EY PARTHENON

Public-private partnerships in higher education

What is right for your institution?

EY-Parthenon Education practice

Higher education under pressure

Higher education institutions are facing increasing pressure on their mission to provide high-quality, affordable education to students and perform world-class research. Reductions in public funding support and concerns about overall affordability present substantial near-term and longer-term budget challenges for many institutions.

Alongside the headlines about ballooning student loans and pressure to minimize tuition increases impacting revenues, institutions are facing a myriad of complicated issues on the expense side such as deferred facility maintenance needs and increasing costs related to new technologies and programs. Combining the above with stagnating enrollment demand, the pressure to compete for students rises, driving an additional need for investment in a differentiated student experience, which may include new state-of-the-art facilities.

While an affordable, quality education that leads to a sustaining career is the core component of the mission of higher education institutions, it is increasingly clear that students and their families are also interested in the non-academic elements that contribute to the student experience (e.g., housing, dining, athletic facilities). In 2015, 45% of incoming freshman rated their college or university's social activities as "very important" to their decision, up 21% from 1983.[1] And often, these social activities are driven by investments made in the university facilities, as opposed to independent actions of students or the local community.

For cash-strapped institutions, this presents a conundrum: allow their facilities to deteriorate and forgo investment, thus becoming less attractive to prospective students and compounding financial challenges associated with reduced enrollment, or seek to attract more students by taking on more debt and/or raising tuition to finance new construction and renovations.

In addition, as complex mechanical, energy and HVAC systems reach the ends of their useful lives, institutions can face further dilemmas between using scarce capital to fund necessary replacements or projects that are more visible to staff and students. These types of projects are often atypical for facilities personnel to oversee, and the risks of overruns during construction and/or adverse surprises during future operations can be significant.

Public institutions are particularly affected, having been hamstrung by freezes or cuts in state funding. State appropriations across the US grew by just 0.5% annually between 2005 and 2015. State funding has still not recovered to 2008 levels, the last year in which state funding decisions would not have been affected by the Great Recession.[2]

Private colleges and universities are not exempt from financial pressure, particularly those with limited endowments. At the end of 2014, the roughly 800 private institutions with fewer than 1,000 enrolled students had just $17.5b in endowment assets combined, while the 50 richest schools ended FY14 with an average of $5.2b apiece.[3]

1 Higher Education Research Institute, *The American Freshman: National Norms Fall 2012 Survey*, https://www.heri.ucla.edu/pr-display.php?prQry=111 (survey data based on the responses of 192,912 first-time, full-time students entering 283 four-year colleges and universities of varying levels of selectivity and type in the United States)

2 Integrated Postsecondary Education Data System (IPEDS) — state appropriations revenue divided by total fall enrollment, 2005–15

3 IPEDS, all US private institutions, FY14 endowment assets

University as real estate operator

For better or for worse, colleges and universities are no longer just in the "business" of education, research and public service (if they are land grant institutions). They are also large-scale real estate owners and operators. Academic buildings with classrooms and labs, student centers and dorms, athletic facilities, administrative buildings, retail and parking garages, energy, steam, cooling or other systems, and sometimes even hospitals all add up to a complex real estate portfolio.

While the state of these facilities influences a student's decision to attend an institution, their design, construction and maintenance are not exactly core to university missions and can even be considered a distraction from the delivery of education. The question naturally arises: Does your institution have enough time, energy, money and expertise to pour into these non-core but increasingly essential activities.

The higher education challenge

In this era of tightened resources and heightened competition for students, higher education institutions have been pouring time, money and energy into real estate operation, leaving less focus for their core mission.

Enrollment is down while competition for students is up

2% | **Total enrollment growth at US higher education institutions from 2007-15.** Most states and higher education institutions are coping with relatively flat enrollment growth.[4]

$3,300 | **Marketing cost per enrolled student at a US private institution.**[5] Cost has jumped more than 50% in just 10 years.

13.4% | **Freshmen, in 2012, who couldn't afford their first-choice institution.**[6] This is up 4% from 2006, and we can reasonably assume it has grown further in the years since.

Expenses grow while operating resources diminish

Private two and 4-year institutions[7]

1.9% | **Annual growth of expenses from 2010-15**

0.8% | **Unrestricted revenue growth from 2010-15**

~$22M | **Average endowment of the approximately 800 private institutions with fewer than 1,000 enrolled students in 2014.**[8] Compare this with the 50 richest, who ended FY14 with an average of $5.2b each.

