



HIGHER EDUCATION ENERGY P3

State of the Industry 2026

BRAILSFORD
DUNLAVEY

Foreword

The higher education energy P3 market has changed shape.

In 2024, Brailsford & Dunlavey released its first State of the Industry report on higher education energy public-private partnerships. Our 2025 report described a market moving from experimentation toward execution, with institutions increasingly focused on modernization, financial integration, and long-term infrastructure outcomes.

Since then, that evolution has continued. The first generation of campus energy partnerships demonstrated that private partners could bring **capital, operating expertise, and meaningful risk transfer** to mission-critical infrastructure. It also exposed limitations in how some early transactions were financed, structured, and procured.

The model is improving.

- **Renewal over monetization.** Newer approaches increasingly emphasize infrastructure renewal and transformation rather than extracting value alone.
- **Cheaper capital.** Tax-exempt financing has narrowed the cost-of-capital gap between partnership delivery and university borrowing.
- **Collaborative procurement.** Progressive procurement is giving institutions and private partners more room to develop complex projects before committing to final scope and price.
- **Targeted risk transfer.** Risk allocation is becoming more deliberate, focused on the risks a partner is actually positioned to manage.

Capital is also only one constraint. Many colleges and universities can borrow efficiently, yet still lack the bandwidth, specialized expertise, or organizational capacity to execute the scale of infrastructure change now required. **Cheap capital does not help much if the institution cannot execute the project it would fund.** Increasingly, partnership value is being measured through infrastructure renewal, execution capability, performance, and long-term risk management.

2025 was an unusual year, not the whole story.

Using the inclusion criteria outlined in the following section, B&D identified no qualifying higher education energy P3 transactions reaching financial close during 2025, the first zero-transaction year in our data set since 2017. Significant activity continued outside the boundaries of our database, however, and 2026 has already produced a noteworthy closing with additional projects advancing through the market.

For purposes of this report, **Energy P3** is used broadly to describe long-term partnership structures used to finance, deliver, modernize, and/or operate major campus energy infrastructure. Energy-as-a-Service, concessions, DBOM, DBFM, availability-payment structures, nonprofit issuer models, and other approaches are variations within a broader continuum. **The appropriate structure should follow from the institution's objectives, asset condition, risk tolerance, capital strategy, and execution needs.**

This year's report examines what the market learned from its first generation of transactions, how the partnership model is improving, and why institutions evaluating major energy infrastructure needs may want to take another look.

By the numbers

9-Year Market Snapshot

32

Transactions

37

Colleges and universities

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Years of tracked activity

Projects included in this annual report must be located on or directly related to a college or university in North America, involve one or more major energy infrastructure projects of at least \$40 million in capital cost or 10 megawatts of capacity, and have reached financial close within the reporting period.

Using those criteria, B&D identified no qualifying transactions in calendar year 2025, the first zero-transaction year in our dataset since 2017.

Zero closings in 2025 should not be interpreted as an absence of campus energy activity. Several notable transactions reached financial close or other significant milestones during 2025 but fell outside the specific inclusion criteria used for this report.

See “Market Snapshot” for notable 2025 activity outside the dataset and a preview of the more active 2026 pipeline.

Trends and market shifts

The structures now coming to market differ materially from those that defined the first generation.

Unpacking the gap year

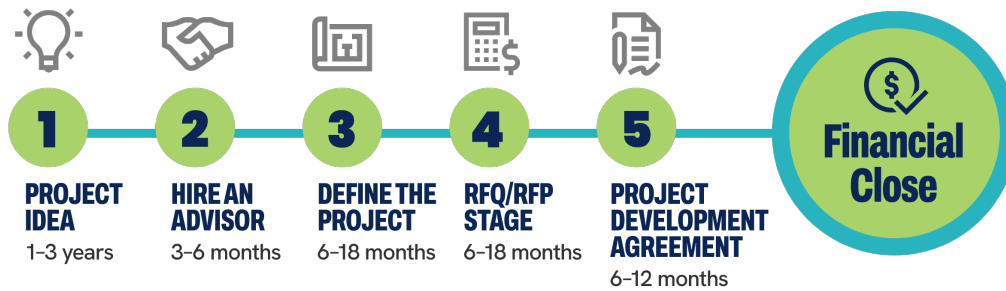
There is no single explanation for why 2025 produced no qualifying higher education energy P3 closings. The better explanation is a combination of timing, cost, institutional disruption, and market uncertainty.

The first factor is pipeline timing.

