reserves managed and managed by each party
Contingen t Liabilities	<ul style="list-style-type: none"> Liabilities to debt service may vary depending on agency charter, state laws, etc. 	<ul style="list-style-type: none"> Liabilities to debt service may vary depending on agency charter, state laws, etc. 	<ul style="list-style-type: none"> Financing risks assumed by SPV and/or the SPV’s equity participants Credit guarantees may be provided 	<ul style="list-style-type: none"> Directly responsible for debt issued for facility development 	<ul style="list-style-type: none"> Directly responsible for debt issued for facility development

	Toll Road Authority (toll roads only)	Transportation Authority	Private Special Purpose Entity	Joint & Separate Management (toll)	Joint & Separate Management (non-toll)
Examples	<ul style="list-style-type: none"> • Delaware River Joint Toll Bridge Commission (DRJTBC) • Ohio River (Indiana and Kentucky) <i>(Pending)</i> 	<ul style="list-style-type: none"> • Port Authority of New York and New Jersey (PANYNJ) • Delaware River and Bay Authority (DRBA) • Delaware River Port Authority (DRPA) 	<ul style="list-style-type: none"> • Fort Madison Toll Bridge (Iowa/Illinois) which is owned by BNSF • Brownsville & Matamoros Int'l Bridge which is jointly owned by the Government of Mexico and the Union Pacific Railroad Texas/Mexico) • Ambassador Bridge (Michigan-Canada) 	<ul style="list-style-type: none"> • Blue River Bridge (Michigan-Canada) • I-74 (Iowa/Illinois) <i>(Pending)</i> • Illiana Expressway (Indiana and Ohio) <i>(Pending)</i> 	<ul style="list-style-type: none"> • Woodrow Wilson Bridge (Washington, D.C., Virginia and Maryland)

**APPENDIX F –
JOINT & SEPARATE MANAGEMENT
PROJECT CASE STUDIES**

Case Study: Blue Water Bridge – Ontario Canada & Port Huron, Michigan

Project Description

- The Blue Water Bridge crossing is a large complex consisting of two unique spans and toll and inspection plazas on each side of the border. The original Blue Water Bridge, which opened in 1938, is a three-lane westbound bridge. The second Blue Water Bridge, which opened in 1997, carries three lanes of eastbound traffic.
- The bridges are located between Port Huron, Michigan and Sarnia, Ontario connecting both Interstate 94 and Interstate 69 with Highway 402.
- The original bridge was designed by an American firm with American and Canadian construction associates. The American Bridge Company fabricated and erected the main span, while the Wisconsin Bridge and Iron Company erected the American approaches. The superstructure for the Canadian approach span was built by the Sarnia Bridge Company.
- This steel cantilever bridge has a main span of 871 feet, anchor arms 326 feet long, and approaches consisting of deck girder spans and two deck truss spans adjoining the anchor arms on both the American and Canadian sides. The American approach spans are 2,283 feet in length, while the Canadian approach is 2,657 feet long, giving the bridge an overall length of 6,463 feet. It is 38 feet wide, providing a roadway of 32 feet and two sidewalks.

Governance

- In 1935, the Michigan Legislature passed created a State Bridge Commission to finance the design and construction of the main bridge structure of the Blue Water Bridge. The commission was approved by the United States Congress in August of 1935. This legislation assumed that Michigan and Ontario would each build their own approaches to the bridge, along with the customs, immigration and toll facilities.
- Today, the Michigan DOT (MDOT) owns, operates and maintains the U.S. portion of the bridge and Blue Water Bridge Canada owns, operates and maintains the Canadian portions of the bridges, approaches and structures.
- Policy, funding, operations and maintenance decisions are made independently of each other.
- In 1964, the Canadian Parliament passed the Blue Water Bridge Authority Act, creating a federal authority operated by a Board of Directors, which was appointed by the Governor. The Act envisioned the establishment of a joint international authority with equal numbers of Canadian and American members to oversee the operations of both portions of the bridge. However, the United States did not give its consent to the joint operation of the bridge. The Authority cannot exercise any powers on portions of the bridge situated in the United States.

