

# Models of P3 for Higher Education Institutions —Opportunities and Pitfalls

Henrik P. Minassians\*, Maria Barseghyan

California State University, Northridge, USA

Email: \*henrik.minassians@csun.edu

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## Abstract

Public-private partnerships are not new to the public sector and the central idea remains whether these partnerships add value through cooperation with the private actors. In general, the literature suggests that public and private actors develop a sustainable cooperation through which they produce products, services or policies while sharing risk and develop an organization plan to achieve the needed arrangements. However, there are fewer examples and cases of public-private partnerships (P3) in higher education institutions. This study examines various opportunities, through case analysis methodology, when it comes to P3 and demonstrates successful cases where universities have leveraged this type of partnership to create public value.

## Keywords

Public-Private Partnership, Higher Education, Creation of Public Value

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## 1. Introduction

During the past three decades, higher education institutions have witnessed a decline in state funding and support. Therefore, many institutions are looking for different ways of thinking and acting when it comes to sources of funds (Warner & Hefetz, 2012). According to a report using the International City/County Management Association (ICMA) survey, the findings show that 47 percent of local service delivery in the US is done through public-private partnerships (P3). This study defines public-private partnerships as a way of managing and governing organizations, as an institutional arrangement for financial relationships (Khanom, 2010).

In the past few decades, the universities have been relying on these types of partnerships to provide needed services to the students and the institution. Some have heavily invested in acquiring grants while others have created auxiliary

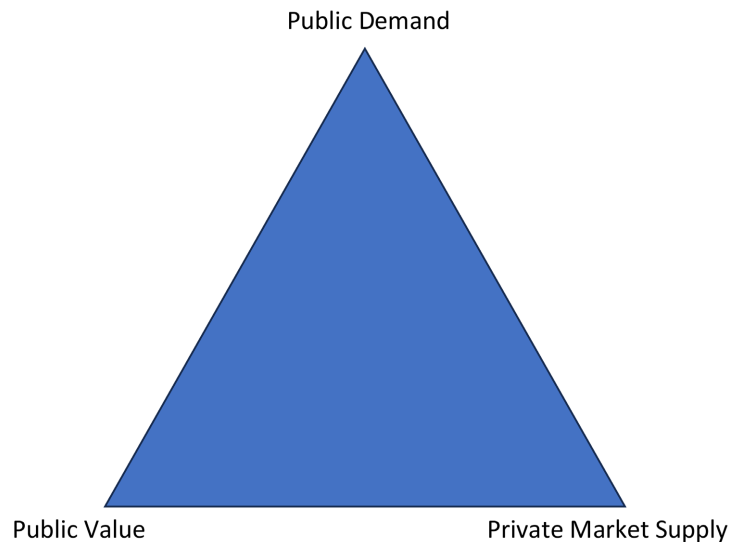
units in the form of foundations and university units that act privately for garnering greater levels of revenues. Many institutions, to stay competitive, have relied on various strategies from building world class sport teams, making facilities that attract students, building world class research centers for attracting talent and partnering with private sector industry for research and development. This strategy has been successful for those universities with higher ranking in the United States.

Meanwhile, more teaching-oriented universities have investigated entertaining the idea of adding services to their core academic mission. Thus, many universities are looking into creative ways to achieve these goals through partnering with private sector parties (e.g. developers and industry partners), for greater level of efficiency and effectiveness. In addition, P-P P (P3), provides opportunities for the design, construction, and financing of new facilities, as well as specialty operations. The focus of public-private partnerships, in the public sector, is to transfer public dollars for the provision of public goods (Wang et al., 2018).