A campus energy procurement that might normally take 18 to 24 months from launch to financial close stretched considerably during and immediately after the pandemic. A project closing in 2025 would likely have been initiated during 2021 or 2022, when many institutions were still reassessing enrollment, operations, capital priorities, and long-term planning assumptions. Relatively few major energy procurements entered the market during that period, and the effects showed up several years later.

From idea to financial close

The key phases of project development



Cost escalation and rising interest rates made the problem worse.

Projects launched with estimates prepared only a few years earlier often encountered market pricing that was materially higher. At the same time, rapidly rising interest rates increased borrowing costs and amplified the financing premium associated with many P3 structures. In some cases, institutions were forced to reconsider or narrow projects not because the underlying infrastructure need had disappeared, but because the capital plan and financing assumptions no longer matched the cost of delivery.

Leadership transitions and federal policy uncertainty also slowed decision-making.

Long-duration infrastructure partnerships require sustained executive sponsorship, particularly when they involve major changes in delivery model, capital strategy, or operations. Presidential and senior leadership turnover interrupted several efforts. At the same time, changing federal policy created uncertainty around higher education funding and energy incentives. Interviews for this report suggest that the perception of changing incentives sometimes moved faster than the underlying economics, causing institutions to pause while tax credit eligibility and other federal support were clarified.

Several of those conditions are now easing, but new pressures are emerging.

Pandemic-era pipeline disruptions are further behind us, interest rates have stabilized somewhat, construction cost escalation has moderated, and institutions have greater clarity around the current federal policy environment. At the same time, rapid growth in data center investment is placing new pressure on electrical equipment, utility capacity, skilled labor, and construction resources. The underlying campus need has also continued to grow as aging infrastructure, electrification, healthcare and research expansion, and new and growing loads increase pressure on utility systems.

The 2025 gap year is better understood as a lagging indicator of a disrupted development cycle than as evidence of a shrinking market.

The more important question is what the market learned during that pause, and how the partnership model has changed in response.

Lessons from the first generation of energy P3s

Our 2025 report framed an important distinction between monetization and transformation. A year later, that distinction has become even more pronounced. The first generation of energy P3s demonstrated that private

partners could bring capital, operating expertise, and meaningful risk transfer to mission-critical infrastructure. It also revealed where transaction structures could become disconnected from the long-term needs of the underlying system.

From monetization to renewal and transformation

Several early concession structures were designed in part to generate substantial upfront proceeds while transferring broad operating and lifecycle responsibility to a private partner. Those objectives were legitimate, but in some cases the transaction itself became more prominent than the long-term condition and transformation of the infrastructure.

The market is increasingly asking a different question. Rather than starting with, “What can we monetize?” institutions are more often asking, “What does this system need to become, and what is the best way to get there?” That shift has pushed projects toward infrastructure renewal, resilience, capacity expansion, decarbonization, and long-term operating performance.

Asset condition matters

A concession can work well when the system being transferred is in reasonable condition and future obligations are reasonably understood. It becomes much harder when the system carries significant deferred maintenance or requires major near-term reinvestment. In those cases, the private partner must finance that work before meaningful value can be returned to the institution.

This is one of the clearest lessons from the first generation: transactional value cannot be evaluated separately from asset condition and future capital needs.

Execution capability matters too

Access to low-cost capital does not necessarily mean an institution is positioned to self-deliver a complex infrastructure transformation. Large-scale utility projects require sustained project development, technical integration, procurement, construction management, operating expertise, and organizational focus over many years.

A lower cost of capital on a project an institution cannot otherwise execute is not especially helpful. Increasingly, institutions are evaluating partnerships not simply as a source of capital, but as a way to add the capacity and expertise required to deliver change.

Risk transfer is becoming more targeted

Our 2024 report emphasized the importance of clearly defining risk transfer and aligning performance requirements with risks the private partner can actually control. That lesson is becoming more visible in the structures now coming to market.

The objective is increasingly not to “get out of the utility business,” but to place specific risks with the party best positioned to manage them. Depending on the structure, those risks may include development and design, construction cost and schedule, operating performance, lifecycle responsibility, financing, or other defined obligations. Other risks, particularly those outside the partner’s control, remain with the institution.

The result is a more targeted form of partnership. The emphasis is shifting from extracting value from an existing system toward creating **institutional value** through renewal, execution capacity, performance, and long-term risk

management. That evolution is setting the stage for the financing and procurement models now reshaping the market.

