

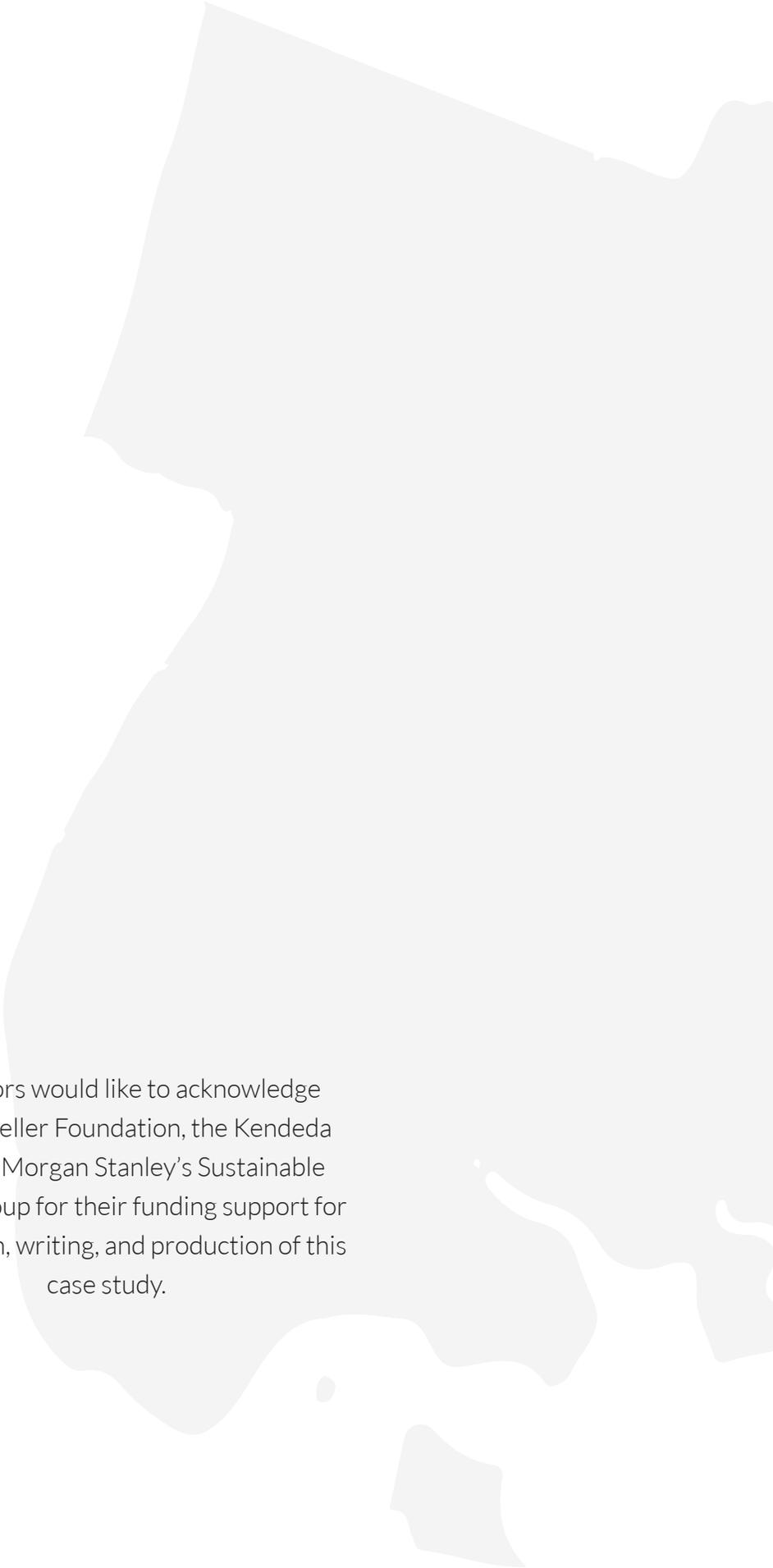
DEVELOPMENT STUDY FOR

THE BRANIX

COOPERATIVE DEVELOPMENT INITIATIVE

A Model for Economic Transformation





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DEVELOPMENT STUDY FOR THE BRONX COOPERATIVE DEVELOPMENT INITIATIVE

A Model for Economic Development

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EXECUTIVE SUMMARY

Few urban places compare to the Bronx, New York, for its combination of rich assets and deep contradictions. It is home to the third largest commercial district in New York City, one of the world's largest food distribution centers, and several major hospitals, which count among the city's largest employers. It is also the poorest urban county in the US, where food deserts proliferate and health outcomes are among the worst in the nation. People living in the Bronx bear a disproportionate share of the health, pollution, violence, incarceration, and economic burdens of New York City. Such forms of "structural violence" exact an enormous economic and human toll, making urgent the need for alternative development approaches that not only promise prosperity for a few but advance the well-being of all Bronx residents more broadly. Bronx residents and leaders have already begun searching for such alternatives, and the Bronx Cooperative Development Initiative (BCDI) has grown from that search. BCDI proposes a model for sustainable urban development that harnesses local assets and leverages the purchasing and investment power of Bronx anchor institutions to foster sustainable, community-driven, and community-owned wealth generation among low- and moderate-income residents.

This study represents six months of intensive data gathering, interviews, research,

observation, and engagement with the borough of the Bronx, its people, and its institutions. It seeks to explore the viability of *anchor-based development* in the Bronx. This means leveraging the procurement streams and other assets of large institutions like hospitals, universities, and cultural institutions, which are firmly rooted within the Bronx thanks to significant investments in real estate, infrastructure, and social capital. It also means proposing new metrics for the evaluation and development of borough-based enterprises seeking public and private investment. These metrics are designed to account for all of the manifold social costs and benefits that a new business brings to a community; to highlight the value brought by ongoing, meaningful community participation in the development process; and to gauge the likelihood of an enterprise's long-term success and sustainability.

Based on exhaustive data analysis and in consultation with local organizations and experts, a multidisciplinary team from MIT and Commonwise ("the study team"), identified five key sectors of opportunity for the borough—health, food, energy, education and manufacturing (particularly advanced manufacturing). The study team determined that each of these sectors, particularly where they overlap with national and local business growth trends, have ample capacity to address community needs, leverage

borough assets, satisfy stable and long-term demand from anchor institutions and build sustainable businesses. Importantly, the study team determined that performance in each sector could be gauged with both traditional measures of economic growth as well as a broader view of democratic wealth creation—one that takes into account sustainable employment, social impacts, and opportunities for employee ownership and shared decision-making.

Drawing on the data gathered and the performance metrics developed by the study team, this study presents an illustrative set of short-, medium- and long-range economic development projects that could be pursued within the five sectors. These opportunities include an energy audit and efficiency firm, a hydroponic greenhouse operation, a shared manufacturing space, and a research and development (R&D) cooperative. A comprehensive development proposal awaits collection of sufficiently granular procurement data to measure actual market demand. This process is now underway. The study concludes with proposed next steps.



PART 1: INTRODUCTION

ABOUT THE BRONX

The Bronx has significant financial, organizational, and social assets that can, if appropriately leveraged, provide a strong foundation for sustainable community and economic development. It has two sources of significant wealth: the purchasing, employment, and development capacities of anchor institutions— including hospitals, universities, and cultural institutions, which are firmly rooted within the Bronx thanks to major investments in real estate, infrastructure and social capital—and the collective savings and purchasing power of Bronx residents. Although many Bronx residents have low or moderate incomes, collectively, they have purchasing power that rivals many wealthy suburban communities. As an example, the major economic thoroughfare of the borough, Fordham Road, is the third largest economic corridor within New York City, racking up annual retail sales exceeding \$500 million. Bronx residents are also significant contributors to insurance companies and both public and private pension funds, all of which are forms of collective savings.

The Bronx has other community assets that can also be leveraged to support sustainable development. For instance, it has a rich set of mission-driven organizations that have a long track record of affordable housing development, civic engagement, education-reform and environmental-justice efforts, and community-development and workforce-training initiatives. The borough has also been a leader in cooperative development: it is home to Co-op City, the world's largest housing cooperative with over 15,000 residential units; Cooperative Home Care Associates, a home healthcare agency, is one of the largest worker cooperatives in the US with over 2,000 workers; and the Hunts Point Food Distribution Center, one of the largest food distribution centers in the world, is in fact a producer cooperative. Lastly, the Bronx has a high density of unionized workers. Local 1199, the healthcare workers' union, alone has more than 50,000 members in the Bronx.

ABOUT BCDI

The Bronx Cooperative Development Initiative (BCDI or “the Initiative”) is a transformative model for urban economic development and the only model of its kind in the New York metropolitan area. It was launched in 2011 following a year-long, community-engagement process led by Bronx-based institutions, grassroots organizations, and civic leaders. BCDI is working to build a *community enterprise network*, which will promote the development of sustainable, employee-owned businesses; build business-development and business support capacity; and foster collaboration between community-based organizations (CBOs) and anchor institutions. In this way, BCDI aims to support equitable economic development in the poorest urban county in the United States, where over 30 percent of the population lives below the poverty line.

More specifically, BCDI’s objectives are to:

Develop a comprehensive model for sustainable urban development that harnesses local assets and leverages the purchasing and investment power of Bronx anchor institutions to support the creation and expansion of community-driven and community-owned businesses and promote wealth generation among low- and moderate-income residents. The implementation of this model will create a powerful living example of how to build more equitable and sustainable communities and cities.

