



Joint Study by Initiative for a Competitive Inner City and CEOs for Cities



Leveraging Colleges and Universities for Urban Economic Revitalization:

An Action Agenda

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The Initiative for a Competitive Inner City (ICIC) is a national, nonpartisan, not-for-profit organization founded in June 1994 by Harvard Business School Professor Michael E. Porter, follow ing several years of pioneering research on inner-city business and economic development. With affiliates in three cities and

significant on-the-ground activities in many others, ICIC has rapidly established itself as a national force in inner-city economic development. ICIC's mission is to spark new thinking about the business potential of inner cities, thereby creating jobs and wealth for inner-city residents.

CEOs for Cities

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CEOs for Cities is a national, bipartisan alliance of mayors, corporate executives, university presidents, and other nonprofit leaders. Its mission is to help cities achieve and sustain vital economies. CEOs for Cities particularly seeks to influence perception and policies to reflect and build upon the new reality that, after decades of decline, cities are increasingly fueling metropolitan

economies, thanks in large part to innovative partnerships across sectors. CEOs for Cities works to strengthen these partnerships—both nationally and locally, commissions new research and best practices in urban economic competitiveness, and works with national and local policy makers to advance recommendations stemming from its research and leadership network discussions.

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Table of Contents

Executive Summary	
I. The Opportunity	6
Colleges and Universities	
and Urban Revitalization	6
The Untapped Economic Resource	7
New Civic Collaborations	8
A Call for Action	9
II. A Strategic Framework for Leveraging College and University Assets	12
Purchaser	14
Employer	19
Real Estate Developer	22
Incubator	26
Advisor and Network Builder	29
Workforce Developer	33
III. Vision and Strategy in Action: In-Depth Case Studies	36
Columbia University in New York City	36
Virginia Commonwealth	
University in Richmond	44
Bibliography	54
Appendices	57
A. Project Methodology	58
B. Interview List	59
C. Federal Government and Other Funding Sources	62
D. College, University, and Related Trade Organizations	64

Executive Summary

Colleges and universities have long been important to urban and regional economic growth. They have also been one of the most valuable assets for urban communities in advancing educational, health, and social service needs of urban residents. However, urban academic institutions are equally well positioned to spur economic revitalization of our inner cities, in great part because they are sizable businesses anchored in their current locations. Unleashing the local economic development capacity of these institutions should be a national priority. While ambitious, it is an agenda that does not require massive new funding or heroic changes in day-to-day operations of colleges and universities, city governments, or community groups.

More than half of the nation's colleges and universities are located in central cities and their immediate surroundings. Unlike corporations that relocate or are transformed by mergers and acquisitions, colleges and universities are largely enduring components of urban economies. The futures of institutions of higher education are inexorably tied to the health of their communities.

Bringing colleges and universities into the fold of inner-city economic revitalization should be a local and national priority, especially in an economic downturn. It is time to take a fresh look. Consider:

- In 1996, the latest year for which data is available, the more than 1,900 urban-core universities spent \$136 billion on salaries, goods, and services—nine times greater than federal direct spending on urban business and job development in the same year.
- Most of these dollars were earned from nonlocal sources. For example, of every nine dollars that Brown University spends in Rhode Island, only one dollar comes from within the state.
- Urban colleges and universities employ 2 million workers, and contrary to popular belief, two-thirds of these jobs represent nonfaculty administrative and support staff.
- Analysis of industry clusters shows that Education and Knowledge Creation is the second-fastest-growing industry in the country, with colleges and universities leading the growth by adding 300,000 jobs between 1990 and 1999.
- In 1996, urban-core colleges and universities held more than \$100 billion in land and buildings; they spend billions more each year on capital improvements.

During the past year, the Initiative for a Competitive Inner City (ICIC) and CEOs for Cities surveyed 20 colleges and universities and interviewed experts across the country to understand this large and promising potential. We have interviewed more than 100 professionals in the field and 10 university presidents. Based on this research, we developed a strategic framework to accelerate urban economic revitalization, improving the value and well-being of the urban communities where universities have sizable and immovable investments.

Some notable institutions are taking action. For example, urban decay and high crime during the 1970s and 1980s in the neighborhoods surrounding Trinity College and Columbia University caused a drop in applications. Both Columbia and Trinity initiated significant economic development initiatives that, by the 1990s, had helped transform their communities. By the late 1990s, applications to Trinity had increased by 77 percent over a decade earlier, and Columbia became one of the most sought-after lyy League colleges.

Chronic disputes over issues ranging from land use to institutions' tax-exempt status have led to a deep skepticism by city governments and communities about the benefits of colleges and universities to the local economy. Colleges and universities, for their part, have often seen cities and communities do little to enhance—and much to impede—the growth and competitiveness of their institutions.

Lost in the antagonism is the fact that economic interests can be—and often are—ultimately aligned. In instances where universities, local governments, and communities have developed an integrated approach to economic development, the results have generated substantial impact. This study has identified a number of such highly instructive efforts. For instance:

■ Howard University teamed up with the Washington, D.C., government, Fannie Mae, and corporate partners to transform 45 abandoned, university-owned properties in a neglected, crime-ridden neighborhood into more than 300 housing units and \$65 million in commercial development. More important, not a single one of the housing units remains unoccupied, and owners of 130 adjoining properties are beginning to rebuild.

- The University of Pennsylvania, through its "Buy West Philadelphia" program, has focused on increasing purchasing from its surrounding innercity neighborhoods. Penn requires its large national vendors to joint-venture with local firms. It also partners with community organizations to identify qualified local vendors and contractors. Annual local spending increased from just over \$1 million in 1986 to \$57 million in 2000.
- Since 1999, Columbia University has partnered with a number of local organizations to identify qualified candidates for positions available at the university. For instance, it created the Job Connections Program with the Morningside Area Alliance—a program that identifies, screens, and refers potential job candidates. More recently, Columbia started to work with other local groups to expand its pool of candidates.
- Virginia Commonwealth University (VCU) formed a joint venture with the state of Virginia and the city of Richmond to create the Virginia Bio-Technology Research Park. The state facilitated the initial development of the incubator by issuing a \$5 million bond for construction. VCU's business school contributes to the development of the companies in the incubator by providing business-planning advice. The Center has sparked new businesses and new jobs. Twenty-six companies have been born-75 percent of those from VCU faculty research—a powerful tool in attracting the best faculty and brightest students.

We are optimistic that many institutions will be inspired by the examples in this report and use their capacity to advance economic opportunities for all citizens. ICIC and CEOs for Cities hope to encourage urban colleges and universities, together with local public and private leaders, to accept our call to action.

To encourage leaders to leverage the assets of colleges and universities, we have developed a strategic framework. The framework identifies the following six areas where colleges and universities can have meaningful impact on job and business growth in economically disadvantaged areas: purchasing of goods and services, employment, developing real estate, creating business incubators, advising business and building networks, and workforce development. In most cases, only minor shifts in university policies would yield significant benefits to institutions and their communities. The six activities are mutually reinforcing, and harnessing them together will amplify the impact.

Executive Summary

The following are overall recommendations for college and university, city, community, and business leaders to build on emerging partnerships across sectors.

College and university leaders can:

1. Create an explicit urban economic development strategy focused on the surrounding community. The strategy should mobilize the multiple ways in which colleges and universities can create economic impact and ultimately advance their own interests.

- 2. Include meaningful community participation and dialogue in formulating this strategy.
- 3. Charge specific departments and offices with explicit economic development goals.
- 4. Create a high-level coordinator to oversee and advance the effort.
- Deploy college and university leadership to serve on the boards of business associations, community organizations, and public-sector bodies.
- 6. Think long-term.



- 7. Incorporate colleges and universities in short-term and long-term economic development strategies of their cities.
- 8. Convene college and university presidents and business leaders regularly to identify and further economic development partnerships and opportunities.
- Establish a college- or university-liaison office to advance collaboration and economic development.

Community group leaders can:

10. Seek out "win-win" partnerships with colleges and universities and acknowledge these institutions' economic interests.

Business leaders can:

- 11. Invest with colleges and universities in real estate development, supplier development, research commercialization, incubators, workforce development, and other economic development partnerships.
- 12. Involve institutions of higher education in business forums, associations, and public/private initiatives.



I. The Opportunity

"Colleges and universities have historically made an important contribution to education, health care, and social programs in central cities. But these institutions are also powerful economic engines. With a strategic view, colleges and universities can have a major impact on economic revitalization without massive new funding. In the process, colleges and universities become more competitive themselves."

-Michael E. Porter

"At a time when pressures of mergers and acquisitions make corporations increasingly footloose, colleges and universities have remained one of the few enduring urban institutions—institutions that can serve as economic anchors for the revitalization of our cities."

-Paul S. Grogan

Colleges and Universities and Urban Revitalization

As America transitions to a knowledgebased economy, institutions of higher education have become engines of economic growth. While academic institutions have always been important in educating, their role has broadened and become more important. Urban academic institutions are increasingly recognized as centers of science and technology, incubators of companies, major employers, creators of housing, and purchasers of goods and services. Emerging partnerships across business, government, and academia have helped to fuel business growth and innovation in fields as diverse as computing, telecommunications, and health care. In many respects, the bell towers of academic institutions have replaced smokestacks as the drivers of the American urban economy.

While the broader influence of universities on the regional economy is becoming better understood, the role of universities in urban areas and economically distressed inner cities remains relatively unexplored. Many of the country's colleges and universities are located in or near poor urban areas. They have much to offer to the economic revitalization of these areas. Many of their operating and academic activities can materially impact the economic vitality of surrounding communities. With more economically vibrant surroundings, these institutions can more readily attract high-quality students and faculty. Greater economic vibrancy and more successful academic institutions will in turn contribute to the competitiveness of the broader urban and regional economy. Unlike mobile corporations, colleges and universities are largely guaranteed to stay in their present locations. They are enduring components of urban economies and can become leaders in enhancing urban vitality.

Though there are initial efforts, much more can be done to redirect colleges and universities to strengthening our cities. To showcase some of these initiatives and to expand on them, the Initiative for a Competitive Inner City (ICIC) and CEOs for Cities have joined forces to understand and advance the role of colleges and universities in urban and inner-city economic development. This study identifies opportunities and develops a framework for action.

The study was based on an extensive literature review, expert interviews, a survey of 20 colleges and universities, and two in-depth case studies of Columbia University in New York City and Virginia Commonwealth University (VCU) in Richmond. The 20 institutions were selected based on the findings in the literature review and interviews with experts in the field who cited pioneering efforts of these institutions. For the 20 that we focused on, we also tried to balance geographic and institutional diversity, ensuring that we have institutions from the South, the West Coast,

the East Coast, and the Midwest, as well as community, state, and private institutions. The two in-depth case study universities were selected for their instructive value. Columbia University, specifically, shows how an urban-based university can align its interests with those of its surrounding community, creating a strong "win-win" relationship. VCU, moreover, shows how such an institution can take not only local but also regional leadership in anchoring economic growth.

