UNIVERSITY LEADERSHIP COUNCIL



Establishing Strategic Public-Private Research Facility Partnerships

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I. RESEARCH METHODOLOGY

Project Challenge:

A member institution approached the Council with the following questions regarding public-private research facility partnerships:

- What are the preferred models for capitalization of public-private research facilities?
- What are the benefits and drawbacks of these models?
- Do institutions view public-private partnerships as a way of limiting institutional financial risk?
- To what extent are institutions using tax-exempt bonds to fund projects?
- What revenue streams are used to service debt?

Research Parameters:

• The Council reached out to administrators in the offices of the controller, finance, and corporate and economic development at large research universities.

A Guide to the Institutions Profiled in this Brief			
Institution A	Southeast	Research Universities (very high research activity)	20,300 / 13,500
Institution B	Southeast	Research Universities (very high research activity)	33,800 / 25,300
Institution C	East	Research Universities (very high research activity)	45,200 / 38,600
Institution D	N/A	N/A	N/A
Institution E	Midwest	Research Universities (very high research activity)	24,100 / 19,000
Institution F	Southeast	Research Universities (very high research activity)	28,500 / 20,500

Source: National Center for Education Statistics

II. EXECUTIVE OVERVIEW

Key Observations:

- Across contact institutions, the most common development model for public-private research partnerships is ground leases to developers, who assume the financial risk and obligation of securing occupants. The university reserves the right to approve occupants in most cases, with some institutions requiring formal partnerships with the university before private entities can become tenants in partnership facilities.
- When institutions embark on public-private research partnerships, they often finance the first buildings on their own; however, most contacts agree that moving forward, developer-led projects are the preferred model. Many early building projects are financed with an institution's debt capacity, through fundraising and state allocations, or through municipal bonds. Contacts suggest that developer-led initiatives allow institutions to focus on research and to stay out of the real-estate management business.
- Contacts at one institution are evaluating other creative avenues to secure financing to build partnership research facilities. This institution is evaluating Real Estate Investment Trusts (REITs) as a potential model for raising capital and investing in the university's own research facilities. Though the REIT tax designation is common in private real estate investment activity, no other contacts discussed using it to raise capital for building projects.
- The use of private, non-profit development companies specializing in university building projects presents an opportunity for institutions to leverage the expertise of developers at a lower cost than traditional private development deals.
- When considering private partnerships, institutions must determine whether they want to require all private tenants to establish official research partnerships with the institution or whether incubating different areas of research in the same space with shared facilities is sufficient. One contact institution observes that formalized relationships serve to ensure that private tenants' research initiatives overlap with the research initiatives of the institution, thereby strengthening potential for truly collaborative work. Contacts at this institution are skeptical of the value of merely sharing common space and some facilities without a formal research partnership.
- Contacts agree that a main purpose of public-private partnerships is to increase university research exposure to the world of product innovation, in order to meet faculty interest in spinning off research into marketable products. Moreover, many institutions—especially public ones—recognize their role in regional and statewide economic growth and development. By increasing efforts to bring academic research and for-profit product innovation into contact, institutions are increasing opportunities for local researchers to develop business locally, fueling economic development around the university.

III. ESTABLISHING MODELS FOR PUBLIC-PRIVATE RESEARCH FACILITY PARTNERSHIPS

Increasingly, large research institutions are forging partnerships with private companies in order to both expose university research to the possibilities of product innovation and to facilitate shared research around topics that are of interest to both the university and the private sector. Given this, institutions are creating spaces in which university and private-sector research can collaborate, and institutions have used a variety of different development models to create such spaces. When creating these partnerships, institutions must consider how to raise capital, apportion responsibility, manage risk, take advantage of tax incentives, and conceptualize their partnerships with private entities. Below is an overview of seven models for capitalizing partnership projects.

Ground Leases

Institutions A, B, C, and F

Funding Model

Across institutions, the most common model used for building public-private research facilities is to lease university-owned land to a developer. Under this ground-lease arrangement, universities pay rent to the developer as regular tenants, and the developer takes on all responsibilities associated with the project. Responsibilities include securing financing, contracting builders, and recruiting additional tenants; however, most institutions reserve the right to approve outside occupants. When financing projects, developers are not able to leverage universities' 501(c)(3) status to gain tax-exempt bonds, despite the fact that the university will partially occupy the building. Specific addendums or contract clauses at contact institutions are highlighted below:

- Institution B: The university requires that all tenants have formalized partnerships with the university, meaning they are working on joint or parallel research initiatives.
- Institution C: Ground lease agreements for some projects include a clause stipulating that the facility reverts back to the institution after 60 years. The agreement also carries a clause which mandates that excess profit above a certain level be channeled to the institution. This provision stems from the university's ownership of the land on which the research facility was built.
- Institution F: Contacts indicate that their ownership of the land results in a discount rental rate from the developer.