Design a participatory and inclusive community-planning process that enables community members to articulate the goals of local social, economic, and environmental development, and to shape the wealth-building process. The planning process will support meaningful, ongoing participation in shaping the future of the community and increase the deliberative capacity of local residents, leaders, and community-

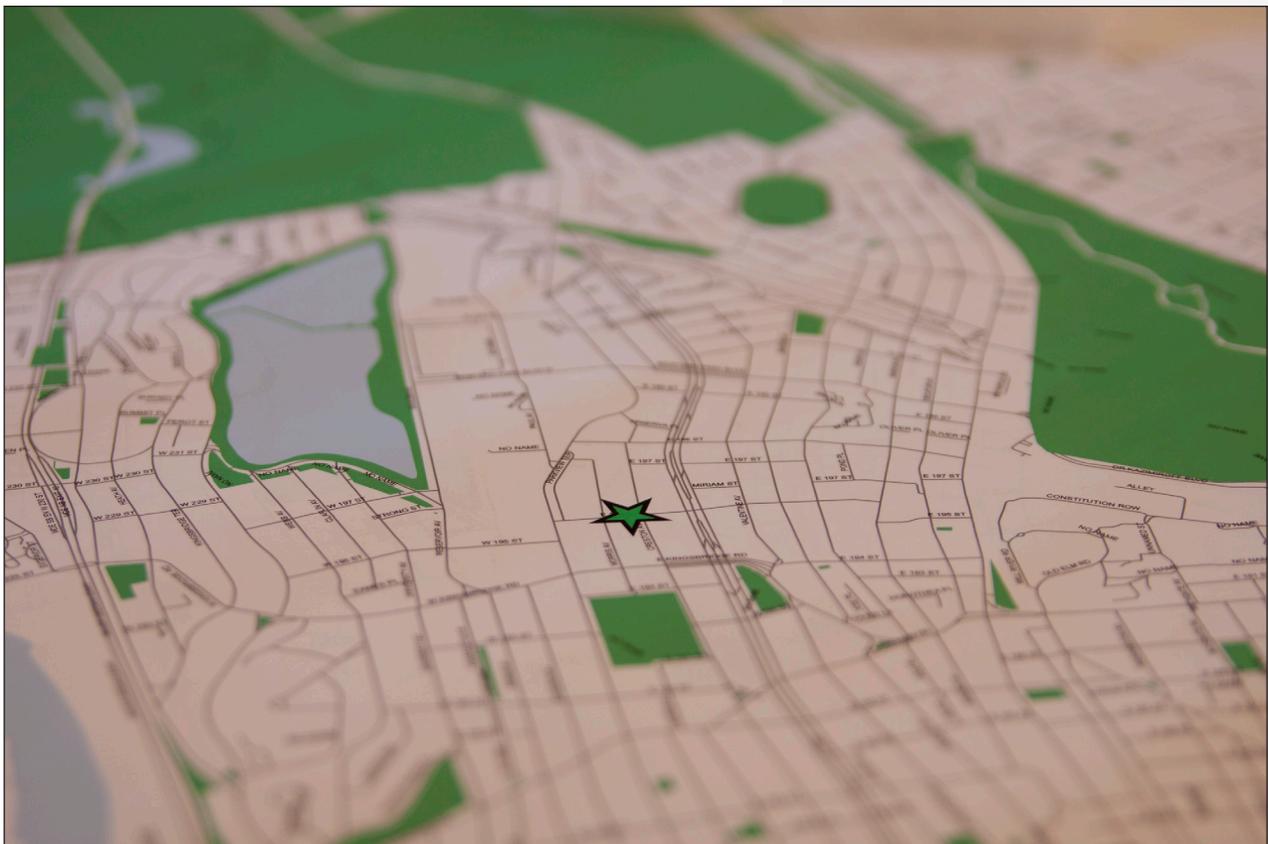
based organizations to influence and lead development of the local economy and the borough.

Organize, coordinate, and institutionalize a local, cross-sector democratic network that, over the long term, provides the support infrastructure necessary to sustain local wealth creation and ensure the resilience of individuals, businesses, communities, and institutions within the Bronx. This includes planning and policy, community engagement, business development, education and training, finance, and research and development.

Historically, economic development initiatives in the Bronx have narrowly focused on the creation of predominantly low-wage jobs with little potential for local residents to build equity or increase their financial assets. These ventures have also frequently relied upon a familiar model: the transfer of publicly

owned or *in rem* properties to regional or national private enterprises for little or no money. Such transfers of public wealth and real estate have often been accompanied by significant incentives for the developer, yet these initiatives have failed to meaningfully improve economic opportunities for the local workforce, significantly diversify the local economy, or result in new wealth creation for more than a handful of Bronxites.

BCDI's efforts emerged from the long-standing frustration of Bronx-based organizations and leaders with this model of development and its failure to bring meaningful economic returns to the borough and its residents. In stark contrast, BCDI seeks to build on successful national and international models for urban economic development that create living-wage jobs and enhance opportunities for local residents to accumulate wealth through ownership and shared decision-making.



ABOUT BCDI'S APPROACH

BCDI's approach to economic development is grounded in precedent and powerful evidence of what works, including the following strategies and projects:

The **import substitution** model, a regional economic approach that advocates for a diversified local economy based on replacing imports through local production in sectors that present competitive advantages to local enterprises. Such an approach promotes local resilience and community well-being through strengthening internal markets and buffering communities from external economic shocks.

Academic research, in particular “Building a Platform for Economic Democracy: A Cooperative Development Strategy for the Bronx” (Masters Thesis by MIT Department of Urban Studies and Planning’s Nick Iuviene, now a principal leader of BCDI); “Making a Place for Community: Local democracy in the Global Era (Williamson Thad, David Imbroscio, and Gar Alperovitz); and economist Jane Jacobs’ work demonstrating the essential role played by diversified and locally-based urban economies in driving national competitiveness (“The Economy of Cities”).

Practitioner reports assessing promising comprehensive community development initiatives, in particular those issued by the Aspen Institute Roundtable on Community Change and The Initiative for a Competitive Inner City’s (ICIC), which have conducted extensive research on successful anchor

institution development strategies around the world.

Innovative efforts to revitalize local economies using enterprise networks of worker coops as the foundation of local and regional economic development work. Primary examples – and advisory partners to BCDI – include The **Evergreen Initiative** in Cleveland, Ohio – which has been widely praised as a leading US example of community-based green business development – and **Mondragon Corporation** – a network of worker cooperatives based in the Basque region of Spain that is now the seventh largest Spanish business group and provides employment to more than 85,000 people. The Bronx itself is now home to the largest worker-owned coop in the US, Cooperative Home Care Associates (CHCA)*, a licensed home healthcare agency, providing high-quality services to elderly, chronically ill, or disabled clients, that employs more than 2,000 staff.

* <http://chcany.org/>

Promoting Economic Democracy

BCDI aims to change the patterns of economic development in the Bronx. Leveraging the borough's existing assets is a useful starting point for development that generates shared wealth. In addition, BCDI's strategy critically examines current practices and explores how new economic development initiatives can begin to break ongoing patterns that have failed to respond to the full range of community needs.

Unlike prior efforts that simply set job-creation targets, the BCDI strategy locates *democracy* at the center of its vision of the borough's economic future. This study takes the view that true development cannot adequately be gauged by the one-dimensional measure of gross domestic product (GDP) nor by the broader metrics embedded in the human development index (HDI). BCDI's approach suggests that economic development must move beyond the circumscribed view of growth as mere job creation and must instead focus on how communities can produce democratic, inclusive economies that enable all members to live healthily and with dignity.

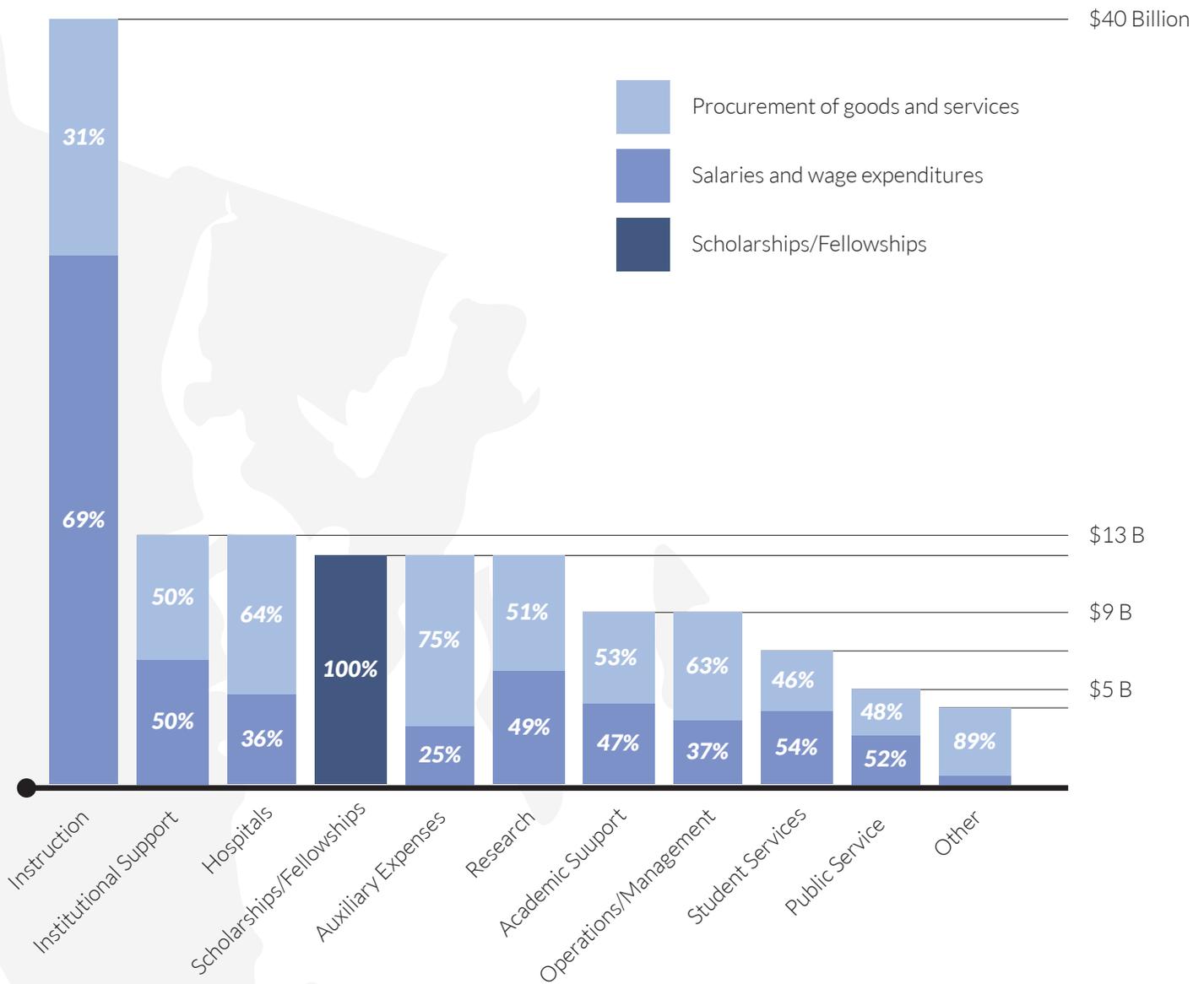
Harnessing the Power of Anchor Institutions

BCDI posits a central role for anchor institutions like hospitals, universities, and cultural institutions, which are firmly rooted within their communities because of significant real estate, infrastructure,

and social capital investments that make it difficult to leave. In reality, anchor institutions are already playing a crucial role in providing jobs and supporting business development in their regional economies. In many places, they are their regions' leading employers and further support the economy through the purchasing of goods and services. In fact, the 1,900 US universities located in the urban core have salary and procurement budgets nine times greater than federal direct spending on urban business and job development* —and that does not count other anchor institutions like hospitals, museums, or concert halls.

* Leveraging Colleges and Universities for Urban Economic Revitalization: An Action Agenda, Joint Study by Initiative for a Competitive Inner City and CEOs for Cities. www.icic.org/ee_uploads/publications/UIFINAL.PDF.

