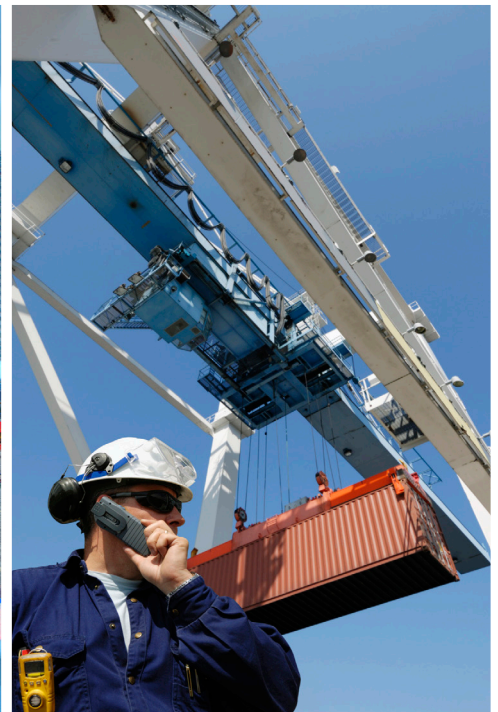
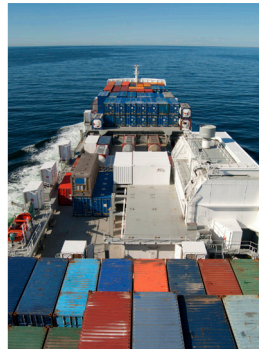




Port Planning and Investment Toolkit

MODULE 3: Financing



U.S. Department of Transportation

Maritime Administration

AAPA



**American Association
of Port Authorities**

Alliance of the Ports of Canada, the Caribbean, Latin America and the United States



Preface

The American Association of Port Authorities (AAPA) and the U.S. Department of Transportation (USDOT), Maritime Administration (MARAD) signed a cooperative agreement to develop an easy-to-read, easy-to-understand, and easy-to-execute Port Planning and Investment Toolkit. The goal of the project is to provide U.S. ports with a common framework and examples of best practices when planning, evaluating and funding/financing freight transportation, facility and other port-related improvement projects.

The analytical tools and guidance contained in this comprehensive resource are designed to aid ports in developing “investment-grade” project plans and obtain capital for their projects in a variety of ways, including: (1) improve the chances of getting port infrastructure projects into Metropolitan Planning Organization (MPO) and state transportation programs to qualify for formula funding; (2) better position port projects for federal aid; and (3) assist ports in obtaining private sector investment.

Since each port investment project is unique with its own set of strengths and obstacles, the material in this Toolkit is not intended to address specific requirements of any single project, user or port; it is a resource for a diverse group of users to become familiar with port planning, feasibility and financing and to highlight opportunities for engagement and coordination throughout the project definition process. This document is not a replacement of existing policies or consultation handbooks and does not constitute a standard, specification or regulation. The exhibits, processes, methods and techniques described herein may or may not comply with specific national, state, regional and local regulatory requirements.

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This Toolkit will be updated periodically as new regulations and policies are developed affecting port planning, feasibility and investment requirements related to the applicable laws discussed in the document. Additional information, updates, and resources of the Toolkit are available on the AAPA website at <http://www.aapa-ports.org/empowering/content.aspx?ItemNumber=21263> and the MARAD website at - <https://www.marad.dot.gov/ports/strongports/port-planning-and-investment-toolkit/>

For all other queries regarding the Port Planning and Investment Toolkit, please contact Jean Godwin, Executive Vice President and General Counsel, AAPA at 703-684-5700.



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Financing Module

While every port investment project is different, and each project plan has unique attributes, ports should generally evaluate and approach the feasibility of investment opportunities using an approach grounded in prudent due diligence and fundamental credit/investment evaluation. Ports function as intermodal facilities for goods and passengers, and they are by necessity public-private partnerships in the broadest sense. As a result, the range of financial solutions for public ports is very broad. In order to make the best use of scarce funding sources, it is important for port owners to understand the full range of potential financial structures, and not be wed to just one potential solution.

The finance processes presented in this Module and shown in Exhibit 3-1 are the steps that have been undertaken in port project financings. They have been successfully used to attract billions of investment dollars for public port and transportation enterprises.

3.1 Strategize

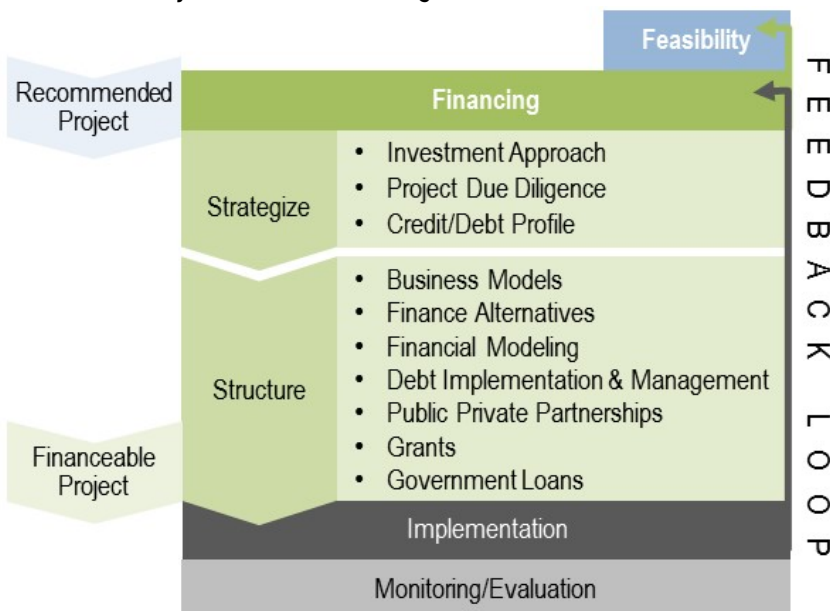
The port industry is very fragmented from a financial markets perspective. Larger ports tend to have large scale projects and **capital improvement programs (CIP)**, along with sophisticated **capital structures** necessitated by such extensive capital needs. Smaller ports with fewer or smaller projects may rely more on governmental and operating funding sources for ongoing CIP requirements. As such, strategy is a primary consideration of any investment decision, and a key factor when defining the various project objectives, strategies and timelines for pursuing selected forms of infrastructure investment and delivery.

3.1.1 Investment Approach

The project finance or **public private partnership (P3)** approach should be in congruence with a port's underlying mission and the specific project objectives established in the Initiate stage. For example, would the port owner prefer to seek upfront fee from a P3 **concession** for use on other port facilities, or would maximizing revenue sharing from the project better meet the port owner's long-term needs?

A review of port financial and planning documents and legal framework is needed in order to develop an understanding of the finance options available for the recommended project and how capital investment might further the port's strategic goals. The review should help the port, investors, and other stakeholders to understand the overall strategic guidelines and criteria regarding the identification of appropriate project/P3 opportunities, the utilization of financing structures, and the selection of potential private sector partners. Ultimately, a port's strategic goals for any given project should inform any approach to capital investment.

Exhibit 3-1 Project Definition: Financing Process





Further, many port owners utilize policy documents to guide decision processes. Policies relevant to funding strategies may include:

- **Debt/Financing Policy:** establishes guidelines regarding debt issuance for funding capital investment, including capital structure and risk parameters. Some port owners will also have a separate swap policy to guide decisions on the use of swaps (for example, **interest rate swaps** on debt).
- **P3 Policy:** establishes guidelines and criteria regarding the identification of appropriate P3 opportunities, selection of private sector partners, and parameters for entering into related agreements.

Depending on state law and legislation, many port owners may utilize state and/or local statutes to guide their internal policy documents. The material and processes included in this Module assume that a port owner has the legal ability to issue debt and/or enter into P3 contracts, without regard to state and/or local statutes of any particular port locality.

3.1.2 Project Due Diligence
Due diligence requirements for a given port project vary depending upon the type and size of project/port. For example, projected cargo and revenue data is important for large cargo terminal development projects given the financing requirements, particularly for project finance/P3s.

However, a port owner seeking to finance some small CIP projects for existing facilities and/or refinance some

outstanding debt could have simpler requirements. They might use historical audited operating and financial results and a historical **net revenue** over **maximum annual debt service** **Additional Bonds Test** under an existing **bond indenture** to meet new money financing requirements. Therefore, an initial step in project due diligence is to understand the nature of the project and how it fits into the overall port system financing scheme.

Typically relevant data regarding the port is available in an **enabling act**, **master plan** and/or **strategic plan**. In addition to reviewing these documents, other itemized factors to review may include, but are not limited to, those listed in Exhibit 3-2.

Evaluating investment opportunities for large project developments will require cargo **demand and revenue studies**, forecasts of initial **capital expenditure (CapEx)**, **renewal and replacement (R&R)** requirements and estimated **operations &**

Exhibit 3-2 Due Diligence Factors

Due Diligence Factors	
Organizational and Regulatory Documents	Legal
Financial	Legal basis to pursue P3 and/or other financing options
Audited financials to include breakout of port costs - 3 years	Attorney letters and pending litigation
Monthly revenue reports, container throughput, and operating statistics - 3 years	Board minutes
Material Contracts	Insurance
Shipping line 1	Summary of coverages
Shipping line 2	Claims - pending and last 3 years
Shipping line 3	Market Information
Operator	Market Studies
Miscellaneous facility use agreements	Master plans
Purchase and supply agreements	Port marketing materials
Real Property	Media clips
Maps/photos, as-built drawings, rail layout	Environmental
Intermodal-rail lease agreements	Phase One assessments
Fixed asset inventory	Permit status, violations, citations
Land and building titles/deeds	Historical and projected capital expenditures
Copies of permits	Historical - past 5 years
Condition assessments	Projected CapEx
Property management forms	Expansion Plans
Labor Contracts	Current design
Terminal/cranes - policy, staffing, performance	Berth & crane capacity analysis
State Department of Transportation Policy	Contracting requirements



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maintenance (O&M) expenditures (OpEx) needed for a terminal or other port facilities.

For smaller scale projects, a port owner may not need an outside study of demand and revenue and costs, instead relying on in-house expertise and

forecasts. Any capital investment evaluation, including of a lease / concession, must incorporate a thorough understanding of the underlying business economics.

Additionally, the due diligence should incorporate a **risk analysis**, which is needed to quantify a range of likely economic outcomes. A further aspect of project due diligence is an analysis of the ports' outstanding debt and how existing capital structures might impact future investment decisions. For example, some P3 capital investment structures would require the **defeasance** of pre-existing debt, and the economics of any such defeasance must be factored into the overall evaluation.

Thus, the approach to project due diligence (Exhibit 3-3) necessitates extensive cost and revenue forecasting, **credit rating** (if relevant) and capital markets financing experience to adequately address the nuances of any given port project financing.

3.1.2.1 Feasibility Screening

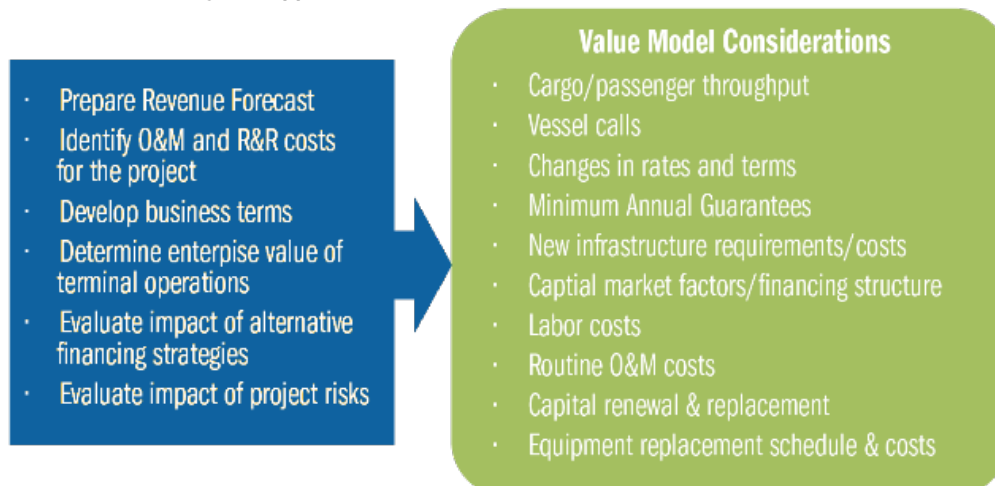
An early step in screening involves a review of existing demand forecasts and cost data, in order to assess what additional information is needed to make a preliminary determination of the recommended project's financial feasibility. As project definition activities proceed, it is critical to review the costing, financing, and O&M documents, and the demand and revenue forecast as these elements are key drivers of the economic feasibility of a project.

In most instances, for a project that requires third party public financing to be economically viable, the development of investment-grade revenue and cost forecasts are required. The term "**investment grade**" is used to signify the level of detail and risk analysis required by the credit rating agencies in order for them to assign a rating of investment grade or above.

An investment-grade cost and revenue forecasts for the project are critical to a port's decision-making process and would be an integral part of

any final financing plan, assuming access to third party public financing is desired. A port owner and its advisors should be involved in the process of developing and reviewing these projections/reports and maintain an emphasis on credit standards in order to ensure that access to financial markets and partners is achievable for the project.

Exhibit 3-3 Due Diligence Approach





The screening tasks outlined in Exhibit 3-4 are overlapping and iterative since components such as demand and revenue often change. The output from this assessment can be used to determine if a port owner should proceed with the recommended project as planned, modify the project alternatives to meet market demand and cost limitations, or to discontinue the project altogether.

3.1.2.2 Risk Analysis

As discussed in the Feasibility Module, the port owner and other project team members should develop and evaluate risk factors that could impact the viability of the recommended project. Key inputs to the development of the financing options will be the results of the revenue, and CapEx and OpEx forecasts. As such, evaluate these inputs to determine potential deviations from estimates.

The major financial elements of this stage of work effort include:

- Define project financing risks and evaluation criteria/measures in order to craft and assess the impact to financial scenarios
- Use risk adjusted revenue forecasts, OpEx estimates and CapEx forecasts and implementation schedules to test and refine different financing strategies
- Identify stress points in the project pro forma cash flow due to the sensitivity analysis
- Develop credit rating and investor risk mitigation strategies and incorporate the same into the plan of finance
- Identify a short list of mitigating financial strategies with key decision makers and project team members

For smaller CIP financings that fit within a port's overall system financing structure, risk analysis may be limited if system net revenues are clearly sufficient to support additional debt service requirements.

Exhibit 3-4 Financial Feasibility Components

Demand & Revenue Report: estimate future cargo/passenger market and operating performance of port operations under current and alternative operating structures
Overview of regional, national and international cargo/ passenger markets
Conduct detailed market analysis for the port/terminal of the current and potential cargo/passenger markets
Rate and volume measurements and revenue projections - 30+ years
Develop capacity measures of cargo/passenger operations
Determine market driven capacity enhancements
Engineering Report: estimate project capital costs, and operating and lifecycle costs of port assets, under current and alternative operating structures
Existing facilities and operations
Project description including: location, regional market, design capacity, and purpose (e.g. support new container business)
Recommendations for infrastructure and equipment to meet capacity needs, versus baseline capacity
Estimate and itemize capital costs
Projected operating & maintenance costs - 30+ years
Future renewal & replacement costs - 30+ years
Plan of Finance: using net revenues and cost estimates from the demand & revenue and engineering reports, develop a preliminary plan of finance
Consider various potential business terms
Consider enterprise value of port/terminal asset
Alternative financing strategies may be necessary to meet investor, creditor, and rating agency thresholds

That is, the risk analysis may be limited to system wide strains on net revenues or an evaluation of how present day financing fits into the system plan of finance if future capital needs are on the horizon, all of which can be analyzed via a port system cash flow model approach. Alternatively, for large project developments, all risk assessments and sensitivity scenarios should be evaluated primarily through a project-specific financial model.

Risks manifest themselves in different ways depending upon the timing and type of risk, as well as the structure of the financial plan. For example, construction risk could result in additional public funds being needed for project completion.



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Mitigation factors include **design-build** contracts with fixed prices and **liquidated damages** for late completion, as well as capital cost contingencies and **capitalized interest**.

3.1.2.3 Outstanding

Debt Considerations

Undertake due diligence to understand the nuances of a port's outstanding debt to determine how existing capital structures might impact future investment decisions. For ongoing CIP financings that fit within the context of a port's system capital structure, care must be taken such that investment/financing decisions do not result in breaking through the floors of both bond indenture debt service coverage thresholds as well as rating agency **debt service coverage ratio** ranges, as relevant.

Separately for project finance/P3 undertakings, certain P3/concession capital investment structures may, for example, require the defeasance of pre-existing debt, and the economics of any such defeasance must be factored into the overall project evaluation. Two key steps are to figure out 1) which of the port's outstanding debt issues should be allocated to which facility, and 2) the cost to defease/terminate this debt and any related interest rate swaps assuming such debt is allocated to the facilities upon which the recommended project will be developed. Outstanding debt that was issued directly for the subject terminal facilities, as well as debt that was partially/indirectly used for the subject facilities needs to be examined.

Other potential considerations pertain to the ability of a port to issue subordinate debt under an existing bond indenture, or the ability to include additive project net revenues when determining additional bond test thresholds upon the issuance of new project debt secured by port system net revenues. While some ports already have bond indentures structured to accommodate subordinated liens and projected revenues, other ports rely on more limiting bonding parameters in their indentures.

Depending on the circumstances, there may be methods to restructure existing bond indentures without harming existing debt holders or jeopardizing credit ratings. For example, "closing" an existing **senior lien** indenture and creating a new **subordinate lien** indenture as the functional indenture going forward, with effective second and third liens. Careful consideration must be made regarding potential impacts to credit ratings and future borrowing capacity.

3.1.3 Credit/Debt Profile

Creditworthiness, and thus financial viability, underpins all capital investment decisions, and so port owners must develop a thorough understanding of their creditworthiness and traditional debt programs. Traditional debt programs are often the easiest and least expensive to implement, and therefore they should not be overlooked while also considering new project delivery techniques.

Understanding the credit rating process and potential impacts related to any specific project under consideration for capital investment is a key step for two different but important reasons. First, utilize the due diligence and credit profile to help assess the attractiveness of the project for outside investment. Is the project creditworthy as a stand-alone enterprise outside of a "system" financing? Second, determine the impact, if any, on the port's existing credit ratings.

Capital markets financing and P3s can have unintended consequences to a port's financial operations if not properly structured. As such, analyzing and comprehending the port's **credit/debt profile** must be completed with a broad perspective.

3.1.3.1 Credit Elements of Project Finance

Project finance credits in the transportation sector can require analysis of complex data and project structures. Further, the characteristics of project creditworthiness vary across delivery methods and sub-sectors such as ports. Generally, project finance attributes include the following:

- Non-recourse debt – debt holders cannot look to the general obligation or full faith & credit of the public project sponsor
- Capital financing is secured by project operating revenues
- Construction risk is incorporated into the financing credit
- Operations & maintenance risk is incorporated into the financing credit
- Financial plans typically incorporate a full lifecycle cash flow analysis
- Credit ratings are typically lower due to construction risk, long-term revenue uncertainty, and long-term O&M cost uncertainty
- More complex & innovative contracting
- More complex & innovative debt structures

Inherent in project finance structures is the notion that a new project will be constructed, and if the construction contracting method chosen involves a third party, such as via a design-build contract, then related considerations and analysis include:

- Detailed description of the contractor's qualifications and the construction contract terms - The contract discussion should include the price, risks shifted to the contractor, schedule, performance &

payment bond requirements and providers, liquidated damages and how those are sized, any warranty period or other terms that the general engineering consultant views as important.

- Description and estimate of any port project costs that are outside of the design-build contract such as land purchases or construction management.
- Risk estimates for all port costs and any design-build contract risks assumed by the port - The engineering report should describe these risks and provide both cost and time potential impacts. Following these risks, mitigation measures need to be detailed. Examples of mitigation measures include: contingency funds built into the contract, owner's provided insurance, capitalized interest beyond construction completion to absorb delays, among other measures.
- A contractor replacement analysis should the contractor go bankrupt - This analysis should show how much incremental time and money would it take to complete the recommended project, net of any payments made by bond providers. A description of how the port would cover these costs is also necessary.





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More broadly, elements and sub-elements of credit to consider when evaluating project viability include, but are not limited to, those shown in Exhibit 3-5.

Exhibit 3-5 Elements of Credit

Socio-Economic Need
<ul style="list-style-type: none"> • Safety • Environment • Economic development
Economically Justified
<ul style="list-style-type: none"> • Efficient transportation • Generates revenues • Connecting key business/trade regions
Revenue Study
<ul style="list-style-type: none"> • Economic forecast • Demand forecast • Independent and credible • Bond offering disclosure
Construction & Operating Issues
<ul style="list-style-type: none"> • Construction and O&M cost risk • Lump sum/fixed price contracts • Financial strength/performance of construction team
Risk Management Plan
<ul style="list-style-type: none"> • Environmental mitigation • Construction completion • Surety bonds & insurance
Public Support & Public Interest
<ul style="list-style-type: none"> • State and local political support • Federal agencies • Public equity/funding for EIS, design and engineering

3.1.3.2 Port Credit Attributes

In addition to general project finance credit elements, port financing approaches, including for both project finance/P3s and ongoing CIP financings, entail specific credit criteria for repayment quality. Included below is a brief review of the credit attributes considered important by market analysts. Each of the rating agencies uses their own specific qualitative and quantitative factors in reviewing port credit attributes. The focus is on port operating revenue attributes, but certainly the introduction of state or local tax-backed sources would change the credit profile somewhat, potentially in a positive way.

Market Position

Competitive dynamics: Since many ports are engaged in multiple lines of business - containerized, breakbulk or bulk cargo operations; passenger cruise activity; or real estate development - the competitive dynamics of each sub-market must be understood, including the degree of competition from other ports.

Location and local economy: Location affects travel time to and from major trade partners, transportation links to inland markets, and local demand for port import products and supply of export products.

Importers and distribution centers: Port of entry or exit is increasingly tied to a port's relationship with importers and its proximity to major distribution centers.

Measuring demand: Certain key demand measures and trends include market share, market size, share of discretionary cargo (cargo that is destined for or originates from outside of the port's Metropolitan Statistical Area), the balance of trade (the ratio of volume of imports to exports), cargo volume (as measured most commonly by twenty-foot- equivalent units, or TEUs), cargo tonnage, and cruise activity.

Structural and Operational Factors

Governance structure: A port's ruling body might be a local or state government, or an independent board. The governance structure may determine if a port must compete with other public entities for public funds, divert port revenues to support non-port operations, and the type of debt a port can issue. Ports may also be operated by a private concessionaire under a long-term agreement with a state or local government.

Scope and nature of operations: Considerations for an authority managing multiple business lines or facilities include the mix of revenues pledged to the system's debt, and the extent the port

operation makes a net revenue contribution to or receives an operating or capital subsidy from the authority's other business lines.

Operating structure: There are two basic types of port operating structures: (1) Landlord ports - leased to a private operator, and lease payments are usually based upon a minimum annual guaranteed payment and an amount tied to cargo volumes; and (2) Operator ports - facilities are used on a common carrier basis with the port controlling use of the facilities, and performance is dependent upon cargo volume.

Facilities, capacity, and transportation

infrastructure: Key factors include (a) depth of main access channel, turning basin, and berths, (b) number and type of cranes, (c) wharfage and dockside facilities, (d) presence of on-dock or near-dock rail facilities, (e) terminal capacity, (f) railroads serving the port, (g) proximity to highway network, and (h) availability of land for storage and expansion.

Cargo mix: Diversity in cargo operations generally will have a positive effect on a port's overall credit profile.

Major trading partners: The strength and growth prospects for a port's trading partners, including trade route distribution, are an important factor in credit evaluation.

Major shipping lines and alliances: A factor in the analysis of ports is the diversity and financial strength of the shipping lines calling at a port. Shipping alliances add another layer of uncertainty for ports - as partners realign, they may radically change the amount of cargo shipped through a port in a relatively short period of time.