Public two and four-year institutions[9]

1.5% | **Annual growth of expenses from 2010-15**

0.7% | **Annual operating revenue growth from 2010-15**

7% | **Annual increase of long-term debt**[10]

0.5% | **Annual growth of state appropriations from 2005-15**

The power of a P3

In the face of these new, overwhelming real estate operation considerations, a public-private partnership (P3) may be an institution's best option. P3s can provide greater flexibility and efficiency when building, financing and managing infrastructure and facilities. They can help to offset risk, promote designs of new facilities that fit into the existing structures, and confirm that the new facilities are both of high quality and attractive to prospective students. But perhaps the greatest benefit of a P3 for an institution and its leadership is the time and energy they no longer need to spend on non-academic activities, allowing them to instead focus on delivering an academically excellent experience for their students.

The usefulness of P3s to institutions is evidenced by their increasing popularity in recent years (see Figure 1). There has been approximately a 50% year-over-year increase in the value of the P3 transactions, and some speculate that the volume may reach $5b over the next five years.[11]

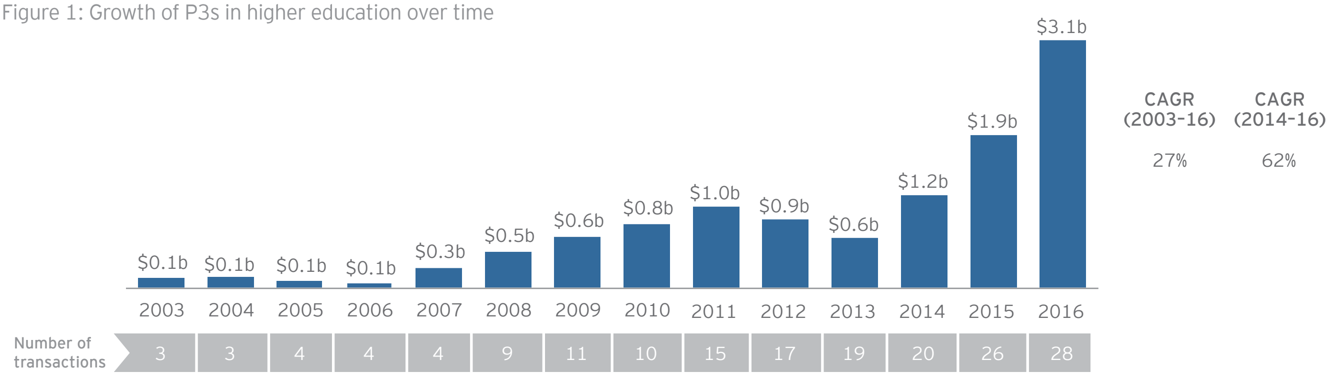
What is a public-private partnership?

A P3 is a contract between a public agency or nonprofit and a private sector entity, in which they can share skills, technology and responsibility when delivering a product or service.[12]

In the case of higher education, P3s can be a benefit in a variety of ways, including:

- Front-office, student-facing functions (e.g., enrollment management, student affairs, education delivery)
- Back-office functions (e.g., finance, human resources, technology)
- Facilities (e.g., student housing, labs, food service, parking, transportation)

Figure 1: Growth of P3s in higher education over time



Source:

4 IPEDS, all US higher education institutions, 1980-15 Total Fall Enrollment

5 NACAC (National Association for College Admission Counseling) Annual State of College Admissions

6 Higher Education Research Institute, *The American Freshman: National Norms Fall 2012 Survey,* https://www.heri.ucla.edu/pr-display.php?prQry=111 (survey data based on the responses of 192,912 first-time, full-time students entering 283 four-year colleges and universities of varying levels of selectivity and type in the United States)

7 IPEDS data – 2010-15 unrestricted revenue (private) and operating revenue (public) growth versus expenditure growth

8 IPEDS, all U.S. private institutions, FY14 endowment assets

9 IPEDS data – 2010-15 unrestricted revenue (private) and operating revenue (public) growth versus expenditure growth

10 IPEDS, public four-year institutions, long-term debt (private institutions do not report long-term debt to IPEDS)

11 InterFace On-Campus Housing Panel moderated by Jason Taylor, The Scion Group, Nov 2-4, 2016 https://textlab.io/doc/22245194/edr-s-everett-joins-interface-on-campus-housing-panel-to-

