

ALASKA DEEP DRAFT ARCTIC PORTS STUDY

PUBLIC-PRIVATE PARTNERSHIP EVALUATION

IN SUPPORT OF THE ARCTIC DEEP-DRAFT PORTS STUDY

The Alaska Department of Transportation and Public Facilities (ADOT&PF) and the US Army Corps of Engineers (USACE) are co-sponsoring the Alaska Deep Draft Arctic Ports Study to evaluate potential port locations on the northern and western coasts of Alaska. The study is in response to the Arctic coast experiencing increased vessel traffic. Alaskan Arctic port(s) would serve as a major infrastructure asset and northernmost port for the US Coast Guard (USCG), the US Navy, and the National Oceanic and Atmospheric Administration (NOAA) in protecting and maintaining federal sovereignty and the environment. Arctic port(s) would support search and rescue, oil spill response, and economic development.

The 2012 Alaska Deep Draft Arctic Ports Study includes: defining the study area, identifying other agency efforts, evaluating public/private partnerships, examining problems and opportunities, establishing siting criteria, conducting scenario analyses, identifying potential sites, engaging stakeholders and communities, and scoping additional study efforts. Drafts of these report components are being prepared by the Project Development Team which includes ADOT&PF, USACE, and RISE Alaska/ARCADIS. Background documents for the Alaska Regional Ports Study and additional information about this study are available at <http://www.poa.usace.army.mil/en/cw/AKPortsStudy.htm>

We appreciate your review of these working draft materials. All public and stakeholder input/comments are welcome and will be considered by the Project Development Team. These working draft products will be refined throughout the year and included in the Alaska Deep Draft Arctic Ports Study scheduled for publication in November 2012.

Please email your comments to the Project Development Team at Akregports@usace.army.mil.

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PUBLIC-PRIVATE PARTNERSHIP EVALUATION

INTRODUCTION

The Alaska Regional Ports project is a collaborative effort between the Alaska Department of Transportation and Public Facilities (DOT&PF) and the Alaska District U.S. Army Corps of Engineers (USACE). Previous efforts include conferences held in 2008 and 2010 which brought together stakeholders from private, business, and state and federal government agencies to envision and address infrastructure needs in the state. A charrette in 2011 brought together interested parties to address infrastructure planning for deep-draft ports in the state and will support sustainable economic development and meet the needs of national sovereignty, environment and human safety.

The purpose of the future ports was defined by the State as:

“To promote economic development, employment, job training, and education in the State of Alaska, including areas of rural Alaska with historically high rates of unemployment, through the development and construction of an Arctic Port that will attract new industry, expand international trade opportunities, and broaden and diversify the economic base in Alaska in a safe, reasonable, and efficient manner.”¹

The national agenda is still broader. Eight nations have Arctic territory. The State of Alaska is the United States’ link to the Arctic. Furthermore, the sovereign rights over each Arctic nation’s “extended continental shelves” (beyond the 200 nautical mile exclusive economic zone) depend upon adjudication by the parties to the United Nations Convention on the Law of the Sea (UNCLOS).² Internationally, increased accessibility of the maritime Arctic, and a greater appreciation of the Arctic’s potential resource wealth have increased interest in developing this remote region. Infrastructure development, from ice-capable vessels to research stations, from deep-dredged ports to a search-and-rescue agreement, is moving forward.³ International and local marine traffic is increasing as the ice-free season grows.

The challenges for the state, the nation, and our international concerns are located in the middle of the most remote areas of the country. Alaska’s Lieutenant Governor, Mead Treadwell, recently spoke at an

¹ USACE/DOT&PF Alaska Deep-Draft Arctic Ports Planning Charrette, Anchorage, Alaska May 16-17, 2011 facilitated and summarized by RISE Alaska, LLC.

² Report on the Goals and Objectives of the Arctic Research Council 2011-2012 for the U.S. Arctic Research Program Plan.

³ Ibid.

Arctic Council gathering and was quoted as saying “We feel a bit naked when it comes to shipping...”⁴ Admiral Robert J. Papp Jr. of the U.S. Coast Guard wrote “Although the Coast Guard has operated in southern Alaska, the Gulf of Alaska, and Bering Sea for much of our history, in the higher latitudes we have little infrastructure and limited operating experience...”⁵ The State of Alaska is exploring ways to address the deep-draft port needs for the western and northern shores of the state. The constraints of developing Arctic ports and infrastructure and the complexity of multiple agency needs exceeds the capacity of any one party to underwrite. This report explores ways in which a public-private partnership (P3) could be pursued to meet the needs of the state while being proactive in protecting national sovereignty and the environment.