Financing has improved: the 501(C)(3) structure

For years, one of the most persistent challenges facing energy P3s has been simple: **universities can often borrow more cheaply than their private partners**. An institution considering partnership delivery therefore had to decide whether the benefits of execution capacity, performance accountability, and risk transfer justified a meaningful cost-of-capital premium.

The growing use of nonprofit 501(c)(3) issuers has changed that calculation.

By routing project borrowing through a nonprofit issuer, qualifying projects can access tax-exempt debt while retaining a private partner responsible for development, delivery, and long-term performance. Market participants interviewed for this report consistently described the 501(c)(3) model as a significant reduction in financing cost. Estimates shared during those discussions suggest that traditional developer-financed structures have often carried a premium of roughly 150 to 200 basis points over university-issued debt, while recent 501(c)(3) structures have narrowed that difference to **as little as 30 to 50 basis points**.

That does not make partnership capital cheaper than university debt. It makes the difference small enough that institutions can evaluate the broader value proposition rather than stopping at the financing spread.

Henry Ford Health (2025) provided an important early reference point for this structure, and the University of Kentucky (2026) subsequently applied a similar approach in higher education. Market participants interviewed for this report indicated that institutions considering new energy partnerships are now routinely asking whether a tax-exempt nonprofit structure should be evaluated alongside traditional developer equity.

The practical shift: institutions no longer need to choose starkly between low-cost capital and partnership delivery. They can increasingly compare financing structures while separately deciding what execution responsibility and risk should move to the partner.

This distinction matters. Financing structure and delivery structure are related, but they are not the same decision.

What comes next?

The 501(c)(3) model materially improves financing economics, but it does so by accepting a tradeoff. To preserve tax-exempt treatment, the private partner generally cannot hold the same attributes of ownership it would under a traditional developer-equity structure. That can limit participation in profits and losses, depreciation, rate-setting, residual value, and other forms of true equity exposure.

That raises the next structural question for the market:

Can institutions combine tax-exempt borrowing costs with genuine private ownership and meaningful long-term risk transfer?

Market participants interviewed for this report pointed to existing provisions of the federal tax code that may offer a path. One involves allocating private business use against private cash equity in qualifying mixed-use projects.

Another may allow certain local district heating and cooling systems to qualify for private activity bond financing, potentially avoiding some of the ownership and term constraints that apply to other tax-exempt structures.

The concept is promising, but not yet proven in a campus energy transaction. Similar structuring is being explored outside higher education, and the applicability will depend heavily on project facts and tax counsel.

For university leaders, the takeaway is simple: **the financing toolkit is still evolving**. The 501(c)(3) model should not be viewed as the final answer, only as a major improvement over the structures that came before it.

Procurement is still a limiting factor

Better financing does not fix a poorly designed procurement.

Campus energy projects are unusually difficult to define completely before a partner is selected. Existing conditions may be imperfectly understood. Engineering evolves as systems are investigated. Capital budgets move. New projects change campus loads. Institutions may also still be deciding how much responsibility and risk they actually want a partner to take on.

Trying to force that uncertainty into a conventional fixed-price competition can create predictable problems: conservative pricing, extensive qualifications, uneven proposals, limited competition, or procurements that simply stall.

Progressive procurement is becoming more common

Rather than requiring bidders to fully price an incompletely defined project, institutions are increasingly selecting a partner based on qualifications, team, approach, indicative economics, and demonstrated ability to deliver. The institution and preferred partner then develop the project collaboratively through a defined predevelopment period, with approval gates and off-ramps before final commitment.

Our 2024 State of the Industry report identified progressive procurement as an emerging best practice for complex energy P3s, particularly where scope, pricing, and risk allocation need to evolve together. What has changed is the amount of evidence behind it. Recent procurements and interviews for this edition suggest the market has become more comfortable with qualifications-based selection, indicative pricing, and predevelopment agreements as a way to develop certainty in stages rather than demand it upfront.

Progressive procurement is not automatically better. Institutions still need to preserve competition, establish commercial guardrails, maintain the ability to walk away, and retain enough market leverage to test pricing. Traditional procurement can remain appropriate where scope is well defined and price certainty is the dominant objective.

The larger lesson is that certainty may be something the parties develop together, rather than something an institution can demand at the start of a complex transformation.

Converging asset classes

Energy infrastructure is becoming harder to separate from the rest of the campus capital plan.