12 www.ncppp.org

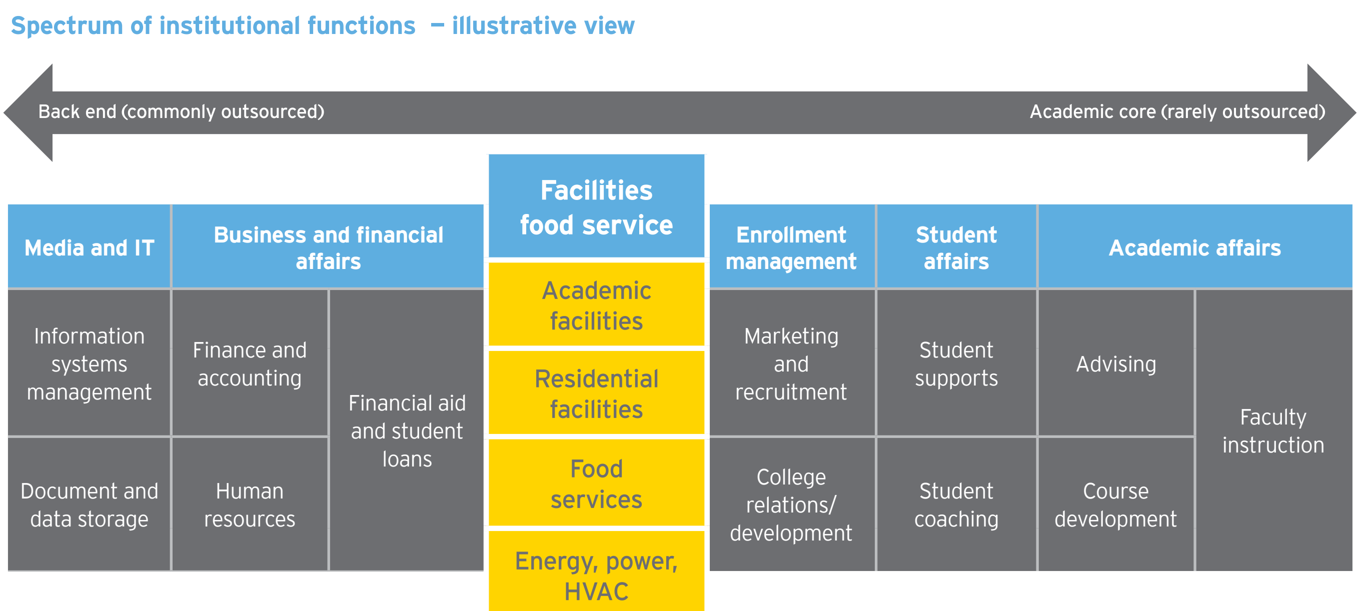
What can a P3 do for me?

Though institutional functions previously considered sacred and core to the teaching and learning mission of universities, such as course design and development, have seen increased outsourcing and partnerships in recent years, the strong majority of P3s focus on facilities and food services. These projects tend to be the most capital intensive and further afield from university capabilities; they also are some of the first things students see when they enter campus.

For example, on a recent project called Merced 2020, the University of California Merced (UC-Merced) contracted in a P3 for a $1.3b campus expansion to ultimately accommodate 10,000 students — nearly doubling the physical capacity of the campus.[13] It includes a 39-year concession to build and operate 1 million square feet of classroom spaces, research labs, housing, recreational area and dining facilities. The project is being financed by approximately $600m in UC revenue bonds and $700m in private debt/equity investment.

In an interview with UC Merced News, Chancellor Dorothy Leland said of the project, "Plenary Properties Merced has produced a compact, environmentally sensitive design that blends beautifully with our existing campus, facilitates our multidisciplinary teaching and research methods, and provides flexibility for future changes in building usage. Most important, it's a cost-effective way of building out our campus."[14]

Figure 2: Spectrum of P3 functions



13 http://www.ucmerced.edu/news/2016/campus-announces-major-expansion
14 http://www.ucmerced.edu/news/2016/campus-announces-major-expansion

Motivations for P3 transactions vary widely, but include:

- **Supplementing traditional debt instruments.** These include private capital, using off balance sheet or alternative mechanisms.
- **Transfer of risk.** Historically, universities have born all or most of the risk of facilities-related projects themselves. A P3 is a way to either transfer or at least share the risk.
- **Speed and efficiency.** A P3 allows for a faster development process, and time to completion is generally shorter and on schedule. The sole focus of the private entity is to complete the project on budget and on time. University infrastructure tends to have competing priorities across all-campus facility needs.
- **Outsourcing provision of non-core assets.** Outsourcing allows institutions to focus investment of internal resources and capabilities on those functions that are closer to the academic needs of its students.
- **Experience.** Private partners often have much more experience and skills in a particular development area (e.g., facility architecture and infrastructure, student housing needs) and are able to better accommodate the needs of students, faculty, administrators, etc.
- **Planning and budgeting.** Private partners offer experience and know-how in long-term maintenance planning and whole life cycle budgeting.