Benefits of Ground Leasing

In addition to the advantages that institutions receive from owning the land they lease to developers, there are strategic benefits as well. The two primary benefits are:

- 1. Increased Efficiency: Contacts at Institution A note that because building is developers' main business, they are better able to move the construction process along, avoiding difficulties or delays.
- 2. Reduced Risk: By allowing the developer to assume the project's debt and responsibility for occupancy rate, the university is more insulated from the risks associated with real estate projects.

III. ESTABLISHING MODELS FOR PUBLIC-PRIVATE RESEARCH FACILITY PARTNERSHIPS (CONT.)

Example Projects

Contacts at **Institution B** offer examples of facilities built using the ground lease model. A software company has its headquarters in Institution B's research park for public-private partnership. Here, the university also built an education research center next to a middle school. Alongside the institute and the middle school, two large companies have leased space to work on developing education technology tools for K-12 education. Contacts cite this as a prime example of academic and private research combining to work on a large-scale issue like education.

Contacts also mention that natural resources researchers at collaborate with the state resource commission leaders on issues of preservation.

University-Financed Buildings

Institutions B, C, and F

Funding Model

Institution B developed its research campus by first building a series of university-financed projects. As a tax-exempt institution, Institution B secured 501(c)(3) bonds to partially finance the project. Contacts note that these bonds may only be used to the extent that non-profit entities will occupy the space, though regulations build in a 10 percent cushion in the event the university overestimates non-profit occupancy. Thus, if a building will be half occupied by university research, the building may be financed with 60 percent tax-exempt bonds.

At Institution C, early research park building initiatives were university-financed as well. Unlike at Institution B, these buildings are fully occupied by university research, which allowed complete tax-exempt bond-financing. Some contacts suggest that buildings within public-private partnerships occupied solely by university research still contribute to the incubation of public and private research endeavors.

Benefits and Drawbacks

The primary benefit to university-financed buildings is that the institution has complete control over all aspects of the project and occupants moving forward. However, as contacts at **Institution A** note, the drawback is that most institutions have limited debt capacity, and counting the debt of a new building project against institutional capacity poses the general risk of large financial obligations, which can adversely impact institutional credit ratings.

III. ESTABLISHING MODELS FOR PUBLIC-PRIVATE RESEARCH FACILITY PARTNERSHIPS (CONT.)

Fundraising and State Matching

Institution F

Funding Model

The state legislature makes state matching funds available for certain research universities in the state with the purpose of developing high quality research facilities that could boost economic development in the region. Because university general funds are commingled with state monies, they are ineligible for the state match. **Institution F** instead sought federal grant indirect cost recovery dollars, private donor funding, and associated infrastructure project money—such as city parking garages—as outside sources which qualified for state matching funds. The state approves outside funding sources before matching funds are disbursed.

Benefits and Drawbacks

To build without taking on institutional debt while preserving the university's discretion to bring in private companies as research partners represents a marked advantage of this strategy. Yet, the strategy works only because of highly specific legislation passed at the state level. Contacts at the Institution F suggest that university leaders can educate state governments about the benefits of increased research to the economic growth of the region, and perhaps work to build similar legislation.

Municipal Bond Financing

Institution F

Institution F also used municipal bond financing for one of the buildings in its public-private research park. As with other municipal bond projects, the university can pay advantageous interest rates because the interest paid has tax-exempt status. Further, the can lease up to 10 percent of its space to private entities. As with other types of university-financed projects, institutions must have sufficient capacity to bear the debt associated with these bonds. The primary advantage to this financing structure is that universities are able to take low-cost debt and still facilitate private partnerships.

Real Estate Investment Trusts (REIT)

Institution F

Traditional REITs are tax designations for companies investing in real estate with money raised from investors. The REIT designation allows the company to reduce or eliminate its corporate income taxes provided that it disburses a large majority of its income and profit to its investors. For investors, REITs serve as a way to gain real estate exposure in an investment similar in structure to mutual funds.

