# ALASKA DEEP DRAFT ARCTIC PORTS STUDY

## PUBLIC-PRIVATE PARTNERSHIP EXAMPLES

## EXAMPLES OF SUCCESSFUL P3S

Following are examples of unique P3 approaches. While these projects are a result of unique circumstances, together they demonstrate the breadth and variety of ways in which the public and private sectors can collaborate to meet mobility needs.

## PROJECT PROFILES

### New Mexico SR 44

New Mexico state law did not permit design-build procurement at the time NM 44 was constructed. However, the New Mexico State Highway and Transportation department was able to replicate many of the efficiencies of the design-build model through the use of an innovative professional services contract. For more information, visit: http://www.fhwa.dot.gov/ipd/project_profiles/nm_sr44.htm

### King Coal Highway

This four-lane highway through rugged terrain in West Virginia involves an innovative partnership with a local coal companies that are using excess materials generated by the mining process to construct the foundation for the highway. This arrangement facilitates the permitting process for new mining activity and is estimated to have resulting in a 50 percent cost savings for the initial section of the highway. The coal companies are collaborating with the DOT to ensure that the alignment provides access to coal-rich areas. This model may be replicated in other coal producing states. For more information, visit: http://www.fhwa.dot.gov/ipd/project_profiles/wv_kingcoal.htm

### Heartland Corridor

This project is an innovative partnership between U.S. DOT and the private freight rail industry. Norfolk Southern Corporation is investing $44.4 in an initiative to heighten clearances in 28 tunnels and obstructions in West Virginia, and Kentucky, enabling double stacked rail operations between the Tidewater ports and Columbus, Ohio. This contribution has leveraged $105.6 million in public funding, including a $90 million earmark in SAFETEA-LU. For more information, visit: http://www.fhwa.dot.gov/ipd/project_profiles/wv_heartland.htm

### Chicago Region Environmental and Transportation Efficiency Program (CREATE)

The create project is a collaboration between six private railroads, METRA, AMTRAK, and state and local governments in Illinois. The private railroads plan to make a $212 equity contribution towards a $1.534 billion capital program involving grade separation projects and extensive upgrades of tracks, switches and signal systems. This is the first time that so many competing railroads have collaborated to increase the efficiency of an urban rail network. For more information, visit: http://www.fhwa.dot.gov/ipd/project_profiles/il_create.htm

### SmartWay Upgrade Kits

This unique partnership marks the first deployment of technologies to lower fuel consumption and emissions by trucks along a major transportation corridor and has also received a loan from the Oregon State Infrastructure Bank (SIB). The U.S. DOT, EPA, and DOE intend to work together with State and local governments, non-profits, state trucking associations in an effort to replicate this deployment strategy around the country. This project demonstrates the wide range of transport initiatives that can benefit from P3 arrangements and innovative finance tools. For more information, visit: http://www.fhwa.dot.gov/ipd/project_profiles/or_smartway.htm

**Port of Miami Tunnel**
The project includes a tunnel under Government Cut, roadway work on Dodge and Watson Islands and MacArthur Causeway Bridge widening. Twin tubes, each 3,900 feet long and 41 feet in diameter, will reach a depth of 120 feet below the water. The project is being developed as a public-private partnership with Miami Access Tunnel, LLC (MAT). The state has agreed to pay for approximately 50 percent of the capital costs (design and construction) and all operations and maintenance, while the remaining 50 percent of the capital costs will be provided by the local governments. Under the concession agreement, FDOT will pay MAT milestone payments at various stages of project development. Payments of varying amounts summing to $100 million will be made during construction between 2010 and 2013, followed by $350 million final acceptance payment after construction is completed. In addition, the Department will provide availability payments to the concessionaire that begin at the completion of construction and will occur annually for 30 years. For more information, visit:
http://www.fhwa.dot.gov/ipd/project_profiles/fl_port_miami_tunnel.htm

**St. Lawrence Seaway**
The Great Lakes/St. Lawrence Seaway was built as a binational partnership between the U.S. and Canada, and continues to operate as such. Administration of the system is shared by two entities, the Saint Lawrence Seaway Development Corp. (SLSDC). in the U.S., a federal agency within the U.S. Department of Transportation, and The St. Lawrence Seaway Management Corporation in Canada, a not-for-profit corporation (ownership of the Canadian portion of the Seaway remains with the Canadian federal government.) The SLSDC is a wholly-owned government corporation created to construct, operate and maintain the part of the St. Lawrence Seaway between the Port of Montreal and Lake Erie, within the U.S. territorial limits. The mission of the Corporation is to serve the U.S. intermodal and international transportation system by improving the operation and maintenance of a safe, reliable, environmentally responsible deep-draft waterway, in cooperation with its Canadian counterpart. The SLSDC also encourages the development of trade through the Great Lakes Seaway System, which contributes to the comprehensive economic and environmental development of the entire Great Lakes region.
http://www.seaway.ca/en/management/index.html