P3 DEFINED

Public-Private Partnerships, often referred to as P3, describe a government service or private business venture that is delivered through a partnership of government and one or more private sector companies.⁶ Depending on the circumstances, these partnerships can take many forms, all of which are developed based on the project and the relationships the parties are willing to enter. These are common practice in some countries (e.g., Canada⁷) and have a basis in this country as well. One of the earliest examples of P3 was the Lancaster Turnpike, a toll road built by the private sector with public sector oversight and rights-of-way, connecting Pennsylvania farmers with the Philadelphia market in 1793.⁸ The National Council on Public-Private Partnerships (NCP3P) and the Federal Highway Administration (FHWA) have defined P3s more specifically for their organizations.

National Council on Public-Private Partnerships (NCP3P) definition:

“A contractual agreement between a public agency (federal, state or local) and a private sector entity. Through this agreement, the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public. In addition to the

⁴ Arctic Council group works on spill response plan, by Dan Joling, Associated Press article in the Anchorage Daily News March 23, 2012. <http://www.adn.com/2012/03/22/2386370/arctic-council-group-works-on.html#storylink=cpy>

⁵ Published on U.S. Naval Institute (<http://www.usni.org>) , created 2012-01-31 11:41

⁶ Wikipedia, the Free Encyclopedia - http://en.wikipedia.org/wiki/Public%E2%80%93private_partnership

⁷“In fact, the Province’s capital policy requires that a public-private partnership must be considered the base case procurement option where the provincial contribution to the capital cost exceeds \$50 million.” Remarks from Hon. Colin Hansen – Minister of Finance and Deputy Premier, Province of British Columbia at the 17th Annual CCP3 National Conference on Public-Private Partnerships, December 3, 2009.

⁸ Ten Principles for Successful Public/Private Partnerships published by Urban land Institute, 2005.

sharing of resources, each party shares in the risks and rewards potential in the delivery of the service and/or facility.”⁹

“Public private partnerships are an important option that can be utilized in times of economic uncertainty and in periods of prosperity. There is a nexus between the public sector’s needs and the private sector’s goals. Local and state governments, particularly in today’s challenging economic times, need to find innovative ways to improve infrastructure that makes sense to the taxpayer.”

– Doug Domenech, Secretary of Natural Resource of the Commonwealth of Virginia¹⁰

Federal Highway Administration (FHWA) definition:

“A public-private partnership is a contractual agreement formed between public and private sector partners, which allow more private sector participation than is traditional. The agreements usually involve a government agency contracting with a private company to renovate, construct, operate, maintain, and/or manage a facility or system.”¹¹

“FHWA encourages the consideration of public-private partnerships (P3s) in the development of transportation improvements. Early involvement of the private sector can bring creativity, efficiency, and capital to address complex transportation problems facing State and local governments. The Office of Innovative Program Delivery (IPD) provides information and expertise in the use of different P3 approaches, and assistance in using tools including the SEP-15¹² program, private activity bonds (PABs), and the Transportation Infrastructure Finance and Innovation Act (TIFIA) Federal credit program to facilitate P3 projects.”¹³

The following outlines the risks and rewards that could be achieved with the creation of Public-Private Partnerships to address the growing navigation, resource development and related infrastructure needs of the Arctic.

⁹The National Council on Public Private Partnerships - <http://www.ncppp.org/>

¹⁰ Ibid.

¹¹The Federal Highway Administration - <http://www.fhwa.dot.gov/>

¹² SEP-15 is a new experimental process for FHWA to identify, for trial evaluation, new public-private partnership approaches to project delivery. It is anticipated that these new approaches will allow the efficient delivery of transportation projects without impairing FHWA's ability to carry out its stewardship responsibilities to protect both the environment and American taxpayers.

¹³ The Federal Highway Administration - <http://www.fhwa.dot.gov/>

BENEFITS OF P3S

Public sector budgets are much more challenging than in the past. Public-Private Partnerships are an avenue to pursue that will enable the most efficient use of public and private resources in the pursuit of mutual gains. P3s make possible the completion of projects that would be impossible using more traditional methods of economic development.¹⁴

Possible benefits include:

- **Shared vision** – The vision is the framework for the project goals.
- **Shared risks** – Success or failure of the project does not fall to one entity.
- **Improved project completion** - International experience with P3s suggest that these arrangements are constructed within budget and on time more often than typical public construction. By maximizing each sector's strengths, improvements in the number and quality of projects can be realized. Alternate delivery options allow more flexibility to achieve mutual goals and can minimize risk of cost overruns and schedule delays.
- **Public has more access** – The PPP must be transparent in order to succeed. All parties are held accountable to the public interests. This can also result in improved environmental compliance.
- **Increased funding options** – The combination of public and private financing provides more opportunity for funding and reduces the public capital investment.
- **Mutual rewards** – Outcomes include profitability for the private investor and increased delivery of basic infrastructure for the public sector.
- **Job creation** – Economic development projects will result in jobs for construction and ongoing operations.