\$136 Billion in Annual Operating Budgets of Urban-Core Colleges and Universities, 1996



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

Urban anchor institutions are often the largest conduit for capital flows into and out of their communities. However, currently, much of this capital bypasses local residents and businesses. BCDI's approach thus emphasizes the many ways that anchor institutions can revitalize communities including creating job creation, developing

real estate, building infrastructure, and incubating businesses. If the economic power of anchor activities were more effectively harnessed, they could contribute greatly to community wealth-building. This development study analyzes critical opportunities and barriers to success for anchor-based development in the Bronx.

The Role of Anchors in Community Revitalization: Strategic Framework



Adapted from: http://www.icic.org/ee_uploads/publications/ICIC_RESEARCH_anchor_institutions_r2.pdf

ABOUT THE DEVELOPMENT STUDY

This study positions business development as a critical component of a larger, comprehensive community development process in the Bronx that will advance the well-being of residents, communities, and institutions. The study suggests that while anchor institutions' many assets are critical to ensuring sustainable economic development in the Bronx, they are not the only drivers. Thus, the strategic goals of the study are to:

analyze the full array of local assets, consumer and institutional demands, and aspirations that can be harnessed for business and overall development in the Bronx;

identify the borough's anchor institutions with capacity and disposition to deploy capital and develop procurement policies in support of the BCDI model;

identify key development policies and action steps to advance the model;

identify opportunities and catalyze synergies between assets, consumer needs, and aspirations in order to create businesses that offer life-sustaining jobs and are cooperatively owned and democratically governed;

investigate opportunities to build leadership capacity and democratic-deliberative practices in order to transform enterprises into cooperatively owned wealth-generating assets; and

develop metrics for evaluation and assessment of the Initiative's progress.

Data

The data for this study was derived from a wide variety of sources, including the 2007 to 2011 American Community Surveys, the 2010 Census, and other state and municipal sources, as well as the Bureau of Labor Statistics, and studies by the Initiative for A Competitive Inner City (ICIC), Brookings Institution, the Kauffman Foundation, and IBISWorld. In addition, the team collected substantial qualitative data, including interviews, indicator data, reports referenced by interviewees or during research, photographs, and a review of organizations that engage directly with BCDI, that work in the Bronx, or that relate to a specific indicator.

Analysis

First, the study team conducted an analysis of Bronx County using an asset scan that

identified seven forms of capital: human, social, physical, environmental, capital, transportation, economic, and political, each defined in Appendix C.

The strength of each form of capital was measured according to multiple indicators, including relevance to anchor institutions' purchasing. The study team filtered the data gathered in each capital category by determining how strongly they contributed to shared wealth and equitable, participatory economic development. The data was then subjected to three modes of analysis: (1) *structure or systems analysis* to examine practices and processes that tend to perpetuate marginality, (2) *spatial analysis* at the block, neighborhood, and borough level

to identify areas of greatest need and location of promising assets and (3) *content analysis* to uncover and interpret the meaning of the qualitative data gathered in interviews. These characterizations enabled the study team to understand the meaning and implications for the BCDI model of the data collected. Four concepts emerged from the analyses – the Health and Wellness Imperative; the Energy Constant; the Pursuit of Shared Success; and the Geography of Economic Development. A business analysis was conducted to determine how to synthesize a cohesive narrative of a preferred development process for the Bronx.

WHAT MAKES THIS STUDY UNIQUE?

In addition to setting forth a detailed needs assessment of Bronx neighborhoods, the BCDI study takes an important methodological step forward by combining business analysis and extensive mapping of community assets -- institutions and businesses, as well as local residents' capacities -- with intensive community visioning processes for economic development. This approach – of combining scientific research, urban planning and business development, with community organizing and input – results in a comprehensive analysis of the various forms of capital in the Bronx, while at the same time, it creates a process that can harness this capital for community-driven economic development.

PART 2: DEVELOPMENT CONCEPTS

In this section, we set forth both the community- and business-development frameworks used to create a roadmap for BCDI. The four development concepts proposed below seek to weave together and explore the dynamic relationships between two disparate sets of data: qualitative, community-level data and quantitative, market-research data. For each concept, a written narrative provides description, nuance, and questions raised by the concept,

and a diagram illustrates the complex and interrelated dimensions of each concept. The images and descriptions of the major themes are a subjective interpretation of the content collected by the study team. They are “ways of seeing” the Bronx that provide a fuller understanding of tangible opportunities for development. Tables detailing data associated with the four concepts can be found in Appendix C and the data supplement.

CONCEPT #1: THE HEALTH & WELLNESS IMPERATIVE

Three essential dimensions of health and wellness emerged from interviews and data collection.

Persistence of Negative Externalities

Two intertwined externalities were consistently cited by the study's interviewees in discussions of determinants of wellness:

(a) environmental determinants, such as poor air quality and exposure to toxins; (b) social determinants, such as lack of access to healthcare and healthy foods.

Susceptibility to Unfavorable Outcomes

Both of the above externalities increase the vulnerability of borough residents to poor health outcomes, such as asthma and diabetes, and poor economic outcomes, including unemployment and diminished productivity for Bronx businesses and institutions.

Opportunities for Intervention

A reversal in the negative trajectories of the first two dimensions will require a robust, carefully considered, and potentially far-ranging health and wellness strategy by BCDI.

Health and wellness (hereafter H&W) emerged as a central and recurring focus in much of the qualitative data, leading the study team to

conclude that H&W must play a predominant role in any economic development process. Based on the anticipated growth in healthcare occupations and opportunities for employment under the Affordable Care Act (ACA), the enhanced power of organized labor in the sector, and the growing size and strength of the borough's principal healthcare providers, the healthcare industry emerged as a significant locus of opportunity. This correlates closely with the findings of the business analysis showing healthcare as a key sector of growth in New York City.

Importantly, understanding the economic development opportunities within a *health and wellness cluster* as distinct from the healthcare industry is important; more than a means to jobs, H&W is a path towards improving quality of life for residents and workers in the Bronx. H&W are analogous to municipal energy and transportation infrastructure that form the basic foundation for all other development activity. Without a strong foundation of H&W, it is difficult for communities to maintain a high quality of life or sustain a robust economy. By prioritizing an H&W strategy, BCDI is embracing a comprehensive approach to development that will add value across sectors.

CONCEPT #2: THE ENERGY CONSTANT

Energy—both production and consumption—consistently emerged in interviews as an area of economic activity that merited BCDI’s close attention. Several motifs emerged from interviews and data collection around this concept:

The Centrality of Aggregating Demand in Energy Markets

The demand for affordable energy in dense urban environments is a constant and thus represents a sizable opportunity for borough economic development. Aggregating that demand and creating a reliable supply is a proven business model that was cited by multiple knowledgeable interview subjects.

Anchor Institutions as Early Adopters

Montefiore Medical Center, the Bronx Zoo and Amalgamated Housing produce their own energy with generation infrastructure that they own and maintain. Fordham University’s cogeneration project similarly represents an effort to reduce energy costs and increase self-sufficiency. These institutions exemplify replicable alternatives to the norm.

Opportunities for Intervention

Interviewees recommended that BCDI consider how it might identify additional opportunities for production, conservation, and even retail distribution of borough-based energy—especially since very little energy is currently produced in the Bronx. Energy

supply opportunities cited by interviewees include energy retrofits for multifamily buildings as well as distributed generation initiatives in the green-energy sector.

Taking advantage of and creating opportunities in the energy sector requires understanding the current production and consumption patterns in NYC. For example, the Grand Concourse consumes a large portion of the energy in the Bronx. Further research on the source of the energy, the providers of energy, and the costs of energy can help determine the scope of the opportunity to produce cleaner and/or cheaper energy for consumption along the Concourse. Policy initiatives like PlaNYC and programs like the NYC Clean Fleets program offer opportunities to work with the public sector in creating energy policies and programs that bolster fledgling industries or new technologies in green energy.

CONCEPT #3: THE PURSUIT OF SHARED SUCCESS

The Bronx is home to over 16,000 businesses; many are models of success despite the difficulties of operating a small business in New York City and the unique challenges of operating in the Bronx. Interview subjects saw opportunities for incubating small business, for fostering innovation in preexisting enterprises, and for preparing the borough's workforce for emergent industries and sectors.

Workforce Development as an Equity-builder

Interview subjects stressed that any successful strategy for borough economic development must focus on both the formal and informal education of Bronx residents. While BCDI can readily identify sectors where local enterprises will have a competitive advantage, interviewees underscored the urgency of crafting a strategy that prepares Bronx residents to meaningfully participate in these enterprises. Such workforce development can take many forms—from improving the quality of public education to ensuring that more Bronx residents receive post-secondary training to equip them to own and manage cooperatively run firms.

Building the Workshops of the Innovation Economy

The team's findings suggest that nurturing an innovation economy in the Bronx will require the creation of dynamic new spaces meeting the needs of small, urban manufacturers—perhaps emulating the Brooklyn Navy Yard by aggregating a number of adjoining industrial spaces or developing scatter-site locations throughout the borough.

Capital Outflows

Interviewees noted that firms in the Bronx are successfully connecting talent and capital in order to succeed and grow. However, many of the largest profit-making enterprises in the Bronx are based elsewhere, redirecting capital outside the area, hiring management from beyond the borough, and returning little in the way of equity or social benefits to employees and host communities. Finding ways for Bronx residents to partake in the growth of these enterprises and sectors must be a central feature of any successful economic development plan.

CONCEPT #4: THE GEOGRAPHY OF ECONOMIC DEVELOPMENT

In the study team’s survey of the Bronx, it was impossible not to be overwhelmed by the sheer size of the Bronx. The borough is 42 square miles, has 75 miles of waterfront, and houses 1.4 million residents. Yet availability of suitable space continues to be both a limiting factor and an opportunity for growth in the borough. Through interviews and research, the study team identified several key themes pertinent to this concept:

Open Space as a Value Proposition

Approximately 24 percent of the Bronx is parkland. While this is a statistic with which many Bronx residents are familiar, it is a fact that has seldom been leveraged in the borough’s economic development planning. Parkland presents opportunities for health and wellness programming, real estate development near parks, “destination events” such as annual festivals, and even some forms of urban agriculture.