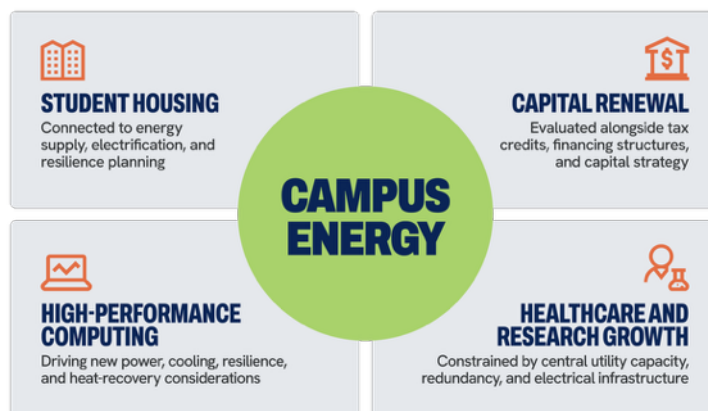
A new research building, hospital expansion, residence hall, or high-performance computing facility is not simply another building project if the campus lacks the electrical, heating, cooling, or resilience capacity to serve it.

Conversely, a major energy investment can unlock development elsewhere on campus by creating capacity, improving reliability, or reducing the burden on aging systems.

The financial structures are beginning to converge as well. Approaches developed in housing, healthcare, and other infrastructure sectors are increasingly being applied to energy projects, while energy-related tax benefits, operating savings, and infrastructure investments can influence the feasibility of adjacent real estate projects.

In our own advisory work, we are increasingly seeing:

- **Student housing** connected to energy supply, electrification, and resilience planning.
- **Healthcare and research growth** constrained by central utility capacity, redundancy, and electrical infrastructure.
- **High-performance computing and campus-scale digital infrastructure** driving new power, cooling, resilience, and heat-recovery considerations.
- **Capital renewal** evaluated alongside tax credits, financing structures, and broader institutional capital strategy.



The larger point is not that every institution should package unrelated assets together. It is that **energy infrastructure is increasingly becoming a platform for institutional growth**, connecting utility capacity, resilience, real estate, research, healthcare, and digital infrastructure.

This convergence across asset classes is still emerging, but it is likely to become more important as electrification, healthcare growth, research intensity, and digital infrastructure place additional demands on campus systems.

Policy and regulatory environment

Federal policy has affected this market almost as much through uncertainty and perception as through actual changes in project economics.

Interviews for this report repeatedly surfaced confusion about which incentives remain available, which have changed, and which deadlines apply. In some cases, institutions assumed that major federal energy incentives had disappeared when meaningful support remained available. That uncertainty can delay projects even when the underlying business case has not materially changed.

Recent changes to investment tax credits, direct pay, and Section 179D have made it especially important for institutions to refresh older financial models rather than rely on assumptions developed a year or two ago. Broader federal funding uncertainty has also influenced willingness to commit to long-duration capital programs.

In this ever-shifting landscape, institutions should confirm current policy and incentive assumptions before relying on older project economics.

Market snapshot

The 2025 reporting year produced no qualifying higher education energy P3 closings under the criteria used in this report, but the market did not stand still. Several previously tracked partnerships reached important follow-on milestones during the year, including asset acquisitions, refinancings, and new financing tied to existing partnerships.

At the same time, the pipeline entering 2026 looks considerably more active. The University of Kentucky reached financial close in June 2026, and several other partnerships are moving through procurement and negotiation.

B&D is aware of active opportunities spanning public and private universities, academic health systems, and multi-institutional campuses. These projects vary substantially in scope and structure, but collectively point to renewed interest in using partnerships to address infrastructure renewal, capacity, resilience, decarbonization, and institutional growth.

The examples below highlight notable 2025 activity outside the dataset, followed by a closer look at the University of Kentucky transaction as an early indicator of what the next phase of the market may look like.

Cordia and Duquesne University

Duquesne University appeared in our 2025 report as an institution participating in the campus energy P3 market. In March 2025, Cordia acquired central plant distribution assets and amended and extended its existing 35-year energy service agreement. Because the transaction expanded an existing partnership rather than financing a new major infrastructure project, it does not meet this report's inclusion criteria.

University of Iowa Energy Collaborative

The University of Iowa first appeared in our 2024 report as one of the market's foundational concession transactions, following its 2020 financial close. In September 2025, the Energy Collaborative refinanced its capital expenditure and working capital facility. Because this was follow-on financing for an existing partnership rather than a new transaction, it is not counted as a 2025 closing.