DRAWBACKS/RISKS OF P3S

An arrangement such as the public-private partnership is not without its drawbacks. Following are some of the potential risks:

- **Conflict of interest** – The real or perceived conflict of interest is one of the greatest challenges of P3s.
- **Maintenance of transparency** – It is difficult to do business and maintain transparency that will suit all inquiring minds.

¹⁴ Richard Norment, Executive Director for the National Council for Public-Private Partnerships.
www.ncppp.org.

- **Financial agreements** – The more sophisticated the financing, the more potential for things to go wrong. Risk should be carefully weighed prior to entering into an agreement, especially if there are funding contingencies or foreign funds. There are many forms of partnership, allocating risks and rewards to each party. See Appendix for a description of the range of forms.
- **Cost**- Capital obtained through P3s can be more expensive than public capital.
- **Control** – Government will have to cede control of the aspects of the project for which users and citizens still hold government accountable. The biggest example is toll rates. Government is also held accountable by the public if it turns out that the private sector partner has made a windfall profit on the deal.
- **Liability issues** – The partnership agreements must clearly spell out who is responsible for each of the pieces and parts of the project, even while not knowing what the future brings. If the private investor is unable to meet the terms of the contract, the public entity must be able to take on the project alone or have another investor to fall back on. Consideration of insufficient revenues, bankruptcy, and default by parties should be spelled out in the agreement.
- **Force majeure** - It is important to remember that force majeure (major force) clauses are intended to excuse a party only if the failure to perform could not be avoided by the exercise of due care by that party. The clause must apply to all parties of the P3 agreement as it does in standard engineering and construction contracts. This generally applies to things such as wars, natural disasters, and other major events that are clearly outside a party's control.
- **Labor concerns** – Finding qualified workers is often a challenge for Alaska projects. The private investor may be accustomed to finding workers nationwide while the state government might give preference to hiring Alaska residents over other U.S. citizens. Resolving these concerns early in the negotiation is paramount.
- **Capability** – As in all agreements, the capacity and assets of all parties should be carefully evaluated. Competition should be designed to bring the best and brightest to the table. Often a Request for Qualifications (RFQ) will draw out the strengths and weaknesses of interested parties. A P3 agreement can include a performance bond.

SUCCESSFUL P3 CREATION

7 KEYS TO SUCCESSFUL P3S FROM THE NATIONAL COUNCIL ON PUBLIC-PRIVATE PARTNERSHIPS

The following are considered “best practices” in the development of Public-Private Partnerships (P3s). It is recognized that the methodology for implementation of P3s can vary, depending on the nature of a given project and local concerns.

1. **Public Sector Champion:** Recognized public figures should serve as the spokespersons and advocates for the project and the use of a P3. Well-informed champions can play a critical role in minimizing misperceptions about the value to the public of an effectively developed P3.

2. **Statutory Environment:** There should be a statutory foundation for the implementation of each partnership. Transparency and a competitive proposal process should be delineated in this statute. However, unsolicited proposals can be a positive catalyst for initiating creative, innovative approaches to addressing specific public sector needs.
3. **Public Sector's Organized Structure:** The public sector should have a dedicated team for P3 projects or programs. This unit should be involved from conceptualization to negotiation, through final monitoring of the execution of the partnership. This unit should develop Requests For Proposals (RFPs) that include performance goals, not design specifications. Consideration of proposals should be based on best value, not lowest prices. The principal key to success: a business case that demonstrates the P3 provides good value for money relative to the public sector alternative. Without that, there is no basis for a deal.
4. **Detailed Contract (Business Plan):** A P3 is a contractual relationship between the public and private sectors for the execution of a project or service. This contract should include a detailed description of the responsibilities, risks and benefits of both the public and private partners. Such an agreement will increase the probability of success of the partnership. Realizing that all contingencies cannot be foreseen, a good contract will include a clearly defined method of dispute resolution.
5. **Clearly Defined Revenue Stream:** While the private partner may provide a portion or all of the funding for capital improvements, there must be an identifiable revenue stream sufficient to retire this investment and provide an acceptable rate of return over the term of the partnership. The income stream can be generated by a variety and combination of sources (fees, tolls, availability payments, shadow tolls, tax increment financing, commercial use of underutilized assets or a wide range of additional options), but must be reasonably assured for the length of the partnership's investment period.
6. **Stakeholder Support:** More people will be affected by a partnership than just the public officials and the private sector partner. Affected employees, the portions of the public receiving the service, the press, labor unions, and relevant interest groups will all have opinions, and may have misconceptions about a partnership and its value to the public. It is important to communicate openly and candidly with these stakeholders to minimize potential resistance to establishing a partnership. A key issue is the treatment of successor rights under existing collective bargaining agreements.
7. **Pick Your Partner Carefully:** The "best value" (not always lowest price) in a partnership is critical in maintaining the long-term relationship that is central to a successful partnership. A candidate's experience in the specific area of partnerships being considered is an important factor in identifying the right partner. Equally, the financial capacity of the private partner should be considered in the final selection process.