A Space-constrained Borough

While on one hand the Bronx has a tremendous amount of open space, various borough institutions and enterprises lack adequate space to expand and modernize their operations. From the overcrowding of public schools and multifamily housing, to the Terminal Market’s urgent need for a modernized, refrigerated “high cube” (high-cubic footage) distribution center, the pressing demand for more space across sectors is evident. These space constraints drive land costs ever higher—a fact of economic life that renders some essential businesses in the borough untenable

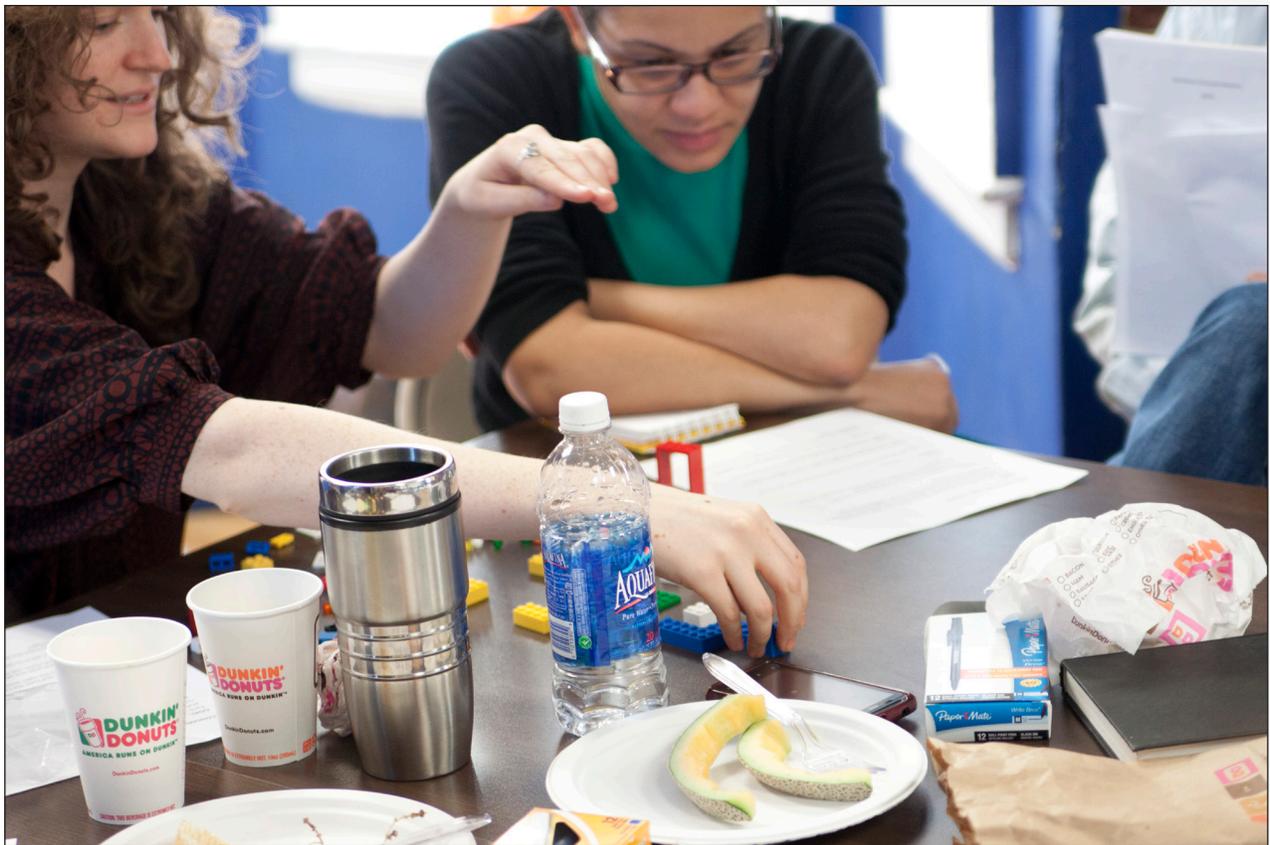
without public subsidy or tax-credit financing. Economic development planning in this context becomes a contest for space and public subsidies—one that often pits communities, businesses, and real estate interests against each other in a three-way struggle of competing visions for the borough’s future. The specter of stalemate haunts many of the borough’s development plans, with elected officials unable or unwilling to negotiate solutions. How BCDI might navigate this aspect of economic development is a crucial question to be addressed.

The Challenge of Boundaries and Divisions

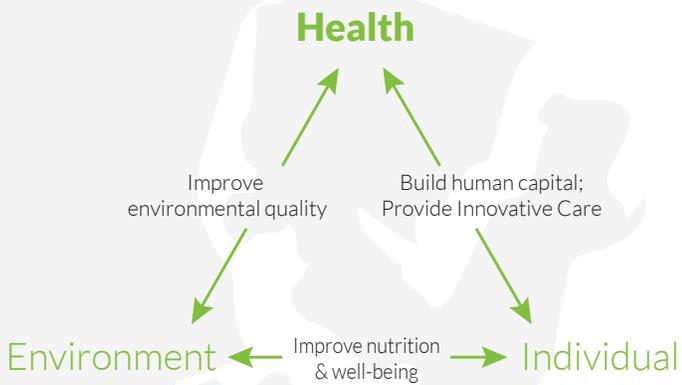
The Bronx has been divided into multiple divisions for various purposes: ZIP codes, Census tracts, political districts (community boards, city council districts, and state and federal division), school districts, business improvement districts, and neighborhoods. As many interview subjects underscored, BCDI must make strategic decisions regarding which districts take precedence in locating enterprises and building a grassroots base. As New York is a city of neighborhoods, neighborhood boundaries—

those constituting the cultural mapping of the borough, rather than its political mapping—might prove more organic and be more readily grasped by residents than by outsiders. Political boundaries must also be considered as elected officials may welcome BCDI into their districts and be well-positioned to provide support for BCDI’s efforts.

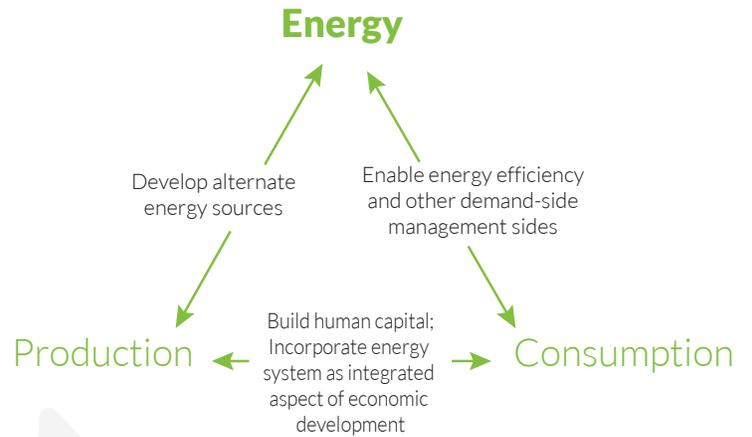
Equitable development that responds to the challenges and opportunities outlined above must also address the human dimensions inherent in the geography of economic development. Connecting people in the Bronx to sustainable jobs in their home borough while matching current employees to suitable housing near their workplaces is another area of opportunity that merits further exploration by BCDI.



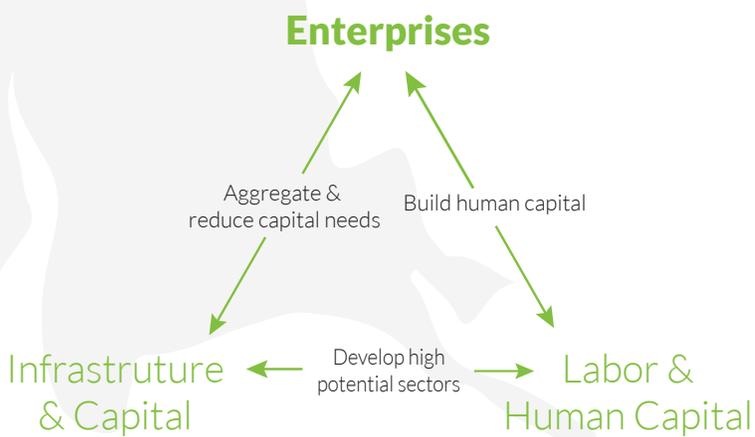
CONCEPT #1



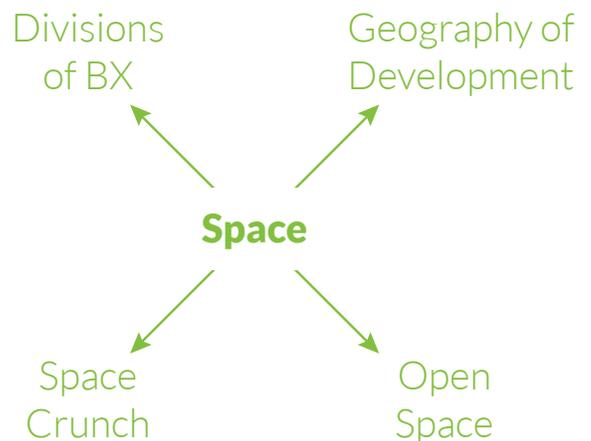
CONCEPT #2



CONCEPT #3



CONCEPT #4



PART 3: DEVELOPMENT STRATEGY

This business analysis triangulates multiple sources of data into an informed point of view about potential business opportunities in the Bronx. We examined relevant national and local business trends, including trends in the small and urban business sectors; trends in local procurement and efforts to leverage anchor procurement in other cities; and possibilities for expanding existing businesses (particularly cooperatives) to the Bronx.

The goal was to scope out a market niche for businesses that can:

leverage and build on the existing skill profile of Bronx work for a reasonable investment in training and development,

provide a living wage that is higher than the typical wages residents may now be receiving and also offer the opportunity for ownership and wealth creation, and

sustain itself over time.

The study found a great deal of convergence between the business and overall community development analyses conducted for this study. The community development analysis identifies five areas of opportunity in the Bronx—health, education, food, energy and manufacturing—that are also supported by business analysis of procurement trends and national and local New York City growth trends across industries and within the small and urban business sectors. Specifically, the healthcare and food opportunities rise to the top across all of the growth trends, as do green construction and building maintenance. Machine shops as a sector show promise as well, correlating with proposals to leverage growing potential in digital fabrication and to pursue import replacement and advanced manufacturing strategies in the Bronx. These trends are detailed in Appendix D.

IDENTIFYING POTENTIAL PARTNERS

The tens of billions of dollars of collective annual anchor purchasing creates a potentially lucrative market to attract existing businesses to relocate and help jumpstart development of green and cooperative “satellite” businesses in the Bronx. BCDI team member and Commonwise CEO

Jeffrey Hollender leveraged his network and experience as a successful entrepreneur and sustainable-business expert to identify potential expansion partners, and he has begun early conversations with a number of green businesses.

ADDRESSING BARRIERS TO ANCHOR-BASED BUSINESS DEVELOPMENT

Despite the promise of anchor procurement as an engine of local business development, and even with increased efforts by many anchor institutions to increase local purchasing, significant structural barriers to harnessing this demand persist. Key among these are anchors’ lack of information about the offerings of local businesses and the need for small businesses and minority- and women-owned businesses (M/WBEs) to increase capacity to respond to anchor needs and contracting processes. BCDI can serve as a crucial link between anchors and small, emerging, and/or M/WBE businesses seeking to leverage the strength of anchor purchasing in the Bronx. BCDI has already begun organizing a multi-sector conversation between Bronx-based anchors, community partners, foundations, and public officials about how to promote local sourcing. As next steps, BCDI should also:

Work with anchor institutions to develop a local vendors database that is regularly updated. This will provide a clearinghouse of local vendor information to the anchor institutions and a mechanism for local businesses to market their products and services to the institutions.