**Baltic Sea Co-operation**
The Baltic Sea Region comprises both the sea itself and the surrounding states. Organized Baltic co-operation also encompasses participation by Iceland, Norway and the EU. The objective of this form of co-operation is to promote political, economic and social development, and to furnish the Baltic Region with a reciprocal network that enables it to occupy a position of strength in other international contexts.
http://www.norden.org/en/about-nordic-co-operation/areas-of-co-operation/the-baltic-sea-region

**Beaufort Sea Partnership**
The Beaufort Sea Partnership (BSP) is the primary forum for stakeholder engagement in integrated ocean management of the Beaufort Sea area. The BSP has broad stakeholder representation from 53 organizations providing a forum for all groups who are active or have an interest in the Beaufort Sea Large Ocean Management Area (LOMA) to share information about their activities/interests. The BSP is comprised of regional level representatives and has an open membership, meaning that any organization with an interest in the management of the Beaufort Sea can become a member with the approval of the Regional Coordination Committee (RCC). The BSP builds on work done by the Working Groups, considers questions formulated by the RCC, and makes recommendations to the

RCC. The BSP also serves as a network to identify new opportunities for collaboration and to prevent duplication of efforts by raising awareness of current and upcoming initiatives in the Beaufort Sea. http://www.beaufortseapartnership.ca/

## ALASKA P3 ENABLING STATUTES

The Knik Arm Bridge and Toll Authority is an example of legislation that allows Private-Public Partnerships in the state. A.S. 19.75.111 from Alaska Legal Resource Center. http://touchngo.com/lglcntr/akstats/Statutes/Title19/Chapter75/Section111.htm

### Alaska Statutes.

Title 19. Highways and Ferries

Chapter 75. Knik Arm Bridge and Toll Authority

Section 111. Powers and Duties of the Authority

Statute 44.88. Alaska Industrial Development Export Authority

### AS 19.75.111. POWERS AND DUTIES OF THE AUTHORITY.

**(a)** Except as otherwise explicitly made applicable to the authority, the performance of the authority's duties and the exercise of its powers, including its powers to issue bonds and otherwise incur debt, shall be governed exclusively by this chapter. In furtherance of its purposes, the authority may

**(1)** own, acquire, construct, develop, create, reconstruct, equip, operate, maintain, extend, and improve the Knik Arm bridge and its appurtenant facilities;

**(2)** sue and be sued;

**(3)** adopt a seal;

**(4)** adopt, amend, and repeal regulations under AS 44.62 and establish bylaws;

**(5)** make and execute agreements, contracts, and all other instruments with any public or private person, governmental unit or agency, corporation, or other business entity lawfully conducting business in the United States for the exercise of its powers and functions under this chapter and for the financing, design, construction, maintenance, improvement, or operation of facilities, properties, or projects of the authority, including making and executing contracts with any person, firm, corporation, governmental agency, or other entity for the purpose of

**(A)** incurring indebtedness, obtaining investments in the authority's projects, acquiring or granting lump sum payments for services in advance or in arrears, grants, and other financing; and

**(B)** entering into public-private partnerships or service contracts in any form;

**(6)** in its own name acquire, lease, rent, sell, or convey real and personal property;

**(7)** issue and refund bonds in accordance with this chapter, in order to pay the cost of the Knik Arm bridge and its appurtenant facilities; the authority may also secure payment of the bonds as provided in this chapter;

**(8)** incur other indebtedness, including lines of credit and indebtedness to the Federal Highway Administration, United States Department of Transportation, under 23 U.S.C. 601 - 610 (Transportation Infrastructure Finance and Innovation Act of 1998), as amended, and secure that indebtedness as provided in this chapter;

**(9)** apply for and accept gifts, grants, or loans from a federal agency or an agency or instrumentality of the state, or from a municipality, private organization, or other source, including obtaining title to state, local government, or privately owned land, directly or through a department of the state having jurisdiction of the land;