PORT P3 STRUCTURES

When a public port authority leases land to a terminal operator and allows that operator to construct and operate a terminal, that is a P3. This is a very common model for ports. Continued research (see Bibliography for references to Engel et al (2004); Juan et al (2004); Notteboom (2007); Pallis, Notteboom & DeLangen (2008); Theys, Notteboom, Pallis & DeLangen (2009) and Ferrari & Basta (2009) has

focused on the structuring of concessions internationally. The majority of this work is focused on container terminals as opposed to whole ports. Some P3s are designed for captive user bulk terminals linked to vertically integrated supply chains. Generally, government is reluctant to let go of ports, viewed as strategic assets and/or cash cows. The landlord port structure which sits above the terminal P3s allows private sector efficiency and investment to be combined with continuing public sector control and a regular income flow.

Dr. Sheila Farrell presented to the Lisbon Symposium of PORTeC in 2011, on “Decision Models and P3 Performance in the Ports Sector.” She noted that ports were candidates for P3s because of sharing of infrastructure, regulation of monopolies, securitization of revenues and promotion/control of externalities. Most P3s in the ports sector take the form of landlord port authorities controlling privately-operated terminals. The role of the port authority is to provide and manage common facilities like the breakwater and entrance channel, utilities and road and rail access; to regulate the individual P3s; and to plan and implement the expansion and development of the port. The duration of the agreements is commonly 20-30 years.

There are 4 primary models for port P3s:

1. Divestiture of public assets where assets are leased to private operator for management/investment.
2. Development rights for private assets where assets are built and operated by private sector, and then transferred back at the end of the concession.
3. Joint ventures where the port has a large share in the terminal operating company as well as acting as landlord and regulator.
4. A public port authority investing in a private port.

P3s are now the dominant organizational structure for container terminals. Challenges with this form of port development and operation include competition, conflicts of interest, financial weakness of some landlord ports, and culture change. Management contracts, where the private sector operates port facilities on behalf of the public sector with minimal investment of its own are now quite rare. This is partly because they generate small returns in relation to the management time required. There is also a history of failure caused by conflicts over strategy, arising when private operators are not given the freedom they need to satisfy public sector objectives for the contract. Short term leases of public assets of up to 15 years, often renewable, are more popular than management contracts because they give the operator greater commercial freedom.

Most port P3s impose strict limits on what private operators are allowed to do, in terms of the types of cargo they are allowed to handle. Intended to encourage efficiency through specialization, this also protects the interests of other private operators and maximizes the value which the port authority can extract through the creation of local monopolies.

Two other common limitations on P3 activities are the separation of cargo handling from marine services, and the design of P3s on a terminal rather than a whole port basis. Cargo handling has traditionally been separated from marine services (pilotage and towage). The latter enjoy significant economies of scale. Safety and security have led to the desire to keep marine services in the public sector or outsource them to

a single operator of good reputation. The level of specialization found in ports is not replicated in other modes of transport, and is one of the reasons why ports have entered into P3s on a terminal rather than a whole port basis.

Four areas of future research noted in the literature are:

- The gap between public sector objectives and public sector behavior
- Exploring acceptable risk-reward ratios
- The performance of different types of private partner
- The impact of P3s on supply chain rents.

ALASKA P3 PROJECTS

The State of Alaska has a history of P3 for infrastructure development, including KABATA and AIDEA, as well as the Valdez Port Authority.