Convene a working group of procurement managers from the anchors to develop a pipeline of procurement opportunities for business development. **Engage** group purchasing organizations to identify how Bronx-based businesses can be connected to the existing anchor-institution supply chains.

EVALUATING OPPORTUNITIES FOR BUSINESS CREATION AND EXPANSION

The community development framework, economic development framework, and business feasibility and business-development filters are designed to be concurrent: potential businesses will be assessed across all three filters and will likely have different levels of relevance depending on the lens. The aggregate score of the business across these filters will demonstrate the extent to which it adheres to the values and aspirations of BCDI and ultimately supports the development goal of building a creative, healthy workforce and place in the Bronx. Assessing prospective businesses through these lenses will be the focus of future business development work for BCDI.

Community Development Filter

The first filter examines the overall development goals of BCDI in the context of the five opportunity areas identified in the Bronx and links them with an understanding of the commercial assets that businesses could leverage in the borough (e.g., access to ports).

This filter asks the following essential questions:

- Does the business contribute to thickening social relationships within the community?
- Does it fit the five areas of opportunity: health, food, energy, education, and manufacturing?
- Does it leverage existing Bronx assets, including human, social, physical, and other forms of capital?

Economic Development Filter

The second filter measures potential businesses' consistency with BCDI's mission. It explores strategic choices with regard to geographic priorities within the Bronx, whether the business should be new or an expansion of an existing business, the extent to which the business fits within industry priorities, and finally and likely most importantly, the extent to which the business fulfills Bronx anchor needs.

This filter asks the following essential questions:

- Does the business benefit the geographic areas identified as development priorities?
- Does the business help balance the creation of new businesses with the expansion of existing ones?

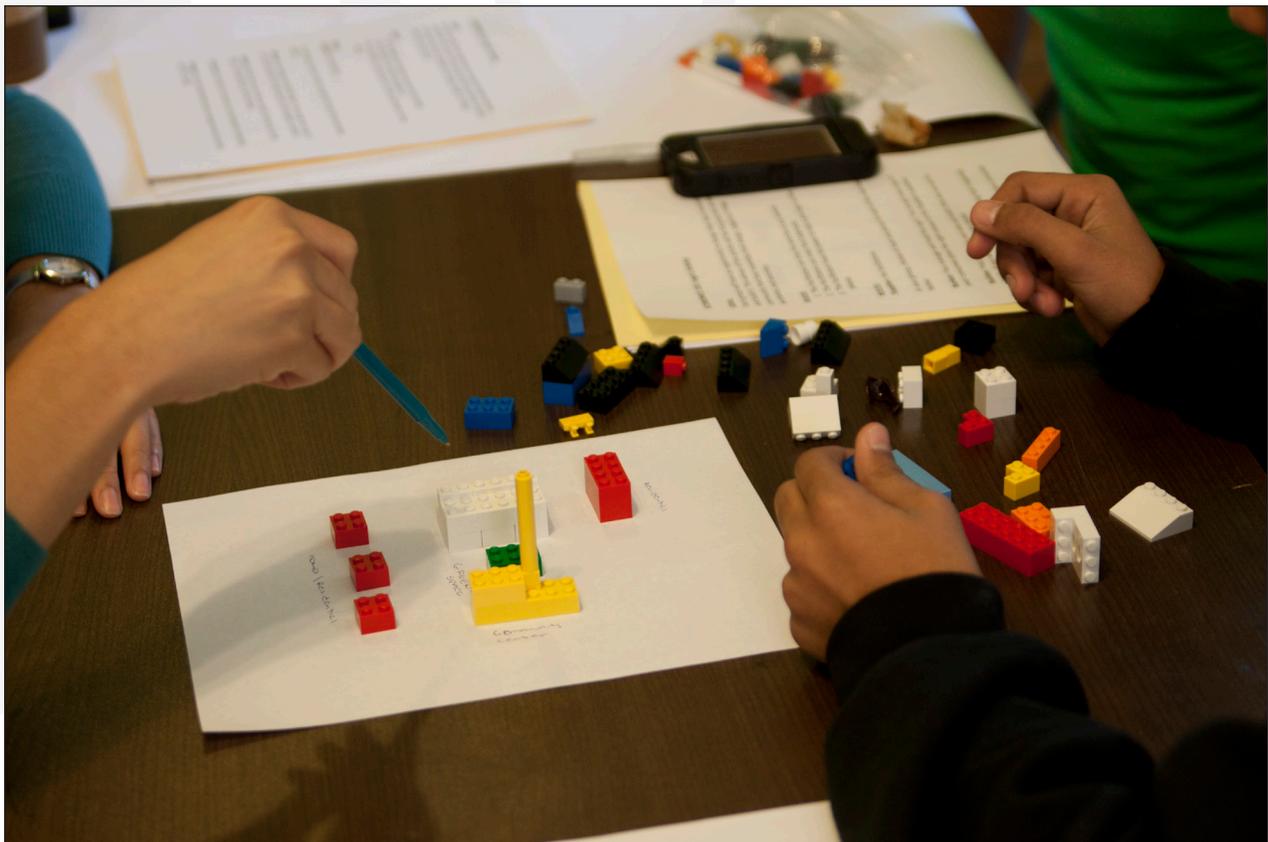
- Does it fit sector priorities, i.e. is it in a growth industry that can be easily traded with individuals and firms beyond the Bronx?
- Does it leverage existing and anticipated demand from anchor institutions?

Business Feasibility

Finally, the third filter considers the viability of the business itself exploring areas such as the amount of startup capital needed and the numbers of jobs anticipated.

This filter asks the following essential questions:

- How much startup capital does the business need, and what other barriers to entry does it face?
- How many jobs will it create?
- Will it pay living wages to its employees?
- Is the business conducive to an employee-ownership model that will support wealth accumulation among workers?
- Will it link to other Bronx-based coops or businesses looking to expand?
- Will the business benefit from the BCDI ecosystem (e.g. shared professional services, incubator space, etc.)?



Filter 1: Community Development Framework

Contributes to thickening social relationships through multiple developmental dimensions, and related projects.

Fits Areas of Opportunity:

Health
Food
Energy
Education
Manufacturing

Leverages Existing Bronx Assets:

Takes advantage of existing infrastructure, human, social and other forums of capital

Filter 2: Economic Development Framework

Fits Geographic Development Priorities: clear benefit to focus areas defined by MIT Studio and Partners

Fits Business Creation Targets:

right balance of new business establishment versus existing business expansion; right number of businesses

Fits Industry Sector Priorities:

In industry showing clear positive growth trends; not highly regulated; “tradeable industry” with potential to provide services beyond the Bronx

Leverages Anchor Demand:

business created in an area with big total anchor purchase volume and commitment to local purchase by anchors

Filter 3: Business Feasibility

Start Up Capital Requirement and other Barriers to Entry: max 2 year start-up capital requirement of \$5M and reasonable capital to job ratio

Job Creation Potential: Could create up to 50 jobs within 3 years

Wage Level: Potential to provide a “living wage” / life-sustaining job

Wealth Accumulation Potential:

Conducive to employee ownership and will support wealth accumulation (\$50,000 dollars in employee accounts in 5 years).

Leverage BCDI Partnerships:

Potential links to existing successful coops or other businesses open to Bronx expansion

Can Benefit from BCDI Ecosystem:

Businesses have sufficient commonality to share pooled services with other companies (e.g. accounting, professional services)



EVALUATING BCDI'S EFFICACY

In addition to evaluating business opportunities as they arise, BCDI must also constantly evaluate its own operations to ensure that the businesses it is supporting and the activities it undertakes supports its overall mission to enhance economic opportunities and community well-being within the Bronx. To that end, BCDI has developed a rubric for evaluating its own mission-consistency and efficacy:

Are the jobs that BCDI is facilitating good jobs that pay a living wage, allow for growth and advancement at work, and connect workers to growth sectors in the economy?

Are the relationships built through education and training institutions promoting the development of skills and excitement needed for productive futures (creativity, teamwork, sense of ownership)? Or are we narrowly conceiving of achievement as passing a test or earning a certification?

Is BCDI helping local community colleges and universities connect to areas of innovation and growth?

Is BCDI connecting to and enhancing the capacity of creative arts and cultural outlets as critical components of innovative thinking for new businesses and mental health?

In addition to creating jobs in the food and healthcare sectors, are we ensuring that Bronx residents will have access to these resources as well?

With respect to the physical infrastructure

and strategic location of manufacturing jobs, are we considering how to minimize energy consumption and pollution and mitigate or eliminate other environmental health hazards?

How can green spaces provide opportunities for employment and environmental resource management, while also offering safe recreation, exercise, and creative human development?

Do residents have adequate transportation to access all of the educational, employment, and social-support institutions that sustain a healthy community?

PART 4: IMPLEMENTATION

Within each of the five opportunity areas—health, food, energy, education and manufacturing (particularly advanced manufacturing)—the study team identified potential projects that meet BCDI’s objectives and hold the promise of bringing about meaningful economic transformation in the borough. Proposed projects were vetted against a set of inquiries that reflect core BCDI values and strategic objectives.

Using the tools referenced above and drawing upon data, precedent, and information gleaned from interviews within each sectoral cluster, the study team identified the following short-term, medium-term, and long-term projects for further consideration and development by BCDI and its partners.



SHORT-TERM PROJECTS

Aligning Local and Existing Businesses with Anchor Supply Chains

The clearest pathway to success in building local businesses with strong ties to anchor supply chains is through direct conversation with the anchors. One often-cited barrier to local sourcing is anchors' lack of information about the range of local vendors available. Initiatives such as Cleveland Evergreen and Detroit Midtown are invested heavily in supporting the creation of such a database, as they feel it is a vital support to their goals. To overcome the information barriers, a starting point in the Bronx would be conducting a broad survey of local businesses to identify and catalogue existing local businesses (and New York-area businesses that share BCDI's commitment to community ownership and might be willing to relocate), that could be a match with anchor procurement needs. Additional research might also help identify capacity gaps, such as needed technology systems, that must be addressed to ensure local businesses' ability to compete for anchor contracts. BCDI might be able to play a role in addressing identified capacity gaps.

Initial goals of this proposed project would include: 1) Mutually defining what local purchasing means; and 2) setting specific targets for the portion of the organization's procurement that will be sourced locally over the next 1, 3, and 5 years. BCDI could then help support such an effort by developing communication materials promoting "buy local" approaches and highlighting Bronx

enterprises identified in the local business survey. Such materials could help anchors communicate prioritization of local sourcing within their organizations to ensure widespread awareness of, and cooperation with, this priority across departments. In parallel, BCDI could explore procurement policy innovations, as well as incentives to support growth of local procurement. Finally, in addition to facilitating anchor contracts, BCDI might consider addressing the need for advisory services to local vendors seeking assistance with complex RFP processes.