This is mainly due to limitation of resources while trying to stay competitive. In response, schools have been looking and evaluating services that they can provide through public-private partnerships to meet the mission of their institution. The form of public-private partnerships takes different approaches, and this study examines the types that colleges and universities can undertake. With aging campuses and facilities, partnership opportunities can assist in facilities design, construction, financing, and even long-term operations. However, there are no common agreements on the definition of public-private partnerships and what type and shape should a P3 represent. There are greater number of studies examining P3 when it comes to P3 in transportation, as stated in the introduction earlier, or construction and provision of large public infrastructure or services, but there is paucity of knowledge when it comes to the colleges and universities. This is even more prevalent when it comes to publicly funded colleges and universities where governing bodies and policies might hinder or create greater level of obstacles in achieving public goals. The main strategy for P3 between colleges and universities with the industry relies on sharing in the resources, risks, and incentives for campus operation (Pillai et al., 2021). **Figure 1** represents the role of the P3 partnership in the creation of value for public sector systems, including higher education institutions.

## 2. Legal and Financial Structures of P3

The basic structure of P3 relies on 3 models. First, focuses on redevelopment where the public systems use partnerships for economic development and production of affordable housing. Second, utilization of leasing and lease/back arrangements where public entities use this strategy for lowering the cost and without economic burdening public systems. Finally, the use of concession agreements where design, construction and long-term operation and maintenance is shifted to the private entities without any cost to the public agencies. These three models can also be utilized in different combinations.



**Figure 1.** Triangle of P3 and value creation.

Meanwhile, the National Council of Public-Private Partnerships identifies 18 different legal and financial arrangements when it comes to P3 agreements. P3's are not short-term arrangements and to make them financially viable, they require long-term commitment from both parties. This obviously makes the P3 agreements challenging since public colleges and universities as well as the private sector can't predict the future and the needs of the systems. Moving away from public funding for achieving societal goals through P3 arrangements is one type of alternative mechanism for the schools (Cardini, 2006). There are other financial models such as the use of auxiliary contracts for generating revenue (i.e. leasing out food franchises on campuses).

Initially, P3 focused on building construction but in more contemporary era these partnerships cross retail and mixed-use buildings, campus recreation, research parks, hospitals among others (Siemiatycki, 2022). For example, in recent years the University of Southern California has utilized P3 for the creation of mixed used facilities with unique food outlets, which tailored to the needs of the students. The structure of these partnerships is highly complex since different projects require different forms and types of partnerships. In addition, the partnerships are for decades to come, hence picking the right partner and designing the contractual obligations should be carefully outlined.

The background of P3 and university partnerships goes back to the 1960s (Pillai et al., 2021). In the early days, the university provided the land and allowed the developer to design, construct, finance and operate the assets. However, this arrangement placed the universities in a disadvantaged position since the developers were more experienced. In recent years, universities being more experienced are looking into creation of greater value for the needs of public.

### 3. The Evolution of P3 in the US University System

In the late 1990s, P3 in higher education existed in a few states, but between

1997 and 2015 transactions exploded to over \$13 billion worth of insurance. One can associate the rise of P3 partnerships to the rise of the New Public Management movement globally (some associate this with neo-liberal policies) and reinventing government movement in the United States (Koppenjan & Koliba, 2013). This shift from provision of goods and services from mainly public sector into greater reliance of partnerships stems not only from the rise of outsourcing, but overall revolt against the spending of tax-payers money. The findings of numerous studies suggest that contracting-out and multi-sectoral partnerships have become integral part of public management practices across various public service delivery mechanisms (Agranoff & McGuire, 2004; Bingham, Nabatchi, & O'Leary, 2005; Brudney et al., 2005). In the background and the evolution of the US and greater reliance on Public-Private Partnerships, the higher education institutions have been witnessing greater level of engagement with the private sector. For example, some of the most notable mixed-use P3 projects include developments at Drexel University, The University of South Florida, The Ohio State University, University of Kentucky, Texas A&M University, Houston Baptist University, Louisiana State University, Rowan University, and Seattle University, just to name a few.

One approach for P3 is through equity model where the developers have ownership model (Fitch et al., 2018). The approach that this type of plan takes place is through Real Estate Investment Trust (REITs) (McClure, Ryder, & Devita, 2017). REITs, or real estate investment trusts, are companies that own or finance income-producing real estate across a range of property sectors. The real estate companies must meet several requirements to qualify as REITs. Most REITs trade on major stock exchanges, and they offer several benefits to investors. A REIT buys and develops properties primarily to operate them as part of its investment portfolio. Some REITs are registered with the Security and Exchange Commission and are publicly traded on a stock exchange and others are not traded. These are known as non-traded REITs. Usually, non-traded REITs do not participate in the open market for infusion of investor money through stock exchanges.