Knik Arm Bridge and Toll Authority (KABATA)

The Knik Arm Crossing is a planned toll bridge and associated roadway crossing Cook Inlet between Anchorage – Alaska’s largest city – and the Matanuska-Susitna Borough – one of the fastest growing areas in the U.S. The Alaska Legislature established the Knik Arm Bridge and Toll Authority in 2003 under Alaska Statute 19.75 to “develop, stimulate, and advance the economic welfare of the state and further the development of public transportation systems in the vicinity of Upper Cook Inlet with construction of a bridge to span Knik Arm and connect the Municipality of Anchorage and the Matanuska-Susitna Borough.” (See Appendix for enabling legislation.)¹⁵

In 2007, Knik Arm Bridge officials planned to develop the bridge using a “revenue risk transfer” model, which had the potential of funding the project solely with private debt and equity. However, the 2008 financial crisis changed the marketplace significantly and it became clear that some collateral would be necessary to leverage the private equity necessary to build the bridge.

KABATA financial analysis shows that a project reserve, much like the project reserve used for the Alaska Industrial Development and Export Authority (AIDEA) and Alaska’s Student Loan program, would allow the State to attract large amounts of private equity to build the bridge at attractive rates. The 2012 Alaska Legislature is deliberating on provision of this project reserve. There are three international consortia shortlisted as potential P3 candidates, with proposals to be solicited in fall 2012.

Revenue forecasts indicate that the requested project reserve will be sufficient to carry the project through traffic ramp up and that it will be repaid in full, generating about \$1 billion more for the State than will be required to pay the private partner over the 35-year term of the agreement. The project reserve fund will be made whole once toll revenue is substantial enough to replenish the reserve fund, about seven years

¹⁵ Additional information about the Knik Arm Crossing Project and KABATA can be found on KABATA’s website at www.knikarmbridge.com.

after bridge opening. When sufficient surplus beyond reserve requirements is generated, the State will be repaid its investment.

One of the primary reasons for the public sector to enter into a public-private partnership is to transfer risks to the private sector. In this case, the private sector partner will take on the risk of financing, designing, constructing, operating and maintaining the bridge over the term of the agreement. If the private partner underperforms or underestimates its costs, their profits will be impacted and they could lose their equity investment. Meanwhile, the State owns the bridge and the toll revenues from the day it is opened.

Valdez Port Authority

In 1999, Valdez residents voted to form the Alaska Gasline Port Authority. Since the Port Authority's formation much has happened in the world energy markets to confirm moving Alaska's vast resources of natural gas from the North Slope to Alaskans as cheap energy, anchored in long term contracts with the world markets, in the form of liquefied natural gas (LNG). The Port Authority continues to work closely with recognized energy leaders such as Sempra Energy and Mitsubishi Corporation. The recent devastating earthquake in Japan has refocused Japan on their need for significant additional volumes of LNG imported from outside their country. Given Alaska's 40+ years of supplying LNG to Japan, Alaska is an excellent position to fill that additional demand.

Alaska Industrial Development and Export Authority (AIDEA)

AIDEA is a public corporation of the State of Alaska, created in 1967 by the Legislature to "promote, develop and advance the general prosperity and economic welfare."¹⁶

AIDEA has supported Alaska mining and ports for over 25 years.

- In 1985, AIDEA financed and built the first phase of the DeLong Mountain Transportation System, the road and port serving the area that includes the Red Dog Mine. DMTS is a 52-mile long, 30-foot wide industrial haul road and shallow-draft port with upland support facilities. AIDEA is repaid through user fees. In 1997, AIDEA financed the Production Rate Increase expansion of the DMTS Portside, to be repaid by user fees. In 2004, AIDEA participated in feasibility and environmental study of the proposed Terminal deepwater expansion to the DMTS Port.
- In 1990, AIDEA purchased and renovated the Skagway Ore Terminal. The Concentrate Storage Building was later demolished due to corrosion.
- Long-term planning is another function that the state can support to outline issues, potential and priorities. AIDEA contracted and managed preparation of the Northwest Alaska Resource

¹⁶ Alaska Statute 44.88 and Regulations 34AC 99.100.930

Development Transportation Study. In 1993, AIDEA (with repayment provisions through a Reimbursement Agreement) financed the scoping study of overland transportation options for the proposed Illinois Creek gold mine. AIDEA also coordinated an economics study of the costs of exporting Healy coal to South Korea.