Financial

- The original Blue Water Bridge was completed at a cost of \$4 million, financed jointly by the State of Michigan and the Province of Ontario. The enacting legislation permitted the sale of bonds that would be repaid by the revenue from the tolls collected within 30 years.
- Both the United States and Canadian governments agreed to operate the bridge toll-free once bonds were repaid. The U.S. side of the bridge became toll-free in February 1962. Tolls were reinstated in 1971. In order to re-assess tolls, MDOT had to repay the federal government \$348,000.00 for the grant it received in 1938, which funded the approach road
- A separate enterprise fund, the Blue Water Bridge Fund, was created within the DOT. The fund

was being used to account for the receipt of \$45 million in federal funds in 1998 and the subsequent repayment of this loan. This loan was fully repaid during FY07.

- For the Canadian portion, the Blue Water Bridge Canada issued bonds in 2002 which raised funds to pay for the following: (1) completion of the 2nd bridge span; (2) rehabilitation of the original span; (3) deposits to the debt service reserve fund and operating and maintenance reserve fund; and (4) provided additional funds for implementing capital projects identified in the master plan.
- Blue Water Bridge Canada is limited to charging tolls to provide revenues sufficient to pay current costs, to establish reserve funds, to provide/replenish sinking funds for its outstanding bonds, and to pay other expenses incurred by entity in its performance of its duties.
- About 75 percent of toll revenues come from trucks and 25 percent from passenger vehicles.
- MDOT has embarked on a \$586 million project that will rebuild the toll plaza and 2½ miles of the Interstate 69/94 expressway.
- The Michigan portion generated \$15 million in toll revenues in 2008. Excess funds for the Blue Water Bridge are deposited into the state transportation fund. MDOT incurred no over-expenditures in FY09 and FY08 related to the bridge.

Capital Projects

- MDOT has embarked on a plaza project which consists of :
 - Modernizing two miles of I-94/I-69 corridor leading up to the plaza;
 - Replacing and expanding the Black River Bridge, which is on the approaches to the BWB
 - Relocating Pine Grove Avenue from its current alignment running under the plaza;
 - Expanding the plaza to 56 acres while lowering the current elevated plaza to grade; and
 - Improvements to border security, vehicle inspection, and toll collection.
- The \$583 million that is needed to complete the project will be financed with a combination of available federal earmarks from SAFETEA-LU and the sale of bonds backed by toll revenue from the Blue Water Bridge and U.S. General Services Administration (GSA) lease revenue.
- Construction on the plaza expansion is scheduled to begin in 2014 and be completed by 2017.

Operations

- The Blue Water Bridge is tolled in both directions. The Canadian entity collects tolls from vehicles going to the United States (westbound). MDOT collects toll from vehicles going to Canada (eastbound).
- Operations and maintenance are undertaken separately by the Michigan DOT and the Blue Water Bridge Canada.
- The entities do not coordinate their maintenance activities.
- In an evaluation of the Canadian portions of the Bridge in 2007, it was found that these structures were in good to very good condition. However, Canada had not obtained the recent engineering inspection reports about the condition of the American portions of the bridge. Because of a breach in communication in recent years, both authorities had stopped sharing their engineering inspection reports.
- Recently, the entities have initiated discussions to develop a mechanism to share operational and maintenance information and to coordinate work efforts.

Case Study: President George Bush Turnpike (PGBT) - Dallas, Collin and Denton Counties, Texas

Project Description

- In 1995, the Texas Department of Transportation transferred to the Texas Turnpike Authority the ownership of SH 190, SH 78 and portions of SH 161 which would comprise the beginning of an outer loop around the Dallas metroplex.
- The turnpike authority was later dissolved and its successor, the North Texas Tollway Authority (NTTA), assumed ownership of the roadway to develop it as a toll facility.
- The toll facility became the President George Bush Turnpike and is a 30.5-mile, six-lane east to west limited access expressway passing through or along the seven cities. It offers an alternative route to the Dallas-Fort Worth International Airport from the northern and eastern cities along the corridor.