**(10)** fix and collect fees, rents, tolls, rates, or other charges for the use of the Knik Arm bridge and appurtenant facilities, or for a service developed, operated, or provided by the authority; notwithstanding AS 37.10.050 (a), fees, rents, tolls, rates, and other charges fixed and collected under this paragraph may exceed the actual operating cost of the use of the bridge, facility, or service;

**(11)** bring civil actions, refer criminal actions to the appropriate authority, and take other actions or enter into agreements with law enforcement and collection agencies to enforce the collection of its fees, rents, tolls, rates, other charges, penalties, and other obligations;

**(12)** pledge, encumber, transfer, or otherwise obligate revenue derived by the authority from the ownership, use, or operation of toll facilities, including fees, rents, tolls, rates, charges, or other revenue of the authority or money that the legislature may appropriate, except a state tax or license, as security for bonds or other indebtedness or agreements of the authority;

**(13)** deposit or invest its funds, subject to agreements with bondholders;

**(14)** procure insurance against any loss in connection with its operation;

**(15)** contract for and engage the services of consultants, experts, and financial and technical advisors that the authority considers necessary for the exercise of its powers and functions under this chapter;

**(16)** apply for, obtain, hold, and use permits, licenses, or approvals from appropriate agencies of the state, the United States, a foreign country, and any other proper agency in the same manner as any other person;

**(17)** perform reconnaissance studies and engineering, survey, and design studies with respect to the Knik Arm bridge and its appurtenant facilities;

**(18)** exercise powers of eminent domain or file a declaration of taking as necessary for the Knik Arm bridge and appurtenant facilities under AS 09.55.240 - 09.55.460 to acquire land or an

interest in land; the authority's exercise of powers under this paragraph may not exceed the permissible exercise of those powers by the state;

**(19)** confer with municipal and other governments, metropolitan planning organizations, and the department, concerning the Knik Arm bridge;

**(20)** do all acts and things necessary to carry out the powers expressly granted or necessarily implied in this chapter; nothing in this chapter limits the powers of the authority that are expressly granted or necessarily implied.

**(b)** The authority shall

**(1)** prepare an annual report of its operations to include a balance sheet, an income statement, a statement of changes in financial position, a reconciliation of changes in equity accounts, a summary of significant accounting principles, an auditor's report, comments regarding the year's business, and prospects for the next year; the report shall be completed by the third day of each regular session of the legislature, and the authority shall notify the governor, the commissioner of the department, the presiding officers of each house of the legislature, and the Legislative Budget and Audit Committee that the report is available;

**(2)** comply with the provisions of AS 37.07 (Executive Budget Act), except that AS 37.07 does not apply to the activities of the authority that relate to the authority's borrowing of money as provided in this chapter, including the issuing of its obligations or evidence of that borrowing and the repayment of the debt obligation;

**(3)** establish a personnel management system for hiring employees and setting employee-benefit packages;

**(4)** establish procedures, rules, and rates governing per diem and travel expenses of the employees of the authority in substantial conformity to statutes, procedures, rules, and rates applicable to state employees of similar state entities;

**(5)** coordinate the exercise of its powers to plan, design, construct, operate, and maintain the Knik Arm bridge with the department, and with the mayors of the Municipality of Anchorage and the Matanuska-Susitna Borough.

**(6)** have the exclusive authority to determine and fix fees, rents, tolls, rates, and other charges, including the tolls for the use of the bridge and appurtenant facilities and for the use of all other properties under the control of or owned or managed by the authority.

## P3 FORMS

The following examples of forms for public-private partnerships have been taken from the websites of the National Council for Public-Private Partnerships and the Canadian Council for Public-Private Partnerships. This list is by no means exhaustive. Forms of Public-Private Partnerships are limited only by our imagination and the level of risk and reward that each party is willing to accept.

### Operations and Maintenance Contract (O&M)

A public partner (federal, state, or local government agency or authority) contracts with a private partner to provide and/or maintain a specific service. Under the private operation and maintenance option, the public partner retains ownership and overall management of the public facility or system.

### Operations, Maintenance & Management (OMM)

A public partner (federal, state, or local government agency or authority) contracts with a private partner to operate, maintain, and manage a facility or system proving a service. Under this contract option, the public partner retains ownership of the public facility or system, but the private party may invest its own capital in the facility or system. Any private investment is carefully calculated in relation to its contributions to operational efficiencies and savings over the term of the contract. Generally, the longer the contract term, the greater the opportunity for increased private investment because there is more time available in which to recoup any investment and earn a reasonable return. Many local governments use this contractual partnership to provide wastewater treatment services.

