Market Scope

The Public-Private Partnership (P3) market in the U.S. is ‘young’ compared to other countries, such as Canada and Australia, but is growing rapidly. Between 2014 and 2017, P3 projects under development in the U.S. increased five-fold, according to the Brattle Group. Much of this is due to the diversifying of project types well beyond toll-funded transportation projects (financed under the Demand-Based Model, which involves user fees). Between 2015-2017, 57 percent of P3 project closings used the increasingly popular Availability-Based Model, which includes revenue outside of user fees. Expanded use of this model has contributed to the overall growth of the market, and the growth of ‘social infrastructure’ project types, such as student housing and justice facilities.

Top Clients: Student Housing Developers

A survey by Student Housing Business magazine revealed that more than 175,000 beds are planned for delivery between now and the fall of 2022. The list below features the top 10 most active developers in the student housing industry, their headquarters locations, and number of beds each has in development over the next three years. (For more on the student housing market, see page 3.)

1. Landmark Properties Athens, GA: 23,316 beds
2. CA Ventures Chicago: 15,906 beds
3. Aspen Heights Partners Austin, TX: 15,428 beds
4. American Campus Communities Austin, TX: 13,744 beds
5. Harrison Street Real Estate Capital Chicago: 13,190 beds
6. Core Spaces Austin, TX: 11,978 beds
7. RISE: A Real Estate Co. Valdosta, GA: 8,118 beds
8. Gilbane Development Co. Providence, RI: 7,825 beds
10. Sterling University Housing Houston, TX: 7,200 beds

5 Current Market Trends

1. Rise of ‘Social Infrastructure’: Social infrastructure generally refers to vertical projects that accommodate a social service function (with a broad definition of what this may be). Typically, this refers to buildings, such as schools, universities, hospitals, courthouses, prisons, and community housing. As the P3 market has matured, many new projects, such as those for streetlights or convention centers, have also been included in the social infrastructure category. The first notable social infrastructure project was the Long Beach Courthouse (CA), completed in 2010. As the use of the Availability Payment Model for P3s has advanced, so have the number of social infrastructure projects. In 2017, they made up nearly 24 percent of active projects, second only to transportation projects at about 45 percent, according to the Brattle Group. The growth of the social infrastructure market is expected to continue at a steady pace. Of the 13 major P3 projects that closed in 2017-2018, five were considered social infrastructure (see full list on page 3).

Continued on next page

U.S. P3 Pipeline Surges

![Graph showing the number of P3 projects by stage of development from 2006 to 2017. The graph indicates a significant increase in projects from 2006 to 2017, with a notable surge in the number of pre-launch projects in 2017.](source: The Brattle Group)
2. **Size Matters:** P3 project delivery is particularly suitable for large projects, generally defined as those over $125 million in total project cost; few P3s under $50 million have been undertaken. However, as the number of U.S. P3s has increased, owners have begun to 'bundle' many small projects (sometimes hundreds) into one P3 contract. A well-known and early project of this type and size is the Pennsylvania Department of Transportation’s Rapid Bridge Replacement Project, which bundled 558 bridges into one $1.12 billion (2019) P3 contract.

3. **Risky Business:** Nearly all P3 projects include alternative delivery of design and construction services, with design-build being the norm. The graphic below shows the full spectrum of the contract and delivery models used for P3 projects. With P3 projects, an A/E team is a subconsultant to a design-build contractor, who is a subconsultant to the concessionaire (or team of concessionaires), who is generally the prime. Such an arrangement has shown to increase the risk to A/E firms, and further distances the design team from the project owner. When considering all of the stakeholders of a P3 project (owners, primes, etc.), other elements of risk include those related to possible financial and schedule failure, as well as political and public backlash.

4. **Educating Owners is Key:** Many owners are either just considering P3 project delivery or have little experience with this contract type. Although a few states with experienced owners have developed centralized P3 offices, the process of sharing best practices is fragmented in the United States. As a result, educating owners by A/E firms and other team members is key, as the quality of the procurement process and contract documents is critical. Elements project teams encourage owners to embrace include the need for balanced quantitative and qualitative selection criteria; opportunities for potential bidders to comment on draft Request for Proposals; and the use of stipends. At the federal level, there are centers of information for transportation and water project financing, including P3s, within the U.S. Department of Transportation’s Build America Bureau, and the U.S. Environmental Protection Agency’s Water Infrastructure and Resiliency Finance Center.

5. **Airport P3s are Taking Off:** Currently the hottest market for P3 projects is the airport sector. As one can see by 2017-2018 Significant P3 Closings (next page), all types of airport projects are now using P3 contracting, from people movers to rental car facilities. Airport projects made up $51.7 billion in active P3 procurements in 2017, according to the Brattle Group. This trend is expected to increase, as airports have very large capital improvement needs, and the ability to forecast and fund payments from a variety of user fees is a good fit for P3 project delivery.