- In 1995, AIDEA entered into agreement with Suneel Alaska to purchase 49% of the Seward Coal Terminal. AIDEA was repaid through semi-annual payments.
- Permitting is another arena for state support of private development. In 1996, AIDEA arranged federal permits enabling military craft to airlift mining equipment to the Illinois Creek mine site.
- In 1996, AIDEA issued conduit revenue bonds to finance the tailings facility at Fort Knox.
- Support of feasibility studies is another area for state support of private development. AIDEA was authorized by the legislature to issue conduit revenue bonds for docking facilities and tailings management facility at Kensington Mine. Staff undertook feasibility activities with repayment of costs by Coeur d'Alene Mines Corporation. AIDEA facilitated the study of power options to serve the potential Donlin Creek mine. AIDEA funded a feasibility study with Cash Minerals for shipping coal through the Skagway Ore Terminal.
- Capitalizing construction is another form of state support. In 2007, AIDEA executed a 7-year user agreement with Sherwood and began construction of new Concentrate Storage Building and support structures in Skagway. The Ore Terminal was reactivated. In 2010, a report for safe handling of lead concentrate was completed. Additional shippers of lead zinc may include Canadian firms and Selwyn Chihong Mining Ltd.
- AIDEA authorized a Reimbursement Agreement with Zazu Metals Corporation for AIDEA to conduct early due diligence on development of the Lik Deposit in DeLong Mountains. AIDEA brought in Behre Dolbear to perform the work.

P3 PRIVATE PARTNERS

There is a broad range of private entities involved in P3 relationships for ports. Some of them could be potential partners for Arctic ports in Alaska.

Private partner candidates now involved in P3 relationships:

- Mining firms (70% Canadian in Alaska)
- Financial firms (newcomers): Goldman Sachs; Guggenheim Partners; Deutsche Bank; AIG; Macquarie; Mantauban SA; Babcock & Brown Infrastructure
- Private foundations, retirement/pension funds: Ontario Teachers Pension Fund; Prudential; Borealis (Canadian pension fund)

- Sovereign funds: GIC (Singapore Gov Co); Dubai Ports World
- Port and shipping industry: CMA-CGM; Eurogate Holding; Hesse Natie; Eurokai; Hutchison Port Holdings; PSA Corp; Maersk Line; Neptune Orient Lines; Nippon Yusen Kaisha; P&O

ROADMAP FOR P3 GENERATION

What is needed to support a public/private partnership for Deep Draft Arctic Ports development? The following issues define a template for use with ports and harbors, but are also relevant to infrastructure and inland transportation, both rail and road.

State Action

- **Policy framework** rationale and commitment. General support for P3 is present now, but not the financial commitment. Additional funding for AIDEA investment is under consideration in the 2012 legislative session. The priority of resource development and infrastructure in Alaska could be manifested in regulatory processing, specialized training of public sector professionals, training for Alaska workforce, investment in research, and support of the university.
- **Regional Port Authority** - The costs to develop Arctic ports and appropriate infrastructure will be significant. No single entity, community or business would be able to financially support and carry full risks for this infrastructure. The facilities must be designed and developed to 1) accommodate multiple users with multiple interests and 2) make sense for a region rather than a locale. Different missions will require different port infrastructure, and even different sites. A multiple port system is likely to be required. As a result it is suggested that a Port and Development authority for Western Alaska be considered. The Port Authority would have the responsibility for ports development and for related infrastructure. The Port and Development Authority would address the logistics and business development needs as a “system” for the region to drive decisions that address related investment in assets such as roads, rail, pipelines and transmission lines. A regional Port Authority would provide opportunity for private investment from foundations, pension funds, shippers and others. It would also provide the vehicle for USACE and the Federal government to enter into agreement with private parties.
- **Legal framework** – Underlying legislation was set up for KABATA. AIDEA legal structure and operating history is also in place. Alaska has the foundation to work with the P3 tool. Industrial roads would require additional legislation.
- **Human resources/expertise**-skills development contracted or inside public sector is needed for identification, evaluation, and cultivation of P3 possibilities, transactions, oversight, sustaining talent and experience over time. Potential P3 partners for Arctic Ports include mining companies, investment firms, private foundations, retirement and pension funds, the Alaska Regional Corporations, CDQ groups, the Alaska Railroad Corporation, shipping, and oil/gas companies. Note that 70% of the investment in Alaskan mining is from Canada.