Existing Assets

This proposal builds on relationships with major institutions in the Bronx and the Greater New York Hospital Association (GNYHA), the hospital trade association and the group purchasing organization (GPO) that GNYHA operates. GNYHA has already begun a "buy local" campaign targeted at New York State, recognizing the value in localizing of supply chains.

Potential Partners

In addition to GNYHA, BCDI could explore partnerships with larger, more established local or New York area businesses that share BCDI interest in building community ownership and might be willing to set up mentoring relationships with emerging Bronx businesses, or relocate/build new facilities in the Bronx.

Anticipated Outcomes

The above measures are targeted to address critical barriers to anchor procurement contracting by local Bronx businesses. Among other things, these measures can help ensure

that local businesses secure a reliable supply of clear, contractual commitments with anchor partners and that they have the capacity to fulfill them.

Harnessing Healthcare Reform Spending by Anchor Institutions

New requirements of the Affordable Care Act (“ACA”) offer an outstanding opportunity to generate revenue, create jobs, promote wellness, and “thicken” relationships between community partners and anchor institutions through a collaborative planning process to address community health needs.

must take into account both community input and specialized knowledge or expertise in public health. This scheme creates opportunities for residents to conduct focus groups, participate in field research, and provide critical health intelligence about their neighborhood, while potentially creating jobs in the community.

Pursuant to the ACA, the Internal Revenue Service has implemented clearer guidelines for IRS-required “community benefit” activities by nonprofit hospitals. The new definitions are quite broad, including expenditures for job training, environmental remediation and fresh food supplies. Current practices suggest that nonprofit hospitals spend between 3 and 5 percent of their revenue on such activities, guided by community health needs assessments conducted by hospitals of their catchment areas every three years. BCDI can play an instrumental role in ensuring that local community partners, who are uniquely positioned to collect data from the local community, can leverage this opportunity.

As a work product, CHNAs could equip Bronx residents, organizations and institutions with vital information for addressing determinants of health within the borough, and importantly, could provide important support for relationships needed to take meaningful steps to address health issues.

ACA requires that an Investment Strategy be derived from the CHNA. Given the ACA’s broad definition of relevant community benefit activities, including increasing availability of fresh foods, improving energy efficiency and air quality, it is quite possible that strategically developed CHNAs could help deploy hospital community benefit dollars to be used for start up capital for community businesses that leverage local procurement streams.

First, community partners can develop the skills and tools to conduct health assessments. The Community Health Needs Assessment (CHNA) is an ongoing process of evaluating the health needs of a community. Assessments

Existing Assets

This project leverages the strength of community-based organizations, which lies in

their ability to organize and train residents to gather data in their communities. It also has the potential to tap the prodigious technical and material resources found at anchor institutions, which helps ensure that the method of inquiry follows accepted practice.

Potential Partners

BCDI has identified a number of partner organizations whose wealth of experience in community organizing and intimate understanding of community dynamics place them in an ideal position to carry out a successful needs assessment. SEIU Local 1199, a union of healthcare workers, in partnership with community partners, could enhance the capacity to carry out the assessment, while strengthening the union's ties with community residents. Montefiore Medical Center and Bronx Lebanon Hospital

are both strong potential healthcare institution partners.

Anticipated Outcomes

Building and institutionalizing community capacity to conduct health needs assessments supports BCDI's values and strategic objectives by promoting the concept of wellness in communities, leveraging the local expertise of community-based organizations, and strengthening relationships between anchor institutions and smaller, grassroots organizations. If developed in an inclusive, collaborative, and deliberative way, the survey can serve as an opportunity to address broad community organization and development concerns, with health as the fundamental thread that binds them together.

Leveraging Opportunities in the Energy Sector

The study team identified several viable opportunities in the energy sector, including energy audits and efficiency improvements for multi-dwelling as well as commercial properties. Working with NYCHA, as well as local housing and commercial associations, a BCDI-partnering organization could offer these services to a range of building sizes and types across the borough. By both fostering further growth of this sector and preparing a highly skilled labor force to then fill the job needs, BCDI can (1) build the Bronx's local economy, (2) open up new career ladders for

its residents, (3) improve the physical capital within the borough, and (4) reduce carbon emissions from the building sector in the Bronx.

In 2010, buildings (including commercial, residential, industrial, and institutional) accounted for 75 percent of New York City's energy use and the burning of fossil fuels to power buildings comprised 80 percent of the city's carbon emissions.* The age, construction, building material, and design

* Center for American Progress, New York City Green Collar Jobs Roadmap

of buildings all contribute to the energy efficiency of the building stock. Undertaking energy efficiency and weatherization improvements to buildings through better insulation, lighting, and user-side energy conservation practices can not only be a great cost-saving mechanism for building tenants and owners, but also an effective means to combat climate change and reduce unnecessary resource use. As a result, companies engaging in energy efficiency and weatherization improvements are a steadily growing sector.

Existing Assets

Building stock has incredibly high longevity; many of the Bronx's buildings were constructed in the 1920s and 1930s. The strategy outlined above would enhance these existing assets thereby making them more cost effective and tenable to inhabit for decades going forward.

Potential Partners

Both Bronx Community College's Center for Sustainable Energy and the Northwest Bronx Community and Clergy Coalition have a wealth of expertise and experience in weatherization and energy audits. The Bronx-Manhattan North Association of Realtors is a membership organization that represents a significant share of the multi-dwelling property owners in the borough. These three organizations are well-positioned to partner with BCDI on this initiative. Each of the borough's anchor institutions are also prospective clients for energy audit and weatherization services.

Anticipated Outcomes

Many existing workforce development programs are already focused on the energy sector, but are not necessarily coupled with economic development projects that have the capacity to create relevant employment opportunities. This two-pronged strategy would both build transferable skills and career paths for trainees and generate stable, long-term employment in the sector.

MEDIUM-TERM PROJECTS

Shared Maker/Manufacturing Space and Allied Education and Workforce Development Programs

The study team identified shared manufacturing space, digital fabrication and allied training programs as a promising opportunity for BCDI to begin building a highly skilled workforce in the borough. A BCDI-partnering organization would not only manage the space, but it would assist businesses with formation, financing, advocacy, technical assistance (e.g. business plans, legal help), as well as facilitate the installation of sustainable infrastructure and sustainable manufacturing practices. Availability of cost-effective space lowers or eliminates barriers to entry for start-up manufacturing firms. The essential

educational components of this project would include on-site job training courses, workshops, certificate-granting programs, and other long- and short-term educational experiences that focus on manufacturing-related skills and concepts such as design and engineering.

Potential targets for a BCDI-run industrial park include food-processing firms that serve anchor institutions; cleantech start-ups; new media enterprises; digital fabrication shops, and design firms.

WHAT IS A SHARED MANUFACTURING SPACE?

One example of a successful shared manufacturing space is the Brooklyn Navy Yard, a multipurpose manufacturing hub on Brooklyn's East River waterfront. The Brooklyn Navy Yard Development Corporation is a nonprofit organization that manages a 300-acre industrial park and leases to over 200 manufacturing, distribution, design, greentech, and media production firms. With access to right-sized space that will never be rezoned, manufacturing at the Navy Yard has flourished. The waitlist for locating in the Navy Yard is long and continues to grow, suggesting there is demand for such a space. By developing and managing similar industrial space, BCDI can take advantage of the demand, encourage employee ownership among tenants, and work to connect Bronx residents with jobs.

Potential targets for a BCDI-run industrial park include food-processing firms that serve anchor institutions; cleantech start-ups; new media enterprises; digital fabrication shops, and design firms.

Existing Assets

This proposed project takes advantage of an abundance of industrially zoned space in the Bronx and the presence of manufacturing start-ups like Big Belly Solar in the borough. The project also leverages NYC's competitive advantage in design and clean-tech and strong publicly funded training programs at CUNY's two-year schools in the South Bronx.

Potential Partners

Oak Point Property and Harlem Commonwealth Industrial Park are adjoining industrial sites on the East River shoreline of the South Bronx. Taken together, they have nearly 21 acres of suitable land for industrial development. The Center for Sustainable Energy at Bronx Community College has longstanding relationships in the renewable

energy and clean transportation sectors, which could be useful in identifying start-up manufacturers in these spaces. A number of labor unions are also poised to collaborate with BCDI on this effort.

Anticipated Outcomes

By owning industrial space, BCDI and its local partners can meet the needs of growing manufacturers already in or moving to the Bronx and potentially could leverage increasing federal investment in digital manufacturing.* In addition, the proposed project encourages job creation, attraction, and retention by promoting local hiring and connecting local high school and community college students with internship or apprenticeship opportunities in the firm. While all tenant firms need not be employee-owned, BCDI would be well-positioned to attract worker coops to the space, promote a cooperative ownership model, and establish labor standards and practices for all tenants to follow.

School-Based Health Centers

The school-to-prison pipeline is a much-discussed topic in underserved neighborhoods of New York City. Healthcare opportunities in the Bronx, however, hold the promise of shifting this trajectory into a new direction: toward job creation. The study team identified school-based health centers (SBHC) as key placement sites for training the borough's next generation of primary care workers. New York State has a \$1 billion healthcare training fund that could

be leveraged for these activities.

Existing Assets

According to the Office of Community Relations and Governmental Affairs at Montefiore Medical Center, the institution already partners with public schools for activities around physical fitness and medical services. The hospital also sees great upside in establishing a school based health clinic at every school in the Bronx. An SBHC training

program connected to a two year CUNY institution like Hostos Community College—already working in the healthcare space—could link internships, a training sequence, and higher ed coursework to culminate in a specialized certificate or degree.

Potential Partners

Currently, SEIU 1199, Montefiore, Bronx Works, Highbridge Community Life, three local universities, and other community partners are participating in the Bronx Healthcare Learning Collaborative. This group is exploring how to funnel Spanish-dominant young people into college and higher-paying professional careers (nursing, social work, physical therapy) in healthcare. Hostos Community College offers extremely successful academic and non-academic programs for aspiring healthcare professionals, including dental hygienists, licensed practical nurses, and x-ray technicians. In addition, The New York Alliance for Careers in Healthcare (NYACH), launched in 2011, and supported by the New York City Workforce Innovation Fund and the National Fund for Workforce Solutions is working with the Community Healthcare Association of New York State, the Greater New York Hospital Association, the Southern New York Association, and 1199's Training and Education Funds to create employer-led workforce partnerships that address the needs of acute, long-term and primary healthcare facilities. Partners conduct strategic workforce planning, secure commitments from healthcare institutions to hire low-income New York City residents, and invest in training existing

workers for career advancement. In addition to employers, NYACH also engages service and training providers, representatives from local medical centers, and university research institutions to inform NYACH's work, implement training, and conduct long-term research on training in the healthcare industry.

Anticipated Outcomes

SBHCs would provide dental care, primary care and reproductive health services that are accessible, holistic, and culturally appropriate for a diverse Bronx population. But beyond direct healthcare service provision, SBHCs can serve as community hubs that intentionally conceive of health and wellness holistically and provide the larger community with opportunities to address health through this lens. In one scenario, SBHCs would become community centers for wellness, offering exercise classes, walking groups, cooking demonstrations, and meditation.