Thompson Rivers University

Thompson Rivers University was profiled in our 2025 report for its low-carbon district energy partnership with Creative Energy. In 2025, the Canada Infrastructure Bank and Creative Energy reached financial close on a \$50 million financing facility supporting decarbonization and retrofit projects, with TRU serving as the first project under the program. This represents a later funding close associated with an existing partnership rather than a new qualifying P3 transaction.

2026 preview

Multiple higher education energy partnerships are currently advancing through project definition, procurement, predevelopment, and negotiation. B&D is aware of active opportunities spanning public and private universities, academic health systems, and multi-institutional campuses, varying substantially in scope and structure but pointing collectively to renewed interest in partnership delivery.

Those opportunities are at very different stages. Several could reach major commercial or financial milestones before the end of 2026. Others are earlier in development and may shape the 2027 and 2028 transaction pipeline.



University of Kentucky

- **LOCATION:** Lexington, KY
- **CAPITAL VALUE:** Approximately \$580 million
- **DELIVERY MODEL:** Availability-payment DBFOM with tax-exempt financing through a 501(c)(3) structure
- **FINANCIAL CLOSE:** June 2026
- **TERM:** 33 years, including approximately three years of construction and 30 years of operations
- **DEVELOPMENT TEAM:** Kentucky Infrastructure Partners, led by Plenary Americas and Walsh Investors; Walsh-Turner DBJV as design-builder; NORESKO as operations and maintenance provider; Optimum Energy supporting optimization of existing central plants; Provident serving as the nonprofit borrower.
- **DESCRIPTION:** The project includes a new central utility plant, upgrades to district energy distribution, backup power infrastructure, and modernization and optimization of existing utility systems. UK is advancing the project to provide the capacity and resilience needed for the Chandler Hospital expansion and broader campus growth.
- **WHY IT MATTERS:** This transaction brings together several trends discussed in this report: tax-exempt financing, progressive procurement, targeted risk allocation, and the use of an energy partnership to enable major institutional growth. UK also expanded the scope during development after concluding that incorporating enabling infrastructure into the P3 offered better long-term value, schedule alignment, and risk transfer.

Strategic considerations for campus leaders

The strongest energy P3s are usually won or lost before procurement begins.

Energy P3s can help institutions address infrastructure needs that are too large, complex, interdependent, or operationally sensitive to solve effectively through normal capital planning alone. The relevant comparison is the partnership against the institution's realistic self-delivery path, including available capital, staffing, execution capacity, operating risk, and future reinvestment needs.

Start with the institutional need

Define what the energy system needs to accomplish over the next 20 to 30 years. Renewal, capacity, resilience, decarbonization, operational performance, and campus growth can lead to very different project scopes and partnership structures.

Separate the four decisions

Funding, financing, delivery, and risk allocation are related but distinct. University leaders should understand who ultimately pays, who provides capital, who delivers and operates the system, and who remains accountable for specific risks.



Funding

Who ultimately pays?



Financing

Who provides capital?



Delivery

Who delivers & operates?



Risk

Who stays accountable?

Use a realistic self-delivery case

Compare the partnership against what the institution is actually positioned to deliver. That may include phased capital approvals, staffing constraints, deferred renewal, competing institutional priorities, and exposure to emergency investments. Cheap university debt only solves one part of that equation.

Measure institutional value

Evaluate reliability, lifecycle performance, execution capacity, risk allocation, operating discipline, speed, and capital flexibility alongside transaction economics.

For campus leaders, the central question is whether a partnership provides a stronger long-term path for essential infrastructure than the institution can realistically deliver on its own.

Community colleges

Community colleges face many of the same infrastructure pressures as larger universities, but often through a different mix of assets and priorities. Microgrids, solar, battery storage, EV infrastructure, building electrification, and resilience investments may be more relevant than large central thermal systems. These projects can directly support continuity of operations, emergency response, affordability, and the college's role as a community hub.

The delivery challenge is often one of scale and coordination. Individual projects may be too small to support a bespoke Energy P3, but districts can create stronger opportunities by bundling work across facilities, aligning projects with bond programs and grants, and sequencing investments so that one project does not undermine the next. Partnerships with local agencies and neighboring institutions can also help create scale, share expertise, and improve access to funding.

For community colleges, the most promising models may combine practical infrastructure renewal, distributed energy, resilience, and disciplined implementation in a structure sized to the institution and its capital program.

Adjacent markets

Energy P3 structures are also appearing in other infrastructure-intensive sectors that share many of the same challenges as higher education: aging assets, large capital needs, operational sensitivity, resilience requirements, and pressure to coordinate investment over a long period. The fit varies by sector, but several adjacent markets are worth watching because they can offer useful lessons on financing, delivery, operations, and risk allocation.