Types of public-private partnerships

Public-private partnerships can take a wide range of forms and tend to vary with the level of involvement and risk that the private entity holds in the arrangement with the educational institution. The terms of a P3 are typically set out in a master development agreement or contract that outlines the responsibilities of each party with a particular focus on the allocation of risk to the institution and the private entity. The type of P3 warranted varies depending on the specific needs of the institution. It could be a short-term partnership or could include a contract that lasts 40 or more years.

The four types of P3s

Operating contract/management agreement

Short- to medium-term contract with private firm for operating services

Ground lease/facility lease

Long-term lease with private developer who commits to construct, operate and maintain the project

Availability payment concession

Long-term concession with private developer to construct, operate, maintain and finance the project in exchange for annual payments subject to abatement for nonperformance

Demand-risk concession

Long-term concession with private developer to construct, operate, maintain and finance the project in exchange for rights to collect revenues related to the project

Operating contract/management agreement

Short- to medium-term contract with private firm for operating services

Benefits:

- Enables institution to focus on core mission instead of non-core functions
- Access to private sector skills

Drawbacks:

- Private incentives not aligned with institutional goals
- May limit tenor and payment terms by tax law

Sample facility type:

- Dining, parking, other auxiliary facilities, specialized medical/lab facilities

Case study

Long-standing dining services continued at Texas State

Texas State has approved a dining services extension with Chartwells that is worth $13.6m, which now extends the contract term though 2023.

The contract contains all aspects of dining services at Texas State. The areas managed by Chartwells include all dining halls, the student center food court, and the other snack and food facilities that span the campus. The contract allows Chartwells to manage all the food services at the various venues and gives it the opportunity to work with future facilities that Texas State opens. The contract also allows Chartwells to provide catering services to the university community.

Ground lease/facility lease

Long-term lease with private developer who commits to construct, operate and maintain the project

Benefits:

- Enables institution to focus on core mission instead of non-core functions
- Access to private sector skills
- Partial risk transfer to private sector

Drawbacks:

- Depending on lease structure, may be limited risk transfer

Sample facility type:

- Academic, research/lab, housing

Case study

The University of Kentucky's homegrown food economy

In 2014, the University of Kentucky embarked on a 15-year, $245m partnership for dining services at the university. This P3 created immediate positive results with a decrease in student meal plan pricing and $70m in food investments from Aramark. Part of the deal was a commitment from Aramark to use sustainable practices and locally sourced food.

"In Aramark, we have a partner who, like the university, is committed to Kentucky and one of our most important industries and way of life — agriculture and locally sourced and produced food."

– University of Kentucky President Eli Capilouto[15]

15 https://uknow.uky.edu/campus-news/unprecedented-public-private-partnership-support-and-promote-vibrant-innovative-food

Availability payment concession

Long-term concession with private developer to construct, operate, maintain and finance the project in exchange for annual payments subject to abatement for nonperformance

Benefits:

- Some risk transfer to private sector
- Life cycle and performance risk transfer to private sector

Drawbacks:

- Depending on lease structure, may be limited risk transfer

Sample facility type:

- Academic, research/lab, housing

Case study

UC-Merced pursues innovative campus expansion

UC-Merced contracted space for an additional 10,000 students — nearly doubling the physical capacity of the campus. That includes a 39-year concession to build and operate 1 million square feet of classroom spaces, housing, recreational areas, dining facilities and walkways. The project is being financed by $600m in UC revenue bonds, $157m of UC-Merced funds and $386m of equity funding from a consortium of international financial, engineering and design partners.