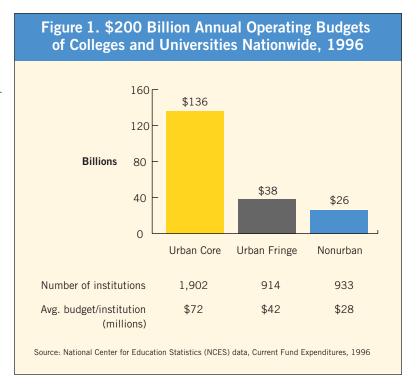
This initiative confirmed previously held (but loosely based) beliefs and revealed some surprising insights, including these findings:

- Leveraging academic assets in urban economic growth strategies remains one of the greatest untapped urban revitalization opportunities in the country.
- Academic, public, private, and community leaders are joining together in new, innovative, and bold partnerships to promote urban and inner-city economic development as never before.
- More can be done to accelerate the formation of these partnerships to rebuild our urban communities.
- Economic development opportunities arising from these partnerships do not require massive funding or heroic changes in day-to-day operations of colleges and universities, governments, or community groups.

The Untapped Economic Resource

Despite their considerable size, colleges and universities are often an overlooked component of urban economies. Their impact on these economies can be enormous. More than half of all the colleges and universities in the nation are located in the urban core: central cities and their immediate surroundings. They have significant purchasing power, attract substantial revenues for their surrounding communities, invest heavily in local real estate and infrastructure, are major employers, and help to train workforces and nurture new businesses.¹

Colleges and universities are key players in nurturing or incubating new businesses, especially ones that are on the cutting edge of today's economy. In fact, universities in urban areas are helping to place cities at the frontier of economic growth and competitiveness. Close to 19,000 licenses of innovations made at academic institutions were active in 1999. In the same year, with only 25 percent of these licenses generating revenue, they contributed to over \$40 billion in economic activity and supported 270,000 jobs. Business activity associated with the sales of these products is estimated to have



generated \$5 billion in tax revenues at the federal, state, and local levels.²

The more than 1,900 colleges and universities in the urban core spent a total of \$136 billion on salaries and goods and services in 1996—nine times greater than all federal spending on urban job and business development in the same year.³ Many of these institutions generate considerable inflows of

resources to the local area. For example, for every nine dollars that Brown University spends in Rhode Island, only a dollar comes from sources inside the state.⁴ In 1999, Harvard University spent a billion dollars more in the Boston metropolitan area economy than it raised in tuition and fees locally.⁵

Urban colleges and universities directly impact economic growth in their sur-

¹ This study does not examine the ways in which universities invest their endowment funds. Part of the revenues generated from investments of endowment funds support the capital and operating activities outlined in this report. Further analyses may elucidate the potential of channeling a greater share of these investments to local economic development.

² Association of University Technology Managers, Licensing Survey (1999).

³ ICIC/PricewaterhouseCoopers, "Inner City Business Development: Benchmarking Federal Spending" (1999). The 1996 federal direct spending on urban job and business development amounted to \$16 billion.

⁴ Appleseed, Inc., "Partners for the 21st Century: Brown University's Economic Contributions to Providence and Rhode Island" (2000).

⁵ Appleseed, Inc., "Investing in the Future: Harvard University's Contribution to the Boston Metropolitan Area Economy" (1999).

I. The Opportunity

rounding areas. They hold vast amounts of real estate. In 1996, the original purchase price of land and buildings held by urban-core colleges and universities was \$100 billion (current market value is several times greater), a net increase of \$8 billion from the prior year.⁶ Almost all of the 20 colleges and universities interviewed for this study had major capital improvement projects in progress, with estimated cost of over \$800 million for the largest project.

Colleges and universities are also major employers. They offer a large number of stable, well-paying jobs. Nationally, colleges and universities employ nearly 3 million workers, with 65 percent working in urban areas. In the greater Boston area, the 65 colleges and universities employ more than 94,000 people—5 percent of regional employment. Significantly, colleges and universities are among the fastest-growing employers in the country. Analysis of nationwide industry clusters shows that Education and Knowledge Creation is the secondfastest-growing cluster in the country. Colleges and Universities are by far the fastest-growing industry within that cluster, adding 300,000 jobs between 1990 and 1999.7

Aside from direct employment and purchasing, these institutions can be indirectly responsible for significant economic impact. For instance, 25 years ago, before the creation of the Medical School at Brown University in Providence, the vast majority of Rhode Island residents traveled outside of the state to receive tertiary medical care. Now the trade balance has completely reversed.

People come from all over the region to receive expert care—making Health Care a major export industry for Providence and the state's leading sector.

New Civic Collaborations

While business, government, and universities have always coexisted in our nation's cities, proximity alone has infrequently led to concentrated efforts to boost business and job growth. Institutions across sectors have not always perceived nor pursued common interests and have, at times, adopted adversarial positions on issues related to economic development. Chronic disputes over issues ranging from land use to academic institutions' tax-exempt status have too often led to deep skepticism by communities about the benefits of colleges and universities to the local economy. Colleges and universities, for their part, have seen cities and communities do little to enhance-and much to impede—the growth and competitiveness of their institutions.

Yet in recent years, the growing importance of technology, combined with new thinking about economic development, has in the best cases led to significantly closer ties between the sectors. Metropolitan areas with robust cross-sector alignment such as Austin, San Jose, and the Research Triangle in North Carolina demonstrate the extent to

which economic growth can be realized when these sectors engage in collaborative and collective growth strategies. In order to better compete, institutions across sectors and across the country are coming together to resolve issues of contention and to form new partnerships. Key among these issues of overlapping interests is the revitalization of our urban economies.

Colleges and universities play an invaluable role in promoting many elements of a healthy inner-city economy. They have, for many years, worked to improve urban schools, offered health and legal services to the urban poor, and have more recently become active in urban housing. These types of public and community service have been core to the operating and learning agenda of colleges and universities.

As they begin to recognize the value of local engagement and collaboration, colleges and universities are stretching beyond traditional faculty and student community service. Several universities are now taking an active interest in the economic development of their local communities through business and job growth. These institutions are following a new path of "enlightened self-interest," recognizing that the economic competitiveness of their communities directly correlates to the health of their institutions and vice versa.

Colleges and universities have much to gain by partnering with local leaders to improve the economic well-being of their communities. Indeed, this report suggests that the destinies of city and university are closely intertwined. Just as colleges and universities are in increased competition with one another

⁶ The dollar values here represent the "book value" of the assets. According to NCES reporting rules: "Book value for institutional plant assets is the purchase or construction cost of purchased or constructed assets or the market price at the time of the gift for donated assets."

⁷ Cluster Mapping Project, Institute of Strategy and Competitiveness, Harvard Business School (www.isc.hbs.edu).

to attract and recruit high-caliber students and faculty, so their cities are in increased competition with urban areas around the world to grow and retain businesses. Just as colleges and universities seek to build and maintain healthy endowments and research funding, so their cities seek to nurture and develop a financial and intellectual capital base to sustain and accelerate economic development.

Business, government, academia, and community groups frequently partner on a variety of economic and social issues. However, these partnerships have largely been missing from innercity economic revitalization. This has been caused in part by a lack of a useful framework to guide action. This report offers a roadmap by which colleges and universities might join forces more closely with business and government in pursuit of their increasingly common destiny.

A Call for Action

ICIC and CEOs for Cities hope to encourage urban colleges and universities to accept our call for a new urban agenda. We are optimistic that many institutions will be inspired by the examples in this report to further advance economic opportunities for all citizens. While this is an ambitious agenda, we offer the following bite-size action steps:

College and university leaders can:

1. Create an explicit urban economic development strategy focused on the surrounding community. The strategy should mobilize the multiple ways in which colleges and universities can create economic impact and ultimately advance their own interests.

In many successful instances of university engagement, the college or university president, with board-of-trustees support, has advanced an economic development strategy to integrate university interests with those of the surrounding community. President Rupp of Columbia University initiated an economic development strategy to channel more university purchasing and contracting to businesses in Upper Manhattan. Through dialogue with the community and including its interests, Columbia University has achieved results unimaginable just a few years ago.

2. Include meaningful community participation and dialogue in formulating this strategy.

As many examples illustrate, meaningfully incorporating community input, particularly in university expansion plans, enhances the operational efficiency of the university. Plans get approved faster, avoiding costly political battles with the community.

3. Charge specific departments and offices with explicit economic development goals.

The University of Pennsylvania and Columbia University, for instance, incorporated explicit economic development goals for purchasing departments. At Penn, purchasing staff performance evaluation is in part based on meeting local purchasing goals. Meeting these goals often involves embracing a change in practice, such as making purchasing protocol small-business friendly.

4. Create a high-level coordinator to oversee and advance the effort.

To ensure continuity and political support, a college or university president should create a coordinator to implement the institution's economic development strategy. This person should be directly accountable to the president. For example, at the University of Illinois at Chicago, its Great Cities community engagement program was initiated and grew rapidly because there was a special assistant to the chancellor in charge of coordinating the entire program.

5. Deploy college and university leadership to serve on the boards of business associations, community organizations, and public-sector bodies.

College and university leaders should seek to serve at the highest levels of local and regional leadership bodies. Virginia Commonwealth University President Eugene Trani served as the chair of the Richmond Regional Chamber of Commerce. This further strengthened the impact of VCU on the local—as well as the regional—economy. The president and high-level executives of the Florida Community College in Jacksonville serve on a number of local and regional business boards, giving them first hand knowledge of employment trends.

I. The Opportunity

6. Think long-term.

Colleges and universities have to contend with two major hurdles when engaging with local communities. First, they often encounter initial resistance and skepticism. Second, while there may be short-term, quick hits that help set relationships on the positive path, most economic development takes a long period to show results. To have meaningful impact, some university leaders interviewed suggested taking a 10-year view.

Mayors can:

7. Incorporate colleges and universities in short-term and long-term economic development strategies of their cities.

Colleges and universities are often missing from a local government's inner-city economic growth strategy. Mayors should incorporate college and university leadership to advise on future direction and bring to bear their considerable purchasing, employment, real estate development, business incubation, advising, and workforce development resources.



8. Convene college and university presidents and business leaders regularly to identify and further economic development partnerships and opportunities.

Our research showed that regular interaction between mayors and college and university presidents is the exception, rather than the rule. Regular interactions among public, private, and academic leaders accompany greater success in forging partnerships.

9. Establish a college- or university-liaison office to advance collaboration and economic development.

Aside from regular, high-level convening, mayoral-university liaison offices can be critical to identifying and acting upon economic development opportunities. For example, Boston's Mayor Menino recently established a Liaison to Schools of Higher Education office to ensure continuous dialogue and collaboration with the city's colleges and universities.

Community group leaders can:

10. Seek out "win-win" partnerships with colleges and universities and acknowledge these institutions' economic interests.

Instead of focusing on charitable contributions, community leaders should look for leveraged and large-scale opportunities where an academic institution can deploy its assets for community economic growth while achieving its own goals. For example, community groups can help create land-use partnerships, identify capable local vendors to meet university purchasing needs, and screen and refer local residents to open positions at universities. This approach to partnership has proved

successful for community groups to attract larger amounts of foundation or public-sector funding.