Labor relations and productivity: Successful ports have the advantage of well-managed labor relations and above-average productivity, including the use of new technology to gain efficiencies.

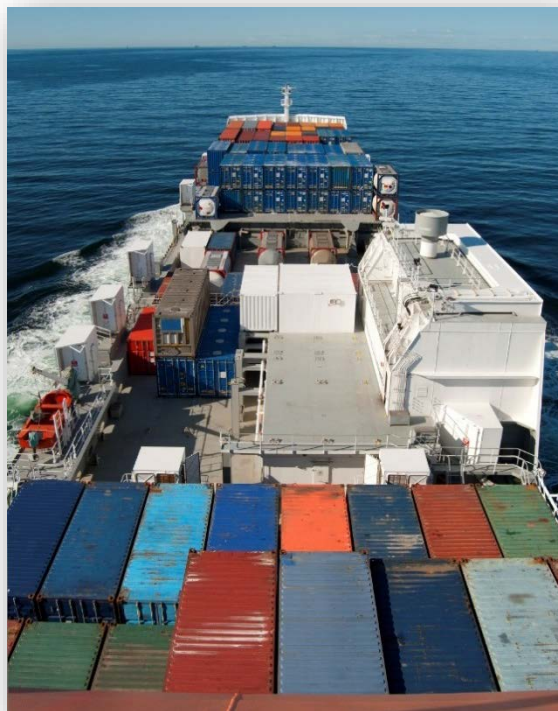
Financial Factors

Financial performance: Key financial factors include revenue stability, revenue diversity, debt service coverage, and expense drivers.

Balanced operations: The ability to achieve a balanced bottom line to mitigate variable operating performance is important for the long-run financial health of all ports and becomes critical for those that do not have significant financial reserves.

Operating and non-operating revenues: An important consideration is the extent to which a port owner relies on operating revenues and non-operating revenues, such as federal grants, state funding sources, or local tax support to cover operating and capital expenditures.

Revenue stability: Minimum annual guaranteed payments required by contracts with the port's customers can help insulate a port's financial operations from cargo fluctuations.





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Revenue diversity: Ports with greater revenue diversity are often financially stronger because of the stability that multiple revenue sources provide. Diversity of revenue stream by business line, such as cargo, cruise, and real estate, and by revenue type, such as wharfage, dockage and lease revenue, determine a port's reliance on any particular income source.

Debt service coverage: Debt service coverage calculations measure a port owner's ability to repay the principal and interest on its debt from net revenues.

Expense drivers: Primary port expenses include salaries, administration, security, and cost of operating and maintaining facilities.

Debt Position and Capital Plan

Debt levels: An analysis of the relative leverage of a port's assets or revenues can reveal vulnerabilities to debt service coverage over the life of the bonds.



Capital and financing plans: Analysis of a port's credit quality includes a review of the strategic and economic rationale of the capital program, its underlying assumptions relating to market development and cargo growth, and the effect that the program is likely to have on a port's financial and debt position.

Debt security: Debt security considerations include the type of pledge (gross revenue or net revenue), the type of revenues pledged (port revenues, tax revenues, lease payments, etc.), availability of other resources (**debt service reserve** funds and operating and maintenance reserves), and the strength of the bond **covenants** (**rate covenant** and **additional bonds test**, etc.).

Debt structure: Debt structure considerations include the mix of variable and fixed-rate debt, whether debt service is level, accelerated or deferred, and whether or not there are any interest rate swap agreements.

Management and Business Strategy

Responses to industry risks: In assessing a port owner's ability to respond to a variety of risks and opportunities, key indicators include a coherent long-range strategic plan, clearly articulated debt and investment management policies, past record of successfully dealing with industry volatility, and the ability to achieve favorable results such as balanced operations.

Budgeting practices: Assessment of budgeting practices includes reviewing a port owner's method of budgeting and of monitoring the budget to determine whether sufficient flexibility and controls are in place to prevent surprises.

3.1.3.3 Rating Agency Considerations

Underlying credit ratings are of paramount importance to bond investors, particularly given that bond insurance is currently less widely used to back-stop port bond issues. The rating agencies change their guidance from time to time and it is important to understand how the changes will affect a port's credit rating.



Port owners need to understand how each rating agency analyzes their credit – while the rating agencies look at similar fundamentals, each agency can have a slightly different view and analytical approach. Additionally, rating agency annual surveillance is an important process in the bond market to ensure ongoing credit transparency.

Port owners and/or their advisors should be familiar with rating agency requirements (Exhibit 3-6). Regular discussion regarding credit trends with senior transportation/port analysts at S&P, Moody's and Fitch is imperative to positive credit rating outcomes.

Rating agency outreach efforts can be accomplished through the preparation of presentation materials that provide a comprehensive assessment of key credit strengths such as:

- essentiality and strong economic rate making ability;
- cargo/passenger demand;
- financial operations and management;
- debt service coverage and **liquidity**;
- efforts to improve capital assets and serve customer needs; and
- initiatives to mitigate and manage risks, such as cost containment measures and steps to address the effects of slow economic recovery cycles.

Participate in rating meetings and periodic update calls to ensure the rating agencies have a clear understanding of a given port/project.

Regularly communicate with the rating agencies in order to define the rating strategy, prepare relevant presentation materials and participate in meetings with analysts to keep them up to date and address their concerns. Such regular dialog means the port owner can anticipate and proactively respond to issues to avoid their manifestation into a negative rating action.

Exhibit 3-6 Credit Rating Criteria



Similarly, regular dialog about the port owner's plans and commitments to operate and maintain its infrastructure in a state of good repair, address growing transportation needs and ensure bondholder protection will help reinforce efforts to secure improved ratings.

As part of this effort, conduct stress tests consistent with rating agency guidelines to assess the flexibility of the financial strategy to address downside risks. Potential stresses that could be tested include the impacts of cargo declines consistent with recessionary periods, increases in capital plan costs, increases to future financing costs, operating expenses, etc. Based on the results of alternative stress scenarios, potential mitigation strategies can be identified that can be used to demonstrate to the rating agencies the port's wherewithal to address such challenges.

Additional information from the rating agencies can be found on their websites:

- www.fitchratings.com
- www.moody.com
- www.standardandpoors.com



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3.1.3.4 Debt Profile

A port's debt profile is an important investment/credit consideration as it may determine the ability to use debt to finance infrastructure projects, and also serves as a key component in any repayment analysis.

As an example, for an on balance sheet system financing, existing debt and debt structures may limit additional debt capacity for a project. For an **off balance sheet** privately secured financing, the structure of the debt can determine its attractiveness to third party investors. Investors, creditors, and rating agencies may view debt profiles from different vantage points, however the underlying question to be answered - i.e. what is the probability that the capital provider will be fully repaid on time? - remains the same across capital markets participants. Some key features of debt instruments that compose debt portfolios are listed in Exhibit 3-7.

Exhibit 3-7 Key Features of Debt Instrument

Security for Debt - tax-backed, net operating revenue, lease revenue, etc.
Bond Indenture flow of funds - senior and subordinate repayment structures
Rate Covenant and Additional Bonds Test - debt service coverage levels
Credit Rating
Type of Debt - public, private, government program

In order for port owners to attract outside investment, they must maintain constant dialogue with investors, creditors and rating agencies and present clear, concise information on port capital structure. A debt profile summary can be utilized, which is a detailed description of an issuer's overall debt portfolio and credit profile that is updated as changes in capital structure occur. A debt profile summary typically includes all of the relevant information about an issuer's debt including current ratings, debt service graphics, debt service coverage and eligibility for refunding. Exhibit 3-8 shows example debt profile components/outputs.



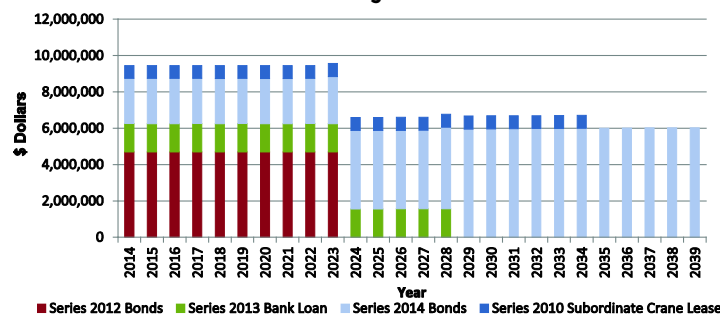


Exhibit 3-8 Debt Profile Summary

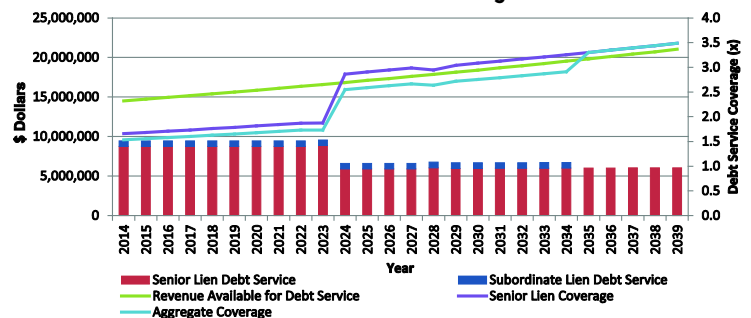
Year	Series 2012 Bonds			Series 2013 Bank Loan			Series 2014 Bonds			Total Senior Lien Debt Service
	Principal	Interest	Debt Service	Principal	Interest	Debt Service	Principal	Interest	Debt Service	
2014	\$ 3,490,000	\$ 1,200,000	\$ 4,690,000	\$ 935,000	\$ 630,000	\$ 1,565,000	\$ -	\$ 2,490,000	\$ 2,490,000	\$ 8,745,000
2015	3,595,000	1,095,300	4,690,300	965,000	597,275	1,562,275	-	2,490,000	2,490,000	8,742,575
2016	3,700,000	987,450	4,687,450	1,000,000	563,500	1,563,500	-	2,490,000	2,490,000	8,740,950
2017	3,815,000	876,450	4,691,450	1,035,000	528,500	1,563,500	-	2,490,000	2,490,000	8,744,950
2018	3,925,000	762,000	4,687,000	1,070,000	492,275	1,562,275	-	2,490,000	2,490,000	8,739,275
2019	4,045,000	644,250	4,689,250	1,110,000	454,825	1,564,825	-	2,490,000	2,490,000	8,744,075
2020	4,165,000	522,900	4,687,900	1,145,000	415,975	1,560,975	-	2,490,000	2,490,000	8,738,875
2021	4,290,000	397,950	4,687,950	1,185,000	375,900	1,560,900	-	2,490,000	2,490,000	8,738,850
2022	4,420,000	269,250	4,689,250	1,230,000	334,425	1,564,425	-	2,490,000	2,490,000	8,743,675
2023	4,555,000	136,650	4,691,650	1,270,000	291,375	1,561,375	105,000	2,490,000	2,595,000	8,848,025
2024	-	-	-	1,315,000	246,925	1,561,925	1,830,000	2,490,000	4,320,000	5,881,925
2025	-	-	-	1,360,000	200,900	1,560,900	1,905,000	2,417,168	4,322,168	5,883,068
2026	-	-	-	1,410,000	153,300	1,563,300	1,980,000	2,341,223	4,321,223	5,884,523
2027	-	-	-	1,460,000	103,950	1,563,950	2,065,000	2,262,165	4,327,165	5,891,115
2028	-	-	-	1,510,000	52,850	1,562,850	2,315,000	2,179,995	4,494,995	6,057,845
2029	-	-	-	-	-	-	3,865,000	2,094,298	5,959,298	5,959,298
2030	-	-	-	-	-	-	4,025,000	1,940,125	5,965,125	5,965,125
2031	-	-	-	-	-	-	4,195,000	1,779,728	5,974,728	5,974,728
2032	-	-	-	-	-	-	4,370,000	1,612,690	5,982,690	5,982,690
2033	-	-	-	-	-	-	4,550,000	1,438,598	5,988,598	5,988,598
2034	-	-	-	-	-	-	4,740,000	1,257,243	5,997,243	5,997,243
2035	-	-	-	-	-	-	4,935,000	1,068,418	6,003,418	6,003,418
2036	-	-	-	-	-	-	5,140,000	871,708	6,011,708	6,011,708
2037	-	-	-	-	-	-	5,355,000	666,905	6,021,905	6,021,905
2038	-	-	-	-	-	-	5,575,000	453,595	6,028,595	6,028,595
2039	-	-	-	-	-	-	5,790,000	240,285	6,030,285	6,030,285
Total	\$ 40,000,000	\$ 6,892,200	\$ 46,892,200	\$ 18,000,000	\$ 5,441,975	\$ 23,441,975	\$ 62,740,000	\$ 50,014,140	\$ 112,754,140	\$ 183,088,315

Series 2010 Subordinate Crane Lease			Subordinate Lien Debt Service	Aggregate Debt Service	Revenue Available for Debt Service	Senior Lien Coverage	Aggregate Coverage	Credit Ratings	
Principal	Interest	Debt Service						Moody's	A1 (stable)
\$ 312,801	\$ 400,000	\$ 712,801	\$ 712,801	\$ 9,457,801	\$ 14,500,000	1.66x	1.53x	S&P	A+ (stable)
325,313	387,488	712,801	712,801	9,455,376	14,717,500	1.68x	1.56x	Fitch	A+ (stable)
338,326	374,475	712,801	712,801	9,453,751	14,938,263	1.71x	1.58x		
351,859	360,942	712,801	712,801	9,457,751	15,162,336	1.73x	1.60x		
365,933	346,868	712,801	712,801	9,452,076	15,389,771	1.76x	1.63x		
380,570	332,231	712,801	712,801	9,456,876	15,620,618	1.79x	1.65x		
395,793	317,008	712,801	712,801	9,451,676	15,854,927	1.81x	1.68x		
411,625	301,176	712,801	712,801	9,451,651	16,092,751	1.84x	1.70x		
428,090	284,711	712,801	712,801	9,456,476	16,334,143	1.87x	1.73x		
445,213	267,588	712,801	712,801	9,560,826	16,579,155	1.87x	1.73x		
463,022	249,779	712,801	712,801	6,594,726	16,827,842	2.86x	2.55x		
481,543	231,258	712,801	712,801	6,595,869	17,080,260	2.90x	2.59x		
500,805	211,996	712,801	712,801	6,597,324	17,336,463	2.95x	2.63x		
520,837	191,964	712,801	712,801	6,603,916	17,596,510	2.99x	2.66x		
541,670	171,131	712,801	712,801	6,770,646	17,860,458	2.95x	2.64x		
563,337	149,464	712,801	712,801	6,672,099	18,128,365	3.04x	2.72x		
585,871	126,931	712,801	712,801	6,677,926	18,400,290	3.08x	2.76x		
609,305	103,496	712,801	712,801	6,687,529	18,676,295	3.13x	2.79x		
633,678	79,124	712,801	712,801	6,695,491	18,956,439	3.17x	2.83x		
659,025	53,776	712,801	712,801	6,701,399	19,240,786	3.21x	2.87x		
685,386	27,415	712,801	712,801	6,710,044	19,529,398	3.26x	2.91x		
-	-	-	-	6,003,418	19,822,339	3.30x	3.30x		
-	-	-	-	6,011,708	20,119,674	3.35x	3.35x		
-	-	-	-	6,021,905	20,421,469	3.39x	3.39x		
-	-	-	-	6,028,595	20,727,791	3.44x	3.44x		
-	-	-	-	6,030,285	21,038,708	3.49x	3.49x		
Total	\$ 10,000,000	\$ 4,968,822	\$ 14,968,822	\$ 14,968,822	\$ 198,057,137				

Outstanding Debt Service



Debt Service Coverage





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3.2 Structure

Port owners need a process to develop a range of finance alternatives to consider before determining the most appropriate structure to move a project forward. Project stakeholders must qualitatively evaluate the advantages and disadvantages of public, hybrid, and P3 operating and financial alternatives as it relates to the port and the project. Some alternatives may prove to be unfeasible or undesirable and would thus be eliminated from further consideration.

For example, a port owner may be interested in **availability payment** P3s, but if the port doesn't have significant non-operating revenues to make those payments and/or its revenues are already pledged to outstanding indebtedness, then an availability payment structure does not make sense. Thus, a framework is needed for a qualitative analysis of financing structures.

The results of a structural alternatives analysis should enable a port owner to understand the detailed advantages and disadvantages of various financing alternatives before choosing a particular path. One of the more important aspects of investment decisions is to realize that certain finance approaches may not be in the best interest of the port.

3.2.1 Port Business Models

Project development and P3s should be considered strategically within the range of procurement alternatives available to ports. U.S. ports have traditionally used capital financing approaches that have corresponded to a variety of operating models. Each financing approach and operating model have associated attributes with respect to key factors such as management control, types of contracts/lease agreements, facilities financed, type of and **security for debt**,

Exhibit 3-9 Port Operating Models

Financing Approach	Public Agency Tax-Backed	Public Agency Operating Revenues	Long Term Landlord Finance	P3 Concession
Operating Model:	Public Operator	Public Operator/ Landlord	Long Term Landlord	Passive Landlord
Primary Management Control:	Public	Public	Public-Private	Private
Typical Contracts & Lease Agreement:	N/A for Grants & Tax Revenues	Multiple Tenants; Variable Contracts Discretionary Terms	Single Tenant; Long Term Must Cover Debt	Single Tenant; Longest Term to Cover Debt & Equity Return
Typical Facilities Financed:	Public Use; Infrastructure such as Roads and Dredging	Private Activity; Docks, Wharves, Cranes, Warehouses, Buildings, etc.	Private Activity; Docks, Wharves, Cranes, Warehouses, Buildings, etc.	Private Activity; Docks, Wharves, Cranes, Warehouses, Buildings, etc.
Sources of Revenues and Security for Debt:	Grants, Gov't Transfers, Taxes	Tariffs, Throughput Fees, Security Fees, Facility Lease Revenue, etc.	Corporate Rental Minimum Guarantee & Throughput Fees	Tariffs/Lease Revenue, etc. Received by Private Concessionaire
Type of Debt:	Agency Revenue Bonds	Agency Revenue Bonds	Agency Special Purpose Conduit Bonds	Privately raised Debt & Equity
Tax Status/Term:	Gov't Purpose & AMT Tax-Exempt 10-30 years	Gov't Purpose & AMT Tax - Exempt 10-30 years	AMT Tax-Exempt 20-40 years	Taxable Debt 50-99 years
Primary Private Partners:	Shipping Company, Railroads, Private Haulers/Trucks	Shipping Company, Railroads, Private Haulers/Trucks, Terminal Operator	Terminal Operator/ Corporate Guarantor (likely operator parent and/or shipping co.)	Private Equity Concessionaire



tax status and debt terms. Each approach can be implemented successfully, and the approach used depends in part on management's preferences and public support.

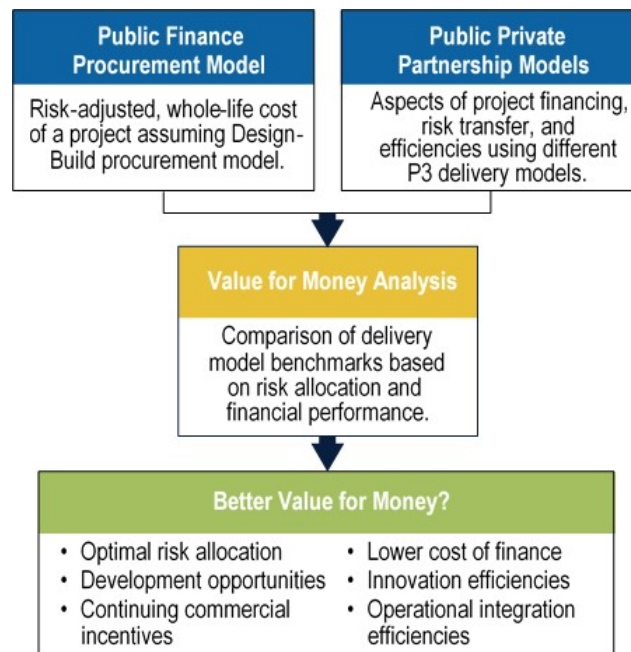
Exhibit 3-9 outlines four approaches most often seen in use today. The P3/concession/equity approach has received much attention in recent years, spurred on by private equity funds aggressively seeking infrastructure investment alternatives. The long-term landlord approach is a hybrid model involving a long-term single tenant **operating and use lease agreement**, with the port issuing municipal finance secured on payments from the tenant alone. One of these two models might be the basis for a port owner's consideration of a new P3 transaction and would help define any negotiation, however, public alternatives should also be evaluated and can provide a comparison by which to measure the P3 alternatives.

In practice, the approaches outlined in Exhibit 3-9 are often used simultaneously for different terminals and different projects by the same governmental port agency. For the port as a whole, there is nothing mutually exclusive about these approaches. Port owners can successfully use multiple approaches at once within the entirety of a system of port infrastructure. Port owners must strategically decide how broad or narrow its financing approach might be, in particular in the context of both future expansion as well as ongoing CIP needs.

3.2.1.1 Selection of Business Models

Many infrastructure investors advocate **Value for Money (VfM)** analysis to evaluate the benefits of risk transfer under a P3 compared to conventional capital procurement options, and VfM is used in USDOT **major project financial plans**. VfM "prices" risk transfer by producing a discounted net present value amount that represents the aggregate impact of the various sensitivities on the port as procurer.

Exhibit 3-10 Value for Money Public Comparator Approach



An assessment of VfM for P3 procurements is a comparative concept, and requires the use of a "public sector comparator" to evaluate VfM, as shown in Exhibit 3-10.

While VfM has its uses for high-level comparative analysis, it was designed for **Availability Payment (AP)** P3s where the public sector is paying for the service in either case and the service portion of the AP is priced to reflect the increased risk the private partner is accepting. This methodology is not intended to be applied to revenue risk P3s. The likely area of application of this kind of P3 for port projects would be common support infrastructure, which benefits the port as a whole, such as highway or freight rail access.

3.2.2 Port Finance Alternatives

Many U.S. ports issue non-recourse net operating revenue supported debt, typically on a "system" approach as opposed to a single project. Compared to debt raised by P3 concession companies, public ports have typically used very conservative debt practices. Many U.S. ports utilize a variety of tenant lease & use agreements by which private partners might construct, finance and/or operate facilities – the related revenues support various



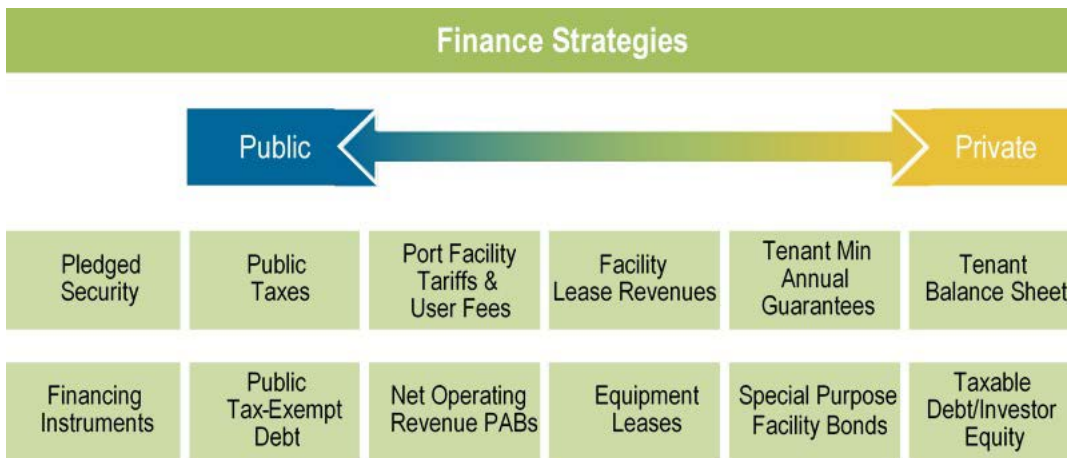
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types of debt. Exhibit 3-11 shows the range of financing strategies employed by ports, from

general obligation bond financings for “bank qualified issuers” (less than \$10 million of debt in any given calendar year). As the marketplace has changed and as their balance sheets have expanded, banks have begun developing long-

Exhibit 3-11 Port Finance Strategies

public to private financing, with various security



term financing tools for larger and larger financings, across a spectrum of security structures. Port owners now have greater opportunity to implement bank loan financings at potentially attractive rates with flexible terms and prepayment provisions.