Governance

- The Authority has a board of directors which sets the toll rates and makes policy, operations and maintenance and procurement decisions regarding the PGBT.
- The DOT has no authority to make any decisions regarding the facility.

Operations

- As the sole owner, the Authority received the exclusive right to design, construct, operate, and maintain the facility as a toll road in accordance with its board policies.
- The DOT did retain ownership of three interchanges which intersect with the PGBT; however, the Authority is responsible for day-to-day operations and maintenance of the interchanges.
- The DOT is responsible for maintaining the parallel service roads that were constructed initially under the assumption that the road would not be tolled.
- The Authority is responsible for toll collection and toll enforcement activities.

Financial

- While the PGBT was transferred to the Authority to accelerate its development through the use of revenue bond financing, the project was developed with a combination of toll revenue bonds and a Section 129 loan that the DOT received from FHWA on behalf of the Authority.
- The DOT made a \$115 million loan to the Authority for the project's construction.
- The transfer of ownership was made without cost to, or reimbursement by the Authority based on the finding by the Texas Transportation Commission that the transfer yielded net benefits which exceeded the cost of the transfer to the Authority.
- The Authority issued revenue bonds to finance the design, construction and right-of-way acquisition.
- The DOT had no rights or obligations with regard to the bond financing for the project except that it agreed to cooperate with the Authority and provide assurances or other information necessary for obtaining bond financing.
- Both shared in the costs to construct the interchanges.

Case Study: Sam Rayburn Tollway (SH 121) - Collin and Denton Counties, Texas

Project Description

- The Sam Rayburn Tollway (aka SH 121) is a 26-mile east-west toll road in north Texas. While it is owned by the DOT, it is located within the North Texas Tollway Authority's jurisdiction.
- The first segment of the facility was designed, constructed, operated and maintained by the DOT as an all-electronic toll facility.
- In 2006, the DOT solicited and received proposals from the private sector to lease the tollway, and complete and finance the construction of the toll road along with operating and maintaining it for 50 years.
- After much political controversy, the Authority ultimately gained the rights to develop, finance, construct, operate and maintain SH 121 as a toll road.

Governance

- The DOT transferred the rights to construct and operate SH 121 from the state highway system and related right-of-way to the tollway authority for 50 years from the commencement of service on the first completed segment.
- The Authority has a board of directors consisting of representatives of five counties within its jurisdiction. Its governance of the tollway is subject to its agreement with TxDOT. Nonetheless, it generally maintains exclusive control over day-to-day operations and policy decisions.
- The agreement established parameters for the assessment of tolls and the toll rate schedule.

Operations

- Frontage roads and several connecting structures remained part of the state highway system.
- The DOT and the Authority entered into an agreement whereby the Authority would design, construct, operate and maintain a 26-mile toll road. The Authority is also responsible for toll collection.
- The DOT was responsible for obtaining the necessary environmental clearances, including the environmental re-evaluation of tolling for the portion of the project in Collin County.
- The DOT and the tollway authority must jointly consult and approve the design of suitable signage and other structures which are necessary or desirable for the proper operation of the SH 121. However, the costs of installing and maintaining the signage are borne solely by the Authority.
- Oversight of design and construction is based on a joint and concurrent review in lieu of an independent and serial review that has typically been used on other projects developed in partnership between the entities.
- At the end of the lease term, the Authority must "handback" the facility to the DOT at the minimum conditions set forth in the agreement.