As noted earlier, the healthcare sector is growing rapidly - New York State is projected to see a 21 percent increase in healthcare spending over the next 7 years. SBHCs can serve as a point of entry into this sector for students who might otherwise not access this kind of training or even consider these types of jobs as viable career paths. By increasing the access of Bronx residents to training and employment in the expanding healthcare sector, BCDI will also increase the likelihood of better health outcomes for Bronx County.

Rooftop Hydroponic Agriculture

Millions of square feet of underutilized rooftop space on the borough's industrial buildings was identified by the study team as a promising untapped resource for the cultivation of culinary herbs and salad greens. A number of business models exist for rooftop agriculture but New York's only operational business in the space is Gotham Greens, which manages a 15,000-square-foot rooftop space in Greenpoint, Brooklyn. Due to demand for its products, Gotham is seeking space throughout the five boroughs to expand its square footage and increase its output.

Existing Assets

The City of New York owns the three principal wholesale markets that serve as the city's portals to the regional food system. These three markets—the Hunts Point Terminal Cooperative Market (produce); the Hunts Point Coop Market (meat and dairy); and the Fulton Fishmarket—along with four other publicly owned buildings inside the Hunts Point Food Distribution Center have sizable rooftops that may be suitable for hydroponic cultivation. In the summer of 2012, the New York City Economic Development Corporation requested bids to convert a 200,000-square-foot rooftop in the Food Distribution Center into a hydroponic greenhouse operation.* Co-locating a hydroponic operation alongside

* New York Daily News, June 12, 2012 <http://www.nydailynews.com/new-york/bronx-biggest-rooftop-farm-world-bloomberg-administration-plan-article-1.1094371>

these prodigious distribution assets will significantly reduce food miles and the negative transportation impacts often associated with trucking food through the South Bronx.

Potential Partners

The NYC Economic Development Corporation is a potential project partner for BCDI, as are a number of private commercial property owners active in the Hunts Point peninsula. Subcontracting relationships with Gotham Greens and its emergent competitor, Bright Farms, could also be explored. Sustainable South Bronx, an environmental advocacy and job-training group, is planning to launch a workforce development program in hydroponic agriculture and could provide the technical resources needed to prepare Bronx residents for greenhouse jobs. Each of the borough's anchor institutions are prospective customers for hydroponic produce—from cafeteria salad bars at Fordham's dining halls to the catering facility at the New York Botanical Garden.

Anticipated Outcomes

The study team projects creation of skilled and semi-skilled jobs in distribution, marketing, cultivation, logistics, and cold chain compliance in this opportunity area. According to Gotham Greens, a 75,000 square-foot rooftop hydroponic operation can support up to 50 jobs. But beyond the simple employment math, the proposed project holds the promise of diversifying

the borough's economy, enhancing its environment by reducing food miles, and reducing the host building's energy costs through reuse of waste heat and an added layer of insulation to the roof membrane. The most promising local markets would be accessed via a "take-off" contract with

Montefiore's cafeteria operator or with the Botanical Garden's catering service; opportunities to supply fresh produce for local residents would have to be further explored.



LONG-TERM PROJECTS

R&D Cooperative

The study team identified research and development activities aimed at Bronx manufacturers as ripe for exploration by BCDI. Keeping Bronx (and other) manufacturers on the cutting edge of their industries, ensuring that workers are properly trained, and assisting companies and workers in transitioning to new products would add enormous value to the borough's economy, according to the study team.

This proposed project is modeled after an initiative of Spain's Mondragon Corporation. A specialized type of Mondragon co-op performs R&D for other industrial cooperatives within the business groups' network. The R&D coops help sister enterprises manage change and develop new technologies for the production process.

To advance a borough-based innovation economy, the study team recommends that BCDI directly invest in innovation. An R&D cooperative or center can serve not only as a hub of practical information, training, and guidance but can become one of the institutions that bind firms together.

Because of the shared services that the R&D center could offer, it will be well-positioned to promote collaboration among firms. This collaboration could lead to a dense network of cooperatives and other firms that partner on product development and technology

deployment. Such a scenario could insulate the local economy from periodic shocks by helping workers move seamlessly between firms for re-training and re-deployment as technology changes and products go in and out of demand.

Potential Partners

Fordham University and Lehman College both have pre-Engineering curricula to prepare students for next level engineering studies. Albert Einstein Hospital also has a growing focus on biomedical engineering. The City University of New York's Grove School of Engineering offers access to internationally renowned researchers and scholars, as well as graduate students seeking real-world engineering challenges. Bronx Community College's Center for Sustainable Energy continues to prepare workers in the borough for leading edge jobs in the renewable energy and clean transportation sectors. The study team recommends that BCDI explore partnerships with these institutions to advance the R&D initiative.

Anticipated Outcomes

An R&D firm not only presents opportunities for direct employment at the R&D firm, but the innovations developed there help sustain existing companies as well as develop new companies. The proposed can also help attract and retain engineers and researchers in the community and help re-brand the borough as a hotbed for innovation and technology.

Cogeneration and District Energy

The study team envisioned a series of “energy districts” across the Bronx that aggregate the energy demand of particularly high energy consuming neighborhoods through cogeneration. If BCDI can work with hospitals, public housing and other anchor institutions to first build district energy infrastructure, and second, extend their district to the adjacent neighborhood, the Bronx can increase its energy independence and security while also transitioning to a more efficient and cleaner source of energy. If the energy generated by the system exceeds the demand for the district, it can be sold back to the grid, generating revenues for the district participants.

What is cogeneration and district energy? Cogeneration captures the heat that is generated in electricity production and channels it into intentional heating. Routing the byproduct heat or steam from the electricity-generating process through a set of buildings--usually a dense area such as a central business district--creates a district energy system that is serviced by this system of combined heat and power. District energy can also include cooling, which uses seawater (or another water source) to run chilled water to buildings.

Existing Assets

The Bronx holds great potential to install a series of district energy systems. The high density and high energy consumption along

the Grand Concourse provides several site options to install cogeneration plants to service different segments of the Concourse through district energy. Furthermore, there is significant potential through hospitals, which are across the board the highest energy consumers of the Bronx. Given the heavy economic losses due to prolonged power outages of Hurricane Sandy, many hospitals and other large institutions are already looking to install cogeneration plants as an adaptation measure to protect themselves from the surge of expected extreme weather events to come.

Potential Partners

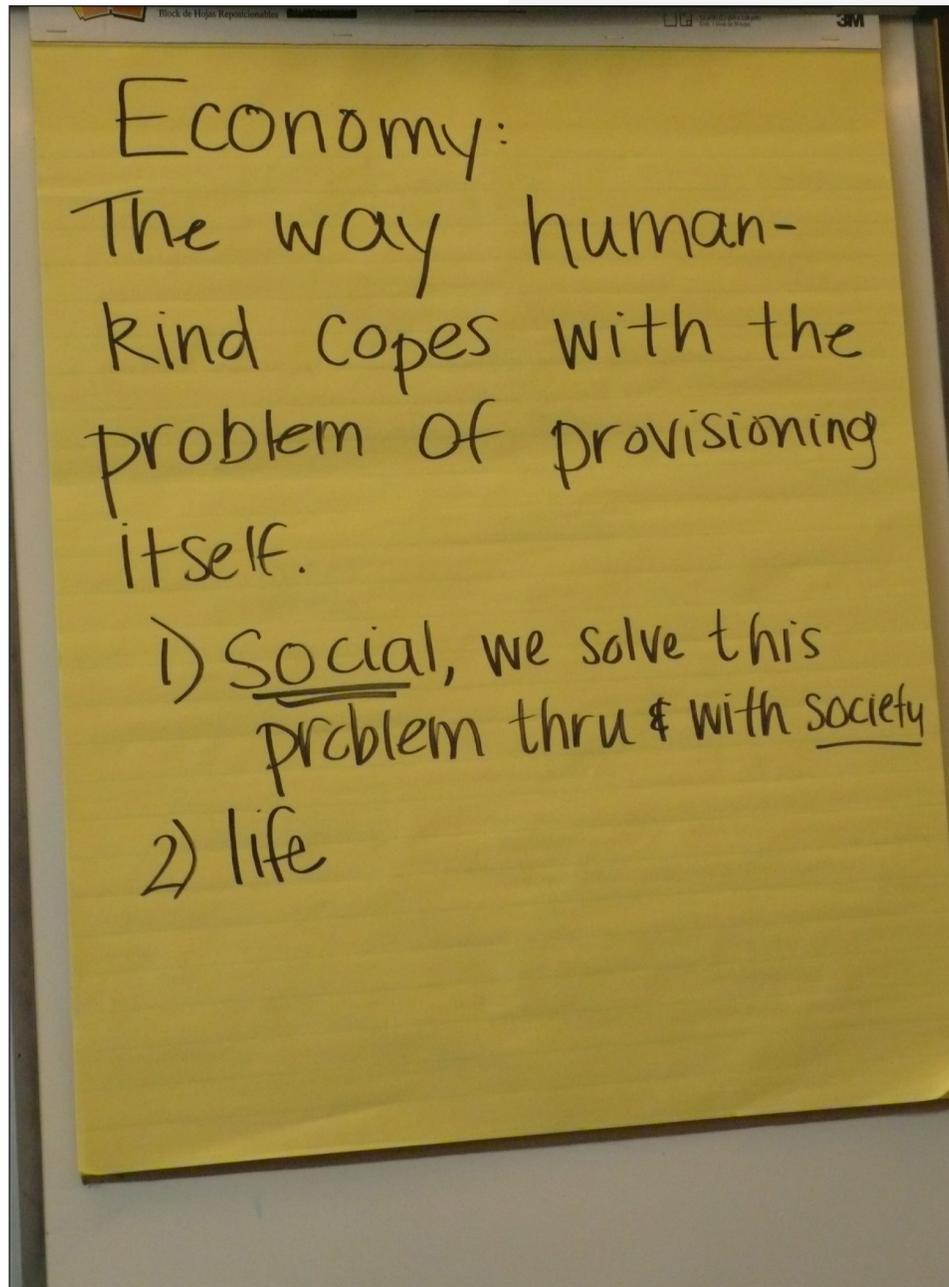
Bronx Hospitals, NYCHA developments, and Hunts Point Terminal markets are all potential high energy-consuming partners that are in close proximity to dense residential neighborhoods that could potentially form energy districts. Montefiore Medical Center has begun to implement cogeneration facilities, a critical first step in establishing an energy district. The Department of Energy, the Emerald Cities Collaborative (a national non-profit that is focused on reducing energy consumption in urban communities while creating high road jobs in communities of color), and the Department of Urban Planning and Studies at MIT are potential technical partners.