Generally, smaller sized financings with shorter term lengths (15 years or less) are often more

pledges and financing instruments.

3.2.2.1 Private Activity Bond Features

Private Activity Bonds (PABs) are securities issued by a government agency to provide debt financing for private projects that are developed for a public purpose. Because of the public purpose, federal tax law provides that most port capital infrastructure is exempt facilities under the code. The use of PABs typically results in reduced financing costs versus conventional taxable bonds or private bank financing since interest on the PABs is not subject to federal income taxes (unless more than 10 percent of the bond proceeds are designated for private use). PABs are typically payable from payments made by the private user of the property financed, although the bond security structure can vary widely. They can be structured and implemented for both traditionally financed port projects as well as projects involving P3 finance strategies.

3.2.2.2 Commercial Bank Financings

Historically, commercial banks participating in the public finance markets would provide small,

efficient when issued as a bank loan, relative to a publicly offered bond issue, due to lower costs of issuance, fewer disclosure requirements and the ability to be issued in a shorter timeframe. Further, some banks may be willing to take on larger financings in excess of \$100 million at more attractive terms than can be achieved via the public bond market.

When a port owner considers an upcoming financing need, an analysis should be completed as to whether a **publicly offered** financing or a **privately placed** bank loan would be more efficient. The port owner and advisors should take all factors of the financing into consideration (term, size, principal structure, credit, and market conditions) and summarize the financing alternatives including expectations of what structure and terms could likely be achieved in the current market, as well as a discussion of the pros and cons of each alternative. Exhibit 3-12 provides a brief summary of some of the pros and cons to consider when analyzing a bank loan financing.

Exhibit 3-12 Bank Loan Pros and Cons

Pros	Cons
<ul style="list-style-type: none"> Does not require transaction be rated or insured No offering documents or registration required Banks usually do not require Debt Service Reserve Fund Disclosure usually limited to receipt of CAFR and budget (no official statement) Minimal cost of issuance 	<ul style="list-style-type: none"> Most banks prefer financings with a term of 10 years or less; some will allow terms up to 15-20 years Risk of future tax law changes retained by the issuer. Bank loans usually contain interest rate "gross up" language, providing the bank the right to increase the loan rate should tax law changes negatively impact the bank's after tax yield. Term limited to 20 years and some banks will not provide a fixed rate for the entire term. Instead, the bank would have a "put" option during the term of the loan (e.g. 5, 10, or 15 years). This allows the bank the options to "put" the loan back to the issuer and force them to refinance at current market rates.

3.2.2.3 Port Project Finance Bond Alternatives

Aside from tax-backed bonds, there are four main security structures that a public port can use to issue debt, either as part of its system of port facilities and/or in a long term lease/P3 scenario:

- Port Net Operating Revenue Bonds
- Port **Asset Backed Debt**
- Port **Special Purpose Facility Bonds**, backed by lessee/concessionaire revenue and parent guarantee
- Port Special Purpose Facility Bonds, backed by the net operating revenue of a single terminal concession, i.e. apart from the port's "system" net operating revenue

The chosen debt security structure is port and project specific, taking into consideration the unique operating and business characteristics of any given port and project.

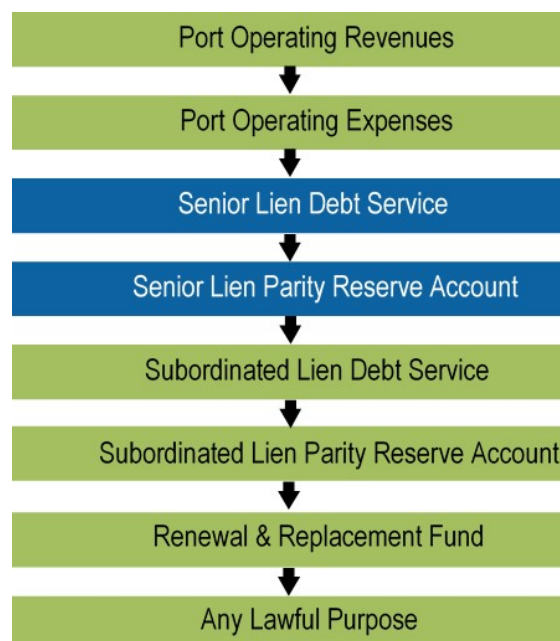
Port "System" Net Operating Revenue Bonds

Security for Debt: Port system net operating revenue, with a Minimum Annual Guaranty and/or revenue sharing from the long-term lease counted as part of the port's operating revenue.

Bond Indenture: Secures revenues for benefit of debt holders. Flow of funds (Exhibit 3-13) specifies the priority of payments for secured revenues; typically includes provisions for operating expenses, debt service and reserves, renewal &

replacement funds, and any lawful purpose. Issuer covenants specified, including:

- Rate Covenant: 1.20x-1.50x senior lien debt service coverage, 1.10x-1.25x aggregate debt service coverage.
- Additional Bonds Test: 1.25x-1.50x senior lien debt service coverage, 1.10x-1.25x aggregate debt service coverage on a historical and/or projected basis.

Exhibit 3-13 Senior Lien



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Credit Rating: Depends on various factors analyzed by the rating agencies including, but not limited to: size, cargo diversification, trade lanes, demand and revenue, ongoing CIP requirements, debt structure and debt service levels.

- U.S. port credit ratings are typically in the range from AA to high BBB, with the majority in the A category.

Type of Debt: Includes publicly issued bonds, private placements, and government loan programs; with fixed and variable interest rates.

Port Asset Backed Debt

Security for Debt: Port system net operating revenue, with a Minimum Annual Guaranty and/or revenue sharing from the long-term lease counted as part of the port's operating revenue.

Bond Indenture: Asset-backed debt typically categorized as subordinate debt in the *flow of funds* (Exhibit 3-14). Subordination of debt accomplished via additional hard asset security such as a crane lease or property mortgage.

- Rate Covenant and Additional Bonds Test the same as in the master indenture (see prior section).

Credit Rating: Given the subordinated repayment position in the flow of funds, credit ratings assigned to such debt are generally at least one notch lower relative to the senior lien debt.

- Due to asset backing, lease transactions are often privately placed and thus unrated.

Term of Debt: Dependent on life of asset.

- Crane Lease: 15-20 years committed funding; 30 year *amortization*.
- Property mortgage: up to 30 years.

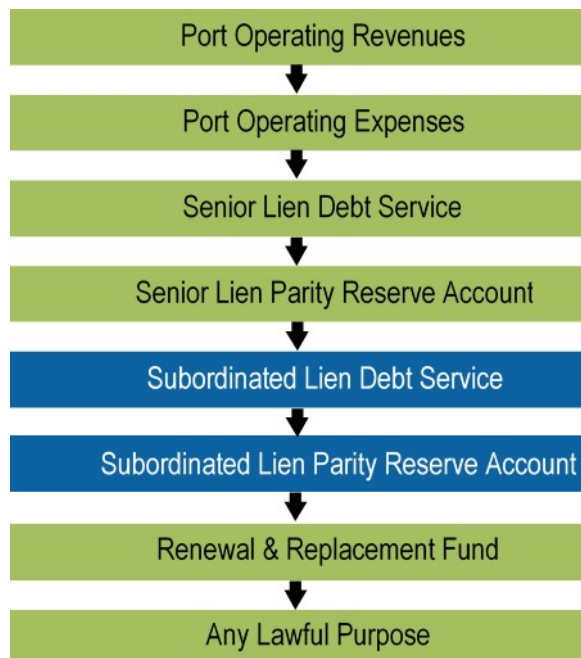
Type of Debt: Includes publicly issued bonds, private placements, lease financing, and government loan programs (e.g. State Infrastructure Bank loans); with fixed and variable interest rates.

Port Special Purpose Bonds – Lessee Guarantee

Security for Debt: Payments of special purpose rent received by the port or the trustee pursuant to an agreement with lessee/concessionaire. Rent/lease payments supported by a corporate guaranty. Additional bond security can be provided with a *Letter of Credit (LOC)* backed by lessee/concessionaire corporate guaranty (see Exhibit 3-15).

Bond Indenture: Secures lease/concession rent/lease payments for benefit of debt holders. Overarching feature from port owner's perspective is off-balance sheet debt which is not additive to the port's system debt.

Exhibit 3-14 Subordinate Lien





Covenant requirements vary depending upon strength of credit/guarantee, and may include corporate-style parameters for debt and equity in addition to municipal market debt service coverage covenants.

Credit Rating: Dependent upon the financial strength of the corporate guaranty, as well as the financial strength of the LOC provider.

Type of Debt: Includes publicly issued bonds and private placements; with fixed and variable interest rates.

Single Terminal Concession: Stand-alone Special Purpose Bonds

Security for Debt: Net operating revenue of a single terminal concession.

Bond Indenture: Secures concession revenues for benefit of debt holders and also incorporates rent and revenue sharing payments to the port (see Exhibit 3-16). Overarching feature from port owner's perspective is off-balance sheet debt.

- Rate covenant and Additional Bonds Test levels typically higher for single terminal net revenue pledge versus port system net revenue pledge (e.g. 1.40x-1.75x senior lien debt service coverage for single terminal pledge).

Credit Rating: Ratings depend on the strength of the terminal/concession cash flows and security structure as defined in the financing documents, as well as the terms of the concession agreement. If a single terminal, the size and lack of diversification will likely lead to a BBB rating at best.

Tax Status of Debt: Upfront payments not used for eligible facility capital costs could not use PABs and such costs would be funded from taxable debt or equity.

Equity: Concession and financing documents would need to provide for distributions to shareholders to pay taxes and provide a return on investment.

Exhibit 3-15 Lessee Guarantee

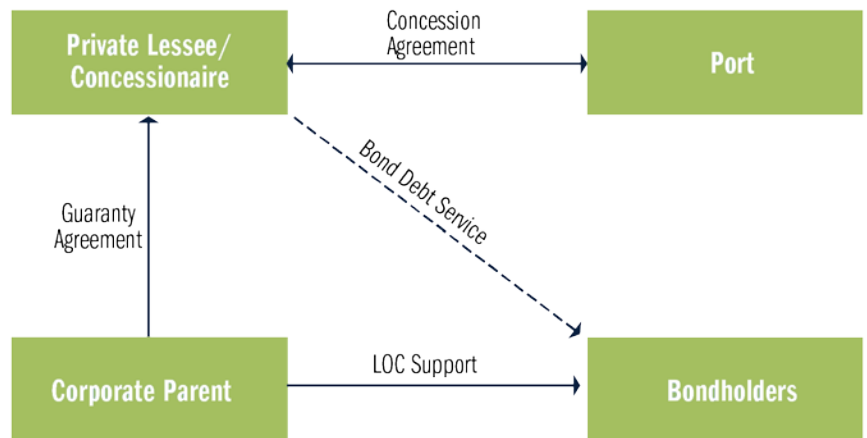
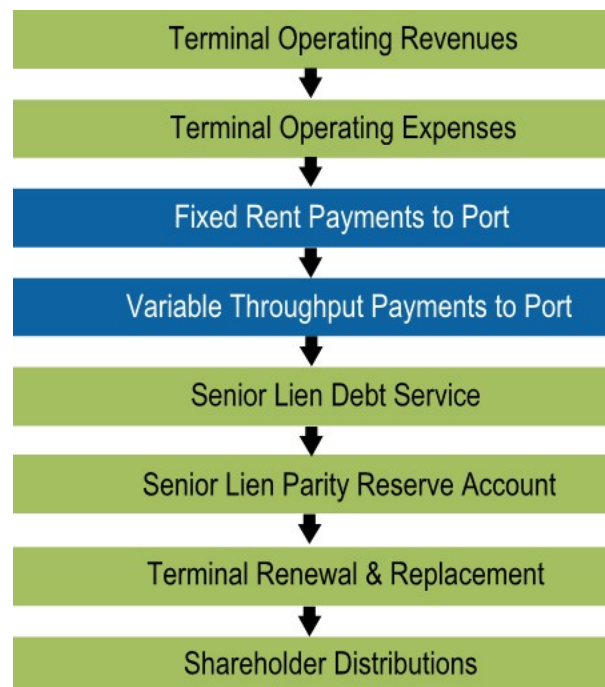


Exhibit 3-16 Payments to Port





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3.2.2.4 Project Revenue Bond Considerations
Project revenue bond structures are unique to the requirements and characteristics of the project being financed. Across revenue bonds, however, a common set of attributes is typically used to structure such bonds in order that such debt both fits issuer parameters and meets marketability

requirements for investors/creditors. Exhibit 3-17 lists some bond attributes and strategies frequently found in project financings.

Exhibit 3-17 Project Bond Attributes and Strategies

Security Sources
<ul style="list-style-type: none"> • Net Operating Revenues • State and Local Taxes • Value Capture
Bond Lien & Structure
<ul style="list-style-type: none"> • Senior & Subordinate Debt • Diversification of Product • Short-Term/Long-Term Mix
Security Requirements
<ul style="list-style-type: none"> • Capitalized Interest • Coverage Ratios • Reserve Funds
Issuance Timing
<ul style="list-style-type: none"> • Interim Construction Financing • Use Public Equity First • Bond Best/Highest Rated Credit First
Credit Enhancement
<ul style="list-style-type: none"> • Federal Programs - TIFIA • Special Tax Supplemental Pledge • Bond Insurance/LOC
Private Sector Enhancements
<ul style="list-style-type: none"> • Deferred Compensation • Vendor Concessions/Parking • Private Equity

3.2.3 Financial Modeling

Financial modeling should focus on the components of quality quantitative analyses to support investment decisions and ultimately any capital financing. Using the output and results of all the prior modules, a comprehensive financial model should be developed to evaluate each project and financial option of interest to a port. A financial model should be structured to assess the financial impacts of different operating, business and financial structures and determine the optimal structure employing risk analyses, as applicable. The financial analysis should incorporate the findings from the credit profile in order to (1) determine the likely interest rate profile based on current credit spreads, and (2) determine the level of equity and risk a potential private partner could be expected to commit in order to achieve a desired return on investment and thus the potential feasibility of the P3 approach. The model should be spreadsheet-based and flexible so that risk sensitivities can be evaluated and their impact on outcomes measured.

The project financial model should be integrated with a port pro forma cash flow model. The port model should incorporate all projected operating revenues, OpEx, R&R, and outstanding debt service. It should have the flexibility to consider incremental revenues, O&M costs, and debt service associated with the project. Just as important, it should have the flexibility to subtract revenues, expenses, and debt service, as applicable, should the project be pursued as a stand-alone P3 concession. While the economics of a P3 concession or other innovative finance approach may look attractive, the port owner has to guard against adverse consequences to its ongoing fiscal position. The dual perspective of a system and project model can help to identify such consequences of a recommended project such that a port owner can adjust its strategy accordingly.

3.2.3.1 Evaluating Project Finance & Delivery Alternatives

To evaluate project opportunities and financial viability, it is important to identify key project inputs and quantified risk assumptions for projects across various public and P3 delivery alternatives. Thereafter, a detailed project finance & cash flow model (more comprehensive than only using a net present value analysis) can be developed using the approach in Exhibit 3-18 including:

- Multiple types of debt can be incorporated
- More than one security lien can be modeled
- Nuances such as debt service coverage ratios, debt to equity ratios, and reserve/liquidity balances must be maintained
- Risk adjustments can be “stressed” against the base case to determine the severity and/or acceptability of impacts
- Capability to analyze different objectives such as more upfront capital versus increased long-term revenue sharing

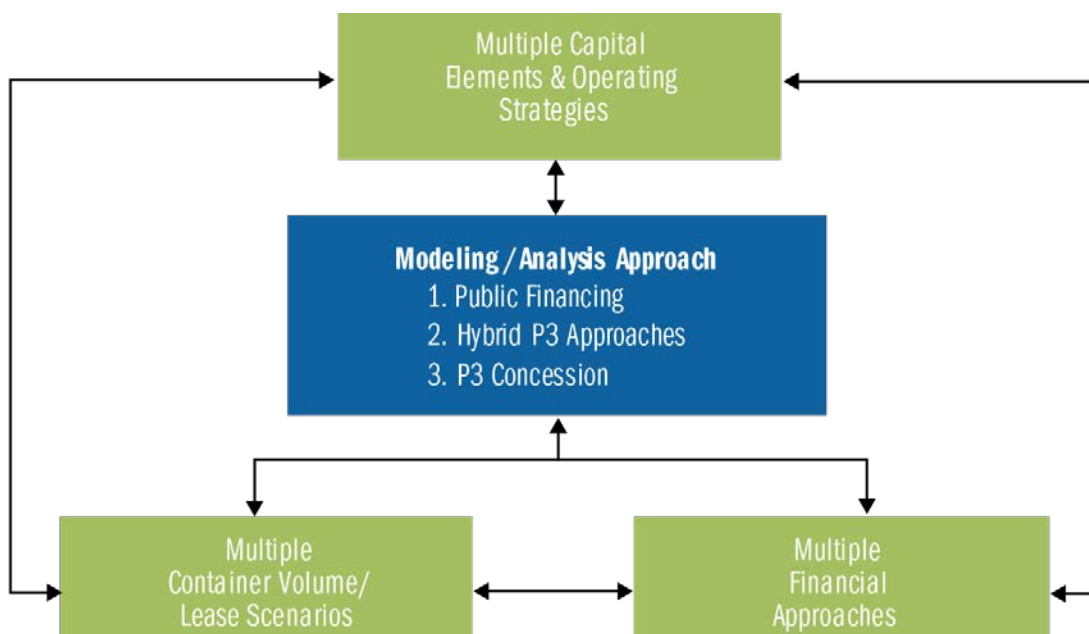
As applicable, the model should incorporate various debt financing strategies and products

project financially feasible. Such products might include, but are not limited to, various forms of PABs, leasing programs, tax/fee revenue financing, **State Infrastructure Bank (SIB)** loans, **Transportation Infrastructure Finance and Innovation Act (TIFIA)** credit, and **Railroad Rehabilitation & Improvement Financing (RRIF)** program loans, among others. The use of such strategies should be developed through close communication with port staff and key decision makers to assure that all issues considered important are properly addressed. The goal of the project financial modeling task is to create a sustainable plan of finance that minimizes “public” funding and results in an overall cost of funds that works for the recommended project.



Exhibit 3-18 Modeling Approach

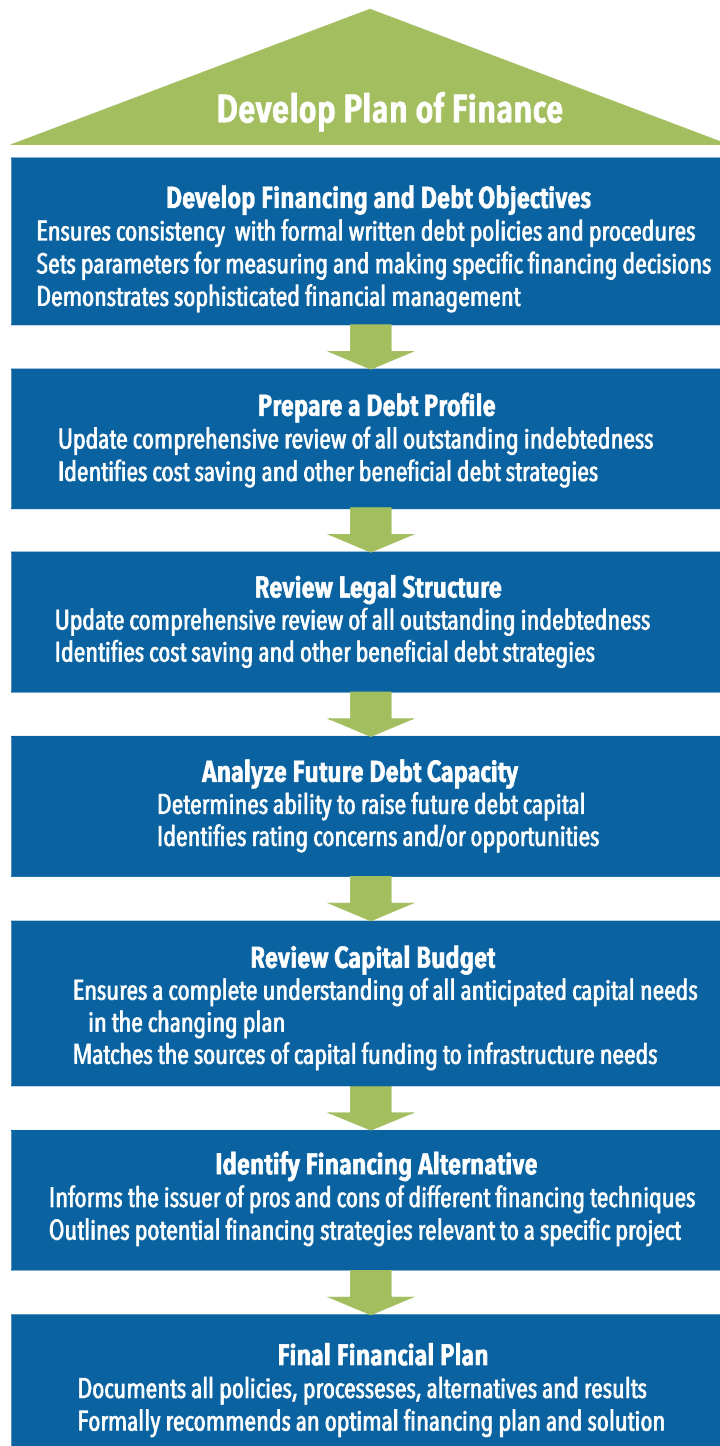
that could be used to make the recommended





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Exhibit 3-19 Financial Plan Outline



3.2.3.2 Approach for Development of a Financial Plan

Developing a project financial plan also entails conducting a review of the port's overall financial situation and developing a strategic financial plan related to debt management and infrastructure development, including planning for P3 transactions as needed. A requisite for this task is an understanding of material project finance areas including debt structures and programs, P3s, and port project development. The plan should be developed through close communication with key port stakeholders to assure that it addresses all issues considered important. Exhibit 3-19 provides a general outline for developing a financial plan.

This approach will likely build on the port's success in developing prior strategic financial plans. A preliminary list of major topics for the plan includes:

- Credit rating outlook and strategies
- Non-traditional financing approaches including bank debt, Federal and State programs, private equity
- Use of P3s for construction, financing, and/or operation
- Debt profile including re-structuring/refunding opportunities for existing debt
- Detailed capital project and cash flow modeling, which should incorporate capital costs, projected available revenues and sources, estimated operating & maintenance costs and the timing of potential debt issuance
- Asset-liability management analysis, including potential use of short-term variable rate financing tools
- Investment strategies



Generally for project financings it is necessary to prepare long-term (30+ year) capital planning models for transportation/port organizations. The financial model is used to identify alternatives to meet capital requirements while remaining within certain financial market limitations. An iterative modeling process (Exhibit 3-20) allows financial planning to impact project requirements within stated program policy constraints.