Financial

- The tollway authority agreed to finance the toll road which included the acquisition, design and construction of the project. It used the forecasted revenues from the SH 121 project and from its entire system of toll facilities to secure bond financing.
- The Authority paid a \$3.3 billion upfront to the DOT in lieu of annual revenue sharing, but must share with the DOT any "excess revenues", based on a formula delineated in the agreement.
- The Authority assumed all design and construction risks and traffic and revenue risks.
- The DOT agreed to purchase right-of-way for one of the projects segments as well as assume the cost to construct and maintain connecting structures e.g. bridges, frontage lanes, etc.
- The Authority is responsible for capacity improvements, which are triggered in accordance to level of service criteria, set forth in the agreement.

- The Authority must establish and make deposits to the Handback Requirements Reserve Fund.
- Toll increases based on 2-year changes in the Consumer Price Index (CPI).

Other

- The negotiations were extremely politicized and contentious. The development of SH 121 was originally procured under a competitive process to select a long-term concession partner. The original role for the Authority was to provide back-office operations. After the contract was awarded but prior to execution, the DOT allowed the tollway authority to submit an alternative proposal which was ultimately determined to have the highest value for the DOT and region. As a result, the project was subsequently awarded to the Authority.
- Politically, the end result of this process was the enactment of a toll-concession moratorium law, which included provisions for handling similar situations. If either TxDOT or a local toll agency is interested in developing a new toll project, the local toll agency may assert “primacy”.
- The project was awarded to the Authority in June 2007. The Authority had four revenue generating projects in operations and was developing five other new or extension projects (two of which had lackluster revenue projections). In order to finance the project, the Authority leveraged the revenues of its entire system. Industry rating agencies were concerned that the magnitude of borrowing would significantly alter the Authority’s debt profile and the Authority’s bond rating was downgraded in 2008.
- In 2009, gas prices begin to rise significantly, the economy begin to decline and traffic levels dropped resulting in 10.9 decrease in projected revenues. The Authority was forced to make an unscheduled rate increase from 11 cents/mile to 14.5 cents/mile Today toll rates are 15.3 cents/mile.

Case Study: Sault Ste. Marie International Bridge - Sault Ste. Marie, Michigan and Sault Ste. Marie, Ontario

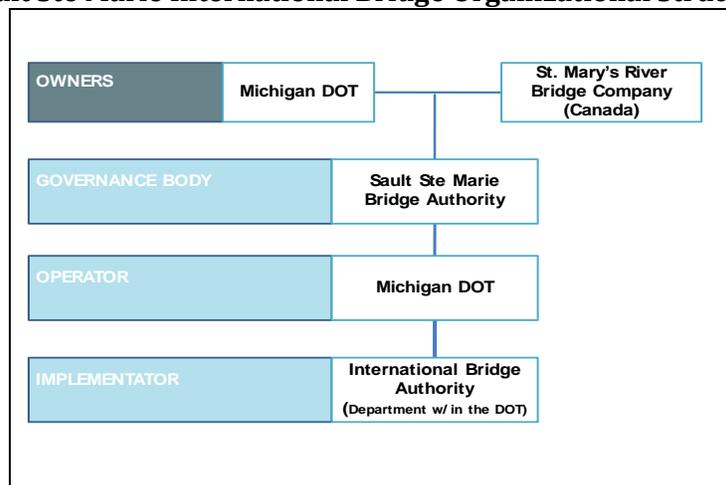
Project Description

- The Sault Ste. Marie International Bridge crosses two navigation canals and the St. Mary's River and is located between Sault Ste. Marie, Michigan and Sault Ste. Marie, Ontario.
- In order to construct the bridge in 1935, the State Of Michigan created the International Bridge Authority (the Bridge Authority), which gained federal Congressional approval in 1940 to develop an international crossing.
- In 1955, the Canadian Parliament created the St Mary's Rivers Bridge Company (the Bridge Company), giving it rights to construct an international crossing. In 1960, the Bridge Company assigned its rights to the Bridge Authority.
- The bridge was designed by one firm and cost \$16 million to construct. The bridge is a two lane roadway 28 feet wide and 2.76-miles long, including approaches.