- **Procedures/guidelines** to standardize contracts and procurement. It is important to educate and standardize to make this development approach more acceptable to legislators and predictable for private ventures.
- **Organization** to hold the development partnership function. AIDEA could be a consultant to the agencies, as to DOT&PF for Roads to Resources. DOT&PF would lead engineering and permitting, and AIDEA would be the investment arm. The state could step aside when the P3 agreements are in place and might handle only startup. The model might be parallel to the airport system, where the port and the uplands infrastructure are treated as one investment, with leased interests to private parties. The eventual ownership would be a State or Regional Port Authority. The P3 might own and operate for a period of time. For inland transport (road and rail) it is important that agreements allow the facilities to be a catalyst for other development, rather than proprietary. See the port facilities at DMTS and Skagway for more details of how this is currently working.
- **Information dissemination** and public/private education could be enhanced. Develop database of Alaska models and global models. Develop model contract language and terms. Develop training materials and workshops for state government, state legislature, and private industry. Develop the investment case to attract private partners.
- **Project development funds** (State Infrastructure Banks, taxes, tolls, bonds). The state needs to provide upfront money to invest in P3 development and recognize the scale of the effort beyond standard civil procurement. Alaska should consider establishment of a State Infrastructure Bank
- **Oversight** of contract development, ongoing operations. This will include accountability for true costs, contingent liabilities, costs of central P3 agency resources, capacity building. It will require regular public reporting and a new level of responsibility. The Legislature created the KABATA Board with expertise, and the funds to hire consultant expertise
- **Roads to Resources** - The State DOT&PF could accelerate its investment, planning and delivery of the Roads to Resources program to provide the necessary connectivity for successful Arctic ports development. Currently, the state has identified some candidate roads that would serve the economic development agenda. A system wide approach could be developed to document the necessary roads, costs and timeline to delivery. This effort would provide increased certainty for port and for resource development investment.
- **Economic Research** - The State could invest in resource economists and research within state agencies, and through contractors and the University of Alaska. The development of baseline data about resource development potential is critical to the formulation of sound projects and the ability to secure significant investment from other parties.
- **Mapping** - Accelerate investment in the Alaska Statewide Digital Mapping Initiative with a focus on the coastal areas of Western Alaska. Alaska is the only state in the nation lacking current,

accurate, high-resolution maps. This hampers economic growth and presents risks to public safety. Resource management and economic development require a strong mapping foundation; emergency preparedness and readiness for disaster recovery depend on accurate location information.

Federal Action

- **Support of Arctic Council** – Support Arctic Council agenda to negotiate international protocols for Search and Rescue, Oil Spill Response, and address the needs of indigenous people.
- **P3 legislation** – The Alaska Congressional delegation could initiate legislation that would enable public-private partnerships for the country so that various funding agencies can capitalize on shared resources.
- **International Agreement** – Ratify the Law of the Sea Treaty. The country and Alaska in particular are at risk the longer we delay participating with neighbor countries in UNCLOS and Arctic development.
- **Tax Incentives** – Resource extraction companies could be allowed a “tax holiday” in the initial years of development for their participation in P3s so that important capital investments can be made which encourage development rather than penalize risky investments.
- **Mapping** – Develop NOAA's ShoreZone coastal habitat mapping for Western Alaska as it has been for Prince William Sound and the Gulf of Alaska. This standardized system catalogs both geomorphic and biological resources at mapping scales of better than 1:10,000. The high resolution, attribute rich dataset is a useful tool for extrapolation of site data over broad spatial ranges and creating a variety of habitat models
- **Other Incentives** – the Federal government could also allow different Federal agencies to share their resources for projects that provide shared benefits. Both the Coast Guard and the Navy have expressed interest in using a deep-draft port in Alaska, yet neither can bring funding to the project for development on their own.

Private Sector Action

The private sector is looking for certainty and predictability in support of the long-term relationships needed for project development and ongoing operations. The components of a good agreement include:

- **Leadership.** Private partner alignment with designated public sector champion.
- **Vision.** Clearly articulated shared vision of the value of partnership and its desired outcomes as the basis of contractual agreements.
- **Human capacity.** Solid partners and professional management inside private partner firms and government to evaluate proposals; draft P3 contract; negotiate terms & conditions; manage

design; oversee construction; coordinate technical, management and financial resources for development and operations.

- **Social responsibility.** Alignment of private and public sector support of stakeholders, including end users, communities, general public, labor unions, competing interests, public sector employees. This could include private support of thought-leadership and training through the University of Alaska and other training organizations. Excel at being a good neighbor.
- **Defined revenue stream.** Funding to cover long-term financing and cash flow.
- **A real project with detailed business plan.** Plan and contracts responding to genuine need in the market. The project should include performance goal-orientation with space for innovation; clear decision-making process; best value versus lowest price; specific milestones and goals; reporting of metrics and frequency; risk allocation strategy; dispute resolution methodology; workforce development assumptions and expectations.

AFFILIATED ORGANIZATIONS

National Council for Public-Private Partnerships

<http://www.ncppp.org/>

The National Council for Public-Private Partnerships is a non-profit, non-partisan organization founded in 1985. The Council is a forum for the brightest ideas and innovators in the partnership arena. Its growing list of public and private sector members, with experience in a wide variety of public-private partnership arrangements, and its diverse training and public education programs represent vital core resources for partnering nationwide. The Council's members bring an unmatched dedication to providing the most productive and cost-effective public services.