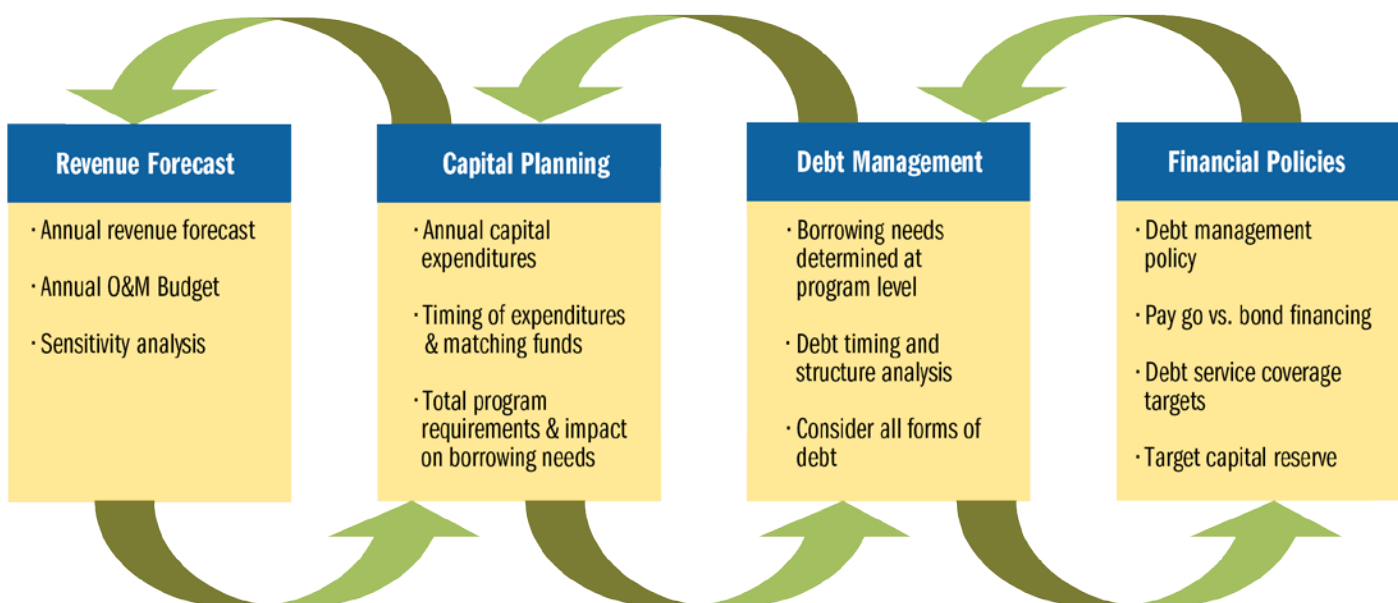
The overall result should be a comprehensive analysis and corresponding set of recommendations that will provide a framework for the port's financial management and financial needs for all its projects. The financial recommendations should incorporate and be consistent with the overall strategic direction of the port as well as the development of debt, investment and reserve policies. Financial plans are often used to support credit ratings as well as to support Federal and State grant and loan applications. New or greenfield project financing is very different from tax/fee- backed funding and even from an existing system net revenue financing. An investment-grade plan of finance requires a different approach than traditional municipal bonding programs. It is important to understand the credit

and operating profile for these different programs and projects, and to tailor a financial plan for the port's particular needs.

A primary goal of financial planning is to become aware of all of the options at a port owner's disposal and the consequences of utilizing each of them. Financial planning in and of itself is not intended to make policy choices for the port; rather the intention is to ensure that the port owner has the appropriate tools to craft a financing strategy that can lead to the lowest cost of borrowing consistent with broader policy and financial objectives. At the outset of the financial planning process, a port owner should develop a list of basic financial objectives that serves as the foundation for the entire process. Focusing the entire financial team on the port's goals at the outset of the project facilitates moving the team forward in an organized manner.

Another primary goal of the financial planning model is to support bond issuance and other forms of financing. The financial plan helps to determine the amount, timing, and type of financing. It also helps to establish the creditworthiness of any associated bonds. The components of the financial plan listed above are key components to any credit

Exhibit 3-20 Iterative Modeling Process





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evaluation. A well thought out financial plan indicates sound and prudent fiscal management. Solid credit ratings are essential to minimizing borrowing costs. The rating agencies place value on comprehensive financial plans and will analyze the components carefully as part of their credit assessment. Therefore, a credible financial plan can help to lower the borrowing costs by establishing a solid credit which in turn results in lower interest rates and/or lower costs of credit enhancement.

3.2.3.3 Project Finance Model

In analyzing and structuring for a variety of project finance techniques, numerous modeling constructs could potentially be developed to evaluate the viability of a recommended project. Regardless of the specific construct of the model, it should have the capability to perform complicated financing structures that may provide alternatives to traditional funding techniques including **senior** and **subordinate** structures with a deeply subordinate component, variable rate debt structuring options, deferred payment structures, etc. A base feasibility model should be utilized to evaluate all aspects of a recommended port project. The model can be utilized at various milestones along the project timeline, which can be critical given potentially lengthy development processes.

At the outset, models are utilized to evaluate a project's viability for investment interest. When the scope of a project is further developed, the model can be used to fine-tune estimates of cash flow, debt coverage, and reserves/liquidity. The model also serves as an important tool for supporting the sensitivity testing and credit rating processes.

With a working group consisting of port staff and financial and technical advisors, a customized financial model should be developed for port projects. The model should be updated to reflect new construction cost and timing estimates as well as legal covenants. The financing and valuation model should be interactive with the ability to provide a range of discounted cash flow valuations as well as to quickly evaluate multiple real-world financing scenarios applicable for new project construction. The model should be anchored by a fundamental knowledge of project finance creditworthiness and the general tenants of a financing type. It should also be able to accommodate a myriad of financial structuring options including federal loans such as TIFIA, project revenue PABs, subordination of operating costs, bank debt and private equity. Optimally managing all of these components is critical to attaining an investment-grade credit, regardless of whether the type of financing will be through the tax-exempt municipal market, or a form of private financing. Generally, the financing and valuation model should be based on specific project forecasts for revenue, CapEx and OpEx as with the initial feasibility model.

Upon inputting the various project requirements into the model, an understanding of project creditworthiness and financing structures should be used to determine an appropriate range of financing costs and reserve requirements.

An understanding of public debt structures and hybrid debt financing tools - such as PABs and TIFIA loans – is helpful in order to create alternative, flexible financing structures based on projected cash flows and the requirements of the facility. Modeling efforts should focus on developing an efficient financing structure that involves creating a balance of innovative financing mechanisms and credit/investor market acceptable conditions.

Exhibit 3-21 shows sample inputs and outputs from a project finance model.

3.2.4 Debt Implementation & Management

Ports of all types and sizes have ongoing capital needs to fund facility improvements and expansion. Further, project finance methods and P3 structures may not be relevant for many smaller, mainstream port improvement projects. Thus, the requirements for demand and revenue forecast data, which are primarily needed for larger, new project developments and project finance/P3s, may not hold the same relevance for a port that wants to finance some existing facilities improvements under its CIP. In this case, a port can typically use historical audited operating and financial results in order to meet disclosure requirements, and issue new money debt under an existing bond indenture via an Additional Bonds Test (for example a historical net revenue over maximum annual debt service ratio of 1.25x), thereby meeting financial covenant requirements. The new debt would likely be secured primarily by a pledge of a port's net operating revenues.

3.2.4.1 Debt Capacity and Issuance for Capital Improvement Programs

Port owners are frequently in the process of evaluating, negotiating and potentially implementing both large and small capital projects, including ongoing CIP requirements that require debt financing.

As an example, a port's CIP might include a refrigerated warehouse development or the procurement of yard cranes, both of which might be smaller pieces of a large port's overall system CIP and debt program, or for a smaller port the only sizeable components of the CIP.

Depending on the size of the CIP and expected debt issuance, the use of public bond markets might be beneficial (less costly for larger borrowings), complemented by alternative forms of debt (e.g. commercial bank loans). Solid investment grade credit ratings are key to structuring publicly issued debt and minimizing interest costs. If the expected amount of additional debt may strain senior lien debt service coverage levels, and thus credit ratings (if relevant), a port may want to consider other forms of financing and lien structures, including junior lien bonds, equipment leases, state infrastructure bank loans, special purpose (conduit) bonds, P3, and cash.

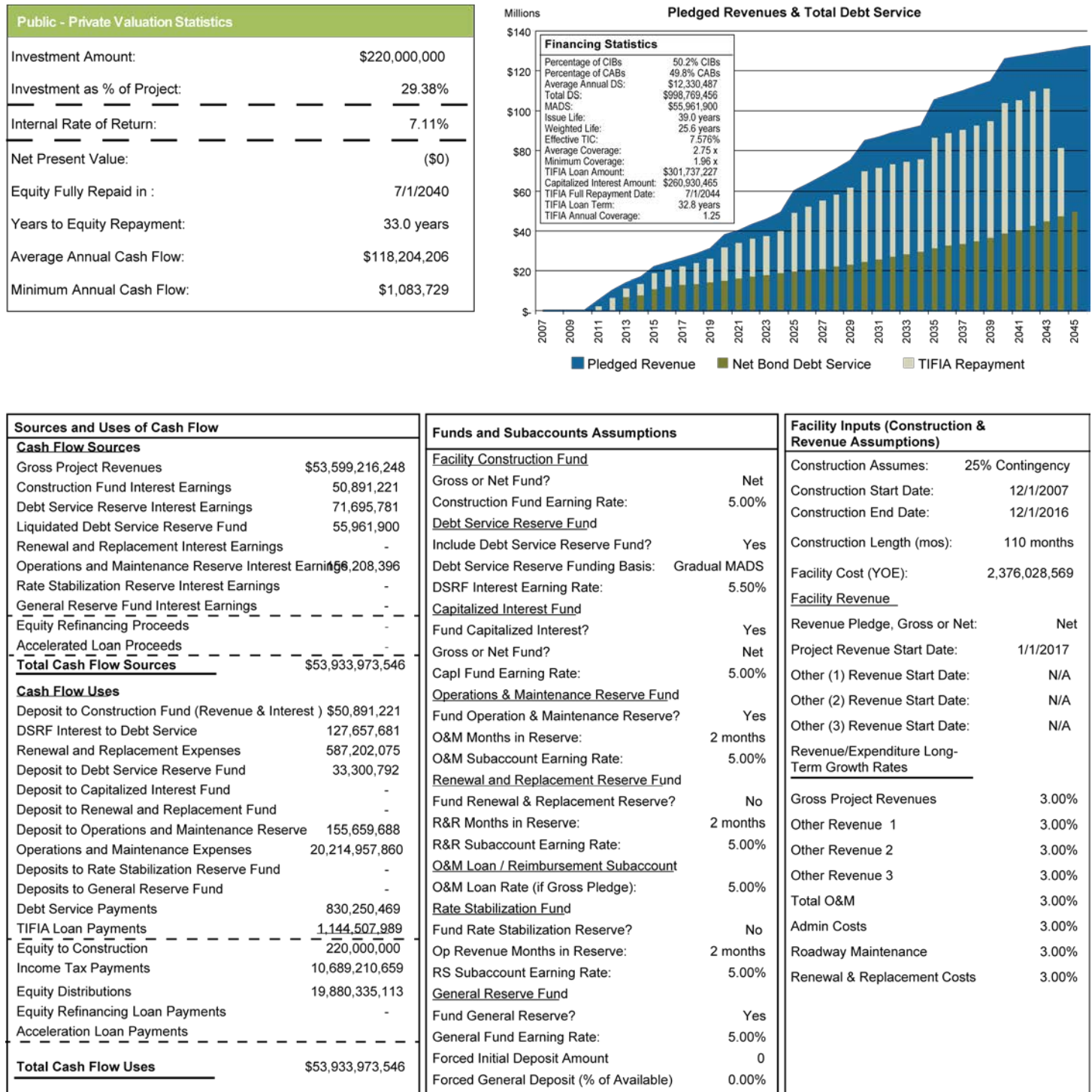
Further, if port system operating and financial results are not as strong as expected, any negative credit impacts of the additional debt would be exacerbated. For publicly issued and rated debt, it should be noted that the credit rating agencies also look at non-quantitative factors, such as management, governance, global trade patterns, etc., which are not factored into a quantitative debt capacity analysis.





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Exhibit 3-21 Sample Inputs and Outputs from a Project Finance Model



Actual borrowing capacity for any given project at any given point in time will depend on various factors, including but not limited to:

- tax status of the project contemplated,
- lien structure of the new debt, financial products used,
- capital markets environment including interest rates,
- net revenues from the contemplated project including terms of any proposed project operating leases, and
- existing system debt service requirements.

Tax status of the project asset being financed determines eligibility for the type of debt used. For example, governmental purpose projects are eligible to be financed with tax-exempt **Capital Appreciation Bonds (CABs)**. **Convertible Capital Appreciation Bonds (CCABs)** can be used to defer interest and principal payments, with conversion to **Current Interest Bonds (CIBs)** so that debt service requirements begin, thus reducing the cost of funds relative to traditional, non-convertible CABs. PABs have **Alternative Minimum Tax (AMT)** status and thus are priced at an additional spread relative to non-AMT tax-exempt bonds. Asset-based tax-exempt financing can be used at a subordinate lien given the security of the hard asset.

In addition to any currently contemplated capital projects and debt issuance, a port may have ongoing CIP needs and other capital projects on the horizon. Multi-year capital requirements may necessitate a coordinated approach to a port's overall capital structure and plan of finance as any future CIP requirements above and beyond contemplated one-off capital projects need to be considered when evaluating debt capacity. As much as possible, a port owner should determine upfront the project(s), capital requirements and net revenues for its CIP.

3.2.4.2 Debt Refunding for Savings

For ports both large and small, refunding outstanding bonds and loans can provide for debt service savings, and consequently, greater debt capacity to fund additional projects. The requirement for projected demand and revenue data, which is primarily needed for new project development and especially for project finance/P3s, is less emphasized for a straightforward debt refunding transaction.

Port owners and/or their advisors should actively monitor port debt portfolios for refunding opportunities to achieve net present value savings and/or cash flow relief. An active approach reduces the likelihood that a port owner misses investor market opportunities and can consistently produce significant reductions in interest expense. Certain structural features of a port's bonds are factored into a refunding analysis including the maturity date, **coupon**, **yield**, **call date** and **price**, and eligibility for refunding under the tax code (**current refunding** - within 90 days of the call date; **advance refunding** - more than 90 days to the call date; or **forward refunding** - locking in the refunding economics more than 90 days from the call date for a current refunding). The recommended savings threshold for a refunding varies depending on the type of refunding structure used (i.e. current refunding, advance refunding, or forward refunding), the risks inherent in the proposed





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Exhibit 3-22 Transaction Management



refunding issue, and port preference. Issuer debt policies often require a minimum of 3 percent net present value savings for refundings, with higher savings thresholds typically recommended for forward delivery or other alternative structures and lower savings thresholds for current refundings with short durations.

Further, an interest rate environment of low short-term rates will likely result in a significant amount of **negative arbitrage** in most refunding **escrows**. It is generally not recommended that an issuer proceed with an advance refunding if the negative arbitrage is equal to or exceeds the net present value savings of the refunding. To reduce the impact of the negative arbitrage, refunding issues can be structured to maximize the time between pricing and closing of refunding bonds to shorten the escrow period. Such delayed delivery typically may be available for up to 30 days without any type of forward premium.

3.2.4.3 Debt Transaction Management

The due diligence, credit and debt profiling, and financial modeling and feasibility steps discussed in prior sections of this Module are the same such steps that are taken leading up to the issuance of bonds/debt. In many instances, developing the plan of finance overlaps with the transaction management process (Exhibit 3-22). Once the plan of finance is in place, the transaction management process is worked through to make certain that the necessary actions take place to complete the financing. Transaction execution whereby the port owner is the issuer of the debt includes, but is not limited to, development of a timetable, bond documents, financing team selection, credit enhancement, rating strategy, investor marketing, pricing and, as relevant, direct purchase and government program loan negotiation. Expertise is required in debt structuring, creating credit structures, managing the rating agency/insurer relationship and pricing bonds in order to complete the financing process in a smooth and cost effective manner.



Financing teams are assembled for each transaction, and while the specific structure of an issuance, among other port specific factors,

dictates the team of professionals required for the issuance of bonds, potential key players typically are those summarized in Exhibit 3-23.

Exhibit 3-23 Key Players of Municipal Port Financing Transactions

Financing Team	Role	Responsibility
Issuer	The governmental entity that is issuing bonds.	Selecting the financing team, determining the method of sale, assists in the preparation of financing documents, sets debt policies, and determines available financial resources for payment of debt service.
Municipal Advisor	Acts in a fiduciary capacity for the issuer	Develops Request for Proposals (RFP) for underwriters, bond counsel, and other members of the financing team. Develops plan of finance, advises on method of sale, and assists in preparation of rating agency strategy.
Bond Counsel	Provides legal counsel to issuer and prepares offering documents	Drafts bond resolution, indenture, loan agreement, and other bond financing documents. Interprets arbitrage regulations and tax law. Provides guidance in structuring issues related to tax law.
Underwriter	Acts as an intermediary between the issuer and bondholders	Has an "arms-length" relationship with the issuer. Provides proceeds at closing and manages syndicate. Prepares distribution analysis and executes bond purchase agreement on behalf of the syndicate.
Underwriting Syndicate	Assists the underwriter in the placement of the bonds	Has an "arms-length" relationship with the issuer. Shares the risk of underwriting the issue and provides proceeds at closing. Distributes bonds to investors.
Underwriter's Counsel	Provides legal counsel to underwriter and underwriting syndicate	Drafts bond purchase agreement, blue sky memorandum, and agreement among underwriters. Advises underwriters on applicable securities law. Assists in due diligence and provides legal opinion regarding disclosure by the issuer.
Rating Agencies	Issues opinion on the credit quality of the bonds	Issues ratings releases and reports informing investors on its opinion of the credit quality of the bonds. Monitors credit quality trends and adjusts ratings accordingly.
Escrow Agent	Holds funds or securities to pay debt service on refunded bonds	Custodian of funds or securities which will be used to pay principal and interest on refunded bonds.
Trustee (Paying Agent / Registrar)	Holds moneys and transmits payments to bondholders	Disseminates debt service payments to bondholders. Maintains records on behalf of issuer. Holds moneys in the project fund and other funds.
Verification Agent	Verifies sufficiency of cash flows to pay debt service of refunded bonds	Issues verification report calculating the sufficiency of cash flows to pay debt service of refunded bonds.
Other Counsel	Provides legal counsel regarding specific issues	Provides special counsel on complex topics. Includes disclosure counsel, special tax counsel, bank counsel, and borrower's counsel.
Feasibility Consultant	Analyzes viability of projects	Prepares report on the economic viability of projects secured by revenue bonds
Insurers/Credit Enhancers	Issues bond insurance or letters of credit	Improves the credit quality of a security by issuing bond insurance or a letter of credit, for a fee
Printer	Prints offering documents	Prints and/or posts online the preliminary and official statements for distribution into the marketplace.
Auditor	Audits financial statements for the issuer	Compiles and audits financial statements of the issuer and issues opinion.



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The documentation required for the issuance of debt varies across transactions, issuers, and localities. Counsel appropriate for the specific issuer and form of debt can help to guide and manage documentation development and execution. Exhibit 3-24 summarizes typical documents for debt issuance, again noting that the particular circumstances of the issuance will determine actual documentation needs.

Exhibit 3-24 Key Documents of Municipal Port Financing Transactions

Document	Summary
Request for Proposal	Used to select providers of debt issuance services (underwriters, bond counsel, etc.)
Bond Resolution	Legal document authorizing a governmental entity to raise money through a bond issuance
Bond Indenture Agreement	Determines the exact nature of the security of the bonds. Establishes guidelines for the trustee and issuer
Loan Agreement	Agreement between an issuer and the holder of a loan specifying covenants and repayment terms
Bond Purchase Agreement	Discloses the agreement between an issuer and underwriting syndicate regarding a bond issuance
Blue Sky Memorandum	Describes the treatment of a new issue under applicable blue sky laws
Agreement Among underwriters	Agreement disclosing liability among underwriters in the syndicate
Escrow Deposit Agreement	Outlines investment and disbursement procedures for escrow agent
Notice of Sale	Alerts investors to an upcoming bond issuance
Preliminary Official Statement	Provides preliminary information regarding the issuance to investors
Official Statement	Provides final information regarding the issuance to investors
Verification Report	Details sufficiency of cash flows in a refunding transaction
Feasibility Report	Details economic viability of a project backed by revenue bonds

3.2.4.4 Post-Issuance Compliance

Issuers of tax-advantaged debt are required to monitor post-issuance compliance throughout the entire period that the bonds remain outstanding. The ongoing monitoring is generally categorized into two types of requirements: (i) the qualified use of proceeds and financed property and (ii) **arbitrage rebate** and **yield restriction** compliance.

The Internal Revenue Service (IRS) encourages issuers to adopt written post-issuance compliance procedures that include the following key elements:

- Regular due diligence reviews;
- Identifying the employee or official responsible for the review;
- Training the responsible employee/official;
- Retaining adequate records that support compliance, such as those relating to the investment and expenditure of bond proceeds;
- Procedures that should identify noncompliance in a timely fashion; and
- Procedures that the issuer will take to correct any form of noncompliance.

By having these written procedures in place, the idea is that issuers should be better able to identify and resolve noncompliance in a timely manner. The IRS encourages adopting these measures because, in general, an issuer that has established written post-issuance compliance procedures and commits to following them is less likely to violate the federal tax requirements than an issuer that does not have such procedures in place.

In addition to meeting legal and regulatory requirements of a bond issue, post-issuance compliance and reporting provides both issuers and investors alike an opportunity to verify the financial health of a port. Do the port's operating and financial statements convey positive or negative trends? Is the port meeting its financial covenant obligations under the bond indenture? For example, a port needing to meet a rate covenant requirement of 1.25x annual debt service under its bond indenture that reports actual fiscal year debt service coverage of 1.39x meets the legal requirements under such bond documents. However, from a credit ratings perspective, if that same port was rated single-A by a rating agency based upon the premise that

debt service coverage levels would remain above 1.40x as had been reported in the past, then this most recent reporting metric may be cause for a negative ratings outlook or downgrade. The takeaway from this example is that post-issuance compliance and reporting can be used to convey the operational and financial health of a port to various stakeholders, with different uses of and perspectives on the same information.

3.2.5 Public-Private Partnerships

Public-private partnerships (P3), in the context of a port where there may already be private tenant terminal operators, is reserved for contracts where the private concession company undertakes significant capital investment at its own expense. Increasingly, the P3 sector in the U.S. is moving toward the use of municipal market financing tools such as PABs, TIFIA and RRIF loans, and particularly for ports, long term lease & use agreements (i.e. a “concession agreement”). At the same time, P3 concessionaires and infrastructure equity funds may be willing to commit equity to a project, and private equity investment is entirely compatible with the financing tools mentioned above.

Therefore, it is important that port owners understand how these techniques can work together (as well as where there may be conflicts) and to formulate comprehensive strategies for a port’s overall capital needs, debt strategies, and budgetary requirements. If a P3 can fit within and improve the overall financial strategy, then it should be considered.

Note that the same due diligence and financial feasibility techniques discussed in prior sections of this Module apply to and are needed for all types of capital, including for a P3 approach. Thus, a P3 approach is by nature an extension of project finance for port capital infrastructure development.

3.2.5.1 P3 Background and Rationale

P3s refer to contractual agreements formed between a public agency and private sector entity that allow for greater transfer of risk and responsibility to the private sector for the delivery and operation of projects. Traditionally, private sector participation has been limited to separate planning, design or construction contracts on a fee for service basis – based on the public agency’s specifications. Expanding the private sector role allows the public agencies to tap private sector technical, management and financial resources in new ways to achieve certain public agency objectives such as greater cost and schedule certainty, supplementing in-house staff, innovative technology applications, specialized expertise or access to private capital. Exhibit 3-25 outlines several key objectives of P3s.