Governance

- The Sault Ste Marie International Bridge is owned by the State of Michigan and St. Mary's River Bridge Company. However, it has been governed by a separate entity created by the owners.
- From service opening in 1962 to 2000, the Bridge Authority was managed and operated by the St. Mary's River Bridge. During this period, the Bridge Authority had three members from Michigan and two representatives from the Bridge Company. The Authority was dissolved in 2000 when all the outstanding bonds were paid off in its entirety.
- The Michigan DOT and the Bridge Company entered into a new 40-year agreement that formed the Joint International Bridge Authority and the International Bridge Administration to govern and manage bridge operations. In 2009, the intergovernmental agreement was revised.
- Effective September 1, 2009, the Sault Ste Marie Bridge Authority (SSMBA) was created to manage and operate the bridge and replace the Joint International Bridge Authority.
- The new Authority consists of four members appointed by the Governor of Michigan and four appointed by the Bridge Company. The Authority is responsible for the following:
 - Approving bridge tolls, operating budgets and business plans;
 - Making rules for the use of the bridge and related properties;
 - Approving property purchases and capital investments; and
 - Overseeing the investment of the bridge reserve fund.

Sault Ste Marie International Bridge Organizational Structure



Financial

- The bridge was financed by two series of bonds: Series A bonds totaling US \$8.4 million were sold to private investors and paid off in 1983. Series B bonds totaling US \$7.85 million were issued by the Province of Ontario and were retired on September 1, 2000 from bridge revenues.
- The Michigan DOT agreed to construct and finance the Michigan approach to the bridge.
- Once all the bonds were repaid, the Bridge Authority was dissolved in 2000.
- Bridge revenues are shared equally by the owners. Based on the most recent data available, the bridge generated \$5.1 million in 2003.
- Potential surpluses are used to fund capital projects.
- Revenues from bridge tolls cover the expenses related to bridge operations.
- Neither owner is required to provide financial support for the bridge.

Capital Projects

- SSMBA's most recent five-year business plan proposes an estimated \$10.5 million, multi-year capital plan for toll plaza facility improvements.

Operations

- In accordance with its intergovernmental agreement, the SSMBA Authority assigned the day-to-day responsibility for operating the bridge to the DOT.
- Within the DOT, a division called the International Bridge Administration carries out the business plan and budgets approved by the SSMBA.
- The Bridge Administration performs the day-to-day operations needed to keep the bridge open to traffic, including administration, operations, maintenance, repairs, toll collection, and capital improvements.
- Its staff consists of DOT employees and an equal number of Canadian and American residents.

Case Study: Thousand Islands International Bridge – Alexandria Bay, New York to Ivy Lea near Gananoque, Ontario

Project Description

- The Thousand Islands Bridge System extends 8.5 miles from Collins Landing in New York to Ivy Lea near Gananoque, Ontario and provides direct connection between US Interstate Rt. 81 and Canada Highway 401. The crossing over the American channel of the St. Lawrence River spans 4500 ft from abutment to abutment including an 800-ft suspension bridge. The Canadian crossing spans 3,330 ft from abutment to abutment and includes a suspension 750 ft bridge.
- The Thousand Island Bridge Authority was originally established through an international agreement executed in 1976 and was created to fund, operate and maintain the toll bridge.
- Once the revenue bonds were repaid, the Authority was allowed to continue and assume operations of both sides of the bridge. Toll plazas are located on both sides of the bridge.

Governance

- The bridge is owned by the Federal Bridge Corporation Ltd. of Canada and the Thousand Islands Bridge Authority (the Authority) who executed an agreement that authorizes the U.S. Authority to make most toll policy and operational decisions through its board of directors.
- The U.S. Authority's is led by a board consisting of a U.S. chair and six board members (three U.S. and three Canadian). The U.S. members are appointed by the Jefferson County Board of Legislators and the Canadian members are appointed by the Canadian entity.
- The Federal Bridge Corporation Ltd. of Canada is responsible for oversight for the Canadian portion of the bridge.