### Design-Build (DB)

A DB is when the private partner provides both design and construction of a project to the public agency. This type of partnership can reduce time, save money, provide stronger guarantees and allocate additional project risk to the private sector. It also reduces conflict by having a single entity responsible to the public owner for the design and construction. The public sector partner owns the assets and has the responsibility for the operation and maintenance.

### Design-Build-Maintain (DBM)

A DBM is similar to a DB except the maintenance of the facility for some period of time becomes the responsibility of the private sector partner. The benefits are similar to the DB with maintenance risk being allocated to the private sector partner and the guarantee expanded to include maintenance. The public sector partner owns and operates the assets.

### Design-Build-Operate (DBO)

A single contract is awarded for the design, construction, and operation of a capital improvement. Title to the facility remains with the public sector unless the project is a Design/Build/Operate/Transfer or

Design/Build/Own/Operate project. The DBO method of contracting is contrary to the separated and sequential approach ordinarily used in the United States by both the public and private sectors. This method involves one contract for design with an architect or engineer, followed by a different contract with a builder for project construction, followed by the owner's taking over the project and operating it.

A simple Design-Build approach creates a single point of responsibility for design and construction and can speed project completion by facilitating the overlap of the design and construction phases of the project. On a public project, the operations phase is normally handled by the public sector under a separate operations and maintenance agreement. Combining all three passes into a DBO approach maintains the continuity of private sector involvement and can facilitate private-sector financing of public projects supported by user fees generated during the operations phase.

### Design-Build-Operate-Maintain (DBOM)

The Design-Build-Operate-Maintain (DBOM) model is an integrated partnership that combines the design and construction responsibilities of design-build procurements with operations and maintenance. These project components are procured from the private section in a single contract with financing secured by the public sector. The public agency maintains ownership and retains a significant level of oversight of the operations through terms defined in the contract.

### Design-Build-Finance-Operate-Maintain (DBFOM)

With the Design-Build-Finance-Operate-Maintain (DBFOM) approach, the responsibilities for designing, building, financing, operating and maintaining are bundled together and transferred to private sector partners. There is a great deal of variety in DBFOM arrangements in the United States, and especially the degree to which financial responsibilities are actually transferred to the private sector. One commonality that cuts across all DBFOM projects is that they are either partly or wholly financed by debt leveraging revenue streams dedicated to the project. Direct user fees (tolls) are the most common revenue source. However, others ranging from lease payments to shadow tolls and vehicle registration fees. Future revenues are leveraged to issue bonds or other debt that provide funds for capital and project development costs. They are also often supplemented by public sector grants in the form of money or contributions in kind, such as right-of-way. In certain cases, private partners may be required to make equity investments as well. Value for money can be attained through life-cycle costing.

### Design-Build-Finance-Maintain (DBFM)

The private sector designs, builds and finances an asset and provides hard facility management (hfm) or maintenance services under a long-term agreement.

### Design-Build-Finance-Operate (DBFO)

The private sector designs, finances and constructs a new facility under a long-term lease, and operates the facility during the term of the lease. The private partner transfers the new facility to the public sector at the end of the lease term.

### Design-Build-Finance-Operate-Maintain-Transfer (DBFOMT)

The Design-Build-Finance-Operate-Maintain-Transfer (DBFOMT) partnership model is the same as a DBFOM except that the private sector owns the asset until the end of the contract when the ownership is transferred to the public sector. While common abroad, DBFOMT is not often used in the United States today.

### Build-Finance

The private sector constructs an asset and finances the capital cost only during the construction period.

### Build-Operate-Transfer (BOT)

The private partner builds a facility to the specifications agreed to by the public agency, operates the facility for a specified time period under a contract or franchise agreement with the agency, and then transfers the facility to the agency at the end of the specified period of time. In most cases, the private partner will also provide some, or all, of the financing for the facility, so the length of the contract or franchise must be sufficient to enable the private partner to realize a reasonable return on its investment through user charges.

At the end of the franchise period, the public partner can assume operating responsibility for the facility, contract the operations to the original franchise holder, or award a new contract or franchise to a new private partner. The BTO model is similar to the BOT model except that the transfer to the public owner takes place at the time that construction is completed, rather than at the end of the franchise period.