Business leaders can:

11. Invest with colleges and universities in real estate development, supplier development, research commercialization, incubators, workforce development, and other economic development partnerships.

12. Involve institutions of higher education in business forums, associations, and public/private initiatives.

* * *

Chapter II presents a strategic framework for engaging colleges and universities in inner-city economic revitalization. The framework brings together six common activities that universities engage in. For each of these activities, the chapter presents:

- Opportunities and challenges
- Lessons from practice, reviewing cases of university engagements
- Actionable recommendations for civic leaders

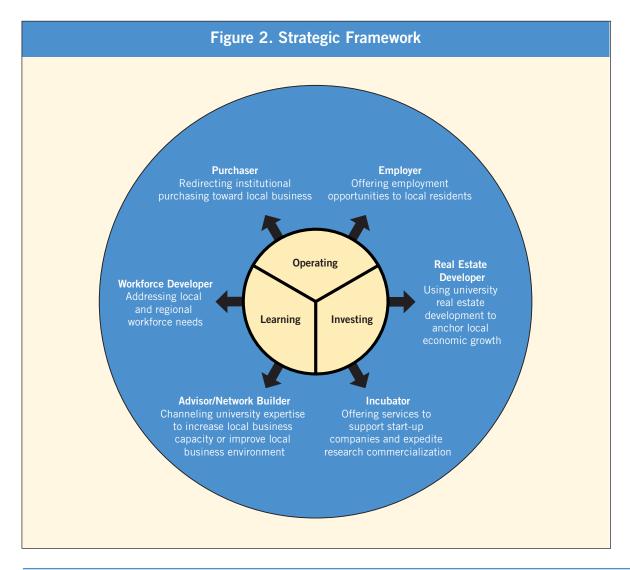
Chapter III presents two in-depth case studies, one of Columbia University in New York City and the other of Virginia Commonwealth University in Richmond. Both of these institutions offer highly instructive examples of urbanbased universities revitalizing their communities. They also shed light on the rationale for action and the role of leadership in achieving results.

To better leverage the assets and resources of colleges and universities, we have developed a strategic framework that defines the role of these institutions in job and business development. A comprehensive use of the framework can accelerate urban revitalization, improving the value and wellbeing of the urban communities where universities have sizable and immovable investments.

The framework leverages the basic activities of universities in six broad areas: purchasing of goods and services, employment, developing real estate, incubating business, advising business and building networks, and developing workforce. These six activities are in line with the operating, investing, and learning functions that an academic institution carries out. Purchasing and employment are primarily related to operations, real estate development and

incubating businesses are related to investing, and the roles of advisor/network builder and workforce developer are related to learning.

These functions are part of the institutional fabric of colleges and universities. In most cases, a slight shift in strategy in each area can have sizable impact on local communities. For example, by incrementally shifting purchasing to the local economy, colleges

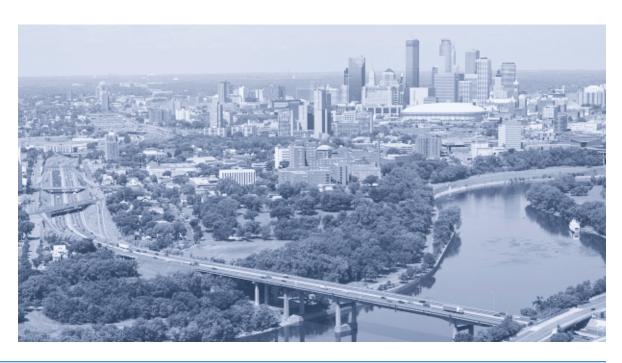


and universities can spur considerable business growth. By focusing some of the hiring activities on the local economy, colleges and universities create a strong bond with their surrounding communities. All of these activities will also help improve the standard of living in the community, hence leading to more economically vibrant surroundings. At the same time, these activities can improve colleges' and universities' operating efficiency. For example, the University of Pennsylvania's focus on hiring locally for construction projects has led to considerably faster completion of real estate projects. Now that everyone has some stake in the projects, there is much more collaboration than political or community opposition to new buildings.

The impacts of these activities represent a continuum, from those where small changes in purchasing and employment patterns create sizable and immediate impact to long-term projects such as incubators which may deliver meaningful results over several years but can be critical to a location's competitiveness.

Any one of these activities can create value for both the university and the community. By strategically linking a number of these activities, colleges and universities can reap great benefits. A comprehensive use of the framework enables institutions to operate more efficiently and effectively, systematically using value generated from one activity to fortify others. A well-communicated vision of how these functions can serve communities creates a unique reputation that attracts external support and resources, high-quality students and faculty, and more endowment contributions.

While nearly impossible to demonstrate a causal link, universities engaged in local economic revitalization report better performance in attracting students. For example, Trinity College in Hartford and the University of Pennsylvania in Philadelphia both show improved application counts concomitant with improved conditions in their surrounding neighborhoods. For instance, during the first five years (from 1995 to 2000) of Trinity President Evan Dobelle's tenure, an era marked by heavy community involvement and economic development, total applications increased 77 percent and early-decision applications increased 144 percent.



Purchaser

1. Overview

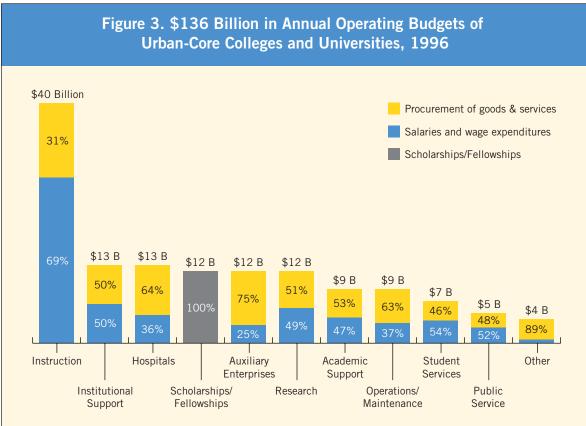
Urban colleges and universities have substantial purchasing power. With \$136 billion in annual operating budgets in 1996, the latest year for which data is available, America's urban colleges and universities purchased nine times more in urban areas than all federal direct

spending on urban job and business development.⁸ While one-half of this total is spent on wages and salaries, the other half—close to \$69 billion—is spent on procuring goods and services. On facilities operations and maintenance alone, these institutions spend an estimated \$9 billion a year.

Small shifts in spending can have a **large impact** locally. For example, 9

percent of the University of Pennsylvania's annual purchasing injected over \$57 million into the West Philadelphia economy. The University of Southern California has committed to directing 15 percent of its \$125 million in purchasing to local businesses.

University purchasing and contracting are an **underutilized resource** for local economic development. Only 4 of



Source: National Center for Education Statistics (NCES) data: Current Fund Expenditures

Notes: Instruction expenditure includes all expenses, including administration for instructional colleges, schools, and departments, credit & noncredit; Institutional Support expenditure includes day-to-day operational support, including plant operations; Hospitals includes all hospital-related expenses; Scholarships/Fellowships includes all outright grants and trainee stipends to individuals in formal, credit or noncredit, coursework; Auxiliary Enterprises includes essentially self-supporting operations such as residence halls, food services, and intercollegiate athletics; Research includes all research expenses; Academic Support includes support services that are integral to academic or public service missions such as libraries, museums, and academic administration; Operations/Maintenance includes all service and maintenance related to grounds and facilities; Student Services includes activities such as admissions and registrar duties, whose primary purpose is to contribute to students' well-being; Public Service includes all funds budgeted for public service activities such as seminars and projects provided to particular sectors of the community; Other includes mandatory transfers of funds and independent operations.

⁸ The most current data available at the time that this report went to print.

the 20 institutions interviewed for this study had formally established local purchasing programs or tracked their local spending. Redirecting some of this spending to local vendors can substantially strengthen the local business base. Colleges and universities stand to gain from this both in terms of the improved economic environment and the rapid service and delivery from vendors in close proximity. Moreover, local purchasing can strengthen the university's community and government relations, which in turn can assist universities in critical capital projects.

To successfully tap into this opportunity, higher-education institutions and local businesses may have to overcome some obstacles. First, purchasing at colleges and universities can be a highly **decentralized activity**. Aside from the central purchasing departments, each academic and administrative unit often procures

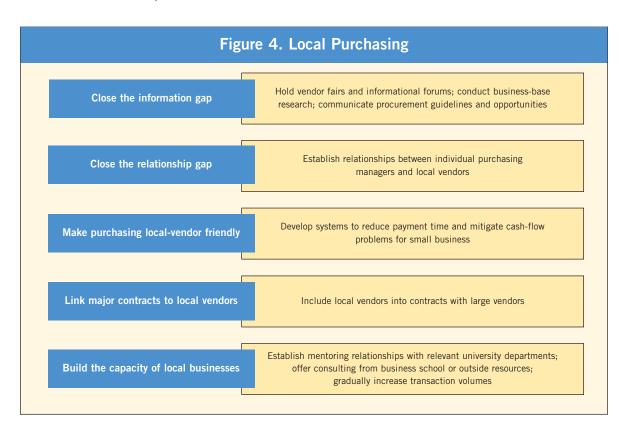
goods and services on its own. For instance, the 1998 business-services spending at Columbia University amounted to \$90 million. Only 40 percent of this total spending flowed through the central purchasing office, while 60 percent occurred through Columbia's individual schools and departments.9

Second, misperceptions and lack of information about the inner-city business base prevent purchasing staff from understanding the advantages offered by local vendors. Very often purchasing personnel do not even know the types of businesses present locally.

Third, purchasing is a relationship-driven activity. Purchasing personnel have existing relationships with suppliers that they have nurtured over many years. Shifting to new vendors can be costly in terms of time.

Finally, many local vendors tend to be small businesses with limited capacity to serve large institutions. Large institutions can have complex, stringent procurement processes that make it very costly or impossible for small businesses to serve them.

Figure 4 summarizes the variety of approaches that colleges and universities can take to start or strengthen local purchasing initiatives. The examples of Columbia University and the University of Pennsylvania that follow offer a detailed account of how these approaches can be incorporated into a university's purchasing operations.



⁹ Boston Consulting Group/ICIC, "Upper Manhattan Empowerment Zone and Columbia University" (1999).

2. Learning From Practice

Case 1: Local Purchasing Initiative, Columbia University in New York City

Applying a comprehensive strategy: bridging information and relationship gaps, capacity building, and linking with major contractors

In fiscal year 2000-2001, Columbia directed \$60 million to local purchasing. Compelled by President Rupp's call, Columbia's administrative departments on the Morningside Campus focused on increasing this spending. Their efforts are showing initial signs of success. In fiscal year 2000-2001, local purchasing by these departments amounted to \$19 million, with some offices increasing spending by 40 percent in one year. Columbia's local contracting also shows sizable growth: increasing 55 percent over the past four years to a total of \$18 million.