Financial

- The bridge is self-supported by toll revenues;
- Depending on the project, capital improvements can be financed equally or separately.
- The facility is gated and has a single toll schedule that is exchange rate adjusted to the extent possible.
- Toll revenues are shared equally between the entities. Excess revenues are distributed semiannually. Interest and investment income from bridge operations is considered to be operating revenue and is also shared.
- Insurance policies are separate, but insurance premiums constitute a shared expense.

Operations

- The U.S. Authority manages, operates, and maintains the bridge as a single venture with complete rights of access to Canadian portion of the bridge.
- In 2010, a new 10-year joint operating agreement was negotiated. This agreement addressed bridge operations, management, applied standards, toll rates, capital improvements, safety, security, regional promotion as well as many others.
- The U.S. Authority is responsible for "normal maintenance" activities, including regular upkeep, painting, preventative maintenance, landscaping, snow removal, and minor replacement. Normal maintenance activities is considered to be less than \$15,000 or less than \$5,000 if the expense is related to buildings, property, or equipment.
- The U.S. Authority must prepare and provide to the Canadian a 10-year capital plan for the management, operation, and maintenance of the bridge as well as annual updates of the plan.
- FBCL is responsible for the oversight of capital projects on the Canadian side.

Case Study: Woodrow Wilson Bridge, Maryland and Virginia

Project Description

- This project involved the development of a new bridge facility to replace the Woodrow Wilson Bridge across the Potomac River between Maryland and Virginia. The project also included improvements to the interchanges and connecting facilities to the new bridge.
- Prior to the bridge replacement project, the federal government was the owner of the bridge, and the Federal Highway Administration (FHWA) petitioned Congress for funds to replace it, with both Maryland and Virginia being major players in this effort as well. FHWA led the planning for the bridge replacement, starting in 1989, and completed a final environmental impact statement in 1997.

Governance

- FHWA had to address difficult interagency and community coordination issues given the bridge's location within two states and near the District of Columbia. To address these issues, FHWA assembled an experienced team of managers and consultants to address complex environmental impact questions, reopened direct and effective communications with numerous federal and state resource agencies, and established collaborative decision-making teams that included local communities and citizens.
- FHWA led the preparation of the NEPA supplemental document because it owned the old bridge. Other federal agencies with major decision-making roles included the U.S. Fish and Wildlife Service (FWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service, the National Park Service, the U.S. Coast Guard, the U.S. Environmental Protection Agency (EPA), and the Advisory Council on Historic Preservation.
- In the mid-1990s, the Woodrow Wilson Memorial Bridge Authority Act of 1995 granted consent to Virginia, Maryland, and the District of Columbia to establish, by interstate agreement, the Woodrow Wilson Memorial Bridge Authority, and authorized the transfer of ownership from the federal government to the proposed authority. However, the Authority was never created.
- The overall project was developed through a partnership between the Virginia Department of Transportation, the Maryland Department of Transportation, the U.S. Department of Transportation and the District of Columbia Department of Transportation, and the U.S. Department of Transportation.
- Federal and state agencies cited above made up a 29-member Interagency Coordination Group. The local members included the City of Alexandria and Fairfax County, Virginia and Prince George's County, Maryland. State-level members included the Virginia Department of Environmental Quality, the Virginia Institute of Marine Science, and the Maryland Department of the Environment, the Maryland Department of Natural Resources, and the District of Columbia Health Department.
- After the completion of the project, the District of Columbia relinquished its ownership rights and responsibility for the new bridge and granted a permanent easement to the states for the portion of the bridge located within its boundaries. Maryland and Virginia became the joint owners of the bridge, and both states exercise joint responsibility and oversight of bridge activities, maintenance, and operations..