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Exhibit 3-25 P3 Key Objectives

Why Consider P3s

Leverage Private Sector Expertise	<ul style="list-style-type: none"> Expand public sector capacity Accelerate delivery Transfer risk <ul style="list-style-type: none"> Financial and operational Save or reallocate funds Reduce debt Improve operations Transparent regulation of revenues <ul style="list-style-type: none"> Tariffs, fees
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How P3 Approach Can Contribute to Project Delivery

Enhance Financial and Operational Capacity	<ul style="list-style-type: none"> Relieve financial pressure(s) <ul style="list-style-type: none"> Operation support from General Fund, debt capacity, pension costs, OPEB Streamline operations Expand service Transfer capital responsibility Launch new program or service Manage rate setting process
---	--

The Value of P3s

Align Public and Private Interests	<ul style="list-style-type: none"> A well structured and executed P3 can: <ul style="list-style-type: none"> Increase agency operating capacity Heighten accountability Value time and performance Value innovation and efficiency Stimulate competition Enhance revenues
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Some of the primary reasons for public agencies to enter into P3s include:

- Encouraging private entrepreneurial development and operation of infrastructure and related assets;
- Transferring risks to those best placed and most incentivized to manage and mitigate them;
- Enhance financing capacity by inviting private sector expertise in accessing and organizing project financing techniques;
- Accelerating the implementation of high priority projects by packaging and procuring services in new ways;
- Increase operational efficiency by allowing the private sector to provide specialized management capacity for large and complex programs; and/or
- Consolidation of similar asset classes under a single management program.

P3s have evolved over time and in many ways. It is important to understand that there is an array of P3 methods and techniques used both domestically and internationally. The range of potential P3 options varies from:

- Design-Build-Finance (DBF), where the port owner engages the private sector to design and construct the project utilizing their own construction finance and pays for the project over a period of time typically starting at the completion of a major milestone, to a **Design Build Finance Operate and Maintain structure (DBFOM)** in which the port owner enters into a long-term concession with the private sector for the design, construction, financing and operation of the project and does not transfer ownership.

Exhibit 3-26 summarizes the continuum of P3 approaches from a purely governmental project to a purely private one.

Currently, many issuers are evaluating P3 alternatives to help accelerate projects including:

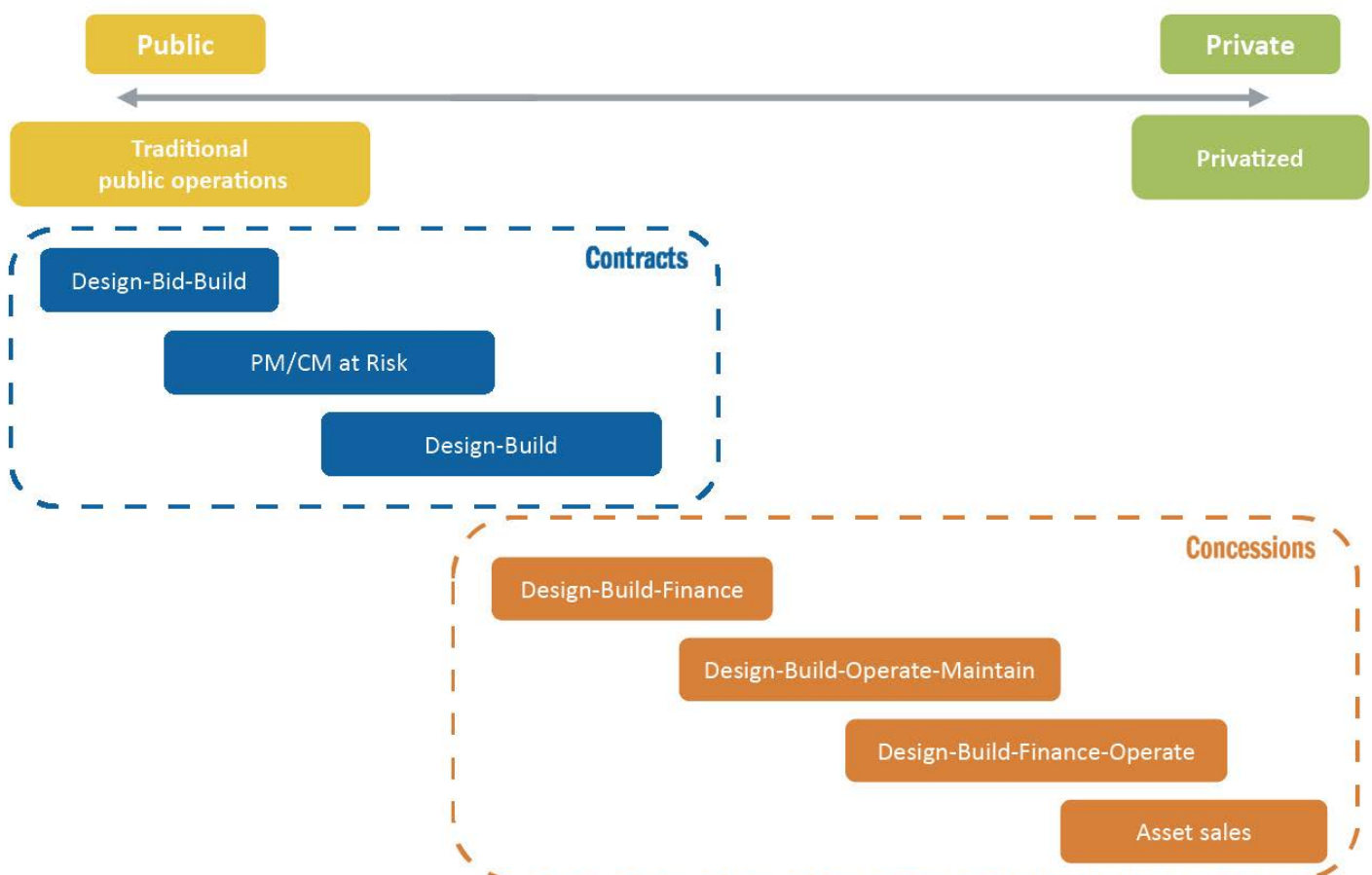
- Design-Build-Finance (DBF)
- **Design-Build-Operate-Maintain (DBOM)**
- Availability Payment concessions (DBFOM)
- Revenue Risk concessions

Such P3 alternatives typically utilize various forms of debt including traditional tax-exempt municipal bonds, bank loans, private activity bonds, and/or TIFIA loans. Note that Availability Payments are treated by rating agencies as long term contractual commitment; Issuers should understand how Availability Payment obligations for a specific project will affect the sponsor agency's debt ratings and accounting treatment.

It is also important to note that P3s are not project finance, despite in some aspects looking like project finance. There are many different P3 structures, and the degree to which the private sector assumes risk and responsibility – including financial risk – differs from one application to another. Additionally, different types of P3s lend themselves to the development of different facilities and others to the expansion of existing assets. The key is to understand the elements of project delivery alternatives and how project finance and P3 techniques can be utilized in various combinations.

Well-structured P3s provide benefits by allocating the responsibilities to the party – either public or private – that is best positioned to manage or mitigate the risk. With P3s, this is accomplished by

Exhibit 3-26 Project Delivery Models





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specifying the roles, risks and rewards contractually, so as to provide incentives for maximum performance and the flexibility necessary to achieve the desired results. At the core, these are often large and complex projects – most often with challenged credit profiles and financial feasibility – for which the risk allocations and risk-reward balance must create acceptable incentives for both the public and private sectors to proceed. But always the issues and methodology remain largely the same. Exhibit 3-28 shows the basic steps involved in the P3 process.

3.2.5.2 P3 Analysis and Valuation

The modeling of alternative project financing techniques and determining and finalizing preferred structures cuts across the various phases of P3s, i.e. valuation (Exhibit 3-28), development and execution. This integration of P3 stages with other project finance alternatives requires a systematic approach.

Any new stand-alone P3 concession is difficult to value and implement without robust project market data and other financial feasibility information available.

Exhibit 3-28 P3 Analysis and Valuation Steps

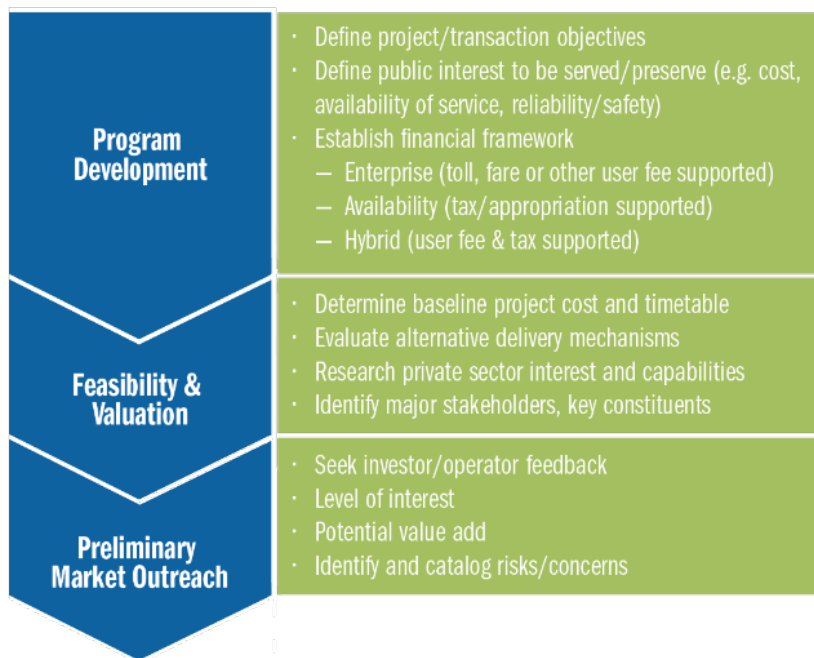
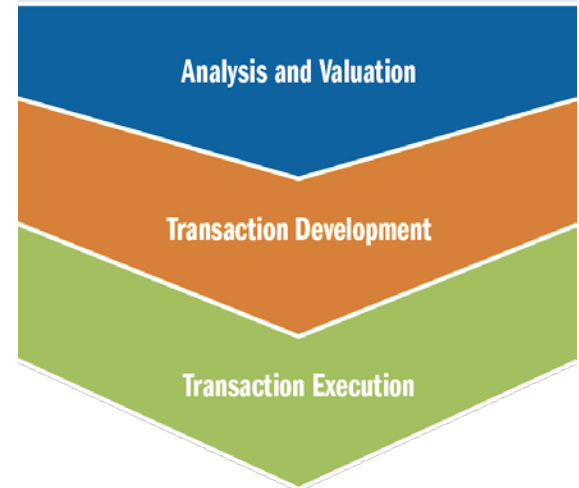


Exhibit 3-27 The P3 Process: Valuation, Development & Execution



This means market, revenue, O&M and R&R data must be thorough and up to date for the project comprehensively, not just from the port owner's vantage point or the P3 partner's perspective. Market environments can change rapidly. Thus, while the current environment may seem viable for a successful competitive solicitation process, it is highly recommended to start any engagement with a thorough market and financial feasibility study to ensure that the port owner's preferred operating/financial/concession model meets the project goals.

If pursuing a stand-alone P3 concession, one approach may be to start with existing market, revenue, O&M costs, and related feasibility materials and use them to the greatest extent possible to save both time and money. However, all market and feasibility materials must be current and meet credit/investor market scrutiny and credit standards for an investment-grade credit rating. Further, the ongoing O&M requirements and capital R&R requirements are significant components of the overall project financial feasibility as well as the concession agreement negotiations. Different projects have different requirements, and different engineers may have different perspectives. Formulating



O&M and R&R plans to meet industry standards and financial feasibility requirements is especially important for longer term concessions such as 50 years as well as concessions that might include future expansion.

The key to a successful solicitation and concession implementation, including financial closing, is a robust financial feasibility assessment. Market information should be vetted to a point that it can generate the maximum capital market interest. Modeling efforts should focus on developing an efficient financing structure that involves creating a balance of innovative financing mechanisms and capital market acceptable conditions. When creating a P3 valuation and financing model, it is also important that the project team have considerable credit/investor market knowledge and familiarity with credit agency analysts. Armed with this information as well as the requirements and limits of the project, the financing structure is modeled to create a financing structure that meets the purpose of the port owner – construction and operation of the project in the most effective manner.

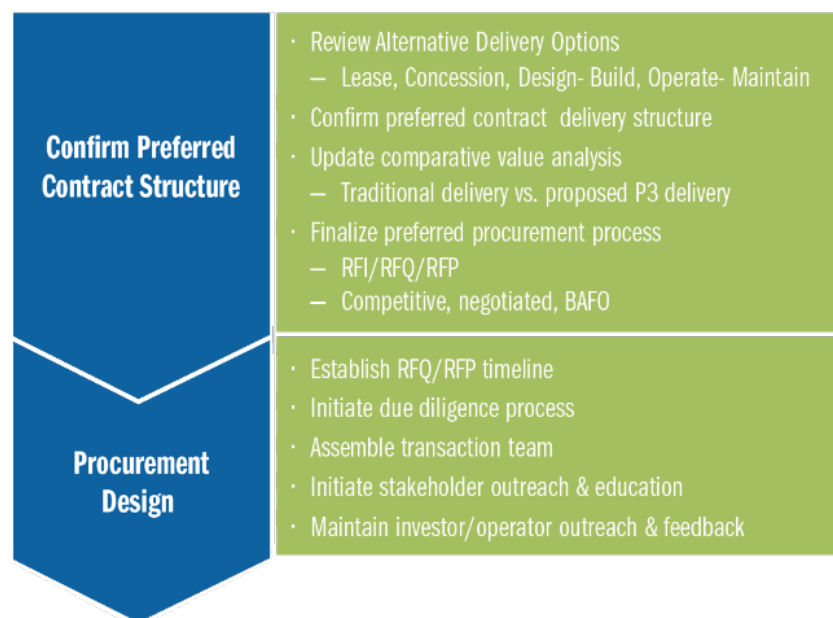
3.2.5.3 P3 Transaction Development

The project financial model and feasibility techniques discussed in prior sections of this Module continue to overlap with the P3 process in the P3 transaction development phase (Exhibit 3-29). Model inputs continue to be refined for changing capital market circumstances, and preferred delivery structures are further compared.

For each component of the P3 transaction development phase, the insight and interest of investors, contractors, and engineers will add value. The global infrastructure community is vast, thus it is prudent to promptly contact those entities that have expressed interest in a port's infrastructure projects or reach out to other enterprises that can bring value to the project.

P3 procurements can attract bids from some of the largest funds and financial institutions in the industry. In addition to their own insights and due diligence measures, investors look to the port owner and its advisors to define the best procurement path for a project. The objective is for investors to more readily disclose their willingness to assume risk and share benefit in the interest of establishing a win-win environment for both public and private sector participants. Engaging investors, contractors and others from the start in developing a port's P3 procurement process and in then compiling the information needed to compare and value P3 alternatives is of critical importance to moving a project forward.

Exhibit 3-29 P3 Transaction Development Steps



During the transaction development phase, the financing team continues to analyze different project delivery vehicles and secures market feedback and insight to help establish their relative value and limitations. At the center of this comparison lie issues of risk transfer – how much responsibility should the port owner be willing to transfer to established and experienced private entities.



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Legal and operational considerations need to be reviewed in detail and procurement alternatives best suited for the recommended project and the port need to be identified.

A transaction schedule needs to be developed and/or modified to account for changing delivery and procurement methods since the start of the valuation process. Exhibit 3-30 is a sample timeline for a P3 process.

Exhibit 3-30 Illustrative P3 Schedule

PERIOD COMMENCING	0	1	2	3	4	5	6	7	8	9	10	11	12	13
	N	D	J	F	M	A	M	J	J	A	S	O	N	D
	Project Start						Execute Lease							
PRE-DEVELOPMENT PHASE														
Initial Operating/Financial Alternatives; Valuation														
Initial Meetings to discuss P3 Models														
Develop Financial Model for Preliminary Evaluation														
Evaluation by Financial Team/Advisor														
Team Meeting; Present Preferred Model														
Conduct Soft Market Test														
Confirmation of Preferred Model														
Port Commission & Team Meetings														
Sign-off from Port														
Data Collection/Ongoing Transaction Preparation														
Demand & Revenue														
Engineering/Construction														
Operations & Maintenance Requirements														
Insurance & Legal Requirements														
Ongoing Review of Financial Model Assumptions														
SOLICITATION & FINANCING PHASE														
Request for Qualifications Phase														
Develop Project Term Sheet														
Review Timing with Port and Advisors														
Develop List of Potential Partners														
Develop/Release Information & Request for Qualifications														
Team Meeting and/or Calls; Approve RFQ & Review RFP														
Response due from Potential Partners														
Review RFQs - Conference Calls as needed														
Request for Proposals Phase														
Develop RFP with Scope of Services - Calls as needed														
Develop Form of Proposed P3/Capital Lease Agreement														
Team Meeting; RFQ Shortlist & Approve RFP														
Release RFP														
Data Room														
Meetings with Potential Offerers for Q&A														
Receive & Evaluate Proposals														
Selection and Negotiation of Final Terms														



3.2.5.4 Concession Business/Financial Terms

After working through the qualitative and quantitative assessments of financial investment alternatives, a port owner is in position to begin market outreach and implementation. A suggested first step is to create an outline of parameters or term sheet regarding 1) financing requirements and covenants, 2) construction and risk, and 3) operational terms. This can then be used to draft the concession agreement. Lease / concession agreements can be large and complex documents. It is very important that they support the desired investment but also equally important that they are complimentary to the port's existing facilities, other capital improvements, operational attributes, legal framework, and credit profile.

For complex procurements such as for a P3 concession, the initial term sheet needs to incorporate significant detail regarding any final environmental, design, engineering, construction, operations, and financing of the project, as applicable for the project and the alternative chosen. Financial and business terms should be drafted to a level that will support a logical negotiation process and a feasible credit assessment.

Key Terms

In a P3 approach, in addition to completing the physical infrastructure and providing operational services, the contractor may provide an equity interest and service debt to finance the construction which remains at risk throughout the early years of the project. The port owner needs to clearly understand all project aspects to be covered by the concession. As examples, who will be responsible for equipment maintenance and replacement, future terminal capital expansion, contracting with shipping lines, etc.? Presumably the private concessionaire, but no two concessions or projects are the same, thus it is important to clearly understand the port owner's preferences.

Additionally, a number of contracting approaches are possible including, for example, an operating & use lease agreement, and DBFOM. Further, key terms vary widely across project type, size, and complexity, which necessitates building the appropriate features into a summary project term sheet and ultimately into a P3 contract. Exhibit 3-31 shows a suggested list of terms that may serve as a basis for further customization.

Exhibit 3-31 Key Business and Financial Terms

Lessor
Description of Property for the Project
Capacity
Financial Expectation for the Private Partner(s)
Project Construction
Financing Assistance
Lease Agreement
Lease Term
Ownership of Project Land
Ownership of Project Infrastructure, Cranes and Equipment
Business Development
Existing Significant Contracts
Security
Environmental
Labor
Expansion
Schedule

Term Sheet Sample

Exhibit 3-32 is an example term sheet that focuses on the concession of a marine terminal facility. While the unique characteristics of any given port project will determine the informational categories and specific language for a term sheet, this example may serve as a starting point for customizing solicitation documents consistent with port objectives and policy constraints.



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Exhibit 3-32 Illustrative Term Sheet

The AAPA Port Administration (APA) operates the USA Marine Terminal (UMT) at the Port of Anywhere. UMT is the primary container terminal at the Port and serves a regional population of over 10 million consumers and market in excess of 29 million within a five hour drive.

APA believes that, with the scheduled opening of the expanded Panama Canal in 2015, UMT must have at least one 50 foot berth capable of handling larger vessels that will be transiting the Canal by that time. APA has decided to explore the possibility of a public-private partnership under which APA would lease UMT exclusively to private partner(s) and the private partner(s) would invest in a new berth, equipment, and other infrastructure at UMT, and provide a revenue stream to APA.

APA is seeking private partner(s) who are willing and able to commit to an investment that will meet the Administration's objectives of a new 50 foot berth and increased international waterborne container volumes at UMT. The private partner(s) would be required to meet a minimum annual guarantee and would be fully responsible for Berth construction as well as all operations and equipment at UMT during the lease term. The private partner(s) would also pay APA for existing terminal and waterside improvements at UMT. APA is willing to offer tax-exempt debt issuance on behalf of the private partner(s), if so desired, or the private partner(s) may put in place other financing as appropriate. Finally, the private partner(s) will be responsible for providing APA with an ongoing revenue stream during the term of the lease. In exchange, APA will grant the private partner(s) a long-term lease to operate UMT, and the private partner(s) will have exclusive operating rights for UMT during the term of the lease. The private partner(s) would be awarded the portfolio of business currently under contract to APA. Proposed key terms are outlined below.

Key Tem	Description
1. Lessor	AAPA Port Administration
2. Description of Property for the Project	A modern and productive intermodal container terminal known as the USA Marine Terminal (UMT), Port of Anywhere, USA, consisting of approximately 150 acres.
3. Capacity	2014 total capacity is estimated to be 1.5 million TEU's. Based on current operating methods, approximately half of the capacity of the UMT facility is covered under long-term contracts.
4. Financial Expectation from the Private Partner(s)	1) Funding for a construction of the Berth, including new cranes & all necessary equipment. Private partner(s) shall provide satisfactory evidence of secured obligation to finance and construct Berth by 2016. 2) Payment for existing terminal and waterside improvements and equipment. It is preferred that this take the form of funds at financial close; however, fixed annual payments or a combination of both may be considered. 3) An annual revenue stream to the APA for the term of the lease based on land rental and revenue sharing beyond 2014 container volumes
5. Berth Construction	Private partner(s) shall construct a 1,750 foot long by 170 foot wide reinforces concrete, earth filled, pile supported low level marginal wharf with 100-foot gauge gantry crane rail along the River. Private partner(s) shall install a portion of sheet pile toe wall to the West at Other Berth and a mooring dolphin east of the wharf terminus, with a minimal dredging at the face of the wharf.
6. Financing Assistance	APA may assist in project financing by facilitating the issuance of tax-exempt private activity bonds. APA may provide the private partner(s) with access to private activity tax exempt financing via the issuance of conduit Special Purpose Facility Revenue Bonds. Private partner(s) should be aware that they may not be able to take depreciation or other tax benefits in any infrastructure and equipment financed via tax-exempt private activity bonds.
7. Lease Agreement	Lease agreement will constitute a "full net lease" which means that the private partner(s), during the lease term, is responsible for keeping the facilities in good order at its own expense, including ongoing systems preservation and repair and replacement of existing equipment and infrastructure. Required operating and other standards will be set forth in the lease agreement.
8. Term	Minimum of 30 years from the lease commencement date.
9. Ownership of UMT Land	Land at UMT will remain APA owned.
10. Ownership of UMT Infrastructure, Cranes, and Equipment	All infrastructure, improvements, and equipment will be owned by the private partner(s) during the lease term. The private partner(s) shall purchase the existing 5 ship to shore cranes and 9 rubber tired gantry cranes, and will own any additional equipment it purchases.
11. Business Development	Private partner(s) will be responsible for business development and would maintain control over operations and shipping contracts. An estimate of the size of the container market within Anywhere's cost effective truck hinterland, along with projected volumes based on historical national and gulf coast growth, is available for review by private party.
12. Existing Significant Contracts	Private partner(s) to assume long-term ocean carrier contracts related to UMT. APA has the significant contracts listed below. A summary of these contracts has been prepared separately from this Term Sheet, and all UMT contacts are available for review by qualified short-listed offerors. 1) Gulf Shipping - Contract through 10/1/2016 2) Atlantic Shipping - Contract through 12/31/2017
13. Security	The APA will be responsible for security under the current Facility Security Plan.
14. Environmental	Private partner(s) must operate the terminal in full compliance with all applicable environmental laws and regulations, and will strive to operate with no or minimal environmental impact.
15. Labor	USA Marine Terminal is serviced by the International Longshoremen's Association. Existing crane and facility maintenance is currently performed by State employees who are members of AFSCME.
16. Expansion	Property known as the ICTF consisting of approximately 50 acres and South Coast Railroad, consisting of approximately 12 acres, could become the subject of future negotiation.
17. Schedule	APA seeks financial close by early 2015.