A number of earlier efforts laid the foundation for Columbia's current approach to local purchasing. In the late 1990s, Columbia hosted vendor fairs and held detailed discussions with several businesses, the Upper Manhattan Empowerment Zone (UMEZ), and other local organizations concerning ways in which the university might increase its local spending.

These initial efforts suggested the need for a more comprehensive, systematic approach to local purchasing. In mid-2000, under a directive from Emily Lloyd, Executive Vice President of Administration, Columbia launched a comprehensive initiative that conducted an in-depth analysis of the local vendor base, built on the decentralized nature of purchasing at the university,

emphasized relationship building, and is making Columbia's purchasing more small-business friendly.

To start, each administrative department that reports to Lloyd¹⁰ was asked to identify areas with potential for increased local purchasing. In order to perform this analysis, each department compared its spending patterns by industry with a database of approximately 6,000 businesses in the targeted communities, compiled in conjunction with UMEZ.

In the Administrative Information Services Department (AIS), for example, new local vendors were targeted in the areas of hardware, car services, temporary employment agencies, florists, food services, and office supplies. The "Look Local First" action plan devised by AIS laid out strategies for identification of these vendors and their integration into the department's procurement process. It also specified an approach to developing ongoing relationships and evaluating these vendors. In less than a year, all administrative departments collectively established (or reestablished) relationships with 200 local vendors, a 54 percent increase over the prior year.

There have been challenges in transitioning to local vendors. For instance, some departments were initially resistant to working with local vendors, citing concerns about unproven track records with the university and potentially higher costs. To address this concern, senior administrators allowed for moderate increases in cost to ensure product and service quality.

In addition, some departments have progressively increased the size of vendors' contracts. For example, the Facilities Management Department has agreed to contract with a local extermination company for services on a single-building basis. By contracting for one building at a time, the department is able to monitor the vendor's performance, provide feedback to the vendor, and progressively increase the size of the contract.

Another solution has been tapping into internal university expertise to provide project oversight. For instance, when the Human Resources Department wanted to print documents for wide distribution, the University Printing Services recommended a local vendor and agreed to oversee the production process.

Yet a fourth solution has been to build local-vendor capacity through business partnerships between larger and smaller firms. For instance, several local cab service firms were identified as potential vendors to the university. However, most of these enterprises were unable to meet the university's insurance requirements. To overcome this limitation, the purchasing department identified a car dispatch company that met the university's contracting requirements and used a network of small car services. As a condition for awarding a master agreement to this dispatcher, the contract required that the large dispatcher use several of the local cab companies within its network.

¹⁰ The administrative departments at Columbia include Administrative Information Systems, Facilities Management, Human Resources, Institutional Real Estate, Purchasing/Support Services, and Student Services.

The university has also developed an effective system to transfer knowledge internally on vendor performance and lessons learned. There are regular interdepartmental meetings, which include senior management, where new local vendor performance is discussed. Moreover, twice a month a group of administrators meets to share positive and negative experiences with new local vendors.

The university continues to experiment with ways to make Columbia purchasing small-business friendly. For example, the newly inaugurated procurement card allows small businesses with shorter cash-flow cycles to become suppliers to the university. With these cards, university departments can pay vendors in just three days, as opposed to up to a few months under the former payment system.

Columbia derives several key benefits from local purchasing. Most important, working with the community to ensure its economic stability and growth improves Columbia's relationship with local businesses and residents, as well as their elected officials. This, in turn, garners greater support from the community for real estate development, expansion, and other strategic initiatives that are fundamental to pursuing Columbia's educational mission. Local purchasing also improves the economic conditions of the surrounding community, enhancing the stability and livability of the community.

Also, university purchasing managers have found that many local vendors provide two key competitive advantages over larger, national firms. First, because of their proximity, local vendors provide efficient delivery and immediate access to goods and services for many student, faculty, and administrative needs. Second, they provide more personalized service. Many of the small local vendors are willing to adapt the delivery of goods and services to guarantee a steady flow of business with the university. As Bob Lewis, owner of Minority Data Forms, claimed, "Our delivery is much better than Columbia has ever experienced. Order today. Product tomorrow. And they [Columbia purchasing personnel] have noticed. Our business with them is climbing every week."

Case 2: Buy West Philadelphia, University of Pennsylvania

Using intermediaries to identify local suppliers and facilitating joint ventures between national and local suppliers

Beginning in 1986, the University of Pennsylvania (Penn) launched a local purchasing initiative called "Buy West Philadelphia" to promote economic development in the surrounding community. From 1986 to 2000, Penn increased local spending from \$1 million to \$57 million, or 9 percent of total spending.

A number of factors account for Buy West Philadelphia's success. Most important, Penn's administration has shown unwavering commitment to the program. As Penn's President Judith Rodin writes, "We believe that the health and vitality of the University of

Pennsylvania are inextricably tied to the health and vitality of our neighborhoods."11 Jack Shannon, Director of Penn's Department of Economic Development, also notes that Penn's involvement in local economic development has helped it develop better relations with the City Council. He emphasized the value that Penn gains from local purchasing: "We are not doing this because of '60s idealism. There is a real payback for both the university and the community." Shannon went on to describe how recent meetings with the City Council about developments at the Civic Center went much more smoothly than normal because of Penn's demonstrated commitment to using local and minority contractors.

Penn has translated its commitment to local purchasing into action by incorporating incentives for local purchasing, forming partnerships with capable intermediaries, leveraging large contracts, and using university programs for business capacity building.

Procurement staff members are now evaluated on two criteria: cost reduction and the use of West Philadelphia businesses. "We beat it into everyone's mind that local purchasing is absolutely essential!" said Ralph Maier of Penn's Office of Acquisition Services. Local purchasing factors heavily into employees' performance evaluations and affects their annual performance-based bonuses. With these incentives in place, employees within the university's Office of Acquisition Services are dedicated to local business identification and the coordination of local purchasing.

^{11 &}quot;Penn: Our Commitment to West Philadelphia" (http://www.upenn.edu/president/westphilly/).

While some universities have created an inventory of local businesses that can serve the university, Penn has partnered with two local nonprofits that have an understanding of the local business base. The West Philadelphia Partnership Community Development Corporation and the Greater Philadelphia Urban Affairs Coalition (GPUAC) help Penn identify and access local and minority-owned businesses. With its detailed knowledge of the local business community, GPUAC helps Penn sort through the many local businesses and find those that are capable of providing the goods and services that Penn needs. GPUAC also serves as an external monitor of the Buy West Philadelphia program, providing the university with an objective and credible perspective on its program.

Penn's purchasing power allows it to require large suppliers to joint-venture with local firms. One local vendor's sales to Penn increased from \$250,000 to \$1.7 million through a joint venture with a national vendor. In another case, a local copier sales and services firm became an authorized national brand dealer through a joint venture that Penn helped establish. When Penn's business later switched to a different national brand, the small copier dealer had established such a strong business relationship with its national partner that they left Penn together and won other major contracts throughout the city.

Penn also leverages its existing university-wide resources to build the capacity of local vendors. The Small Business Development Center (SBDC) at Penn's business school, for instance, offers advisory services to businesses identified for the Buy West Philadelphia pro-

gram. The SBDC focuses on strengthening the small vendors involved in Penn joint ventures, helping them develop necessary capabilities like advanced billing systems.

3. Recommendations For Action

For College and University Leaders:

- 1. Emphasize the strategic importance and commitment to the program:
- Launch a local purchasing initiative with high-level university commitment.
- Invest time in clarifying and communicating the goals of local purchasing.
- Educate all purchasing personnel about availability and value of local suppliers.
- Provide incentives for purchasing personnel to utilize local vendors.
- Track the amount and number of local contracts.
- Communicate purchasing success within the university and the community.
- 2. Invest in understanding the local business base and its match with college or university needs:
- lacktriangle Map the local business base.
- Partner with local organizations that are well networked with local businesses.
- Encourage individual departments to find matches between local vendors and their purchasing needs.

3. Focus on relationship and capacity building:

- Continuously engage in building relationships with local vendors by holding vendor fairs, one-on-one meetings, and developing vendor directories.
- Develop mentoring relationships between vendors and relevant university purchasing departments.
- When contracting with local vendors that have little or no university track record, start with small transactions and expand relationships progressively.
- Facilitate interdepartmental discussions on local vendor performance.
- 4. Leverage other college and university activities:
- Incorporate local companies in contracts with large vendors.
- Tap into existing business advisory services at the university to help build vendor capacity.
- 5. Make college and university purchasing small-business friendly:
- For instance, introduce procurement cards that shorten the cash-flow cycle.

For Mayors and Community Leaders:

- 6. Lower the cost of local purchasing for colleges and universities:
- Support profiling the local business base.
- Help identify local vendors capable of competing for university contracts.

- Support partnerships between universities and expert intermediaries with strong knowledge of the local business base.
- Monitor performance of local vendors and help strengthen their capacity.

For Business Leaders:

7. Large vendors should proactively pursue partnerships with local vendors to better position themselves with colleges and universities on procurement contracts.

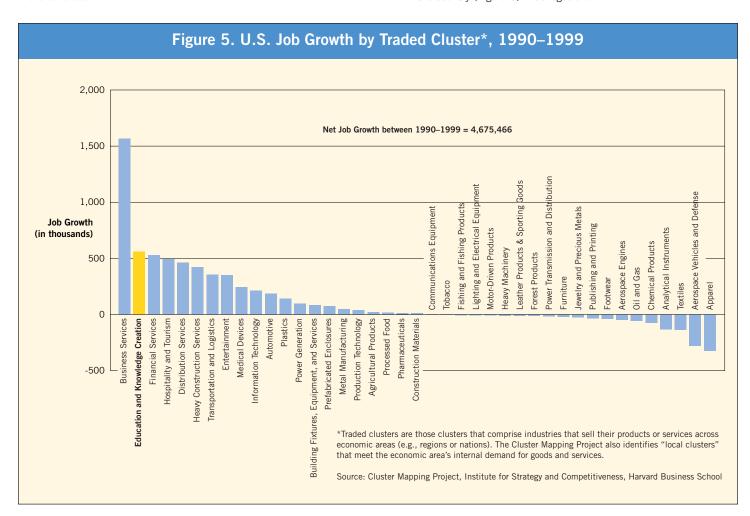
Employer

1. Overview

Urban-based colleges and universities are **large-scale employers**. In 1997, more than 2.8 million people were employed in postsecondary institutions in the United States, more than 2 percent of total U.S. employment. An estimated 65 percent of these employees

work at urban-core institutions.¹² Contrary to popular belief, most of the jobs in colleges and universities are not academic in nature: only a third are faculty—the remaining two-thirds are administrative and support staff positions.¹³

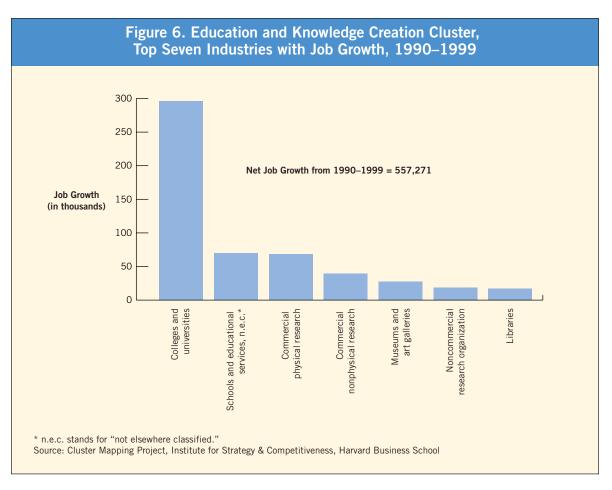
Significantly, colleges and universities are among the fastest-growing employers in the country. Analysis of nation-wide industry clusters shows that Education and Knowledge Creation is the second-fastest-growing cluster in the country (Figure 5).¹⁴ Colleges and



¹² National Center for Education Statistics, Fall Staff Survey (1997).