The literature on P3 (Farakish, Jaggars, & Fay, 2020; Hodge & Grave, 2007), overall argue that shifting the risk to the partners and leveraging their experience is one of the main benefits of partnerships. With that said, some colleges and universities do find P3 partnerships challenging due to loss of revenue stream and greater guarantees to the developers and partners than they are willing to take. P3 can fall under 5 categories with their unique sub-categories. These categories or approaches consist of the followings: Traditional, 501©3 Foundation, Concessionaire, Equity and Fully Privatized (Abednego & Ogunlana, 2006). Traditionally, is financed through the institution and it is university owned, operated, and financed. Universities in the 21<sup>st</sup> century tend to have knowledge of building construction and operation and identify mechanisms for financing the projects (publicly funded or through philanthropy donations). For example, California State University Northridge built a performing arts center called The Valley's

Center for the Performing Arts through large financial donations by philanthropist Younes and Soraya Nazarian family.

Utilization of university or unaffiliated foundation model utilizes leasing the land to an affiliated or non-affiliated 501©3 non-profit foundation. This model allows the foundation to engage a developer in the design and construction of the project, but the facility management is with the university or some shared model of governance (Becker & Patterson, 2005). If the university chooses to pay off the debt, then they have the option of terminating the agreements. One main critical challenge with this model is acquiring the debt and its impact on the university where public funding through State financing can dwindle.

Equity model allows for the private contractor/partner to lease the land for a period of 30, 40 or even 60 years and construct and manage the operations and at the end of the lease term the project reverts to the college or university ownership (Sharma, Cui, Chen, & Kindly, 2010). This model allows ground rent and revenues to be negotiated. This approach might pose its unique challenges such as real estate taxes and control of improvements. Considering that public universities in the United States have a non-profit status, loss of tax revenue to the local governments while utilization the private developer and operator might pose its unique issues. Currently, California State University Northridge is looking for this type of partnership to build a 204-unit apartment complex for the university staff and faculty due to the high cost of rent and housing in the greater Los Angeles area.

Finally, the concessionaire model focuses on the master concession agreement where the university contributes all or most of its existing housing portfolio to a third-party lockbox (Engel, Fischer, & Galetovic, 2011). Usually, these agreements go into effect for a period of 50 years where concessionaire designs and constructs new housing, renovates, and repairs existing facilities while the university collects housing fees and manages the asset management of the property. One example of this is Wayne State University where in partnering with a private entity has enabled the construction of 841 new beds, and renovation of 400 existing units.

#### 4. Few Sample Cases

One great example of P3 partnerships is the Research Triangle anchored by the University of North Carolina, North Carolina State, and Duke has become a model for the nation. Its heart is Research Triangle Park, which houses research and development operations for some of the nation's largest companies. The region's economy is white collar-oriented, predominantly in education, government, high value manufacturing, and services. The success of Research Triangle Park exemplifies what business, higher education, and state partnerships can accomplish in economic development. Economic developers in North Carolina see higher education as the State's best asset. Its community college system of 59 campuses is the third largest in the country and recently ranked number one for providing state-sponsored worker training through partnerships. The 16-campus

University of North Carolina System is also one of the tops in the nation for instruction, service, and research (Koo et al., 1999). The Long-Range Plan of UNC demonstrates its commitment to economic development (University of North Carolina, 2021). Its six strategic directions form the core of a public agenda for the University System.

1) *Access*: Ensure affordability and access to higher education for all who qualify and embrace a vision of lifelong learning.

2) *Promote Democracy*: Through high quality and relevant graduate, professional, and undergraduate programs, develop an educated citizenry that will enable North Carolina to flourish.

3) *K-16 Education*: Continue to propose and support initiatives to serve the needs of the State's public schools.

4) *Serve to Benefit Society*: Expand the frontiers of knowledge through scholarship and research and stimulate economic development in North Carolina through basic and applied research, technology transfer, and public service activities.