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**Project Delivery Models Along a Continuum of Private Sector Involvement**

**Traditional Approach (NON-PPP):**
- Design-Bid-Build (DBB)
- Design-Bid-Build (DB)
- Design-Build (DB)
- Design-Build Finance (DBF)
- Design-Build Finance: Operate-Maintain (DBOM)
- Design-Build Finance-Maintain (DBOM)
- Design-Build Finance: Operate-Maintain (DBFOM)
- Design-Build Finance: Operate-Maintain (DBFO)
- Other private financing
- Operations and Maintenance (O&M) contract

**Public-Private Partnerships (PPP):**
- Design-Build Finance: Operate-Maintain (DBOM)
- Build-Transfer-Operate (BTO)
- Build-Operate (BO)
- Build-Operate (BOOT)
- Build-Operate (BOP)
- Build-Operate (BOO)
- Lease-Build-Operate (LBO)
- Long-term lease concession

**Full Privatization (NON-PPP):**
- Build-Operate (BO)
- Private sector owns and operates
- Asset sale
- Buy-Build-Operate (BBO)

*Source: National Conference of State Legislatures*
Government Affairs Action

- **Private Activity Bonds (PABs):** ACEC is working with stakeholders to advance the Public Buildings Renewal Act (H.R. 960/S. 326) legislation to create $5 billion in PABs to support the design and construction of schools, courthouses, libraries, city halls, law enforcement facilities, universities and other public and institutional buildings. PABs are a key source of financing for P3 projects.

- **Permitting:** Recently, the White House Council on Environmental Quality (CEQ) opened the review of National Environmental Policy Act (NEPA) implementing regulations pursuant to Executive Order (EO) 13807, which directs agencies to optimize interagency coordination of NEPA review and decisions and reduce unnecessary burdens and delays. ACEC supports NEPA; however, we share many of CEQ’s stated goals for this proposed rulemaking, including promotion of efficient, well-informed, and timely federal decision making.

ACEC also supports S. 3303 the “Water Quality Certification Improvement Act of 2018” clarifying provisions of Section 401 of the Clean Water Act where developers of federally permitted projects seek state water quality certifications necessary for final federal project approval. The bill requires states to grant or deny requests in a timely manner and inform applicants within 90 days as to whether any additional information is needed to complete the review. Uncertainties around permitting is a major concern and risk point for P3 project teams.

- **Transportation Infrastructure Finance and Innovation Act (TIFIA):** ACEC is supporting reform and expansion of the TIFIA program to provide greater certainty for applicants by clarifying eligibility/project credit rating requirements and streamlining the application and review process to help expedite qualified projects, as well as legislation to raise the federal volume cap on PABs for surface transportation projects. Both issues are likely to be considered in a FAST Act reauthorization bill currently under development in Congress.

- **New Federal P3 Program:** Historically the federal government has not undertaken many P3s. However, the U.S. Army Corps of Engineers (USACE) in 2019 announced four projects it will consider for P3s under a new pilot program that is part of the larger Revolutionize USACE Civil Works initiative: 1.) Brazos Island Harbor Channel Improvement (Brownsville, TX); 2.) Los Angeles River Ecosystem Restoration (CA); 3.) New Soo Lock at St. Mary's River (MI), and the 4.) Sabine Pass to Galveston Bay Coastal Storm Risk Management project (TX).

Business Development Insight

*Student Housing: A Stable and Still-Growing P3 Market Sector*

Although considered a mature sector within the larger P3 market, student housing continues to grow, providing opportunities for A/E firms. According to EY-Parthenon, the value of P3s between higher education institutions and the private sector soared to $3.1 billion in 2016 from less than $1 billion in 2010.

P3 project delivery is a good fit for universities—particularly cash-strapped large, public institutions—as it allows them to divert money to academic priorities and ‘user fees’ are certain from students’ tuition and fees payments. Although the large population of Millennials have mostly cycled through college, the future of enrollment is predicted to steadily increase. The U.S. Department of Education forecasts undergraduate college enrollment will be 17.4 million by 2027, a three percent increase from 2016.

Typically, student housing projects exceed $100 million and feature styles and amenities that resemble boutique hotels, complete with pools, cafes and gyms, to attract students to campuses.

2017-2018 Significant P3 Closings

1. Los Angeles International Airport Automated People Mover (LAX APM)
2. Los Angeles International Airport Consolidated Rent-a-Car Facility
3. Denver Airport (Jeppesen Terminal)
4. Colorado’s I-70
5. Purdue University Student Housing
6. Lansing Correctional Facility, Kansas
7. Howard County, Maryland Courthouse
8. Massachusetts Bay Transit Authority Automated Fare Collection System
9. Michigan’s I-75
10. Wayne State University Residences
11. Texas Woman’s University Student Housing
12. Virginia’s I-395
13. Virginia’s ‘Transform 66’

*Source: Husch Blackwell*
Key Webinar

The Potential of Opportunity Zones for Your Project Pipeline

The new Opportunity Zone program provides developers the flexibility to pursue commercial, residential and multi-modal projects on underutilized sites. Governors in each state designated 9,000 communities nationwide as Qualified Opportunity Zones. Learn about why this new program is creating such a buzz and how engineering firms can realize new business opportunities.

Webinar Presenters

Catherine Lyons, Manager of Policy and Coalitions with the Economic Innovation Group

Vanessa Sturgeon, President & CEO with TMT Development

On-Demand Link: http://bit.do/opportunity-zones

ACEC’s Private Industry Briefs

Focusing on the private-sector markets listed below, ACEC’s Private Industry Briefs are available via subscription; they are free and you can cancel at any time.

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Intermodal & Logistics

Energy & Utilities

Health Care & Science+Technology

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