Healthcare

Healthcare remains the closest analogue to higher education. Large hospital campuses have similar thermal and electrical loads, mission-critical infrastructure, deferred maintenance pressures, and capital constraints. Energy-as-a-Service and related partnership structures are already more established in healthcare, particularly where major clinical growth depends on corresponding investment in utility infrastructure.

Campus-scale digital infrastructure

High-performance computing and campus-scale data centers are creating substantial new electrical and cooling loads, making utility capacity a potential constraint on institutional growth. They can also create opportunities for heat recovery, resilience investment, and coordinated district energy planning. Unlike hyperscale facilities developed primarily as stand-alone commercial assets, campus projects are often being evaluated as part of a broader institutional strategy for research, teaching, computing capacity, and supporting infrastructure. Recent university procurements suggest that the line between digital infrastructure development and campus utility planning may increasingly blur.

Venues and entertainment districts

Stadiums, convention facilities, mixed-use development, and adjacent commercial uses can create concentrated energy demand under coordinated ownership. The strongest opportunities may emerge at the district scale, where multiple uses can share generation, distribution, resilience, or thermal infrastructure.

Airports

Airports share many campus-like infrastructure characteristics, including concentrated loads, 24-hour operations, resilience requirements, and significant capital needs. Governance and shared-cost structures remain important barriers, and the market has yet to demonstrate a repeatable U.S. partnership model.

What lies ahead

The 2025 gap year does not appear to signal a retreat from Energy P3s. The pipeline is rebuilding, financing structures have improved, and progressive procurement is becoming more established. At the same time, aging systems, electrification, healthcare and research growth, and campus-scale digital infrastructure are increasing pressure on utility systems and capital plans.

What to watch

- **Tax-exempt financing.** Whether 501(c)(3) structures maintain their pricing advantage as more institutions pursue them and market conditions change.
- **Operating performance.** Whether credible data emerges from the 2017 to 2023 transactions on reliability, lifecycle investment, operating performance, and risk transfer.
- **Electrical infrastructure.** Whether growing demand from data centers and other large loads further constrains equipment, utility capacity, and project schedules.

The market has changed, and institutions still judging Energy P3s by the deals of a decade ago may be relying on outdated assumptions. The need for infrastructure renewal is growing at the same time partnership structures, financing tools, and approaches to risk allocation are getting better. For institutions facing major energy and infrastructure decisions, that makes this a good time to take a fresh look at what partnership delivery can offer.



Acknowledgments

This report draws on a mix of public sources, including press releases, disclosures, procurement documents, and other published materials, complemented by direct conversations with institutions, firms, and advisors active in the market.

This is a rapidly evolving market, and no single report will capture every transaction or perspective. We have worked to synthesize the available information and practitioner experience into a useful view of where the market stands today. We welcome corrections, additions, and lessons from others working in the field so future editions can continue to improve.

Special thanks to representatives from **Plenary Americas, Centerstream, Ever-Green Energy, Optimum Energy, Kiewit, and others** who generously shared their time and experience as we prepared this year's report. While the synthesis and conclusions presented here are B&D's, we thank these contributors for generously sharing their time, experience, and perspectives. Their input made this report better.

About Brailsford & Dunlavey

Founded in 1993, Brailsford & Dunlavey (B&D) helps colleges, universities, community colleges, K-12 districts, municipalities, and sports teams plan, finance, and deliver the infrastructure behind their missions. B&D's Infrastructure, Energy & Sustainability practice has completed more than 100 climate action and utility master plans and advises on decarbonization, infrastructure capital planning, scenario modeling, and program management. On energy P3s, B&D guides institutions from early project definition through procurement, negotiation, and implementation: defining the need, testing partnership delivery against a realistic self-delivery path, and structuring financing, procurement, and risk allocation to fit. With more than 1,500 projects and \$40 billion in completed construction value, B&D treats energy as part of the whole campus capital plan, from student housing to research and digital infrastructure. B&D is listed among Engineering News-Record's Top 50 Program Management Firms and is a repeat finalist in P3 Bulletin's P3 Awards.

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P3 Resource Center

The go-to source for public-private partnership information and insight, B&D's P3 Resource Center brings together guides, case studies, market research, and expert perspectives on public-private partnerships. It helps owners, developers, advisors, and other stakeholders understand P3 structures and make informed project decisions.

P3RESOURCECENTER.COM

For more information

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