Though Institution F has not as yet financed a building through a REIT, contacts suggest the institution is considering this funding method as a creative alternative to traditional bank financing. The primary advantage to the institution would be could the ability to build buildings without taking on debt obligations, provided they pay out most of the income to investors.

III. ESTABLISHING MODELS FOR PUBLIC-PRIVATE RESEARCH FACILITY PARTNERSHIPS (CONT.)

Joint-Financed Buildings

Institution F

Though many contacts stress the difficulty of developing and funding buildings through true partnerships, contacts at Institution F indicate that upcoming phases of public-private partnership development will rely heavily on this model. In this arrangement, the university and a developer will each take half of the financial obligation in financing the building and half of the responsibility in securing partners as tenants. Contacts at Institution F suggest that about 40 percent of the building could be financed with tax exempt bonds given the shared public-private use of the building. This contrasts with Institution B, which allows tax-exempt financing for up to 10 percent more than the university's planned space usage.

Institution D

Institution **D** is a 501(c)(3) organization that develops building projects for institutions in a manner that shields them from financial risk and structures rent payments on the building such that the institution will assume ownership of the facility upon satisfaction of the debt obligation by Institution D.

Funding Model

When a university hires Institution D, the university first leases the ground that will be built on to Institution D for a nominal sum. Institution D then works with banks to secure funding for building and contracts with builders. Unlike other private developers, Institution D's 501(c)(3) status allows it to secure tax-exempt bonds for any space to be utilized by the institution for research. In addition to the advantages of tax-exempt bonds, contacts note that Institution D locks in a smaller profit spread than private developers. Whereas developers build in a 10-12 percent spread on the unleveraged debt, Institution D generally builds in a six percent unleveraged spread. Once the building is completed, Institution D sets rent levels such that its expenses, debt obligations, and interest are paid off by the end of the term of debt. At this point, the institution gains propriety of the facility.

Contacts at Institution D note two main advantages to working with the organization instead of with private developers:

- 1. Institution D has spent years building its cash on hand by investing profits into an organizational endowment. In a down economy, in which credit is difficult to obtain, Institution D can pursue projects without reliance on bank-financed credit.
- 2. Institution D has years of experience in real estate development and therefore is better able than a university to secure fair market prices for institutions.

Contacts at Institution D stress that all costs of a building are fully amortized so that the university assumes ownership upon Institution D's completion of the debt obligation. If the university has to borrow at a higher rate due to lower credit rating, this cost is built into rent payments. In some instances—as in much of Institution D's work for Institution A—Institution D has to purchase the land on which the building will stand, this cost is also fully amortized and reflected in universities' rent payments. Contacts at Institution D agreed with contacts at Institution C and Institution F that reducing risk is one of the ways in which Institution D adds value to university development efforts.

IV. ADDITIONAL CONSIDERATIONS

As noted above, **Institution B** requires all private tenants in its partnership campus to formalize partnerships with the university. This requirement has resulted, according to contacts, in highly specific research initiatives (see page 5) that rely on the competencies of both university and private sector innovation to build solutions to identified problems.

Whereas Institution E is in the early stages of developing its partnership campus, contacts observe that Institution B's campus serves as a model. However, contacts at Institution E believe there are benefits of less formalized interaction between universities and private-sector companies as well. Contacts suggest that with different research spaces sharing core facilities and common space, bringing researchers into contact is also possible. Contacts at Institution E did not express concern at the possibility—in these cases of separate work in common facilities—that research in the two areas would remain in their respective silos. At Institution B, this exact concern motivated administrators to institute their condition of formalized partnership.

At Institutions B, C, E, and F, contacts agree that the primary goal of these partnerships is to fuel innovation, product development, and, ultimately, economic growth. Contacts at Institution C portray research as a "contact sport," in which university and private research efforts play off each other to spark innovation and creation of marketable products.

Contacts at Institution E note that faculty discontent with the quality of tech transfer spurred the new public-private partnerships initiative. The head of the newly created unit that handles tech transfer at Institution E reports directly to the board of regents to promote the independence of tech transfer.

At Institution F, the interest in turning research into marketable products was twofold: first, the institution sees its mission as, in part, contributing to job creation in the state, especially within the area around the university. Second, contacts explain that Institution F has immensely increased its grant-earning in the last decade. By bolstering efforts to support faculty who want to spin-off their research into marketable products, the university can attract other research faculty who want that institutional support in creating products for the marketplace.

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