Alternative Financing and Delivery of Waterways Infrastructure

The American Society of Civil Engineers (ASCE) is a non-profit educational and professional society that was founded in 1852 and is the country’s oldest national civil engineering organization. We represent more than 150,000 civil engineers individually in private practice, government, industry, and academia who are dedicated to the advancement of the science and profession of civil engineering.

In 2015, ASCE’s Coasts, Oceans, Ports, and Rivers Institute created the Subcommittee on Alternative Financing of Waterways Infrastructure to evaluate the public-private partnership (P3) authorization included in Section 5014 of the Water Resources Reform and Development Act (WRRDA) and to educate, facilitate, and advocate for the use of alternate finance for water resource projects in the country. This report, released by the subcommittee in 2016, outlines how alternative financing can serve as an important resourcing component to supplement traditional federal financing models.

Currently, the U.S. Army Corps of Engineers (USACE) operates, maintains, and manages approximately one-third of the nation’s water resource assets. Under Section 5014 of WRRDA 2014, the USACE is authorized to enter agreements with non-federal interests, including private entities, to finance construction of at least 15 authorized water resources development projects. Though this provision requires Congressional appropriation prior to taking effect, funding has yet to be provided.

As noted by ASCE’s 2017 Infrastructure Report Card, which gave the nation’s inland waterways a grade of “D,” and despite increases in investments and project prioritization, there is a growing overall funding shortfall between long term, reliable funding needed to build, maintain, and operate water infrastructure projects and the actual appropriations provided to do so. The future of our nation’s security, economy, and our quality of life depends on expanding the tools available to meet the growing infrastructure and funding needs, and an alternative financing and delivery mechanism is one of those tools.

Alternative Financing: Public-Private Partnerships (P3s) and Public-Public-Private Partnerships (P4s)

- P3s and P4s are long-term contractual relationships between a public sector contracting authority and a private entity for the financing, design, construction, renovation, management, and operation and/or maintenance of public infrastructure or public services.
- This mode of financing can result in improvements in public infrastructure and services through shorter delivery times, greater capital efficiency, increased and maximized operational efficiency, lower life cycle costs and risks, private sector innovation, and enhanced project reliability and resiliency. It is important to note, however, that alternative financing is not the only – and not always the most appropriate – solution for the nation’s infrastructure investments needs.

Challenges to Alternative Financing of Water Resources Infrastructure Projects

- **Ring-Fencing and Budget Scoring:** The federal government has no authority to dedicate specific revenues for project repayment, and most existing fees and excise taxes assessed over water resources assets are either deposited in designated trust funds or sent to the General Fund of the Treasury (ie. ring-fencing). Therefore, most federal P3 projects are dependent on budget-based payments, which are treated by budget authorities as a capital lease and are scored upfront in a single year.
- **Revenue Generation:** The federal government has limited authority to create and assess new user fees, which would help facilitate P3s by allowing for cost-recovery associated with infrastructure and service delivery. The government’s ability to assess fees varies depending on the specific water resource asset;
for example, the ability to assess user charges on inland waterways is legislatively prohibited, while there is no such barrier in recreation.

- **Continuing Contract Authority:** P3 projects involve multi-year obligations and payments streams that extend into multiple fiscal years. Unless given specific multi-year contracting authority, most federal agencies are prohibited from making contracts which exceed currently available appropriations or which purport to obligate appropriations not yet made.

- **Budgetability:** The budget prioritization process does not account for or recognize benefits accrued from an alternative finance and delivery approach, such as the accelerated delivery of public benefits and higher return on federal investment. This means that the traditional benefit-cost-ratios (BCR) used to prioritize projects are not reflective of the underlying value of some proposed P3 projects.

- **Scope of Application of Section 5014:** Although Section 5014 of WRRDA 2014 establishes a P3 pilot program for water resources projects, it limits its application to “authorized” projects, effectively restricting USACE from harnessing P3s for many ongoing operation and maintenance (O&M) or rehabilitation projects.

**Recommendations to Address Alternative Finance and Delivery Obstacles**

- **Revenue Generation and Ring-Fencing:** Congress should allow for the authorization of new user fees for cost-recovery on alternative financing and delivery projects. Subsequently, they should also increase federal agencies’ authority to allow the revenues generated from such a dedicated user charge be retained for project-specific purposes, either through a revolving trust fund or an escrow account held by either the non-federal sponsor or the private partner. Funds left in a revolving fund at the end of the year would remain available for use the following year instead of reverting back to the General Treasury.

- **Budget Scoring and Budgetability:** Congress should amend budget scoring and BCR calculation methods to take into account the additional benefits and cost-savings that can be realized through alternative financing and delivery where their use is appropriate.

- **Continuing Contract Authority:** Congress should extend multi-year contract authority (up to 50 years) to federal agencies, including the USACE, seeking to pursue an alternative financing and delivery project.

- **Expand Scope of Section 5014:** Congress should expand the scope of application of Section 5014 of WRRDA 2014 to include O&M, as well as rehabilitation, as authorized projects.

- **Funding:** Congress should provide full appropriations authorized under Section 5014 of WRRDA 2014 to enable USACE’s ability to fully develop the P3 pilot program.

**Conclusion**

In conclusion, ASCE believes our nation must prioritize the investment needs of our water resources infrastructure to ensure a strong economy and a modern, efficient waterways system that can compete on a global stage. As we work towards closing the growing funding gap, we must utilize new models, such as alternative financing and delivery, to improve project delivery times, lower life cycle costs, and create greater project resilience.

Although the promulgation of sustainable alternative financing and delivery contains challenges, these recommendations - many of which mirror those in ASCE’s 2017 Infrastructure Report Card - present opportunities for Congress, the Administration, federal agencies, and private sector/stakeholders to take needed action on water resources infrastructure investment in our nation.