¹³ Administrative jobs include executive, administrative, managerial, and other professional services. Support staff jobs include technical and paraprofessional, clerical and secretarial, skilled crafts, and service/maintenance.

¹⁴ For details, visit the website for the Institute of Strategy and Competitiveness at Harvard Business School (www.isc.hbs.edu).



Universities are by far the fastest-growing industry within that cluster, adding 300,000 jobs between 1990 and 1999.

With such consistent demand for labor, urban colleges and universities could focus on local or inner-city employment. This focus allows for stronger economic and political ties with their surrounding communities. Some of the universities studied for this project have devised promising approaches to tapping into the local inner-city workforce. Columbia University, for instance, has partnered with local nonprofits that screen and refer candidates to the university at no cost to the university. Such efforts help universities identify new sources of employees and garner political capital in the surrounding communities.

Several factors, however, can complicate local hiring. For instance, college and university hiring, very much like purchasing, is often a **decentralized activity**. Each department regularly makes administrative and support staff hiring decisions independently, making a concerted and a well-coordinated effort to increase local hiring difficult.

Moreover, there may be **policies and procedures** in place that present obstacles to local recruitment and hiring. For example, Virginia Commonwealth University, a state institution, is barred by state law from any practice that could be deemed "preferential." At other universities, there is a strong focus on minority or female hiring, and an additional local focus is considered too burdensome. In some instances, labor

unions oppose local hiring initiatives. Yale University has tried to increase its hiring of residents from the New Haven Empowerment Zone, focusing on administrative staff opportunities. In the course of developing the program, however, Yale has run into problems with the union for giving preferential treatment. In an effort to develop a program that meets everyone's needs, Yale now collaborates with the union and a local community college in running a program called the New Haven Residents Training Program.

A number of universities have successfully tapped into local labor pools and overcome these obstacles. They have engaged all critical players within the university, including the human resources department and individual

departments making the hiring decisions. They have "outsourced" or partnered on activities for which they lack expertise. For instance, for recruiting and screening of local residents, Columbia University partners with local community organizations. For providing skills upgrading, Yale University has partnered with the local community college.

2. Learning From Practice

Case 1: Local Hiring Program, Columbia University

Partnering with local intermediaries to identify qualified local candidates

Columbia University is a major employer in the New York metropolitan area. As of October 2000, Columbia employed a total of 13,692 permanent, full-, and part-time faculty and staff. Of that workforce, 70 percent live in New York City, and 37 percent live in the immediate Upper Manhattan area.

To develop stronger economic ties with its surrounding community, in 1999 Columbia partnered with the Morningside Area Alliance (MAA)¹⁵ to create the Job Connections Program—a program that identifies, screens, and refers potential candidates to Columbia and the other large local institutions in the Morningside area. MAA refers candidates for open positions at Columbia from Morningside Heights, Harlem, and several other low-income neighborhoods in the vicinity.

Job Connections has yielded some promising results. Since 1999, Columbia has hired 71 Job Connections applicants for the 600 positions open, filling 21 permanent and 50 temporary positions. This service is funded by the annual membership fees that Columbia

and other Morningside institutions pay MAA, as well as private grants and contributions. Columbia pays no additional fees for the Job Connections Program.

More recently, Columbia has started to work with other local groups, such as Dominican Sunday, a grassroots organization affiliated with a local Manhattan Valley church, to explore ways to increase local hiring in their communities. In 2001, the university worked with Dominican Sunday to fill 30 of the university's open positions. Of the 66 people referred by Dominican Sunday, Columbia hired 20, filling two-thirds of the 30 targeted positions. Though the majority of these hires were for temporary positions, Columbia is tracking these and similar hires in order to move those who perform well into permanent positions as they become available.

Essential to the success of these two programs are local community organizations that leverage their trusted name among community residents. Also essential are the university hiring managers, supported by senior administration, who can facilitate relationships between Columbia and these local community organizations. These personal relationships give hiring managers an opportunity to talk about exactly what they need in a candidate and give the job counselors an opportunity to search their pool of applicants for the right person.



Case 2: Local Recruiting and Hiring, University of Southern California

Bridging information gap on available opportunities and providing basic skills training

As part of its civic and community relations initiatives, the University of Southern California (USC) has adopted the goal of increasing employment from areas immediately surrounding its two campuses. Because of the decentralized nature of its hiring, USC has started its local employment program by first focusing on recruitment, hoping to draw area job seekers to the university and then channeling applicants to various job opportunities.

USC carries out its local recruiting in a number of ways. It holds regular job fairs and information sessions. It also maintains a drop-in recruiting center that allows people to get information about openings and submit online applications. Its new computerized system has made it easier for USC to archive résumés and refer people to opportunities beyond the one for which they initially applied.

In addition to increasing residents' access to university hiring, USC has developed means to increase residents' competitiveness in accessing university jobs. It holds periodic training sessions (such as résumé writing and interviewing skills) for potential employees. In offering these classes, USC is developing a pipeline of qualified local applicants. The university also continues to develop this pipeline internally by providing services to ensure that USC employees are able to better navigate the USC career ladder. USC recently created a free professional development program, which allows employees to

¹⁵ MAA is a nonprofit organization that includes as its members 19 of the large institutions located in the Morningside Heights neighborhood between 110th and 125th Streets in Upper Manhattan.

gain certification in a wide range of job-related skills from English as a Second Language (ESL) to computer literacy to management.

USC's local employment focus has proved successful. One out of seven applicants has been hired (that is, 170 out of 1,175 applicants were hired) from seven surrounding ZIP Codes. Of those 170 residents, 161 were administrative and support staff and 9 were faculty.

3. Recommendations For Action

For College and University Leaders:

- 1. Incorporate local hiring goals alongside other targeted hiring goals (i.e., women and minority targets).
- 2. Develop buy-in from all interested parties:
- Human resources department
- Hiring managers within various departments
- Local community organizations and workforce development programs
- 3. Adopt a multipronged approach to local hiring:
- Improve availability of information about university employment opportunities to local residents.
- Partner with local community organizations to recruit and screen candidates.
- Partner with community colleges and community organizations to provide skills upgrading.

- Review hiring policies and procedures to ensure that local residents are not inadvertently being placed at a disadvantage.
- 4. Gather and effectively communicate local hiring statistics.

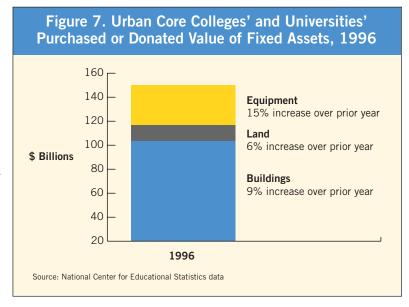
For Mayors and Community Group Leaders:

- 5. Lower the cost of local hiring for colleges and universities:
- Form partnerships with university hiring personnel to provide local residents with prompt information on available positions and skills matches.
- Support partnerships between the university and intermediaries with strong knowledge of local residents' job readiness and skills.
- Work with training programs to target needs of colleges and universities.

Real Estate Developer

1. Overview

Colleges and universities have substantial and growing real estate holdings in urban areas. At the end of fiscal 1996 (the latest year for which data is available), urban-core schools held almost \$100 billion (book value) in land and buildings, including \$8 billion in new land and buildings from the prior year.16 The market value of these holdings may be several times the book value. All 20 of the colleges and universities studied for this project had capital improvements in progress, from library expansions to new student housing to entirely new campuses, with an estimated cost of over \$800 million for the largest project.



¹⁶ According to the National Center for Educational Statistics (NCES) reporting rules: "Book value for institutional plant assets is the purchase or construction cost of purchased or constructed assets or the market price at the time of the gift for donated assets."

As colleges and universities continue their expansion and real estate development, they can serve as anchors of local and regional revitalization. In particular, they can play a significant role in anchoring development in areas that may, at first, appear too risky for the private sector. In some cases, university investment has primed the pump for considerable private-sector commitments-transforming retail corridors, housing, and public spaces. University investments can be direct (such as building campus facilities) or indirect (such as offering housing incentives through down-payment assistance or mortgage subsidies to faculty and staff).

Beyond catalyzing development around their campuses, urban colleges and universities can also anchor regional economic development. As they invest in research parks, new academic departments, and medical facilities, universities can attract businesses and jobs to their regions. Government, business, and university partnerships can leverage these capital investments to maximize inflows of businesses and jobs.

In addition, such developments provide a more immediate opportunity to employ local residents. Construction projects go hand in hand with inflow of contractors. Many colleges have recognized that construction contractors present a substantial opportunity for local hiring, and they have acted upon that opportunity. Columbia University and the University of Pennsylvania are good examples of two schools that have implemented local contractor programs.

There are, however, hard-to-ignore challenges. For many decades, universities did not include the economic interests of their surrounding communities into expansion plans. Their expansion projects in the 1970s and early 1980s, in particular, took a staunch "property rights" approach. In many cases, local residents and businesses were ignored and displaced. This exclusion and displacement led to years of mistrust and poor relations between urban communities and their universities. Some of the animosity still remains, and building trust requires patience and persistence. Many colleges and universities, however, are realizing that inclusion is in their "enlightened self-interest."

Another challenge that colleges face as they expand is their status as taxexempt institutions. Universities are significant real estate owners in many cities. This real estate ownership takes away a portion of what would be a city's commercial tax base. This issue is particularly difficult for small cities because any university expansion can dramatically alter the tax base. The willingness to identify common interests has allowed for creative solutions to the tax-exempt status of academic institutions, one of the most persistent problems in city-university relations. Some universities have alternative arrangements of payments in lieu of taxes (PILOTs) or services in lieu of taxes (SILOTs). At times, these alternative solutions are mandated by state legislatures, but often they are based on voluntary, "win-win" agreements between universities and cities.

2. Learning From Practice

Case 1: LeDroit Park Initiative, Howard University

> Transforming neighborhoods through bold leadership, inclusive planning, and strong partnerships

As the LeDroit Park neighborhood around Howard University in Washington, D.C., fell victim to economic decline, poverty, crime, and drugs in the 1970s and 1980s, the university was in fact contributing to that decline. In the early 1970s, Howard purchased 45 properties in the area, in anticipation of expanding its hospital. When these plans did not materialize, Howard allowed the buildings to remain unoccupied and boarded up. These buildings eventually became hideouts for drug dealers and homes to transients.