Every activity of the Council is geared to enhancing the partnership process from networking events, such as conferences and issue forums, to sharply focused opportunities, such as Committees, Institutes, the Speakers' Bureau and the Web Site. The benefits of the Council membership are bounded only by the energy of its members, which is vast.

Across the country, governments are being challenged to operate more efficiently and cost-effectively and are turning to an accepted tool for serving public needs. In addition to the resources available to its members, the Council has access to expert consultants providing accurate, timely information to the general public. It advocates partnering, where appropriate, at the federal, state and local levels through formal and informal presentations.

MISSION

The mission of The National Council for Public-Private Partnerships is to advocate and facilitate the formation of public-private partnerships at the federal, state and local levels, where appropriate, and to raise the awareness of governments and businesses of the means by which their cooperation can cost effectively provide the public with quality goods, services and facilities.

OBJECTIVES

1. To serve as an advocate of public-private partnerships.
2. To provide complete, objective, timely and useful information on the utilization of public-private partnerships to provide services and facilities to the general public.
3. To facilitate communications between public- and private-sector members with respect to issues related to the implementation of public-private partnerships.
4. To conduct educational, training and other activities on public-private partnerships.
5. To provide input to the public dialogue in support of the use of public-private partnerships and removal of impediments to their implementation.
6. To facilitate an international dialogue on public-private partnerships in support of the foregoing objectives.

KEY VALUES

1. Full and open participation by public and private members and encouragement of frank communication between the public and private sectors.
2. Assistance to both the public and private sectors in public-private partnership analysis and implementation.
3. Promotion of member teamwork in fulfilling the Council's mission and achieving its objectives as a non-profit, non-partisan organization

Canadian Council for Public-Private Partnerships

<http://www.P3council.ca/>

The Canadian Council for Public-Private Partnerships was established in 1993 as a member-sponsored organization with representatives from both the public and the private sectors. As proponents of the concept of public-private partnerships (P3's), The Council conducts research, publishes findings, facilitates forums for discussion and sponsors an Annual Conference on topics related to P3's, both domestic and international. Each year the Council celebrates successful public-private partnerships through the National Awards Program held concurrently with the annual conference in November.

Vision

The Council's vision is to influence the way in which public services are financed and delivered in Canada by:

- Encouraging public-private partnerships
- Providing information on public-private partnerships
- Sponsoring conferences and seminars on partnerships
- Stimulating dialogue between public and private sector decision-makers on the financing and delivery of public services
- Educating the public
- Conducting objective research on key issues that influence the effective use of partnerships

Activities

- Promotion and facilitation of public-private partnerships across Canada
- Compilation of a resource library on P3 issues and projects
- An annual conference and regional events on a wide variety of P3 topics
- Informative newsletters (P3 Quarterly) on Council activities, news and issues discussed at the national conference
- Workshops and seminars that allow participants to share innovative ideas and solutions through a national network
- Council-sponsored publications, including research papers, case studies, guidelines, opinion surveys and national inventories on key public-private partnership subjects

Partnerships British Columbia

<http://www.partnershipsbc.ca/index.php>

Partnerships BC serves British Columbians through the planning, delivery and oversight of major infrastructure projects. As a company registered under the Business Corporations Act, Partnerships BC is wholly owned by the Province of British Columbia and reports to its shareholder the Minister of Finance.

Our mission at Partnerships BC is to structure and implement partnership solutions which serve the public interest. We are committed to transparent operations and achieving wide recognition for our innovation, leadership and expertise in public procurement.

Partnerships BC's core business is to:

- Provide specialized services, ranging from advice to project leadership/management, to government and its agencies with respect to identifying opportunities for maximizing the value of public capital assets and developing public private partnerships;
- Foster a business and policy environment for successful public private partnerships and related activities by offering a centralized source of knowledge, understanding, expertise and practical experience in these areas; and
- Manage an efficient and leading edge organization that meets or exceeds performance expectations.

The company's clients are public sector agencies, including ministries and Crown corporations. To serve these clients effectively, Partnerships BC is also working to build strong relationships with private sector partners such as businesses, investors and the financial services sector.

The company's organization, staffing and governance reflect and support this meshing of public and private sector interests. Partnerships BC has offices based in both Vancouver and Victoria to effectively meet the needs of partners in both sectors.

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

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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 providing 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 sector 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 statutes. 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.

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