Construction

- Maryland undertook the majority of the construction. The states executed cost reimbursement agreements to reimburse the state which performed work on behalf of the other.
 - Maryland has undertaken \$73.2 million of construction works for Virginia
 - Virginia has carried out approximately \$8.0 of construction works for Maryland.
- Virginia, Maryland, District of Columbia, and GEC worked together to ensure that the interests

of the project and sponsoring agencies were maintained at all times. A few of the tools that assisted management throughout the construction phase included quarterly financial reports, monthly project schedule updates, operation plans with regard to GEC program, right of way, and construction management, and weekly project management conference calls.

Operations

- Each of the main project elements is managed separately by the transportation agency in the state in which the project is located. The managing agency for each of the project elements is summarized in the table below.

Managing Agency	Project Elements
Virginia DOT	<ul style="list-style-type: none"> • U.S. Route 1 Interchange • Telegraph Road Interchange
Maryland State Highway Administration	<ul style="list-style-type: none"> • Potomac River Crossing. • I-295 Interchange • Maryland 210 Interchange
DC	<ul style="list-style-type: none"> • D.C. Interstate 295 Project

Financial

- The Federal government provided approximately \$1.5 million (60 percent) of the funding for the \$2.5 billion project. Most of the federal funding was appropriated under TEA-21. Project funding arrangements are summarized in the table below.

Source	Amount (\$M)	Notes
Federal	1,544	<ul style="list-style-type: none"> • Bridge elements are considered eligible for 100% federal funding • Non-Bridge are eligible in accordance with federal funding participation ratios
Virginia	632	<ul style="list-style-type: none"> • Virginia received \$558 million from the USDOT to develop its project components. • Virginia is providing its contribution from state resources.
Maryland	330	<ul style="list-style-type: none"> • Maryland received \$985 million from the USDOT to develop its project components. • Maryland is providing its contribution from state resources.
DC	16	<ul style="list-style-type: none"> • The District of Columbia funded the I-295 project with Interstate Maintenance funds that are 90% federally reimbursable. • The 10% city match came from the District of Columbia Highway Trust Fund.
Total	2,522	

Other

- Although a compact between Maryland, Virginia, and the District of Columbia was drafted to create an independent authority, it was not enacted. The proposed authority would have been granted ownership over the bridge and functioned as a common agency to the governments. Had it been adopted, the bridge authority would have financed, constructed, operated and maintained the bridge, been managed by an 11-member board, had the power to issue debt, and empowered to set and raise tolls.

Maine and New Hampshire Bridges

Description

- The governors of Maine and New Hampshire created a Bi-State Bridge Funding Task Force to recommend a 30-year funding strategy for the rehabilitation and management of three cross-jurisdictional bridges.
- The six-member task force (three from each state) also identified potential partners, legislation required and joint operations.
- At least one bridge had been funded and tolled under the direction of the Interstate Bridge Authority which was dissolved in 2008 as it had no operational funds to maintain the bridge once the tolls were removed. The bridge was then turned over to the Maine and New Hampshire DOTs to provide maintenance.

Governance

- The Task Force recommended that the states reinstitute the Interstate Bridge Authority to oversee all three bridges and to serve as the administrator of the proposed sinking fund.

Financial

- The Task Force identified several possible funding sources including the creation of a sinking fund to be used for capital repair and rehabilitation of two of the bridges.
- Each party would contribute a set amount equally to the fund and supplement it in the event of a shortfall with state and federal funds.
- The Task Force recommended that the states share O&M costs for the three bridges, equally.
- Other proposed funding sources: TIGER II grants, FHWA, DOTs, Maine Turnpike Authority and NH Bureau of Turnpike, and the U.S. Department of Defense.

Capital Projects

- The DOTs would jointly work to identify capital projects which would be funded through the sinking fund.

Operations

- Task Force recommended that the states continue to share O&M costs equally and combine operations to reduce costs.