Years of residents calling on Howard to do something about the state of its surrounding community seemed to fall on deaf ears. This lack of inaction subjected Howard to continuous attacks by local media. The university knew that if it wanted to be able to continue to attract highly qualified students and faculty, it would need to participate in the revitalization of the neighborhoods surrounding its central campus. H. Patrick Swygert, a Howard alumnus who remembered LeDroit Park before its decline, stepped in as president of the university in 1995 and in his fiveyear Strategy for Action recommitted the university to "enhancing national and community service."

With the unanimous support of his Board of Trustees and with Fannie Mae as a strategic partner, President Swygert's action plan focused first on renovating the university's properties within the LeDroit Park neighborhood. Swygert and his newly established Howard University Community Association began renovating the university's 45 boarded-up properties. Redevelopment included housing rehabilitation and new construction; public infrastructure improvements; and planning for commercial space, a cultural district, and parks. The Community Association worked hand in hand with local civic associations and neighborhood groups to devise and refine this redevelopment plan.

Howard invested \$7 million into area improvements and turned to outside partners to build additional muscle and dollars for the project. The university partnered with Fannie Mae Corporation, which provided over \$20 million in expertise and financial resources for the creation of a housing initiative (described below). In addition, the Fannie Mae Foundation provided support for studies resulting in streetscape and infrastructure improvements, a comprehensive land-use plan, and a culturaldistrict study. Manna, a local community development corporation, also helped in the construction of housing for low- and

moderate-income families. Howard successfully competed with other Historically Black Colleges and Universities to win a total of \$2.4 million in grants between 1995 and 2000 to conduct local community development activities in the area. Verizon was invited to become the initiative's technology partner and contributed resources to the effort, including high-speed Internet connections, the latest in home-security technologies, and the capacity for in-home networks.

These efforts created 307 new housing units in an area that has since seen a marked improvement in property values. These changes have sparked \$65 million in commercial development, including a new bookstore located on Georgia Avenue, restaurants, 33,000 square feet of retail space, a new visitor's center, a modern Emergency Trauma Center at Howard Hospital, and a joint Howard/Metropolitan Police Department security station. The redevelopment is expected to expand to more than 130 other vacant and boarded properties in the area. Owners of some of these properties have already begun to redevelop in response to the university's efforts.

Sales of the housing units were expedited through incentives offered to firefighters, police officers, teachers, and university employees. These incentives included down-payment and closing-cost assistance offered by the university and the District of Columbia, below-market interest rate financing by the D.C. Housing Finance Agency, and first-time-homebuyer tax credits. Today, not one home stands unoccupied among the redeveloped properties.

Case 2: Broad Street Redevelopment, Virginia Commonwealth University

Transforming neighborhoods through inclusive planning and facilitating market activity

In response to the Virginia Commonwealth University (VCU) developments next to its academic campus, the private sector is reentering an area of Richmond it has overlooked for more than 40 years. Moreover, in the process of these developments, VCU has discovered approaches to expansion that are "inclusive" of the communities most affected, hence minimizing timeconsuming and costly local opposition to its plans.

The academic campus is nestled between the Fan, Carver, and Oregon Hill neighborhoods. While the Fan is an affluent, high-density residential district, Carver and Oregon Hill are among the poorest communities in the region. Carver is a primarily African-American residential neighborhood with some industrial properties. Oregon Hill, on the other hand, is a primarily white residential neighborhood.

A growing student population in the 1990s, which is expected to grow even further with the inauguration of new academic programs, forced the university to seek student housing and services close to campus. After severe opposition to its expansion into the Oregon Hill community (south of the academic campus), VCU turned its focus to the north—to Broad Street and the Carver neighborhood.

VCU began its expansion on Broad Street by building a recreation center, a parking structure, a large bookstore, a 396-bed student dorm, and an art-school complex. All these facilities were built on empty or abandoned properties; hence, no area residents or businesses were relocated. As one local economic development professional recalled, "Broad [Street] was an utterly abandoned corridor."

As a result of investments by VCU, the private sector is building 455 housing units; Lowe's, the home improvement retailer, has built a signature complex on Broad Street; and Kroger, a regional supermarket, is building a store just off Broad Street. Lowe's is the first-ever hardware and home-renovation store in Richmond's central city, while Kroger's new outlet is the first major supermarket to come to the city of Richmond in over a decade.

To develop and expand the campus in concert with community needs, VCU set up Community Advisory Boards (one for the academic and another for the medical campus) that meet quarterly to address community concerns. With prompting from the community, VCU also set out to create the Carver-VCU Partnership, which seeks to address long-term community concerns in education, health, land use, and economic development.

Through these boards, VCU has involved the neighborhoods in the campus expansion planning. For example, during the Community Advisory Board meetings related to the athletic facility, the community expressed concern over the original plan, which had a blank brick wall along a street marking Carver's boundary. Many local residents felt that the university had turned its back on the community, not to mention the deadening impact that the wall would have on a space frequently used by local residents. The façade was softened with windows and other details to meet these concerns.

The student-housing complex offers another example of successful cooperation. The new dormitory was initially designed as a four-story building; however, based on community input, the Carver side of the building was redesigned to have three stories. VCU also included community space in this dormitory. This space includes meeting and office space, as well as a 14-terminal computer lab exclusively for the use of the community. The Partnership hopes that this space will be used by the Carver residents for job and computer-skills training.

3. Recommendations For Action

For College and University Leaders:

- 1. Capitalize on urban-core colleges' and universities' potential to anchor revitalization:
- Colleges and universities can work with city and state governments to ensure that the surrounding area is an attractive and viable place for residents and businesses to locate.
- 2. Consider ways to incorporate community interests into college and university real estate development projects:
- Seek meaningful input from the community on expansion projects through community advisory boards.
- 3. Investigate innovative ways to contribute to the tax base of the city:
- Work with local government to develop a structure for payments in lieu of taxes (PILOTs) or services in lieu of taxes (SILOTs).
- Develop other innovative ways to overcome tax tensions (e.g., a real estate foundation).
- 4. Determine how the city, community, and college or university can work together to ensure that local residents have access to the jobs and economic opportunities created by college or university real estate developments.

For Mayors and Community Group Leaders:

- 5. Incorporate the expansion of colleges and universities into cities' master planning processes.
- 6. Work with colleges and universities to explore innovative service-in-lieu-of-taxes (SILOT) agreements in conjunction with new real estate development.
- 7. Community groups can seek funding on projects that leverage college and university real estate development efforts.

For Business Leaders:

8. Use the opportunity of joint ventures with colleges and universities as an impetus to reconsider competitive advantages of inner-city and urbancore areas.

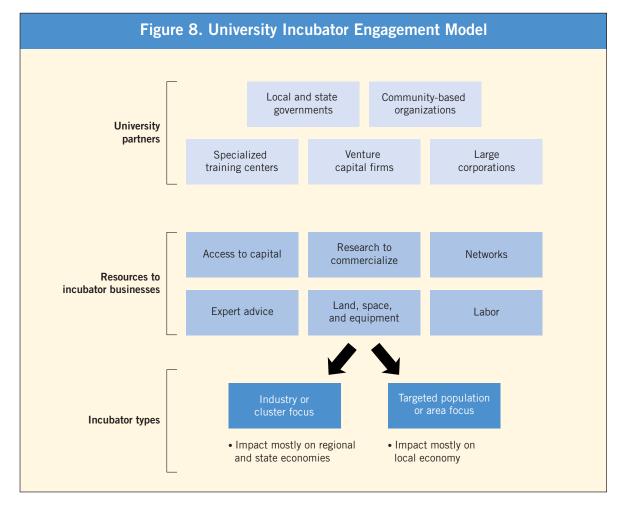
Incubator

1. Overview

While manufacturing propelled the growth of American cities as recently as a few decades ago, rapid technological innovation and its commercialization have become the hallmarks of modern economic competitiveness and growth.

Licenses of innovations made at academic institutions contributed to over \$40 billion in economic activity and supported 270,000 jobs in 1999. Business activity associated with the sales of these products is estimated to generate \$5 billion in tax revenues at the federal, state, and local levels.¹⁷

Cities are uniquely positioned to compete in this economic space. Not only are there high concentrations of business and government resources in cities, they are home to globally leading research universities. Collaboration between these three powerful sectors has fueled innovation and job growth in many cities and regions across the country. The phenomenal growth of



¹⁷ Association of University Technology Managers, AUTM License Survey (1999).

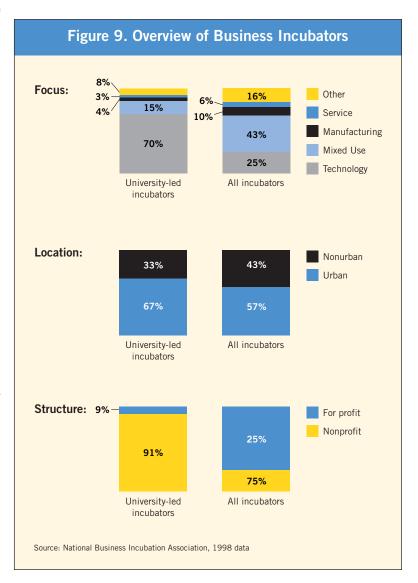
new, knowledge-based economies along Route 128 in Boston, in Silicon Valley in Northern California, and in the Research Triangle in North Carolina are just a few testaments to the power of these partnerships.

In all of these instances, each partner has committed to the incubation and growth of a competitive local business base. Academia has supported aggressive commercialization of research and supported faculty business start-ups. Close to 19,000 university licenses were active in 1999, 25 percent of which reported product sales. The public sector has committed to making transportation and telecom infrastructure available. The private sector has formed networks that expedite the flow of capital and critical market information.

Figure 8 summarizes the host of resources and partners that colleges and universities can bring together to foster business incubation. Some universities bring capital, real estate, and expert advice together through creating an official incubator or by transforming some of their existing operations. Yale University, for instance, transformed its Office of Research Cooperation from a mere patent-and-licensing operation to a one-stop business resource for enterpreneurial faculty. The redefined task of this office is to bring together "science, money, and management," as one Yale official put it. The case of Virginia Commonwealth University (below) discusses the creation of a new, separate incubator as an alternative strategy.

While colleges and universities are not the primary owners and operators of business incubators, they are affiliated with a disproportionately large share of technology incubators. Of the approximately 800 incubators in North America, only a fifth are affiliated with colleges or universities and 15 percent of those incubators are associated with community colleges (Figure 9). However, 70 percent of university-affiliated incubators are technology-focused, compared with 25 percent overall.

Incubating knowledge-based businesses may not directly benefit economically disenfranchised inner-city residents. It may, however, have indirect benefits. Having a high-growth business base offers commercial and support services opportunities that inner-city residents can tap. In many inner cities with abundant land, new research parks or facilities that house start-up businesses often do not displace residents or harm their interests.



¹⁸ Ibid.