5) *Globalize*: Promote an international perspective throughout the University community to prepare citizens to become leaders in a multi-ethnic and global society.

6) *Optimize Operations*: Use the power of information technology guided by IT strategy and more effective educational, administrative, and business practices to enable the University to respond to the competitive global environment of the 21<sup>st</sup> century. The University System is moving to meet most of those expectations and additional goals and activities. Examples of collaborative research include the Biotechnology/Genomic initiative focused on research clusters in genomic, bioinformatics, proteomics, bioethics, and environmental technologies and marine sciences. A Research Technology Institute assesses technology transfer opportunities and provides training on each UNC campus. A Distinguished Professors Endowment Trust Fund, established in 1985 to provide matching grants, has produced 191 endowed professorships, with a two to one ratio in private to public funding. UNC participates with community colleges and school leadership in the Research Council that coordinates research on major policy issues for the Governor's Education Cabinet. In partnership with business organizations and Community Colleges, the University of North Carolina System (UNC) has launched a "Pathways" program to inform families about the availability of higher education and financial aid. It is also exploring options for the development of a state need-based financial-aid program for undergraduates, since North Carolina is one of the few states without such a program.

Another initiative by Illinois is called VentureTECH that encourages partnerships with private industry, state universities, and the federal government. This effort will generate \$4 billion in private/state/and federal technology-related investments. It also provides grants to schools, colleges, and universities to enhance the high-tech skills of teachers, professors, students, and adults. In addition, it offers building grants to universities and laboratories.

Another great P3 partnership around nano technology is with University at

Albany, IBM, and other national and international partnerships injected over \$10 billion into various research opportunities.

San Jose State University, a sister campus to CSUN and part of the CSU system through partnership with Central San Jose community and San Jose City has embarked on creation of different community action projects ranging from after-school tutorial, nutritional education, and adult financial literacy classes. This strategy not only assists community members but allows for the San Jose State University to utilize the needs of the community in the redesign of their mission and strategic plan for the communities that they serve. California State University, Los Angeles, meanwhile, has created a partnership with Los Angeles Police Department and Los Angeles County Sheriff's Office in creation of Hertzberg-Davis Forensic Science Center allowing students and faculty in assisting the local law enforcement agencies but also the creation of California Forensic Science Institute at a university campus. While, California State Polytechnic University at Pomona has created the Innovation Village where mixed-use technology park allows students and faculty to work with Southern California Edison utility company and American Red Cross for training and future employment opportunities for the graduating students. Finally, California State University, Bakersfield through partnership with Chevron has created a lab consisting of fabrication tools and prototyping machinery for developing future technologies.

This study provides a few lessons from this study for other institutions of higher learning, nationally or internationally. This requires identification of "triple-helix" of interaction between respective industry, government, and universities as a key feature for the creation of knowledge-based economy. The success of these projects suggests a few broad lessons for other higher education institutions. First, utilization of the P3 model depends greatly on assembling the right partners, internal, national, or international. Well-rounded P3s require the establishment of a strong team and should include people with expertise in the development of private equity, contracting and legal infrastructure.

Also, considering that these partnerships span across multiple decades, it is critical to design an evaluating mechanism with specific contractual obligations. There needs to be partners with stability and demonstrated commitment for the implementation of the projects. Finally, the foregoing projects should have institutional champions who can advocate for the P3 solution and oversee the process of completion. Establishing consensus on campus and across multiple systems is a critical feature of successful P3s.

## 5. Conclusion

This study has undertaken a review of the experience with P3 at the higher education institutions in the U.S. There are several models for creating successful P3s when it comes to higher education institutions providing different opportunities and paths for creation of these partnerships. This is particularly true and

important in domains where mature private markets exist, and successful partnerships can come into fruition. As states continue to disinvest in higher education, understanding what makes these partnerships vulnerable to the changing environment is critical. Meanwhile, moving away from sole reliance on public system financing and creation of partnerships is critical for the future of universities domestically and internationally. This is particularly true with dwindling public funding of universities in developing countries where resources are limited but partnership opportunities remain critical.

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## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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