Demand-risk concession

Long-term concession with private developer to construct, operate, maintain and finance the project in exchange for rights to collect revenues related to the project

Benefits:

- Access to private sector skills
- Some risk transfer to private sector
- Life cycle and performance risk transfer to private sector
- Revenue risk transfer to private sector

Drawbacks:

- Depending on lease structure, may be limited risk transfer

Sample facility type:

- Academic, research/lab, housing

Case study 1

The Ohio State parking system

In 2013, Ohio State University (OSU) signed a first-of-its-kind deal with Queensland Investment Corporation (QIC) to lease 36,000 on-campus parking spaces for 50 years. This example of a demand-risk concession deal gave OSU $438m for its endowment fund, earmarked for scholarships, staff grants, tenure-track faculty and other important projects. In return, QIC will manage the 36,000 parking spaces and will be permitted to raise meter rates by 5.5% per year for the first 10 years. According to university estimates, in 50 years the initial $483m will result in $3.1b in investment earnings for its endowment.[16]

"Our core strength as a university is not running parking facilities. So we should focus on what we're really good at and hire others to do what they're really good at."

– Richard Dietrich, Member of the Ohio State Faculty Council and OSU accounting professor. [17]

Case study 2

University of Oklahoma utility privatization

The University of Oklahoma entered into an agreement with Corix to purchase a 50-year concession to invest in, design, build, operate and maintain 6 utility systems serving 30,000 students at its campus in Norman, Oklahoma. The initial acquisition price was $118m and the total 50-year capital investment is estimated at over $600m. The operation agreement includes water and sewer systems, a central heat and power plant district energy system, central heat and power plant, district energy system, chilled water production and distribution system, and electrical and natural gas distribution systems. The benefits to the university included monetization of non-core assets and reallocation of the funds to the core education and research missions.[18]

16 http://thelantern.com/2013/12/50-year-agreement-osus-483m-parking-deal-stands-alone-among-schools-year-1/
17 http://thelantern.com/2013/12/50-year-agreement-osus-483m-parking-deal-stands-alone-among-schools-year-1/
18 https://www.calstate.edu/cpdc/executive/training/documents/P3AgendaComplete.pdf

Conclusion

Higher education institutions are increasingly struggling to provide a quality education while keeping up with the challenges of deferred maintenance. This is difficult against the backdrop of reductions in state funding and limited appetite for further tuition increases which impact the student wallet.

Campus real estate operations, maintenance (particularly of complex systems and non-core facilities) and development needs can distract campus leadership from these critical challenges. Now, institutions have the opportunity to reduce their direct role in these non-core functions through partnership. This must be done intentionally and thoughtfully — through a carefully crafted strategy, diligent partner selection process and a well-constructed RFP with clear goals, guidelines and shared risk incorporated. If done properly, institutions can reduce costs, transfer risk, enhance long-term budget certainty, access innovative real estate design and technology systems and create a truly differentiated experience for their students. And they can focus additional attention on what they do best: education. EY-Parthenon and EY Infrastructure Advisory can help assist institutions in exploring the possibilities of partnership and establishing a structured approach to deciding whether a P3 is the right approach.

Appendix

What's the right P3 for your institution?

Given the challenges of the current higher education market, it makes sense for institutions to consider P3s as a way to save effort and put attention back where it belongs — on the core educational mission. Here are three steps to help you decide which P3 is right for you:

Step 1 Ask questions to determine the scope of your project

What do you want to accomplish?

- What are your strategic goals and how does the potential P3 project align to those goals?
  - Create or enhance revenues
  - Better control long-term operating and maintenance budgets
  - Transfer as much risk as possible
  - Leverage alternative borrowing mechanisms
- Enhance institution quality or experience:
  - What is the kind of experience you want to provide to your "customers" (students, faculty, staff)?

What enhancements would give you the most bang for your buck?

- Improved dining experience
- Improved residential halls
- More advanced academic and administrative buildings
- Facilities that surpass your academic peers

How urgent is the need that is driving this project?

- Immediately
- One to three years
- Three to five years
- Five years or longer

How do you and your stakeholders feel about a longer-term partnership?

- Are you willing to take on longer-term debt, working with a provider over a longer period of time?
- Are you willing to entertain a long-term partnership of 30, 40, 50 years or more, meaning that it needs to be structured to "survive" several generations of administrations?