Moreover, the techniques that are used to mobilize university, business, and government resources to incubate companies can also be used to foster business growth by inner-city residents. The case of the Enterprise Center, initially supported by the University of Pennsylvania, illustrates this: the Center currently operates independently from Penn.

Whether they focus on technology, another cluster, or a targeted population, incubators all share one challenge: they are long-term economic development tools, not a short-term solution. The growth and development associated with incubators take years, or even decades, to come to fruition.

2. Learning From Practice

Case 1: Virginia Biotechnology Research Center, Virginia Commonwealth University

> Leveraging local competitive advantage in bioscience research to foster business growth

The Virginia Biotechnology Research Center is an incubator located within the Bio-Technology Park, formed as a joint venture between Virginia Commonwealth University (VCU), the state of Virginia, and the city of Richmond. The state facilitated initial development of the incubator by issuing a \$5 million bond for construction. VCU's business school contributes to the development of the companies in the incubator by providing business-planning advice.

The Center has sparked new businesses and job opportunities in Richmond. The incubator has been 100 percent full since inception. Twenty-six companies have been born, three have gone public, two have been acquired by public companies, and three have graduated into other space in the Park. Though the companies in the Center have only a few employees each, the companies that graduate can significantly grow in size. For example, one company, Insmed, that graduated into another space in the Park now has 50 employees and is expected to double that number in the next year.

The incubator has been successful largely because of its clear focus and strong participation from a number of contributors. Local businesses contribute funding and business services for the Center's companies. VCU keeps the Research Center focused on the research strengths of the university. Seventy-five percent of the businesses are born of faculty research. The Center was designed with state-of-the-art labs, in line with the needs of biotech firms. Because of its life-sciences focus, the incubator will be a powerful faculty-recruiting and -retention tool for VCU.

Case 2: The Enterprise Center, University of Pennsylvania

Using the incubator model to foster entrepreneurship and locally owned businesses in the inner city

The Enterprise Center was founded in 1989 by the University of Pennsylvania's Wharton School of Business. It was the urban-focused arm of the Small Business Development Center housed at Wharton. In the Enterprise Center's early years, Wharton Master of Business

Administration (MBA) students provided 80 percent of the services to companies. Today the Center is run by an 18-member staff, independent of the university (although there is still a university presence on the Board).

The Center is an incubator focused on entrepreneurship and enterprise development as the drivers for transforming declining urban communities. Its goal is to establish innovative and socially responsible community leaders. The Center believes that these leaders will help drive West Philadelphia toward greater economic prosperity and a better quality of life for everyone within the community: local residents as well as university students and faculty.

The first impact analysis of the Enterprise Center revealed that only 50 percent of the Center's graduates stayed in West Philadelphia. The main reason cited for their departure was the unavailability of viable sites. The Enterprise Center is now in the final stages of opening an 80,000-square-foot commercial space down the street from the incubator. The Center management expects that this additional space will retain more of the incubator graduates in the area and continue to drive job and business development in West Philadelphia.

In its 12 years of operation, the Enterprise Center has created more than 50 businesses and assisted hundreds of West Philadelphia entrepreneurs. The businesses assisted at the incubator have created approximately 3,500 new jobs. In 1999, companies in the incubator generated a total of \$4.7 million in revenue and employed 291 people. One company, Claims Management Systems, has doubled sales in its first two years at the Center while it trains and hires Welfare-to-Work participants.

3. Recommendations For Action

For College and University Leaders:

- 1. Make an institutional commitment to better leveraging college and university research expertise and assets to support local business creation.
- 2. Consider creation of a "one-stopshop" business development center to make college and university resources more accessible to the community.
- 3. Consider an incubator as a mechanism for "packaging" and channeling college and university resources to inner-city companies. Local vendors that supply to the college or university may greatly benefit from being part of an incubator.

For Mayors and Community Group Leaders:

- 4. Encourage business incubators and technology parks for underutilized real estate. Ensure that the uses do not harm the economic interests or prospects of local residents and businesses.
- 5. Assist business incubators and technology parks in finding available land in the city. Consider making public land available for incubators.
- 6. Partner with state and federal government to facilitate the availability of transportation and infrastructure assets for public/private incubator collaborations.

For Business Leaders:

7. Strengthen business networks that expedite the flow of capital and critical information for incubator partnerships.

For College/University, City, Business, and Community Group Leaders:

- 8. Leverage college and university research strengths and expertise to enhance business creation:
- Create a critical scale of resources for development of an incubator through government, business community, and college or university collaboration.
- Develop a strategy to encourage incubator graduates to stay in the local area.

Advisor And Network Builder

1. Overview

Business advisory programs—programs that channel student and faculty knowhow to business—are the most prevalent type of college and university engagement in business development, more so than local purchasing or local hiring programs. All universities interviewed for this study had at least one program that worked directly with companies or a program that worked to improve the local business environment. The prevalence of these programs is not surprising. Hands-on, real-world experience is critical to the competitiveness of both students and faculty. Top-quality schools see this type of engagement as an indispensable part of learning.

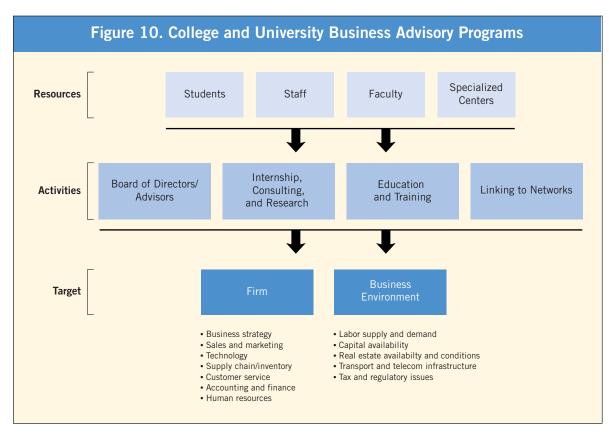
These programs are also valuable to businesses. Companies seek and frequently use these advisory programs. A 1995 Coopers & Lybrand (now PricewaterhouseCoopers) study of 424 fastgrowing U.S. businesses found that 40 percent took advantage of services offered by colleges and universities. Moreover, these services are often free or affordable, enabling local businesses to obtain services that they may not otherwise access. The most expensive program for a business that we encountered in our research charged \$7,500 for a yearlong engagement.

The engagement "model" in Figure 10 outlines the resources, activities, and targets of college and university business-advising programs. Faculty members, for instance, can serve on boards of local companies or offer expert advice. Staff can offer highly specialized skills, such as in finance, accounting, information technology, or administration. Students can consult or intern at companies. Specialized centers, e.g., Small Business Development or Entrepreneurship Centers, can provide educational and training programs in addition to consulting or research. Many business schools have executive education programs that can readily be made available to inner-city business owners and managers. All these actors, particularly faculty and specialized centers, can also link local and inner-city companies to important business networks.

Colleges and universities do not always recognize the important role they can play in facilitating networks of local businesses. They can provide a forum for businesses to meet with each other, as well as access powerful alumni and business networks. Done strategically, these networks can connect local businesses with potential partners, customers, and suppliers. For example, Start Up, a small-business development initiative in East Palo Alto (CA) connected to the Stanford Business School, has been successful in creating networking opportunities for its entrepreneurs. With Stanford's students, alumni, and faculty involved, Start Up has been able to connect entrepreneurs with Silicon Valley venture capitalists and executives, as well as other local entrepreneurs.

Business advisory programs can target both individual companies and the overall business environment in which businesses have to compete. Business schools tend to work with individual companies, whereas urban-planning departments tend to focus on business environment issues such as land use or transportation. Company-specific issues include company strategy, sales and marketing, logistics, accounting, or operations. Business environment issues include availability of usable land, access to capital, transportation or telecom infrastructure, or tax and regulatory environment.

College and university leaders have not tapped into the large portfolio of expertise at their disposal to effectively impact local business growth and



competitiveness. Few schools and departments, other than business and urban planning, have extended their practice-learning opportunities to innercity businesses. In surveying 20 urbanbased universities and reviewing the literature, we uncovered only three programs that used nonbusiness-school or nonurban-planning students or faculty to deliver advisory services to inner-city businesses. All three were law schools. One was the University of Chicago Law School's Entrepreneurship Clinic, which offers regulatory and permitting advice to small or startup businesses. The second was a clinical program offered by the Harvard Law School providing contract and negotiation services to inner city companies. The third was University of Michigan's (UM) Legal Assistance for Urban Communities Clinic.19 In an innovative program, UM's legal clinic stepped in to clear titles on properties, helped city of Detroit develop land disposition policies, and developed manuals on how to acquire land owned by local and state governments. The work by UM's legal clinic enabled the community development corporations to acquire tax foreclosed properties and use them for housing and urban revitalization projects.

Moreover, while business advisory programs are prevalent, very few focus on inner-city companies or business environment. This may stem from misperceptions about the size, quality, and sophistication of the business base in inner cities. Students or faculty may not deem engagement with local businesses sufficiently challenging or educational. In fact, years of ICIC research and fieldwork with inner-city companies prove that the opposite is true. Inner cities are home to not only small, "mom-and-pop" operations but also some of the fastest-growing companies

in the country. The industries represented in the inner city can be as diverse as manufacturing, transportation/logistics, food processing, and commercial services, to name a few.

To ensure effectiveness of advisory programs, however, several traditional pitfalls must be avoided. Fragmented student and faculty participation is the most common of these pitfalls. Many student projects can be limited to an academic term. Business concerns, however, cannot always be understood or resolved with 10-12 weeks of parttime attention. The problem is often further complicated when students and faculty spend insufficient time with the company to uncover the core problems that need to be addressed. They may also spend insufficient time clarifying expectations. These factors make some student projects ineffective and can frustrate clients. The example of Enterprise Development, Inc., below shows how a specialized program can be designed to resolve these problems.

2. Learning From Practice

Case 1: Enterprise Development, Inc., Case Western Reserve University

Matching students with growing companies through rigorous screening of student and company; placing yearlong interns to offer continuity and increasing expertise

Enterprise Development, Inc. (EDI), founded in the early 1980s, is a non-profit subsidiary of Case Western Reserve University and a cooperative venture with the Weatherhead School of Management. EDI focuses on the Cleveland region and presents a strong

model for any school to replicate. It has numerous advisory and entrepreneurial education programs, operates three business incubators, manages several awards programs that celebrate entrepreneurship, publishes a quarterly magazine for entrepreneurs in the region, conducts research, hosts networking events, and offers specialized services to entrepreneurs.

One of EDI's many offerings, the Enterprise Scholars Program, provides an instructive model for student advisory programs. The goal of Enterprise Scholars is to develop a mutually beneficial relationship where students receive an effective, hands-on learning experience and course credit, while participating companies receive the expertise of a second-year MBA student at a reasonable cost. Students are engaged in a full 12-month program with individual companies while also pursuing related coursework in entrepreneurship and management. Each company pays \$7,500 for the whole year, which partially covers cash stipends to interning students. They can pay this in two installments, once per semester. The program also offers scholarships to students to cover the tuition.