3.2.5.5 Solicitation Overview

A solicitation process may be conducted depending on the applicable project structure chosen in order to identify a private partner and investors for P3 project delivery. Without getting into any legalities and procurement rules, which are port specific, the following sections include a template for the types of qualifications that should be requested of respondents as well as evaluation factors. Basic contents of **request for qualifications (RFQ)** and **request for proposals (RFP)** are identified and put into outline format. Solicitation documents and management of solicitation processes are far too port and project specific to have an off-the-shelf form of RFQ or RFP available, or other solicitation form such as a **request for letters of intent (RLOI)**. Rather, the goal is to create an understanding and framework for how to conduct a thorough and productive solicitation.

3.2.5.6 P3 Transaction Execution

The project financial model continues to overlap with the P3 process in the P3 transaction execution phase (Exhibit 3-33). As part of the RFP process, the financial model is used to prepare “shadow” evaluations of any negotiated financial terms so that the port owner has an independent economic perspective. Model inputs continue to be refined for changing capital market circumstances, as relevant.

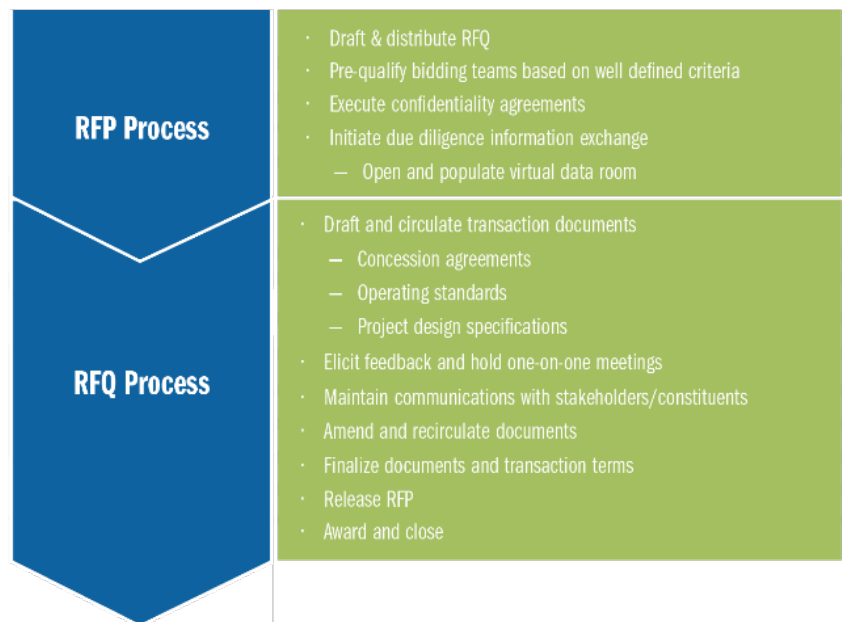
Once the port owner has considered and chosen an operating/business/financial model to pursue its goals, the financial analysis has determined feasibility, and a term sheet has been created, the solicitation process follows and could include the following steps:

- **Market Teaser** – The port owner and its advisors reach out to a wide variety of private market participants to generate interest in the upcoming solicitation. The market teaser contains a brief overview of the project’s positive attributes and the upcoming opportunity. The contents should be short enough for senior executives to read, and

designed to attract interest. The market teaser invites interested parties to contact the port for the RFQ.

- **RFQ Evaluation and Shortlisting** – The project team reviews and comments on the RFQ to be sent to industry participants. Upon receipt and review of qualifications from interested parties, criteria for shortlisting are established.
- **Draft Concession Agreement (“Agreement”)** – The port owner and its advisors establish business parameters to guide the development phase of the project and provide a framework for drafting legal documents. Basic terms include cost sharing during the development work phase, a determination of which operating and financing structures will be considered for the project, and a risk allocation. The form of the Agreement is prepared by counsel.

Exhibit 3-33 P3 Transaction Execution



- **RFP Development including Approval of Evaluation Criteria and Certification of Useful Life Determination** – The financial team and legal counsel send the port a useful life determination, the proposed final RFP, evaluation criteria, and project financial plan.



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- P3 and Proposal Evaluation – After the port owner approves the solicitation items listed above, the final RFP will be sent to qualified shortlisted proposers, with emphasis on the selection criteria and financial underpinnings. The RFP responses need to be reviewed and interviews (first and possibly second rounds) with the proposers shortlisted will take place via calls/meetings.
- Preferred Bidder Negotiation or **Best and Final Offers (BAFO)** – No matter the quality of the solicitation process, proposers will likely try to bend any draft terms and conditions toward their preferences and advantages. So a BAFO process or final negotiations with the preferred proposer are recommended so that any contractual grey areas can be clarified. It should be noted that if an acceptable agreement cannot be reached, the port owner can formally end negotiations with a proposer and, in its discretion; either reject all proposals, modify the RFP and begin again the submission of proposals, or proceed to the next most highly ranked proposal and attempt to negotiate an agreement with that entity.

While overall responsibility and much of the risk for a project under a P3 arrangement is often shifted to the private partner, the success of the project begins with well-developed contractual documents that are structured to satisfy the owner's objectives for the project. While certain risks are appropriate for a P3 contractor to manage, those risks may be hard to quantify or manage within a P3 contractor's scope and will inevitably result in higher percentages of contingency pricing and more difficult financing terms, both of which drive costs up.

In addition to balanced risk allocation, appropriate owner's rights and responsibilities must be structured to support the contractor's success in implementing and operating the project. There are inherent risks in complex port terminal projects that can result in substantial financial impacts if not correctly managed. Risk should be allocated appropriately among the concessionaire and public participants to avoid high contingency costs and to minimize impacts. Concession documentation must be drafted to ensure risk allocation meets both port preferences and market acceptability.

The financial package of the preferred proposer must reflect the concession and related documents. Different types of investors and different types of credit instruments have different covenants and documentation requirements. Most importantly, it should all be consistent with and fit within the context of the port's overall system. The port's solicitation process should allow for all types of investors and credit products, and these can be conformed within the concession documentation after other business and operating terms are settled at commercial close (i.e. the signing of the P3/concession agreement).

After final award has been made to a bidding team and the required good faith deposit has been made, the closing process must still be managed to ensure that all steps are taken and documentation requirements are met to bring the transaction to a smooth financial close.



The effective date of a concession should be contingent upon the successful financial closing, as relevant. Requiring a hard bid with committed financing would cause proposers to incorporate risk premiums due to any uncertainties and grey areas they see in the draft concession agreement, as well as cost to hold financial commitments in uncertain markets as the concession is being finalized. By finalizing all detailed negotiations before getting committed financing, risk is reduced and the likelihood of success improved.

3.2.5.7 RFQ & RFP Contents and Evaluation Factors

The successful use of the P3 approach requires a well marshalled procurement process – where clear project expectations and the understanding of roles is built among the participants, the owner, prospective vendors and stakeholders. All solicitation materials should clearly communicate the preferred transaction structure and desired outcomes. This will minimize downstream negotiations and revisions.

The port owner's advisors and legal team need to identify issues and craft solicitation documents designed to improve the likelihood of success. A two-step process is recommended which first seeks a RFQ before issuing a project RFP. A suggested approach is to start with qualifications, but also include the term sheet with the RFQ so that all parties have a clear understanding of what is expected. Qualified firms should be given access to the data room and invited to propose. The RFP should include the draft concession agreement, again so that complete transparency is maintained with respect to the port owner's intentions for the project.

Every port and project will have a unique set of circumstances to be addressed by the RFQ and RFP processes.

Exhibit 3-34 outlines the general contents of RFQs and RFPs for a marine terminal P3 concession, noting again that specific project needs will drive actual contents.

Exhibit 3-34 RFQ Contents

RFP contents tend to align materially with RFQ

EXECUTIVE SUMMARY
PORT OWNER GOVERNANCE AND OVERSIGHT
TERMINAL INVESTMENT HIGHLIGHTS
<ul style="list-style-type: none"> • CURRENT OPERATIONS • MARKET • INLAND ACCESS <ul style="list-style-type: none"> – Highway – Rail • FUTURE OUTLOOK/EXPANSION
MARINE TERMINAL OVERVIEW
<ul style="list-style-type: none"> • MARINE TERMINAL CURRENT PHYSICAL FEATURES • DRAWING OF MARINE TERMINAL • ICTF CURRENT PHYSICAL FEATURES • DESCRIPTION OF WAREHOUSE PROPERTY • MARINE TERMINAL FINANCIALS
PROJECT TERMS AND CONDITIONS
<ul style="list-style-type: none"> • BERTH CONSTRUCTION • FUNDING CONSTRUCTION • OWNERSHIP AND DEPRECIATION • LEASE AGREEMENT • LEASE PAYMENTS TO PORT AUTHORITY • BUSINESS DEVELOPMENT • EXISTING CONTRACTS • LABOR • ENVIRONMENT • SECURITY
EVALUATION PROCESS AND CRITERIA
<ul style="list-style-type: none"> • OVERALL PROCESS <ul style="list-style-type: none"> – Responses to the Request for Qualification (RFQ) – Confidential Request for Proposals (RFP) – Evaluation Criteria • SOLICITATION SCHEDULE
SUBMISSION REQUIREMENTS
<ul style="list-style-type: none"> • ADVISORS TO PORT OWNER • PROPRIETARY/CONFIDENTIAL INFORMATION • NO LIABILITY FOR COSTS • FORMAT • REQUIRED RESPONSES AND ORGANIZATION <ul style="list-style-type: none"> – Organizational Information – Qualifications and Experience – Responder's Approach to the Project
SUBMITTAL REQUIREMENTS
PORT OWNER'S RESERVED RIGHTS
APPENDIX A - TRANSMITTAL LETTER FORM
APPENDIX B - STATEMENTS OF QUALIFICATION AFFIDAVIT

contents, with the inclusion of fine-tuned details



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as needed. For example, the RFP may require the submission of detailed documentation regarding the project, as listed in Exhibit 3-35.

Exhibit 3-35 Incremental RFP Contents versus RFQ Contents

Additional information regarding the proposer's qualifications and demonstrated technical competence
Feasibility of developing the project as proposed
Detailed engineering or architectural designs
Proposer's ability to meet schedules
Detailed financial plan, including costing methodology, cost proposals, and project financing approach
Any other information the port considers relevant or necessary

RFQ/RFP evaluation factors (Exhibit 3-36) for P3s are set by the port owners that issue them and their team of advisors. Considerations may be broadly defined in the RFQ/RFP in order to allow for a wide range of responses, and may include professional experience, technical competence, operating capability, and financial resources to complete a proposed project, among others.

Exhibit 3-36 Sample RFQ/RFP Evaluation Criteria

Safely, efficiently and productively manage and operate Marine Terminal during lease term, including, but not limited to: <ul style="list-style-type: none"> • Providing a proven management team • Providing and operating a state-of-the-art effective Terminal Operating System • Adhering to Port Authority required operating standards, including, but not limited to, systems preservation, environmental, tenant alteration, security, policing and risk management standards • Working successfully with union labor ILA, particularly the ILA or ILWU
Design and construct a safe and efficient Berth and cranes by 2017 capable of handling, at least, the New Panamax vessels during the lease term
Provide for total funding requirements, some of which may be facilitated by tax-exempt Private Activity Bond financing issued by the Port Authority, with private lessee payments backed by a private party guarantee
Provide a sound and profitable marketing plan for the Marine Terminal that results in ongoing economic benefit for the state

3.2.6 Grants

Grant funding continues to be a factor for port owners in meeting capital investment requirements. Port owners must approach the grant funding process using various positioning strategies to effectively compete for limited grant monies:

- Projects that compete well for grant funding are those that:
 - promote economic competitiveness,
 - generate significant public benefit,
 - leverage private investment, and
 - are ready to proceed in an expeditious manner.
- A comprehensive grant application must be developed that clearly addresses, among other things:
 - project eligibility
 - environmental impacts and permitting activities
 - project risks and mitigations,
 - plan of finance
 - an analysis of project benefits versus costs
- Application requirements vary across programs, so specific grant selection criteria must be adhered to in developing the application package. Applicants should look closely at the notice of funding opportunity or availability for each specific grant program to ensure that they are addressing all the requirements and criteria for the grant program in question.

Combining grant funding with other investment options, port owners will be better equipped to position their projects for competitive grant funding while at the same time enabling port owners to leverage more innovative sources of investment capital.



3.2.6.1 Federal Grant Programs

Grant programs and funding levels change from year to year, as government revenue levels vary and federal appropriations fluctuate. There are many different federal, state and local grant programs available to port owners at any given time. The focus of this section is on USDOT programs available at the time of this Toolkit version to fund port infrastructure, equipment or systems. Ports should investigate if their state has port grant programs available. Federal grant programs are organized into two categories: discretionary grant programs that are awarded directly by USDOT and Federal-aid grant programs that are managed at the local level.

Discretionary Grants

The USDOT awards discretionary grants through a competitive process based on set criteria in a national notice of funding opportunity or availability. Ports became eligible for USDOT discretionary grants in 2009 with the passage of the American Recovery & Reinvestment Act (ARRA) and the Transportation Investment Generating Economic Recovery (TIGER) grant program. Port authorities are also eligible to compete for funds through two discretionary grant programs established in 2015 in the Fixing America’s Surface Transportation (FAST) Act. These programs are the Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies (FASTLANE) and Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Initiative.

Transportation Investment Generating Economic Recovery (TIGER)

The TIGER program funds vital transportation projects that provide real benefits to communities all across the country. In addition, it was the first USDOT grant program that could award funds to inside-the-gate port infrastructure projects. The highly competitive TIGER grant program supports innovative projects, including multi-modal and multi-jurisdictional projects, which are difficult to

fund through traditional federal programs. USDOT TIGER discretionary grants are awarded on a competitive basis for capital investments in surface transportation projects that will have a significant impact on the nation, a metropolitan area or a region.

Port owners should verify the specific terms that apply to each new round of TIGER, which may change from round to round. These are provided in the Notice of Funding Opportunity announcement for each TIGER round, which is published in the Federal Register. Projects generally eligible for TIGER discretionary grants are shown in Exhibit 3-37.

Exhibit 3-37 Projects Eligible for TIGER Discretionary Grants

Highway or bridge projects eligible under title 23, United States Code
Public transportation projects eligible under chapter 53 of title 49, United States Code
Passenger and freight rail transportation projects
Port infrastructure investments, including projects that connect ports to other modes of transportation and improve the efficiency of freight movement

Source: www.dot.gov/tiger

All projects requiring an action by the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA) in accordance with 23 CFR part 450, must be in the metropolitan transportation plan, **transportation improvement program (TIP)** and **statewide transportation improvement program (STIP)**. Further, in air quality non-attainment and maintenance areas, all regionally significant projects, regardless of the funding source, must be included in the conforming metropolitan transportation plan and TIP. To the extent a project is required to be on a metropolitan transportation plan, TIP, and/or STIP, it will not receive a TIGER Discretionary Grant until it is included in such plans. Projects not currently included in these plans can be amended by the State and metropolitan planning organization (MPO).



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Projects that are not required to be in long range transportation plans, STIPs, and TIPs will not need to be included in such plans in order to receive a TIGER Discretionary Grant. Port, freight and passenger rail projects are not required to be on the State Rail Plans called for in the Passenger Rail Investment and Improvement Act of 2008. This is consistent with the exemption for high-speed and intercity passenger rail projects under the Recovery Act. However, applicants seeking funding for freight and passenger rail projects are encouraged to demonstrate that they have done sufficient planning to ensure that projects fit into a prioritized list of capital needs and are consistent with long range goals. To the extent possible, freight projects should be included in a state freight plan and supported by a state freight advisory committee.

Beyond basic project eligibility guidelines, specific selection criteria guide funding determinations. Grants are awarded based on both primary and secondary selection criteria as outlined in Exhibit 3-38.

Exhibit 3-38 Grant Selection Criteria

Primary Selection Criteria
<ul style="list-style-type: none">• Priority is given to projects that have a significant impact on desirable long-term outcomes for the Nation, a metropolitan area, or a region<ul style="list-style-type: none">– State of Good Repair: Improving the condition of existing transportation facilities and systems, with particular emphasis on projects that minimize life-cycle costs.– Economic Competitiveness: Contribution to the economic competitiveness of the United States over the medium- to long-term.– Quality of Life: Creating affordable and convenient transportation choices through place-based policies and investments that increase transportation choices and access to transportation services for people in communities across the United States.– Environmental Sustainability: Improving energy efficiency, reducing dependence on oil, reducing greenhouse gas emissions and benefiting the environment.– Safety: Improving the safety of U.S. transportation facilities and systems.
Secondary Selection Criteria
<ul style="list-style-type: none">• Innovation: Using innovative strategies to pursue the long-term outcomes.• Partnerships: Demonstrating strong collaboration among a broad range of participants and/or integration of transportation with other public service efforts.

Source: www.dot.gov/tiger

The discussion and parameters of TIGER provide an introductory view of the program and are not all encompassing. Additional resources can be found on the USDOT's website

<https://www.transportation.gov/tiger/>.

Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies (FASTLANE)

The FASTLANE program was established in the FAST Act to fund critical freight and highway projects across the country. The program establishes broad, multi-year eligibilities for freight infrastructure, including intermodal projects.

The FAST Act authorizes billions of dollars in funding for the FASTLANE program over the next five-year period from 2016 to 2020. 25 percent of FASTLANE funds are reserved for rural projects, and 10 percent for smaller projects. Large projects (equal to the lesser of \$100 million or a certain specified statutory percentage of the project state's fiscal year apportionment) are eligible for a minimum award of \$25 million. Small projects, which consist of projects below the minimum large project size threshold, are eligible for a minimum award of \$5 million. For more information about the FASTLANE Grant program eligibility, refer to

<http://www.fhwa.dot.gov/fastact/factsheets/fastlanegrantsfs.cfm>.

Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Initiative

The ATCMTD program awards grants to eligible entities to develop model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment.



These model deployments are expected to provide benefits in the form of:

- reduced traffic-related fatalities and injuries;
- reduced traffic congestion and improved travel time reliability;
- reduced transportation-related emissions;
- optimized multimodal system performance;
- improved access to transportation alternatives, including for underserved populations;
- public access to real time integrated traffic, transit, and multimodal transportation information to make informed travel decisions;
- cost savings to transportation agencies, businesses, and the traveling public; or
- other benefits to transportation users and the general public.

This competitive advanced transportation and congestion management technologies deployment grant program promotes the use of innovative transportation solutions. The awards may be used for projects that use real-time traveler information, traffic data collection and dissemination, vehicle-to-infrastructure and an array of other dynamic systems and intelligent transportation system technologies. The program is funded annually through the duration of the FAST Act. For more information about the ATCMTD Grant program eligibility, refer to

<http://www.fhwa.dot.gov/fastact/funding.cfm>.

Federal-aid Grant Programs

Additional federal funding is available through federal transportation grants that are administered through state and local governments. Federal-Aid highway funds are authorized by Congress to assist states in providing for construction, reconstruction, and improvement of highways and bridges on eligible Federal-Aid highway routes and for other special purpose programs and projects (including some port improvements).

Some of the primary federal-aid programs for ports include the Surface Transportation Block Grant Program (STBG), the Congestion Mitigation and Air Quality Improvement Program (CMAQ) and the National Highway Freight Program (NHFP). For a complete guide on federal-aid projects, refer to <https://www.fhwa.dot.gov/federalaid/projects.cfm>.

Normally projects funded through these programs must be identified in the STIP/TIP and be consistent with the L RTP and the Metropolitan Transportation Plan(s) and most importantly for ports, the State's Freight Plan.

Surface Transportation Block Grant (STBG) Program

The FAST Act converted the long-standing Surface Transportation Program into the STBG Program, acknowledging that this program has the most flexible eligibilities among all Federal-aid highway programs and aligning the program's name with how the Federal Highway Administration (FHWA) has historically administered it. The STBG promotes flexibility in state and local transportation decisions and provides flexible funding to best address state and local transportation needs. As under the Moving Ahead for Progress in the 21st Century Act (MAP-21), the FAST Act directs FHWA to apportion funding as a lump sum for each state and then divide that total among apportioned programs. Each state's STBG apportionment is calculated based on a percentage specified in law.

In general, STBG projects may not be on local roads or rural minor collectors. There are a number of exceptions to this requirement, such as the ability to use up to 15 percent of a state's rural suballocation on minor collectors. Other exceptions include: port terminal modifications.

Federal Policies - Buy America

Ports will need to comply with various federal policies when positioning a project to compete for U.S. government grant and credit assistance programs. One example would be any relevant Buy America requirement which, in general, stipulates that steel, iron, and manufactured products used in a federally-funded project must be produced in the United States. A waiver of this requirement might be available under certain limited conditions. For general information on Buy America requirements, refer to <https://www.transportation.gov/highlights/buyamerica>.



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More information about the STBGP program can be found at <http://www.fhwa.dot.gov/fastact/factsheets/stbgfs.cfm>.

National Highway Freight Program (NHFP)



The FAST Act established the NHFP to improve the efficient movement of freight on the National Highway Freight Network (NHFN) and support several goals, including—

- investing in infrastructure and operational improvements that strengthen economic competitiveness, reduce congestion, reduce the cost of freight transportation, improve reliability, and increase productivity;
- improving the safety, security, efficiency, and resiliency of freight transportation in rural and urban areas;
- improving the state of good repair of the NHFN;
- using innovation and advanced technology to improve NHFN safety, efficiency, and reliability;
- improving the efficiency and productivity of the NHFN;
- improving State flexibility to support multi-State corridor planning and address highway freight connectivity; and
- reducing the environmental impacts of freight movement on the NHFN.

As of December 2017, a state may not obligate NHFP funds unless it has developed a freight plan that is consistent with 49 U.S.C. 70202—though the multimodal component of that plan need not be complete by that time. For more information refer to <http://www.fhwa.dot.gov/fastact/factsheets/nhfpfs.cfm>

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The FAST Act continued the CMAQ program to provide a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas).

The FAST Act added eligibility for verified technologies for non-road vehicles and non-road engines that are used in port-related freight operations located in ozone, PM₁₀, or PM_{2.5} nonattainment or maintenance areas funded in whole or in part under 23 U.S.C. or chapter 53 of 49 U.S.C.

The Act also specifically makes eligible the installation of vehicle-to-infrastructure communications equipment. The FAST Act continues eligibility for electric vehicle and natural gas vehicle infrastructure and adds priority for infrastructure located on the corridors designated under 23 U.S.C. 151.

The FAST Act amended the eligible uses of CMAQ funds set aside for PM_{2.5} nonattainment and maintenance areas. PM_{2.5} set-aside funds may be used to reduce fine particulate matter emissions in a PM_{2.5} nonattainment or maintenance area, including—

- diesel retrofits;
- installation of diesel emission control technology on nonroad diesel equipment or on-road diesel equipment that is operated on a highway construction projects; and
- the most cost-effective projects to reduce emissions from port-related landside nonroad or on- road equipment that is operated within the boundaries of the area.



Further details about CMAQ can be found at <http://www.fhwa.dot.gov/fastact/factsheets/cm-aqfs.cfm>

Other Programs and Opportunities

Other programs, such as the U.S. Department of Homeland Security's Port Security Grant Program, are also available to ports. Further, it is suggested that port owners and industry practitioners explore available state and local grant programs as potential funding sources. Such programs may have matching requirements, for example, the provision of grant monies to be applied towards half of the project cost if the port is able to find funding for the other half. Examples of the use of such grant programs are included in the Project Profiles section of this Toolkit. Discretionary allocations arising from state or local government budgets may also provide sources of funding - such allocations are specific to the relevant government of a port's locality.

3.2.6.2 Positioning Ports for Grant Funding

Grant funding is competitive and so it is imperative that projects requesting funding:

- tell a succinct story in the grant application
- meet the grant requirements;
- achieve the priorities of the grant;
- demonstrate strong stakeholder support, particularly funding partners
- have a well-defined funding plan including a significant non-federal match; and
- provide a clear project scope, schedule and budget.

Oftentimes, extraordinary infrastructure needs and reasons for funding and development are the overriding factors in winning project grant monies, as well as the delivery of projects that provide important public benefits (e.g. reduced noise, reduced emissions, reduced traffic congestion, improved safety, and other positive "externalities" for communities). The basic characteristics for

competitive applications include, but are not limited to, those listed in Exhibit 3-39.