### Build-Own-Operate (BOO)

The contractor constructs and operates a facility without transferring ownership to the public sector. Legal title to the facility remains in the private sector, and there is no obligation for the public sector to purchase the facility or take title. A BOO transaction may qualify for tax-exempt status as a service contract if all Internal Revenue Code requirements are satisfied.

### Build-Own-Operate-Transfer (BOOT)

A private entity receives a franchise to finance, design, build and operate a facility (and to charge user fees) for a specified period, after which ownership is transferred back to the public sector.

## Buy-Build-Operate (BBO)

A BBO is a form of asset sale that includes a rehabilitation or expansion of an existing facility. The government sells the asset to the private sector entity, which then makes the improvements necessary to operate the facility in a profitable manner.

## Concession

A private sector concessionaire undertakes investments and operates the facility for a fixed period of time after which the ownership reverts back to the public sector.

## Developer Finance

The private party finances the construction or expansion of a public facility in exchange for the right to build residential housing, commercial stores, and/or industrial facilities at the site. The private developer contributes capital and may operate the facility under the oversight of the government. The developer gains the right to use the facility and may receive future income from user fees.

While developers may in rare cases build a facility, more typically they are charged a fee or required to purchase capacity in an existing facility. This payment is used to expand or upgrade the facility. Developer financing arrangements are often called capacity credits, impact fees, or extractions. Developer financing may be voluntary or involuntary depending on the specific local circumstances.

## Enhance Use Leasing or Underutilized Asset (EUL)

An EUL is an asset management program in the Department of Veterans Affairs (VA) that can include a variety of different leasing arrangements (e.g. lease/develop/operate, build/develop/operate). EULs enable the VA to long-term lease VA-controlled property to the private sector or other public entities for non-VA uses in return for receiving fair consideration (monetary or in-kind) that enhances VA's mission or programs.

## Lease-Develop-Operate or Build-Develop-Operate (LDO or BDO)

Under these partnerships arrangements, the private party leases or buys an existing facility from a public agency; invests its own capital to renovate, modernize, and/or expand the facility; and then operates it under a contract with the public agency. A number of different types of municipal transit facilities have been leased and developed under LDO and BDO arrangements.

## Lease/Purchase

A lease/purchase is an installment-purchase contract. Under this model, the private sector finances and builds a new facility, which it then leases to a public agency. The public agency makes scheduled lease payments to the private party. The public agency accrues equity in the facility with each payment. At the

end of the lease term, the public agency owns the facility or purchases it at the cost of any remaining unpaid balance in the lease.

Under this arrangement, the facility may be operated by either the public agency or the private developer during the term of the lease. Lease/purchase arrangements have been used by the General Services Administration for building federal office buildings and by a number of states to build prisons and other correctional facilities.

### Sale/Leaseback

This is a financial arrangement in which the owner of a facility sells it to another entity, and subsequently leases it back from the new owner. Both public and private entities may enter into sale/leaseback arrangements for a variety of reasons. An innovative application of the sale/leaseback technique is the sale of a public facility to a public or private holding company for the purposes of limiting governmental liability under certain statues. Under this arrangement, the government that sold the facility leases it back and continues to operate it.

### Operation License

A private operator receives a license or rights to operate a public service, usually for a specified term. This is often used in IT projects.

### Finance Only

A private entity, usually a financial services company, funds a project directly or uses various mechanisms such as a long-term lease or bond issue.

### Tax-Exempt Lease

A public partner finances capital assets or facilities by borrowing funds from a private investor or financial institution. The private partner generally acquires title to the asset, but then transfers it to the public partner either at the beginning or end of the lease term. The portion of the lease payment used to pay interest on the capital investment is tax exempt under state and federal laws. Tax-exempt leases have been used to finance a wide variety of capital assets, ranging from computers to telecommunication systems and municipal vehicle fleets.

### Turnkey

A public agency contracts with a private investor/vendor to design and build a complete facility in accordance with specified performance standards and criteria agreed to between the agency and the vendor. The private developer commits to build the facility for a fixed price and absorbs the construction risk of meeting that price commitment. Generally, in a turnkey transaction, the private partners use fast-track construction techniques (such as design-build) and are not bound by traditional public sector

procurement regulations. This combination often enables the private partner to complete the facility in significantly less time and for less cost than could be accomplished under traditional construction techniques.

In a turnkey transaction, financing and ownership of the facility can rest with either the public or private partner. For example, the public agency might provide the financing, with the attendant costs and risks. Alternatively, the private party might provide the financing capital, generally in exchange for a long-term contract to operate the facility.