Critical to the success of the program is the rigorous screening of students and companies, as well as ongoing performance monitoring by EDI. A measure of the success of the program is that half of participating students have received full-time job offers from their host companies.

¹⁹ James H. Carr, "University Partners Play Key Supporting Role," Housing Facts & Findings (Volume 3, Issue 1), Fannie Mae Foundation, 2001.

Case 2: Urban Technical Assistance Program, Columbia University

Bringing university urban-planning expertise to improving the business environment

The Urban Technical Assistance Program (UTAP) at Columbia University's urbanplanning department works primarily to improve the inner-city communities through infrastructure development and physical planning. UTAP impacts the uses, look, and traffic capacity of neighborhoods, making the inner city a better place to do business.

UTAP's immediate focus is on assisting community organizations in the various neighborhoods of Harlem on their revitalization and community development efforts. Since its inception, UTAP has completed 34 projects—six of which have been repeat engagements—and worked with more than 40 organizations, including community development organizations, government agencies, and foundations. The estimated investment in the inner city as a result of these projects is over \$100 million.

Columbia students and faculty have been an integral part of UTAP. With one program director and one administrative staff, UTAP has been able to bring 60 student interns and numerous faculty members to participate in its projects. UTAP is funded on a project-to-project basis by community organizations and foundations, and it receives annual administrative funding from the university. Going beyond the typical course-level consulting project, UTAP represents a sustained, continuous mechanism for channeling Columbia's expertise into the community.

3. Recommendations For Action

For College and University Leaders:

- 1. Establish urban business advisory programs to broaden and enhance educational opportunities and research applications for students and faculty.
- 2. Select advisory projects that play to strengths of the college or university and clearly meet the needs of the business community.
- 3. Engage students and faculty from nonbusiness and planning departments to advise on economic development strategies and assist local firms. Schools, such as law, engineering, and computer science, can be more fully utilized for their expertise.
- 4. Engage staff by providing them with volunteer opportunities to offer inner-city companies their expertise in finance, accounting, information technology, administration, and the like.
- 5. Manage student, staff, and faculty engagements rigorously and from start to finish:
- Have permanent staff with management expertise to coordinate and monitor a program.
- Understand the importance of matching the appropriate student, staff, or faculty advisors to businesses.
- Clearly outline and manage deliverables and timelines.
- 6. Create business networking opportunities:
- Open campus facilities to local business groups for meetings and events.

- Invite local businesspeople to attend existing business events and conferences held at colleges and universities.
- Provide a forum for local business and community leaders to convene and address business environment issues and strengthen participation in existing forums, such as chambers of commerce and local economic development councils.
- Help local businesses tap into the existing faculty, alumni, and business group networks of the college or university.
- Place special focus on immediate and inner-city community.

For Mayors and Community Group Leaders:

- 7. Incorporate college and university expertise in business technical assistance programs:
- When setting up business technical assistance programs, seek expertise from colleges and universities.
- 8. Regularly incorporate college and university expertise in making communities more competitive for business and job growth:
- Invite/recruit greater college and university participation on public/private economic development policy boards.

For Business Leaders:

- 9. Local chambers of commerce should act as intermediaries to identify local business needs for expertise that colleges and universities can address:
- Invite/recruit greater college and university participation on local business association boards.

Workforce Developer

1. Overview

Colleges and universities are in the business of developing tomorrow's workforce, educating students who graduate and assume public, private, and civic positions. The role of colleges and universities, however, can extend beyond their existing academic programs. Throughout the region, they can offer valuable input into all aspects of workforce development. They can offer to the private and public sectors support in recruiting, training, retaining, and promoting workers, particularly those that need skills upgrading or are adults entering the labor force for the first time. While for a long time community colleges have focused on this labor pool and offered direct training, other types of academic institutions can also offer valuable services.

In general, the following are the roles that colleges and universities can play in workforce development:

- Research on labor supply and demand, as well as workforce development best practices
- Program design and capacity building for workforce development partners
- Training of prospective workers
- Facilitating workforce development partnerships and programs through relationships with local and regional businesses

Colleges and universities, along with other organizations, bring unique competencies to workforce development initiatives. Research universities, for instance, have proven effective in conducting market

research and circulating best practices for designing effective workforce development programs. They can also offer valuable expertise in building up the capacity of local community-based organizations, which in turn can provide recruiting and screening services for companies. Community colleges, on the other hand, have the proven track record to provide skills training.

Universities derive unique value from participating in workforce development programs. Not only do they increase the local job opportunities and business base, they also gain a cutting-edge research program that strengthens their relationships with the public and private sectors, increasing student job placements and faculty research opportunities.

The business community also has a role, initiating efforts and participating throughout the entire process to ensure that workforce development programs meet their needs.

2. Learning From Practice

Case 1: Manufacturing Technology Bridge Program, University of Illinois at Chicago

> Offering university experience in improving workforce program design and implementation

Through its Great Cities Institute, the University of Illinois at Chicago (UIC) has assisted in the workforce development programs in the local Pilsen neighborhood. Given its success with

this local initiative, UIC has now partnered with several organizations to help disseminate its knowledge and apply its skills citywide.

Partnering with a group of Chicago institutions, UIC has created the Manufacturing Technology Bridge Program, a program that prepares Chicago's innercity workers for higher-wage jobs in manufacturing. Chicago area manufacturers are currently facing a serious labor shortage because of their retiring workforce, and the Bridge Program strives to help them address this problem.

The Bridge Program is based on a "win-win" partnership. The schools, community organizations, city, and manufacturing industry work together to run a program that meets the needs of both employers and job seekers, while leveraging the unique capabilities and expertise of each partner:

- UIC provides coordination support and technical assistance on program design, planning, and funding.
- Instituto del Progreso Latino, a community-based organization, provides recruitment, counseling, case management, job placement, and follow-up support and offers a site for the instructions.

- Richard J. Daley College provides instruction at community sites and in on-campus manufacturing labs and recruits program graduates into college-level programs in manufacturing technology.
- Illinois Institute of Technology serves as a technical advisor to the project.
- The Chicago Manufacturing Center serves on the advisory board, provides industry linkages, and assists in marketing the program.
- The Mayor's Office of Workforce

 Development assists with linkages to
 the larger workforce development system in Chicago.

Through this partnership, the Manufacturing Technology Bridge Program has been able to create a model that has already demonstrated success in increasing participants' skills and income. As of June 2001, the Tech Bridge program has had:

- More than 260 graduates
- An 80 percent placement rate—72 percent were unemployed upon entry into the program
- A median starting wage of \$10.13 per hour—median wage upon entry into Bridge was \$8.12 per hour
- 73 students placed in college courses

Analysis of the employment outcomes of the Bridge (using wage record data from the Illinois Department of Employment Security) shows that, compared with participants who failed to complete the program, Bridge graduates are significantly more likely to be employed, earn wages exceeding the poverty line for a family of four, be employed in manufacturing, and hold one job as opposed to multiple jobs.

Case 2: Partnerships in Workforce Development, Florida Community College at Jacksonville

> Forging strong partnerships with government and business to meet local and regional workforce needs

The Florida Community College at Jacksonville (FCCJ) has been positioning itself as a premier workforce development resource for employers in the city of Jacksonville, as well as the entire region. To this end, it has pursued a multipronged strategy: it participates in local and regional workforce-planning organizations, seeks industry counsel in curriculum development, partners with individual companies to tailor training programs, and operates specialized workforce development centers.

This strategy enables FCCJ to become a responsive and flexible service provider to business. Its President, Steve Wallace, explains, "We [in community colleges] don't fully understand what is happening in business. The velocity of change is too great, there are more and more proprietary systems, and they [businesses] adapt and evolve much faster than we can if we stick to traditional approaches. We have to devise solutions that keep our curriculum and services relevant to business."

To ensure that it meets the changing workforce needs of the Jacksonville area and the state of Florida, FCCJ works together with state and regional workforce boards, as well as the local chambers of commerce, economic development commissions, and business and industry associations. This participation enables FCCJ to keep its hand on the pulse of employment trends regionally and statewide and design teaching and training programs accordingly. A case in point is FCCJ's new Advanced Technology Center, which will provide training programs in four of the seven targeted industries identified as critical to the local economy by area chambers of commerce and economic development commissions. Not only will the programs be designed to meet the emerging technology-driven workplace but the building is also designed to provide a flexible environment that facilitates training students and future workers as technology evolves.

FCCJ also works with employers to develop its curricula. In 1998, the college reestablished its practice of engaging employer-led, industry-specific advisory councils. Each council comprises members from the relevant industry's local business community and FCCJ faculty. The 50 industry councils organized thus far span a wide variety of industries such as financial services, automotive, aviation, electronics, computer engineering, and information technology. These councils meet at least twice a year to review FCCJ's curriculum, ensuring student preparation for current jobs, assisting in the development of student internships, identifying equipment needs, donating equipment, and connecting students with jobs.

FCCJ has also forged relationships with more than 200 companies in the region as part of its Employee Partnership Program. Through this program, FCCJ tailors training for the individual partner companies, asks members to join FCCJ's advisory councils, and invites company employees to teach at FCCJ as visiting lecturers. The Coggin Automotive Group, for instance, is a member of the FCCJ employer community. As a member, the company is assigned an administrative contact that ensures the college's responsiveness to Coggin's needs. A Coggin leader participates on advisory councils, provides student internships, and has established a new scholarship program at FCCJ. The company also sponsors career fairs for its many dealerships to recruit and encourage students training for automotive careers.

FCCJ has also worked with partner companies to create three workforce development centers that involve continuous employer participation and focus on training in relevant skills and cutting-edge technologies. These centers engage companies in customizing skills assessment and training for their incumbent and prospective employees. As they engage with a large number of employers, these institutes become potent knowledge centers that can react faster to workforce changes and trends.

According to Don Green, FCCJ's Executive Vice President, "There is a synergy that develops between FCCJ and the business world—curriculum is codeveloped by employers and FCCJ, programs are evaluated together, and planning is also completed in partnership." Combined, the Jacksonville workforce development centers trained 10,000 full-time equivalent students during the 2000–2001 school year.

3. Recommendations For Action

For College and University Leaders:

- 1. Work with employers, chambers of commerce, and the public sector to identify important workforce trends and industry needs.
- 2. Utilize research strengths and faculty expertise to help initiate and design workforce-training programs.
- 3. Expand workforce development programs to increase student job placement and faculty research opportunities aligned with local business development needs.

For Mayors and Community Group Leaders:

4. Look to colleges and universities for resources on local labor supply and other workforce data and information.

For Business Leaders:

5. Codevelop workforce training curricula and placement systems with colleges and universities.

For College/University, City, Community Group, and Business Leaders:

- 6. Understand the contributions that each party brings to the table. The cases reviewed and interviews with experts point to the following specialties:
- Community colleges: direct training provider
- Colleges and universities: research and advisory resources
- Business community: an understanding of labor demand and needed skills
- City government: access to public funds for workforce development
- Community-based organizations: an understanding of the labor supply and an ongoing commitment to community
- 7. Jointly and proactively identify workforce solutions.