Further project strengths that may provide a competitive edge include: multimodal projects, including coordinated investment from other sources and programs; demonstrate improved connectivity between users and centers of employment, education, and services; new partnerships and multi-jurisdictional cooperation; problem statement and opportunity for plan clearly defined in application; plan should be actionable and include appropriate risk analysis, mitigation estimates, NEPA requirements, etc.; public private partnerships and support (Source: www.dot.gov/tiger).

Exhibit 3-39 Projects that Compete Well for Grants

Demonstrated strength in at least 2-3 of the primary selection criteria
<ul style="list-style-type: none"> • State of Good Repair • Economic Competitiveness • Quality of Life • Environmental Sustainability • Safety
Projects which are difficult to fund elsewhere
Strong partnership and matches, private funds from benefiting private entities and demonstrated leveraging of other funds
Projects or planning activities which are ready to proceed in the statutory timeframe
Presents a clear story and project impact

Source: www.dot.gov/tiger

The parameters for successful grant applications can often be applied across various funding programs. Again, it is imperative to follow the specific guidelines of the particular funding program being applied to.

3.2.7 Government Loans

Government loan programs, particularly the USDOT TIFIA program but also various SIB programs, have become very important tools for U.S. infrastructure financing. TIFIA has become a key tool for many highway and transit projects, although there is some applicability for ports, especially with respect to intermodal rail



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connections, and also for highway access within and outside of ports (e.g. the Port of Miami Tunnel project financing included a \$341 million TIFIA loan as part of a comprehensive funding package – further information on the project is at http://www.fhwa.dot.gov/ipd/project_profiles/fl_port_miami_tunnel.aspx). These programs require a formal application process, so as with grant funding, projects that compete well for loans and credit enhancement are those that promote economic competitiveness, are difficult to fund via other means, leverage dedicated revenue sources, and are ready to proceed in an expeditious manner. However, unlike with grants, these programs do require repayment and thus creditworthiness is a key eligibility factor. In this regard, the other sections of this Module with their focus on creditworthiness and attracting investment are also applicable to government loans.

3.2.7.1 Government Loan Programs

As with grant funding, government loan programs and funding levels change from year to year as government resource levels adjust. A port owner may have several federal, state and/or local loan programs available to fund infrastructure. The focus of this section is on the USDOT TIFIA program. However, other programs such as the RRIF program and the SIB program can also be used for port-related projects. Following the passage of the FAST Act, the TIFIA and RRIF programs are being managed through USDOT's Build America Bureau, which can be found at <https://www.transportation.gov/buildamerica>

Government loans are typically structured as “bonds” secured under a trust indenture. Loan negotiations require an understanding of the credit concerns of the specific loan provider/program. Given their features as debt obligations, ongoing rating agency surveillance may be required depending on program requirements, including for TIFIA and SIBs. In addition, certain programs such as TIFIA have ongoing reporting requirements, including an

annual financial plan update, coverage compliance, and annual credit rating surveillance.

TIFIA

The TIFIA loan program provides federal credit assistance to nationally/regionally significant surface transportation projects including highway, transit and rail, with some applicability to port intermodal projects. TIFIA offers flexible loan repayment at attractive interest rates, including for subordinate debt. In addition to direct loans, credit assistance offered through the program includes loan guarantees and lines of credit. TIFIA credit assistance may cover portions of total project cost as listed in Exhibit 3-40.

Exhibit 3-40 TIFIA Eligible Project Cost Percentages

TIFIA line of credit: up to 33%
TIFIA loan: up to 49% (or, if the secured loan does not receive an investment grade rating, up to the amount of senior project obligations)
TIFIA loan and TIFIA line of credit, combined: up to 49%
Total Federal assistance (grants and loans) to a project receiving a TIFIA loan: up to 80%

Source: <https://www.fhwa.dot.gov/fastact/factsheets/tifiafs.cfm>

To receive TIFIA assistance, a project must have costs that equal or exceed at least one of those in Exhibit 3-41.

Exhibit 3-41 TIFIA Minimum Project Costs

\$50 million
For a transit-oriented development, local, and rural infrastructure project, \$10 million
For an intelligent transportation system (ITS) project, \$15 million
1/3 of the most recently-completed fiscal year's formula apportionments for the
State in which the project is located

Source: <https://www.fhwa.dot.gov/fastact/factsheets/tifiafs.cfm>

Additionally, TIFIA includes the key guidelines shown in Exhibit 3-42.

**Exhibit 3-42 TIFIA Key Guidelines**

Repayment via dedicated revenue sources that secure project obligations, such as tolls, other user fees, or payments received under a public-private partnership agreement <ul style="list-style-type: none"> Repayment must begin by five years after substantial project completion
Interest rates no less than yields on U.S. treasuries rate of final term (e.g. 20 or 30 years) applies to entire loan <ul style="list-style-type: none"> Loans to rural infrastructure projects are at 1/2 the Treasury interest rate
Maximum maturity is 35 years after project's substantial completion
A project's senior debt obligations must receive an investment grade credit rating
Eligible costs are defined to include development phase activities, construction and
Right of Way acquisition, capitalized interest, reserve funds and cost of issuance expenses

Source: www.fhwa.dot.gov/map21/factsheets/tifia.cfm

Projects generally eligible for TIFIA credit assistance are shown in Exhibit 3-43.

Exhibit 3-43 TIFIA Eligible Projects

Projects eligible for assistance under title 23 or chapter 53 of title 49
International bridges and tunnels
Intercity passenger bus or rail facilities and vehicles, including those owned by Amtrak
Public freight rail projects
Private freight rail projects that provide public benefit for highway users by way of direct highway-rail freight interchange (a refinement of the SAFETEA-LU eligibility criterion)
Intermodal freight transfer facilities
Projects providing access to, or improving the service of, the freight rail projects and transfer facilities described above
Surface transportation infrastructure modifications necessary to facilitate direct intermodal interchange, transfer and access into and out of a port

Source: www.fhwa.dot.gov/map21/factsheets/tifia.cfm; <http://www.fhwa.dot.gov/fastact/factsheets/tifiafs.cfm>

TIFIA eligibility requirements and selection criteria guide funding determinations. Successful TIFIA applications are supported by a capital market acceptable and creditworthy project plan of finance, among other considerations. The TIFIA application requires the eligibility factors listed in Exhibit 3-44.

Exhibit 3-44 TIFIA Eligibility Requirements

Creditworthiness (rate covenant, coverage requirements, investment grade rating(s))
Foster Partnerships that Attract Public and Private Investment
Enable Project to Proceed at an Earlier Date or with Reduced Lifecycle Costs
Reduce the Contribution of Federal Grant Assistance
Environmental Review (NEPA)
Permits and Approvals
Transportation Planning and Programming Process Approvals (STIP and TIP)
Construction Contracting Process Readiness
Project Schedule
Other title 23 or chapter 53, title 49 requirements, as applicable

Source: <https://www.transportation.gov/tifia/tifia-credit-program-overview>

Under USDOT guidance, transportation projects are required to submit a Major Project Financial Plan if any of the following applies: 1) Recipient of Federal financial assistance for a Title 23 project with a minimum cost of \$500 million, 2) identified by the USDOT Secretary as a major project and 3) applying for TIFIA assistance. Thus with any application for a TIFIA loan, a port owner would need to submit a Major Project Financial Plan. The detailed information required includes the following:

- Separate financing/debt discussion including issuance costs, interest costs, and other financial details of the bonds
- Detailed pro forma cash flow to demonstrate sufficiency of cash available to cover all project costs including debt service and related reserves



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- In the case of TIFIA, long term credit ratings are required for both the project obligations as well as the TIFIA loan itself
- P3 Assessment

The TIFIA application and credit process needs to be incorporated into the overall project schedule to ensure that a port can meet its time schedule for project delivery and financial close. The TIFIA application and credit process is generally outlined in Exhibit 3-45.

This discussion and parameters of TIFIA provide an introductory view of the program and are not all encompassing. Additional resources for TIFIA as well as project delivery, project finance, and P3 can be found on FHWA's Innovative Program Delivery website at <http://www.fhwa.dot.gov/ipd/>

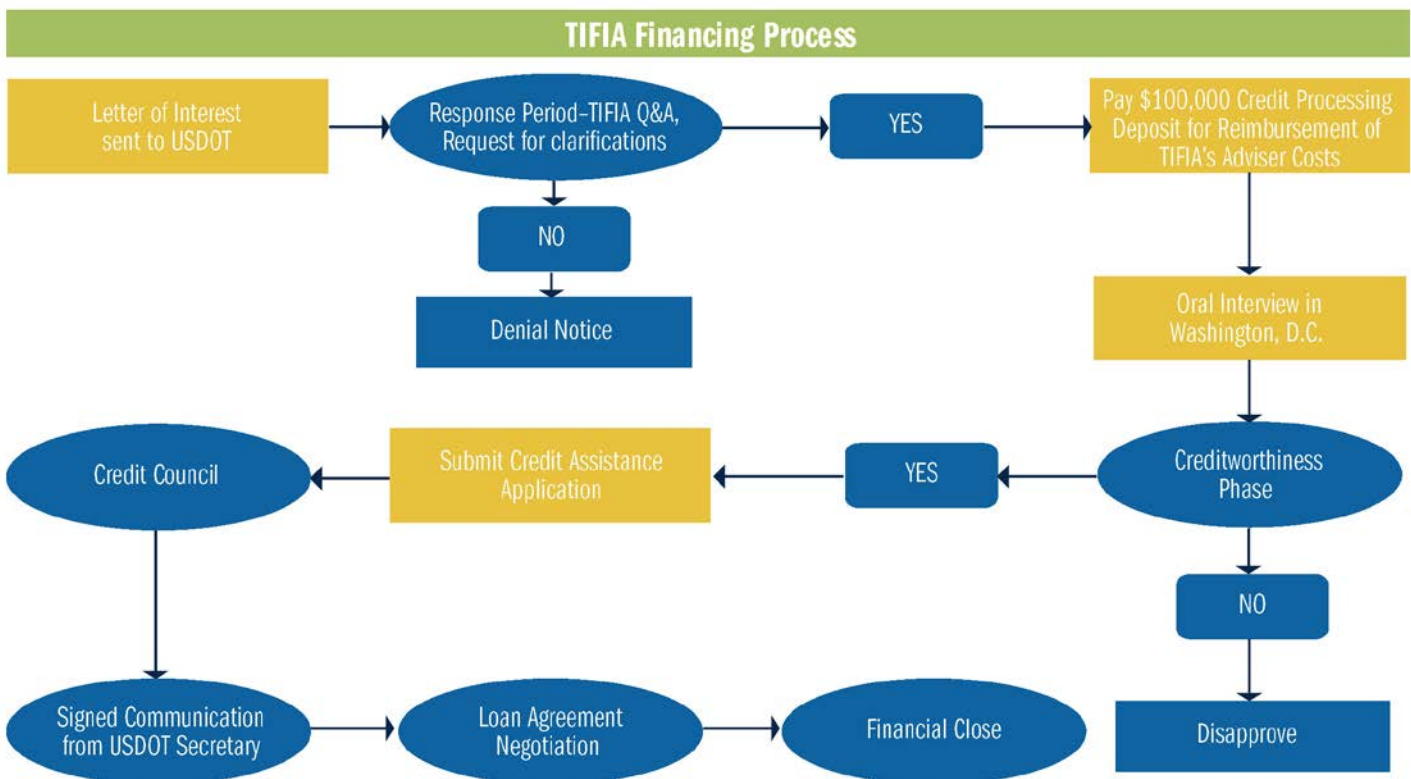
Railroad Rehabilitation and Improvement Financing (RRIF)

The *RRIF* program provides direct loans and loan guarantees up to \$35 billion to finance development of railroad infrastructure, of which \$7 billion is reserved for non-Class I freight railroads. Rail projects within the boundaries of a port are eligible to apply for assistance.

The funding may be used to:

- Acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings and shops;
- Refinance outstanding debt incurred for the purposes listed above; and
- Develop or establish new intermodal or railroad facilities

Exhibit 3-45 TIFIA Financing Process





Direct loans can fund up to 100 percent of a railroad project with repayment periods of up to 35 years and interest rates equal to the cost of borrowing from the government.

Eligible borrowers include railroads, state and local governments, government-sponsored authorities and corporations, joint ventures that include at least one railroad, and limited option freight shippers who intend to construct a new rail connection.

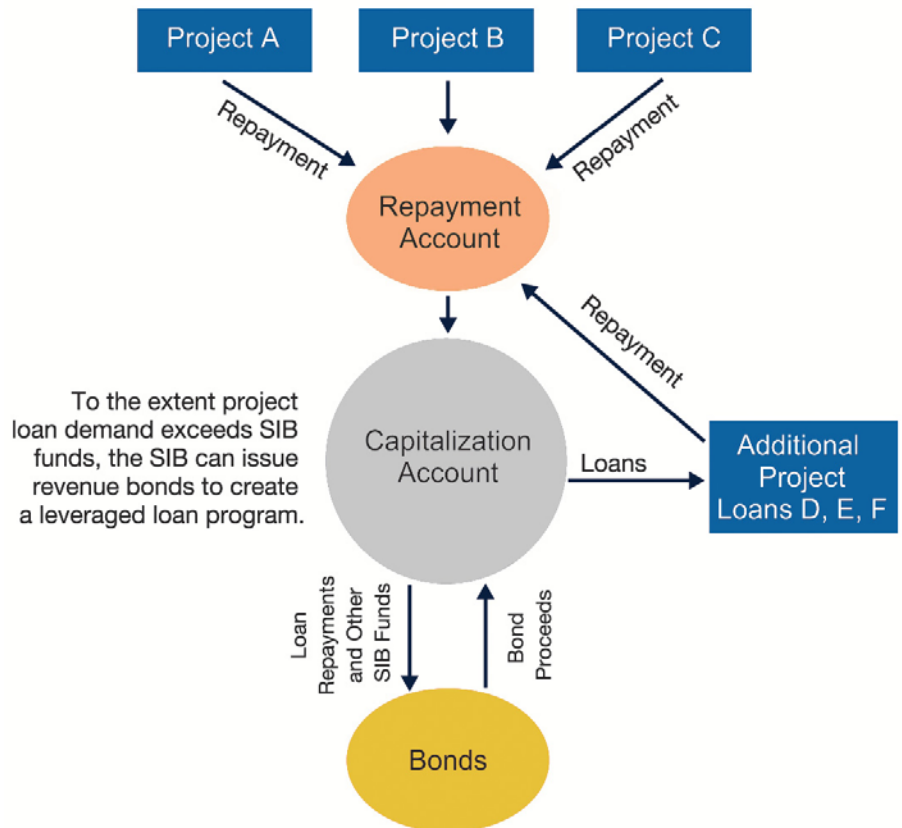
State Infrastructure Bank (SIB)

Several states have recognized the need for a transportation **SIB** program funded at a greater level from state-only sources and with more flexibility relative to a SIB receiving Federal funding. A non-Federal or state-only SIB can expedite project completion times, and provide for other specific advantages such as:

- Enhanced senior lien debt service coverage for project bonds by financing a portion of a project on a long-term subordinate basis
- Provide low cost pre-construction financing on a short-term basis. The SIB loan could be repaid from the proceeds of the permanent construction financing and then be loaned again
- Pay the interest on other project indebtedness during construction and the early years of operations. That is, the SIB loan could fund capitalized interest
- A SIB program is continuously re-capitalized by loan repayments and can be leveraged to increase overall transportation funding

Exhibit 3-46 gives a general overview of how a direct loan program would work (i.e. excluding the “Bonds” portion of the graph), and how a leveraged loan program would work (i.e. including the “Bonds” portion of the graph).

Exhibit 3-46 SIB Program Structure



SIBs generally operate as revolving loan funds to alleviate, in part, a critical need for additional funding for the design and construction of roads and highways and other transportation facilities, such as port infrastructure. Direct loans are made to public entities with eligible transportation improvement projects; SIBs may also make grants to projects with no other viable source of funding. Over time additional capitalization could be derived from the repayment of loan principal and interest, investment income on SIB fund balances, and any other revenues appropriated. The specific characteristics and eligibility requirements of any SIB program vary from state to state.



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3.2.7.2 Positioning Ports for Government Loans Government loan programs can be competitive and so it is imperative that port owners requesting funding provide a succinct story in the loan application and also to the various

stakeholders of the project. For state and local loan programs, competitiveness and eligibility requirements vary. As such, it is important for port owners to have an understanding of how the particular government loan fits into the overall project plan of finance. For the TIFIA program, the requirements can be demanding and the process lengthy.

Therefore, before embarking on a path to procure a TIFIA loan, and dedicating extensive time and resources to the process, it is prudent to be aware of a project's likely chances of being approved for credit assistance.

Many of the project strengths discussed in this Module that help in soliciting grant funding also apply to government loans. Projects that have been successful in gaining TIFIA assistance have generally exhibited the strengths in Exhibit 3-47.

Aside from the specifics of the TIFIA program, other more general factors that can help port owners to position projects for government funding include experienced management team and technical advisors, reputation of private partners, public support of the project, and legislation and regulations in place to accommodate the project and private investment.

Exhibit 3-47 TIFIA Project Strengths

Significance: The extent to which the project is nationally or regionally significant, in terms of generating economic benefits, supporting international commerce, or otherwise enhancing the national transportation system
Private Participation: The extent to which assistance would foster innovative public-private partnerships and attract private debt or equity investment
Environment: The extent to which the project helps maintain or protect the environment
Project Acceleration: The likelihood that assistance would enable the project to proceed at an earlier date than the project would otherwise be able to proceed
Creditworthiness: The creditworthiness of the project, including a determination that any financing for the project has appropriate security features, such as a rate covenant, to ensure repayment
Use of Technology: The extent to which the project uses new technologies, including intelligent transportation systems, that enhance the efficiency of the project
Consumption of the Budget Authority: The amount of budget authority consumed in funding the requested Federal credit instrument
Reduced Federal Grant Assistance: The extent to which assistance would reduce the contribution of Federal grant assistance to the project



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APPENDIX A Glossary of Terms

Additional Bonds Test - The financial test, sometimes referred to as a “parity test,” that must be satisfied under the bond contract securing outstanding revenue bonds or other types of bonds as a condition to issuing additional bonds. Typically, the test would require that historical revenues (plus, in some cases, future estimated revenues) exceed projected debt service requirements for both the outstanding issue and the proposed issue by a certain ratio.¹

Advance Refunding - For purposes of certain tax and securities laws and regulations, a refunding in which the refunded issue remains outstanding for a period of more than 90 days after the issuance of the refunding issue.¹

Alternative Minimum Tax (AMT) - Taxation based on an alternative method of calculating federal income tax under the Internal Revenue Code. Interest on certain private activity bonds is subject to the AMT.¹

Amortization - The process of paying the principal amount of an issue of securities by periodic payments either directly to bondholders or to a sinking fund for the benefit of bondholders.¹

Arbitrage Rebate - A payment made by an issuer to the federal government in connection with an issue of tax-exempt or other federally tax-advantaged bonds. The payment represents the amount, if any, of arbitrage earnings on bond proceeds and certain other related funds, except for earnings that are not required to be rebated under limited exemptions provided under the Internal Revenue Code. An issuer generally is required to calculate, once every five years during the life of its bonds, whether or not an arbitrage rebate payment must be made.¹

Asset - Any item of economic value, either physical in nature (such as land) or a right to ownership, expressed in cost or some other value, which an individual or entity owns.²

Asset-Backed Debt - Debt having hard asset security such as a crane lease or property mortgage, in addition to the security of pledged revenues.

Availability Payment - A means of compensating a private concessionaire for its responsibility to design, construct, operate, and/or maintain an infrastructure facility for a set period of time. These payments are made by a public project sponsor (a port authority, for example) based on particular project milestones or facility performance standards.²

Best and Final Offers (BAFO) - In government contracting, a vendor’s response to a contracting officer’s request that vendors submit their last and most attractive bids to secure a contract for a particular project. Best and final offers are submitted during the final round of negotiations.³

Bond Indenture - A contract between the issuer of municipal securities and a trustee for the benefit of the bondholders. The trustee administers the funds or property specified in the indenture in a fiduciary capacity on behalf of the bondholders. The indenture, which is generally part of the bond contract, establishes the rights, duties, responsibilities and remedies of the issuer and trustee and determines the exact nature of the security for the bonds. The trustee is generally empowered to enforce the terms of the indenture on behalf of the bondholders.¹

Call Date - The date on which bonds may be called for redemption as specified by the bond contract.¹



Capacity (Maximum Practical) - Throughput volume which, if exceeded, would cause a disproportionate increase in unit operating cost or business delay, within the context of a facility's land use, layout, and uncontrollable commercial drivers.

Capital Expenditure (CapEx) - Expenditure on capital items either at the commencement of the project or the cost of their renewal and replacement ("R&R") over the life of the project.

Capital Appreciation Bonds (CABs) - A municipal security on which the investment return on an initial principal amount is reinvested at a stated compounded rate until maturity. At maturity the investor receives a single payment (the "maturity value") representing both the initial principal amount and the total investment return. CABs typically are sold at a deeply discounted price with maturity values in multiples of \$5,000.¹

Capital Improvement Program (CIP) - A schedule, typically covering a period of less than ten years, which outlines expenditures for capital projects on an annual basis and corresponding funding sources.

Capital Structure - The mix of an issuer's or a project's short and long-term debt and equity, including the terms of such financing and repayment requirements.

Capitalized Interest - A portion of the proceeds of an issue that is set aside to pay interest on the securities for a specified period of time. Interest is commonly capitalized for the construction period of a revenue-producing project, and sometimes for a period thereafter, so that debt service expense does not begin until the project is expected to be operational and producing revenues.¹

Concession - An alternative method for a public sector entity to deliver a public-purpose project through long-term contracting with a private sector entity. A concession agreement typically covers the objectives of the asset concession, compensation, and duration of concession. A port

concession is a contractual agreement in which a port owner conveys specific operating rights of its facility to a private entity for a specified period of time.

Convertible Capital Appreciation Bonds (CCABs)

- CABs with a convertibility feature at a future date to CIBs. CCABs can be used to defer interest and principal payments, with conversion to Current Interest Bonds so that debt service requirements begin, thus reducing the cost of funds relative to traditional, non-convertible CABs.

Coupon - The periodic rate of interest, usually calculated as an annual rate payable on a security expressed as a percentage of the principal amount. The coupon rate, sometimes referred to as the "nominal interest rate," does not take into account any discount or premium in the purchase price of the security.¹

Covenants - Contractual obligations set forth in a bond contract. Covenants commonly made in connection with a bond issue may include covenants to charge fees sufficient to provide required pledged revenues (called a "rate covenant"); to maintain casualty insurance on the project; to complete, maintain and operate the project; not to sell or encumber the project; not to issue parity bonds or other indebtedness unless certain tests are met ("additional bonds" or "additional indebtedness" covenant); and not to take actions that would cause tax-exempt interest on the bonds to become taxable or otherwise become arbitrage bonds ("tax covenants").¹





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Credit Rating - An opinion by a rating agency of the credit-worthiness of a bond.¹

Current Interest Bonds (CIBs) - A bond on which interest payments are made to the bondholders on a periodic basis. This term is most often

used in the context of an issue of bonds that includes both CABs and CIBs.¹

Current Refunding - A refunding transaction where the municipal securities being refunded will all mature or be redeemed within 90 days or less from the date of issuance of the refunding issue.¹

Debt Profile - A detailed description of an issuer's overall debt portfolio and credit profile that is updated as changes in capital structure occur. A debt profile typically includes all of the relevant information about an issuer's debt including but not limited to current ratings, debt service requirements, debt service coverage ratios and eligibility for refunding.