Step 2

Design a good RFP

- Focus on asking a well-defined set of questions rather than a broad "fishing" RFP
- Consider engaging a good project management group/financial advisor
- Identify the level of risk that is financially acceptable for the institution to own in the contractual arrangement
- Integrate the procurement process with the overall delivery timeline and maximize competitive pricing

Step 3

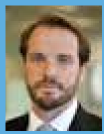
Choose an advisor

Entering into a P3 goes beyond just construction of facilities. A P3 has tax implications and can impact financial reporting, accounting and credit ratings, so the risks need to be assessed thoughtfully and carefully. Here are some basic criteria for choosing a P3 advisor:

- Can the advisor appreciate, identify, advise on and sometimes help structure the impact of the P3 on all aspects of your institution?
- Does the advisor demonstrate understanding of the underlying real estate needs of your institution?
- Does the advisor demonstrate understanding of the student experience and what drives decision-making and satisfaction from before the student applies through graduation?

EY-Parthenon Education practice contributors

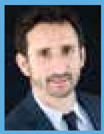
Kasia Lundy
Managing Director
EY-Parthenon
Ernst & Young LLP
+1 617 478 6328
kasia.lundy@parthenon.ey.com



Haven Ladd
Managing Director
EY-Parthenon
Ernst & Young LLP
+1 617 478 7055
haven.ladd@parthenon.ey.com

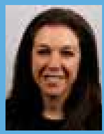
Roy Gibbs
Senior Consultant
EY-Parthenon
Ernst & Young LLP
+1 617 478 4620
roy.gibbs@parthenon.ey.com

EY Infrastructure Advisory contributors



Mike Parker
US Infrastructure Advisory Leader
Ernst & Young Infrastructure Advisors, LLC
+1 215 448 3391
mike.parker@ey.com

Tuyen Mai
Ernst & Young Infrastructure Advisors, LLC
+1 213 977 4236
tuyen.mai@ey.com



Nicole Doheny
Ernst & Young Infrastructure Advisors, LLC
+1 212 773 7024
nicole.doheny@ey.com

For more information on the EY-Parthenon Education practice of Ernst & Young LLP, and our team, please visit parthenon.ey.com.

About EY-Parthenon

Parthenon joined Ernst & Young LLP on 29 August 2014. EY-Parthenon is a strategy consultancy, committed to bringing unconventional yet pragmatic thinking together with our clients' smarts to deliver actionable strategies for real impact in today's complex business landscape. Innovation has become a necessary ingredient for sustained success. Critical to unlocking opportunities is EY-Parthenon's ideal balance of strengths — specialized experience with broad executional capabilities — to help you optimize your portfolio of businesses, uncover industry insights to make investment decisions, find effective paths for strategic growth opportunities and make acquisitions more rewarding. Our proven methodologies along with a progressive spirit can deliver intelligent services for our clients, amplify the impact of our strategies and make us the global advisor of choice for business leaders.

About the EY-Parthenon Education practice

The EY-Parthenon Education practice of Ernst & Young LLP — the first of its kind across management consulting firms — has an explicit mission and vision to be the leading strategy advisor to the global education industry. To achieve this, we invest significantly in dedicated management and team resources so that our global experience extends across public sector and nonprofit education providers, foundations, for-profit companies and service providers, and investors. We have deep experience and a track record of consistent success in working closely with universities, colleges, states, districts, and leading educational reform and service organizations across the globe.

About EY Infrastructure Advisory

Ernst & Young Infrastructure Advisors LLC (EYIA) is an affiliate of Ernst & Young LLP that provides advisory support from the earliest stages of analysis, from project evaluation to procurement, financial close, construction and operations involving municipal and other initiatives. Together with the resources of Ernst & Young LLP, we can assist our clients in devising and comparing financial plans and delivery approaches for projects that involve public, federal or private financing, project revenues and/or grants — and provide support to our clients in their implementation of those plans.

EYIA is a registered municipal advisor. For governmental clients considering new systems, major expansions, significant renewal work and/or P3 initiatives, we can assist in the development of long-term investment plans, as well as agency-wide programs and policy frameworks.

We often help clients navigate the array of potential public and private options so that they can accelerate projects and achieve efficient, innovative and ultimately successful outcomes — all while protecting the public interest.

EY | Assurance | Tax | Transactions | Advisory

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

Ernst & Young LLP is a client-serving member firm of Ernst & Young Global Limited operating in the US.

EY-Parthenon refers to the combined group of Parthenon, Ernst & Young LLP and other EY member firm professionals providing strategy services worldwide.

© 2017 Ernst & Young LLP.
All Rights Reserved.

SCORE No. 03097-171US
ED None
ey.com