Debt Service Coverage Ratio - The ratio of available revenues available annually to pay debt service over the annual debt service requirement. This ratio is one indication of the availability of revenues for payment of debt service.¹

Debt Service Reserve - A fund in which funds are placed to be applied to pay debt service if pledged revenues are insufficient to satisfy the debt service requirements. The debt service reserve fund may be entirely funded with bond proceeds at the time of issuance, may be funded over time through the accumulation of pledged revenues, may be funded with a surety or other type of guaranty policy (described below), or may be funded only upon the occurrence of a specified event (e.g. upon failure

to comply with a covenant in the bond contract) (a "springing reserve"). Issuers may sometimes authorize the provision of a surety bond or letter of credit to satisfy the debt service reserve fund requirement in lieu of cash. If the debt service reserve fund is used in whole or part to pay debt service, the issuer usually is required to replenish the fund from the first available revenues, or in periodic repayments over a specified period of time.

Defeasance - Termination of certain of the rights and interests of the bondholders and of their lien on the pledged revenues or other security in accordance with the terms of the bond contract for an issue of securities. This is sometimes referred to as a "legal defeasance." Defeasance usually occurs in connection with the refunding of an outstanding issue after provision has been made for future payment of all obligations related to the outstanding bonds, sometimes from funds provided by the issuance of a new series of bonds. In some cases, particularly where the bond contract does not provide a procedure for termination of these rights, interests and lien other than through payment of all outstanding debt in full, funds deposited for future payment of the debt may make the pledged revenues available for other purposes without effecting a legal defeasance. This is sometimes referred to as an "economic defeasance" or "financial defeasance." If for some reason the funds deposited in an economic or financial defeasance prove insufficient to make future payment of the outstanding debt, the issuer would continue to be legally obligated to make payment on such debt from the pledged revenues.¹

Demand & Revenue Study - A professionally prepared forecast and report of the market demand for a port's cargo, and the ensuing revenue as a result of charging rates/fees for such cargo moving through a port. Demand & revenue data is used as input in developing plans of finance and evaluating investment opportunities.



Design-Build (DB) - A project delivery method that combines two, usually separate services into a single contract. With design-build procurements, owners execute a single, fixed-fee contract for both architectural/engineering services and construction. The design-build entity may be a single firm, a consortium, joint venture or other organization assembled for a particular project.⁴

Design-Build-Finance-Operate-Maintain (DBFOM) - A method of project delivery in which the responsibilities for designing, building, financing and operating are bundled together and transferred to private sector partners.⁴

Design-Build-Operate-Maintain (DBOM) - 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.⁴

Enabling Act – Legislation by which port authorities and other governmental agencies are created and granted powers to carry out certain actions. While enabling acts for port authorities vary widely; key aspects generally include establishment of the port entity; governance and procedures; powers such as ability to enter into contracts, construct projects, transact business, and enter into financing agreements; and reporting requirements.

Equity - A funding contribution to a project having an order of repayment occurring after debt holders in a flow of funds per the bond indenture securing such funding contribution.

Escrow - A fund established to hold funds pledged and to be used solely for a designated purpose, typically to pay debt service on an outstanding issue in an advance refunding.¹

Flow of Funds - The order and priority of handling, depositing and disbursing pledged revenues, as set forth in the bond contract. Generally, pledged revenues are deposited, as received, into a general

collection account or revenue fund established under the bond contract for disbursement into the other accounts established under the bond contract. Such other accounts generally provide for payment of the costs of debt service, debt service reserve deposits, operation and maintenance costs, renewal and replacement and other required amounts.¹

Forward Refunding - An agreement, usually between an issuer and the underwriter, whereby the issuer agrees to issue bonds on a specified future date and an underwriter agrees to purchase such bonds on such date. The proceeds of such bonds, when issued, will be used to refund the issuer's outstanding bonds. Typically, a forward refunding is used where the bonds to be refunded are not permitted to be advance refunded on a tax-exempt basis under the Internal Revenue Code. In such a case, the issuer agrees to issue, and the underwriter agrees to purchase, the new issue of bonds on a future date that would effect a current refunding.¹

Independent Utility - A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility. (72 FR 47, p. 11196).

Intelligent Transportation Systems (ITS) - An operational system of various technologies that, when combined and managed, improve the operating capabilities of the overall system.





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Interest Rate Swap - A specific derivative contract entered into by an issuer or obligor with a swap provider to exchange periodic interest payments. Typically, one party agrees to make payments to the other based upon a fixed rate of interest in exchange for payments based upon a variable rate. The swap contract may provide that the issuer will pay to the swap counter-party a fixed rate of interest in exchange for the counter-party making variable payments equal to the amount payable on the variable rate debt.¹

Internal Rate of Return (IRR) - The discount rate often used in capital budgeting that makes the net present value of all cash flows from a particular project equal to zero. Generally speaking, the higher a project's internal rate of return, the more desirable it is to undertake the project.³

Investment-Grade - A security that, in the opinion of the rating agency, has a relatively low risk of default.¹ Alternatively, the level of comprehensiveness and market readiness for investment-grade security issuance in referring to a demand & revenue report or engineering report supporting such security issuance.

Letter of Credit - An irrevocable commitment, usually made by a commercial bank, to honor demands for

payment of a debt upon compliance with conditions and/or the occurrence of certain events specified under the terms of the letter of credit and any associated reimbursement agreement. A letter of credit is frequently used to provide credit and liquidity support for variable rate demand obligations and other types of securities. Bank letters of credit are sometimes used as additional sources of security for issues of municipal notes, commercial paper or bonds, with the bank issuing the

letter of credit committing to pay principal of and interest on the securities in the event that the issuer is unable to do so.¹

Liquidated Damages - Present in certain legal contracts, this provision allows for the payment of a specified sum should one of the parties be in breach of contract.³

Liquidity - In the context project finance, the build-up of cash reserve balances which are viewed favorably given the ability to use such reserves to cover debt service and other obligations under a bond indenture should expected project cash flows not materialize for any given period.

Long Range Transportation Plan (LRTP) - A document resulting from regional or statewide collaboration and consensus on a region or state's transportation system, and serving as the defining vision for the region's or state's transportation systems and services. In metropolitan areas, the plan indicates all of the transportation improvements scheduled for funding over the next 20 years. The plan must conform to regional air quality implementation plans and be financially constrained.^{2,4}

Major Project Financial Plan - Under U.S. Department of Transportation (USDOT) guidance, transportation projects are required to submit a Major Project Financial Plan if any of the following apply: 1) recipient of Federal financial assistance for a Title 23 project with a minimum cost of \$500 million, 2) identified by the USDOT Secretary as a major project and 3) applying for TIFIA assistance.

Master/Land-Use Plan - Port documents that guides a port's planning, development and management of land, infrastructure and facilities, with the goal of accommodating future growth and supporting the regional economy. These plans often include information on port owners' goals and policies; survey of existing conditions/facilities; stakeholder outreach activities; land use data; environmental considerations; analysis of future





demand, capacity, and capacity requirements; CIP; and operating and financial performance of the port.

Maximum Annual Debt Service - Maximum annual debt service refers to the amount of debt service for the year in which the greatest amount of debt service payments are required and is often used in calculating required reserves and in additional debt tests.¹

Negative Arbitrage - Investment of bond proceeds and other related funds at a rate below the bond yield.¹

Net Present Value (NPV) - The difference between the present value of cash inflows and the present value of cash outflows. NPV is used in capital budgeting to analyze the profitability of an investment or project.³

Net Revenue - The amount of money available after subtracting from gross revenues such costs and expenses as may be provided for in the bond contract. The costs and expenses most often deducted are O&M expenses.¹

Off-Balance Sheet - Assets or liabilities that do not appear on a company's balance sheet but that are nonetheless effectively assets or liabilities of the company. Assets or liabilities designated off balance sheet are typically ones that a company is not the recognized legal owner of, or in the case of a liability, does not have direct legal responsibility for. Off-balance-sheet financing may be used when a business is close to its borrowing limit and wants to purchase something, as a method of lowering borrowing rates, or as a way of managing risk. This type of financing may also be used for funding projects, subsidiaries or other assets in which the business has a minority claim. An operating lease, used in off balance sheet financing, is a good example of a common off balance sheet item.³

Operating & Use Lease Agreement - A contract that allows for the use of an asset, but does not convey rights of ownership of the asset. An

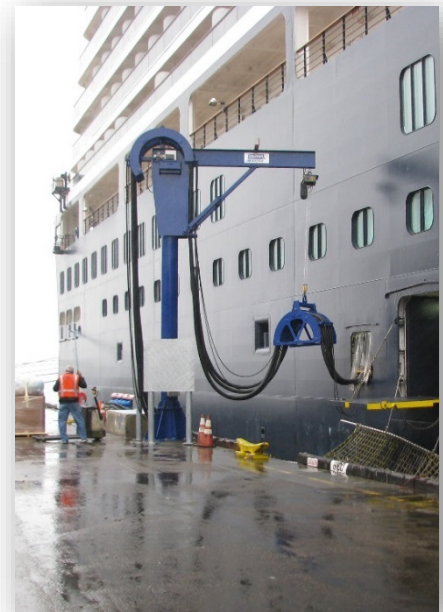
operating lease is not capitalized; it is accounted for as a rental expense in what is known as "off balance sheet financing." For the lessor, the asset being leased is accounted for as an asset and is depreciated as such. Operating leases have tax incentives and do not result in assets or liabilities being recorded on the lessee's balance sheet, which can improve the lessee's financial ratios.³

Operating Expenditure (OpEx) - Expenditure on operating and routine maintenance costs.

Operations & Maintenance (O&M) - Refers to expenses incurred for operating and maintaining a project asset. O&M is a key input in determining project cash flows, often placed after gross revenues in the flow of funds of a bond indenture.

Payment Bond - Deposit or guaranty (usually 20 percent of the bid amount) submitted by a successful bidder as a surety that (upon contract completion) all sums owed by it to its employees, suppliers, subcontractors, and others creditors, will be paid on time and in full.⁵

Performance Bond - A written guaranty from a third party guarantor (usually a bank or an insurance company) submitted to a principal (client or customer) by a contractor on winning the bid. A performance bond ensures payment of a sum (not exceeding a stated maximum) of money in case the contractor fails in the full performance of the contract. Performance bonds usually cover 100 percent of the contract price and replace the bid bonds on award of the contract. Unlike a fidelity bond, a performance bond is not an insurance policy and (if cashed by the principal) the payment amount is recovered by the guarantor from the contractor.⁵





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Port - A single- or multiple-facility entity that facilitates the transfer of cargo and/or passengers between logistically-linked transport modes.

Port Authority - State or local government that owns, operates, or

otherwise provides wharf, dock, and other investments at ports.

Port Owner - Port authorities, terminal operators, private companies, and project sponsors that own and/or operate a port.

Price - The amount to be paid for a bond, usually expressed as a percentage of par value but also sometimes expressed as the yield that the purchaser will realize based on the dollar amount paid for the bond. The price of a municipal security moves inversely to the yield.¹

Private Activity Bonds (PABs) - A municipal security of which the proceeds are used by one or more private entities. A municipal security is considered a PAB if it meets two sets of conditions set out in Section 141 of the Internal Revenue Code. A municipal security is a PAB if, with certain exceptions, more than 10 percent of the proceeds of the issue are used for any private business use (the "private business use test") and the payment of the principal of or interest on more than 10 percent of the proceeds of such issue is secured by or payable from property used for a private business use (the "private security or payment test"). A municipal security also is a PAB if, with certain exceptions, the amount of proceeds of the issue used to make loans to non-governmental borrowers exceeds the lesser of 5 percent of the proceeds or \$5 million (the "private loan financing test"). Interest on private activity bonds is not excluded from gross income for federal income tax purposes unless the bonds fall within certain defined categories ("qualified bonds" or "qualified PABs"). Most categories of qualified PABs are subject to the AMT.¹

Private Placement - A primary offering in which a placement agent sells a new issue of municipal securities on behalf of the issuer directly to investors on an agency basis rather than by purchasing the securities from the issuer and reselling them to investors. Investors purchasing privately placed securities often are required to agree to restrictions as to resale and are sometimes requested or required to provide a private placement letter to that effect. The term Private Placement is often used synonymously with the term "direct loan," which more specifically is a loan to a municipal issuer from a banking institution or another lender. Such obligations may constitute municipal securities.¹

Project - A port owner's acquisition, development, expansion or renovation of a single site, facility, infrastructure element, or operational resource to meet an identified or emergent need.

Project Financing - A non-recourse or limited recourse financial structure where project debt and equity used to finance the project are paid back from the cash flow generated by the project. While the loan structure relies primarily on the project's cash flow for repayment; the project's assets, rights and interests are held as secondary security or collateral.³

Project Funding - A financial structure where internal reserves, user charges and/or government investments are used to finance the project without a direct requirement for repayment.

Project Sponsor - The entity that provides financial resources to support the project.

Public-Private Partnership (P3) - A generic term for a wide variety of financial arrangements whereby governmental entities agree to transfer any risk of, or substantial management control over, a governmental asset to the private entity in the port sector this is typically in exchange for upfront or ongoing payments though those may only be sufficient to pay for the capital improvement.¹



Publicly Issued - The sale of bonds or other financial instruments by an organization to the public in order to raise funds for infrastructure expansion and investment (contrast with privately placed financial instruments including directly placed loans with a financial institution/lender).

Put Bond - A bond that allows the holder to force the issuer to repurchase the security at specified dates before maturity. The repurchase price is set at the time of issue, and is usually par value.³

Railroad Rehabilitation & Improvement

Financing (RRIF) - Under this program the Federal Railroad Administration Administrator is authorized to provide direct loans and loan guarantees up to \$35.0 billion to finance development of railroad infrastructure. Up to \$7.0 billion is reserved for projects benefiting freight railroads other than Class I carriers. The funding may be used to (a) acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings and shops; (b) refinance outstanding debt incurred for the purposes listed above; and (c) develop or establish new intermodal or railroad facilities. Direct loans can fund up to 100% of a railroad project with repayment periods of up to 35 years and interest rates equal to the cost of borrowing to the government. Eligible borrowers include railroads, state and local governments, government-sponsored authorities and corporations, joint ventures that include at least one railroad, and limited option freight shippers who intend to construct a new rail connection.⁶

Rate Covenant - A covenant to charge fees sufficient to provide required pledged revenues.¹

Renewal & Replacement (R&R) - Funds to cover anticipated expenses for major repairs of the issuer's facilities or a project whose revenues are pledged to the bonds or for R&R of related equipment.¹

Return on Investment (ROI) – A performance measure used to evaluate the efficiency of an

investment or to compare the efficiency of a number of different investments. ROI measures the amount of return on an investment relative to the investment's cost. To calculate ROI, the benefit (or return) of an investment is divided by the cost of the investment, and the result is expressed as a percentage or a ratio.³

Request for Letters of Intent (RLOI) - Document used to solicit Letters of Intent, an interim agreement that summarizes the main points of a proposed deal, or confirms that a certain course of action is going to be taken. Normally, it does not constitute a definitive contract but signifies a genuine interest in reaching the final agreement subject to due diligence, additional information, or fulfillment of certain conditions. The language used in writing a letter of intent is of vital importance, and determines whether it is only an expression of intent or an enforceable undertaking.⁵

Request for Proposals (RFP) - Document used in sealed-bid procurement procedures through which a purchaser advises the potential suppliers of (1) statement and scope of work, (2) specifications, (3) schedules or timelines, (4) contract type, (5) data requirements, (6) terms and conditions, (7) description of goods and/or services to be procured, (8) general criteria used in evaluation procedure, (9) special contractual requirements, (10) technical goals, (11) instructions for preparation of technical, management, and/or cost proposals or in the case of P3s, a full P3 contract. RFPs are publicly advertised and suppliers respond with a detailed proposal, not with only a price quotation. They provide for negotiations after sealed proposals are opened, and the award of contract may not necessarily go to the lowest bidder.⁵





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Request for Qualifications (RFQ) - Document used in a procurement process to solicit qualifications of professional providers of goods or services for a given project. The objective of the RFQ is to pre-qualify bidding teams based on well-defined criteria.

Security for Debt - The specific revenue sources or assets of an issuer or borrower that are pledged or available for payment of debt service on a series of bonds, as well as the covenants or other legal provisions protecting the bondholders.¹

Senior Lien Debt - Bonds having the priority claim against pledged revenues superior to the claim against such pledged revenues or security of other obligations.¹

Special Purpose Facility Bonds - Bonds issued by a governmental entity to finance facilities supporting private sector activity, and secured by payments of special purpose rent received by the port or the trustee pursuant to an agreement with lessee/concessionaire. Such bonds are issued by the governmental entity as the conduit issuer to achieve tax-exempt (or AMT) status on the bonds.

State Infrastructure Bank (SIB) - A state or multi-state revolving fund that provides loans, credit enhancement, and other forms of financial assistance to transportation infrastructure projects.²

State Transportation Improvement Program (STIP) - A short-term transportation planning document covering at least a three-year period and updated at least every two years. The STIP includes a priority list of projects to be carried out in each of the

three years. Projects included in the STIP must be consistent with the long-term transportation plan, must conform to regional air quality implementation plans, and must be financially constrained (achievable within existing or reasonably anticipated funding sources).²

Strategic Plan - Port document outlining a port's market positioning and strategic direction. Strategic plans may include, among other topics, a competitive assessment relative to other ports; trends in regional, national and global economies; cargo/passenger analysis; growth strategies; and capital investment recommendations.

Subordinate Lien Debt - Bonds that have a claim against pledged revenues or other security subordinate to the claim against such pledged revenues or security of other obligations.¹

Terminal Operator - A port authority or private company that operates a port facility and manages the movement of cargo and/or passengers.

Transport Modes - For each mode, there are several means of transport. They are: a. inland surface transportation (rail, road, and inland waterway); b. sea transport (coastal and ocean); c. air transportation; and d. pipelines.

Transportation Improvement Program (TIP) - A short-term transportation planning document, approved at the local level, covering at least a four-year period for projects within the boundaries of a Metropolitan Planning Organization (MPO). The TIP must be developed in cooperation with state and public transit providers and must be financially constrained. The TIP includes a list of capital and non-capital surface transportation projects, bicycle and pedestrian facilities and other transportation enhancements. The TIP should include all regionally significant projects receiving FHWA or FTA funds, or for which FHWA or FTA approval is required, in addition to non-federally funded projects that are consistent with the MPO's LRTP.



Transportation Infrastructure Finance and Innovation Act (TIFIA)

- The Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) authorized the USDOT to provide three forms of credit assistance - secured (direct) loans, loan guarantees and standby lines of credit - to surface transportation projects of national or regional significance. A specific goal of TIFIA is to leverage private co-investment. Because the program offers credit assistance, rather than grant funding, potential projects must be capable of generating revenue streams via user charges or have access to other dedicated funding sources. In general, a project's eligible costs must be reasonably anticipated to total at least \$50 million. Credit assistance is available to: projects eligible for assistance under title 23 or chapter 53 of title 49; international bridges and tunnels; intercity passenger bus or rail facilities and vehicles, including those owned by Amtrak; public freight rail projects; private freight rail projects that provide public benefit for highway users by way of direct highway-rail freight interchange (a refinement of the SAFETEA-LU eligibility criterion); intermodal freight transfer facilities; projects providing access to, or improving the service of, the freight rail projects and transfer facilities described above; and surface transportation infrastructure modifications necessary to facilitate direct intermodal interchange, transfer and access into and out of a port. The TIFIA credit assistance is limited to 49 percent of eligible project costs.⁴

Transportation Investment Generating Economic Recovery (TIGER)

- USDOT TIGER discretionary grants are awarded on a competitive basis for capital investments in surface transportation projects that will have a significant impact on the nation, a metropolitan area or a region.

Value for Money (VfM) - A technique used to evaluate and quantify project risks. VfM "prices" risk by producing a discounted net present value amount that represents the aggregate impact of various sensitivities applied to the variable inputs of a project. An assessment of VfM for P3 procurements is a comparative concept, and as such most delivery agencies seek to use a "public sector comparator" approach to evaluating VfM.

Yield - The annual rate of return on an investment, based on the purchase price of the investment, its coupon rate and the length of time the investment is held. The yield of a municipal security moves inversely to the price.¹

Yield Restriction - A general requirement under the Internal Revenue Code that proceeds of tax-exempt bonds not be used to make investments at a higher yield than the yield on the bonds. The Internal Revenue Code provides certain exceptions, such as for investment of bond proceeds for reasonable temporary periods pending expenditure and investments held in "reasonably required" debt service reserve funds.¹

Note: Sources for the glossary include (1) www.msrb.org, (2) www.transportation-finance.org, (3) www.investopedia.com, (4) www.fhwa.dot.gov, (5) www.businessdictionary.com, and (6) www.fra.dot.gov.





APPENDICES

Port Concession Evaluation Model

Port system pro forma cash flow models and project finance models are user and project specific. An additional resource in the Toolkit is a general port concession evaluation model that enables port owners to quickly and at a very conceptual level consider the potential financial performance of a project using varying financing strategies and considering varying project development approaches. The model is aligned with the guidance included in the Finance Module. As the Toolkit user considers the content in each module and the appendices when developing their grant/funding applications or financing documents, they can use this model to compare options. The model is available on the AAPA website at <http://aapa.files.cms-plus.com/PortPlanningandFinanceToolkit/Port%20Concession%20Evaluation%20Model.xlsx>.

For full comprehensive port system pro forma models, existing system net revenues can be augmented by off balance sheet project revenue streams, both of which factor into the port's system debt service coverage levels and fund balances. For the project finance components of a model, as project revenues flow through the various operating, debt, and reserve requirements, the model should solve for the cash flows required for private partner payments. A model can be made to further solve for the discounted cash flows and calculate the equity Internal Rate of Return in order to determine the full value

of a concession agreement to a potential private partner.

The **port concession evaluation model** reports several financial measurements from the concessionaire and port owner perspective based on key variables that are input into the model. The following ten spreadsheet tabs comprise the model:

Instructions - Includes a description of the intent and objectives of the model and a list of variables that can be adjusted.

I. Assumptions - Primary input sheet for general information and variables related to concession payments and tax rates, project capital costs and financing sources.

II. Sources & Uses - Reports sources and uses of funds on hand, senior lien bonds, subordinate lien bonds, concessionaire bonds and equity.

III. Concessionaire Cash Flow - Reports the concessionaire's cash flow schedule including annual operating revenues and costs, fixed payments, variable payments, pledged revenues, senior lien debt, capital deposits, income tax, equity contributions, dividends and cash flow total.

IV. Public Entity Cash Flow - Reports the port owner's cash flow schedule including annual operating revenues, concessionaire fixed and variable payments, total revenues, operating expenses, revenues available for debt service, senior and subordinate lien debt and residual revenues.

**V. Concessionaire Debt Service and**

Coverage - Reports the concessionaire's debt service schedule for senior lien on the project including annual principal, interest, debt service, capital interest, net debt service, pledged revenues and lien coverage ratio.

VI. Public Entity Debt Service and

Coverage - Reports the port owner's debt service schedule for senior lien on the project including annual principal, CAP/interest, net debt service, new and convertible capital appreciation bond values, interest and debt service, existing debt, total senior debt service, subordinate lien debt, aggregate debt service, pledged revenues and lien coverage ratios.

VII. Concessionaire Tax - Reports a schedule of the concessionaire's annual profit before tax, state and federal carryforward tax loss, state and federal taxes, loss utilized, remaining tax carryforward and tax payable.

VIII. Depreciation - Reports a schedule of the annual depreciation and amount remaining related to the equity amount, depreciation method, acceleration factor, and depreciation term.

Data Input - The second input sheet which includes schedules for operating revenues and costs, existing debt payments and project debt issuance pro forma including principal and interest schedules for:

- Interest Bonds
- Capital Appreciation Bonds
- Convertible Capital Appreciation Bonds
- Subordinate Lien Interest Bonds
- Concessionaire Senior Lien

By following the instructions in the first tab and inputting general project and finance information in the second and last tab, a high level indication of the project's anticipated financial performance can be estimated for the concessionaire and port owner. Results from this model are not investment grade but will provide an indication of the relative financial performance of a project under consideration and will inform the port's finance experts or consultants on where and how to improve the project plan.

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