Anticipated Outcomes

Energy districts have the potential to provide a host of benefits to the community, including: reduced capital and maintenance costs for individual institutions; increased collaboration between anchor institutions

and community residents; lowered energy consumption; lowered energy costs; shared revenue generation to support community benefits; job creation in construction, operations and maintenance; and

environmental benefits including: increased resource efficiency, reduced air pollution, increased use of renewable energy, and adapting to climate change.



Community leaders developing how they define economy.



PART 5: CONCLUSIONS AND NEXT STEPS

Much of the opportunity in the Bronx lies in improving coordination of key institutions and adopting a collaborative framework for moving the borough forward. The development concepts identified in this study provide a framework and the projects proposed by the team offer specific opportunities to advance the involvement of anchors and other stakeholders in building the Bronx's capacity for sustainable, democratic wealth building. While the purchasing and job-creation capacity of anchor institutions are central to the community development proposals put forth in this study, the needs, aspirations and engagement of the larger community are critical for a broader democratic process.

BCDI must continue its efforts in the short term to:

Meet with procurement managers of Bronx anchor institutions to discuss specific local supply chain opportunities;

Launch a series of planning sessions with all local stakeholders around the business development proposals contained in this study;

Advance high-level conversations with the principals of Bronx anchor institutions to explore potential partnerships around the proposals contained in this study;

Cultivate and strengthen relationships between anchor institutions and other local stakeholders to align the reinvestment, social development and environmental priorities of Bronx anchors with the mission of BCDI and its local partners; and

Establish capacity to incubate and capitalize community businesses that, to the extent feasible, align with the development concepts articulated in this report while serving the needs of the anchor institutions and local residents.

Many of the proposed projects in the development study present opportunities for business creation or expansion in the Bronx, notably around the model of import substitution. As noted throughout this report, the long-term success and scalability of these business proposals largely depend on commitments from anchor institutions to engage in local procurement from the enterprises that grow out of BCDI's efforts. In other cities like Cleveland and Detroit where anchor institutions have collaborated with community development initiatives

around redirecting anchor-procurement streams, these institutions have realized not only significant community revitalization outcomes through new local job creation but also competitive advantages in the marketplace through customized, enhanced services.

These models demonstrate the power and viability of anchor-based economic development strategies; however, BCDI can improve upon the traditional anchor strategy in two key areas. First, BCDI's development proposals are informed by extensive community engagement and visioning—meaning that not only will business development respond to area needs but local residents, as drivers of the development process, are heavily invested in the long-term success of new community enterprises.

The second area where BCDI can advance anchor strategy is through its three-pronged Business Filter evaluation tool. As noted above, the Filter is designed to assess the viability of each business proposal as well as its compatibility with economic and community development goals. Using indicators such as local workforce-readiness assessments, startup-capital-to-jobs ratios, measurements of local anchor demand, and community-impact projections, BCDI has fashioned a tool to gauge feasibility. The strategic benefit of the business filter is that it will identify only those proposals with the greatest likelihood to succeed, to be taken to scale, and to bring about meaningful community benefit for the people of the

Bronx. To multiply the local impacts of the Business Filter model, BCDI should:

Brief decision-makers at the borough's public and private economic development organizations on the approach;

Brief CRA lenders and tax-credit finance professionals active in the borough; and

Brief elected officials and key staffers on the Filter's applications as a decision-making tool to better inform the evaluation of subsidy, financing, relocation packages for businesses seeking them.

The goal of this study is to provide community members and decision-makers new “ways of seeing” the borough that fully appreciate all its assets, its complexity, and the very real opportunities for transformative action; and to furnish a strategic vision and specific tools and metrics that public- and private-sector actors can use to enhance economic opportunity and quality of life within the Bronx. Rather than rekindle old debates about the meaning of past failures, successes, and missed opportunities in the borough's pursuit of jobs and economic development, the study team hopes that this report sparks a concerted, multiparty effort to reorder development priorities, better leverage borough assets, and aggressively seek out opportunities to pursue cooperative and shared-success models for the people of the Bronx.

APPENDIX A: STUDY TEAM AND PARTICIPANTS

This development study was designed and executed by a team of faculty, staff, students, and consultants at the Department of Urban Studies and Planning at MIT and Commonwise. Members of the study team include:

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The MIT team worked closely with an array of partners at both Bronx and city-wide organizations and enterprises and consulted close advisers at the borough's anchor institutions. Individuals whose ideas and guidance informed this study include:

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*New York Industrial Retention Network
Pratt Center for Community Development*

AMALGAMATED
HOUSING CORPORATION

ANGELA FERNANDEZ

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JOHN CALVELLI

Wildlife Conservation Society ("Bronx Zoo")

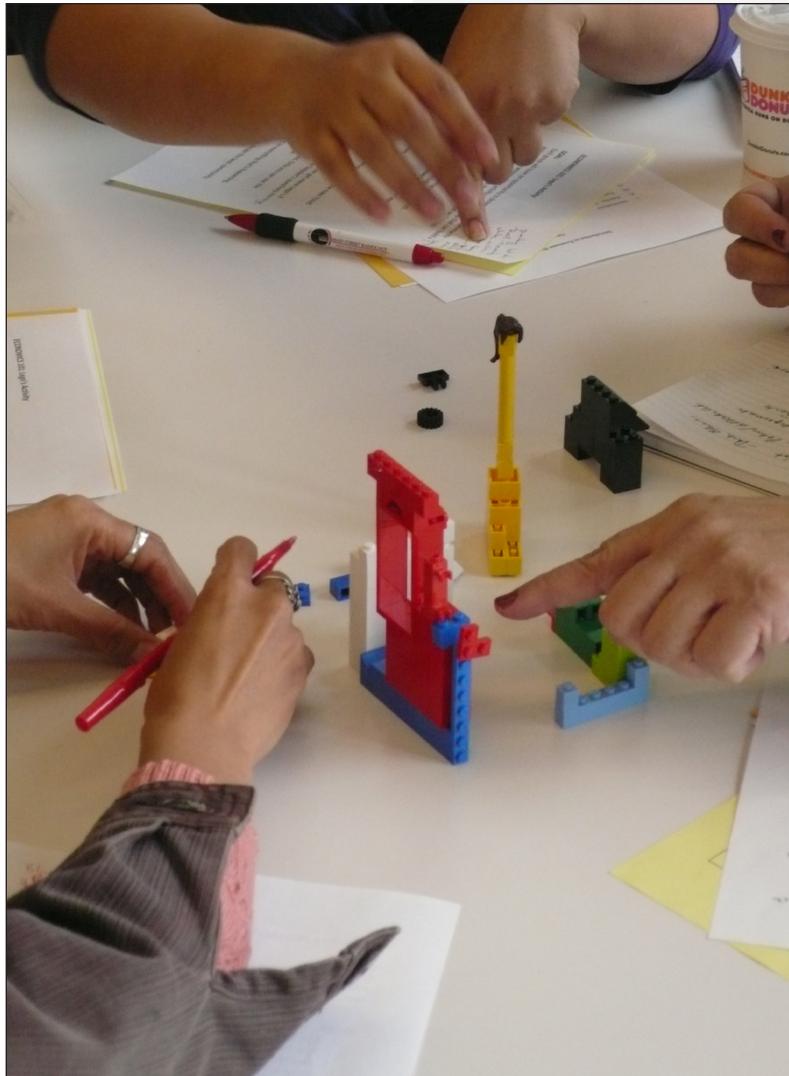
DR. FELIX MATOS RODRIGUEZ
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SISTAS AND BROTHAS UNITED

SUNSHINE BUSINESS DEVELOPMENT INCUBATOR

WANDA SALAMAN
Mothers On The Move





APPENDIX B:

OPPORTUNITY SECTORS

Drawing upon study data, metrics, precedent, and exhaustive interviews, the Team identified five sectoral clusters for projects that could serve BCDI’s objectives: Manufacturing, Health, Food, Energy and Education.

Manufacturing is a linchpin of economic activity that connects people to place through jobs that can put low-to-medium skilled workers in positions to achieve sustainable careers. By replacing imports with products made in the Bronx, the economy becomes more resilient and grows. Further, with respect to advanced manufacturing, innovation becomes a driver of economic change over the medium term.

Health is a crosscutting dimension of economic development that has the potential to “thicken” relationships between seemingly disparate actors and efforts. Good jobs, transportation, food, open green space, manufacturing, access to quality medical care, education, rates of incarceration and unemployment, participation in the arts—all of these things are linked together by health. The vitality of the borough’s healthcare sector itself is a source of economic potential, as well as a key determinant of economic success across sectors.

Food is linked to good nutrition and wellness, while providing family-sustaining careers that can add great value to communities. It is an urgent dimension because the current trajectory of the food system in the Bronx has often contributed to poor health outcomes and employment that is temporary and low-paid.

Energy costs will always be a limiting factor for local enterprises across sectors. Yet in the Bronx, a number of local organizations have built a track record in distributed energy generation, energy efficiency work, and weatherization.



Education is the basis for creating a flexible and creative workforce and the essential link between economic productivity and life-affirming jobs. While education as a sector itself presents manifold opportunities for sustainable job creation, it also has the

capacity to improve outcomes for workers across multiple sectors. The preponderance of higher education institutions in the Bronx makes this sector particularly promising for development purposes.

APPENDIX C: ASSET ANALYSIS

The data underlying this analysis can be found in the accompanying Data Supplement.

SEVEN FORMS OF CAPITAL

1. HUMAN CAPITAL

The knowledge, skills, attributes and health of individuals that contribute to the building of organizations and institutions.

2. SOCIAL CAPITAL

The institutions and relationships that build community strength to generate wealth and overcome obstacles.

3. ECONOMIC CAPITAL

The stock of unencumbered monetary assets invested in other forms of capital or financial instruments, as well as economic and financial structures and institutions.

4. ENVIRONMENTAL CAPITAL

Naturally occurring assets derived from renewable and non-renewable resources, such as air, land, water, minerals, flora, fauna, and the broader ecosystems, natural features, and the land forms in which they exist.

5. PHYSICAL CAPITAL

Capital imbedded in fixed assets – like buildings, infrastructure, and land – and in basic infrastructure – shelter, energy and communications, as well as equipment for the production and distribution of goods.

6. TRANSPORTATION CAPITAL

The transportation infrastructure and ease of access to that infrastructure, as well as its efficacy in aiding mobility.

7. POLITICAL CAPITAL

The ability to influence the distribution of resources within a social unit, decision-making about policies that affect populations within that unit, and the planning processes that are determinative to the future well-being of those populations.

Under **human capital**, the team prioritized ZIP codes with high population densities in order to impact more people. Given the history of racial exclusion in New York City, the team prioritized high minority concentrations as a reliable proxy for poor health, low income, and disproportionate unemployment. ZIP codes with large concentrations of youth and elderly people and elevated levels of primary healthcare needs were ranked high. The team also elevated ZIP codes in which poor food consumption, lower education levels, and non-English speakers predominated (Tables 1-19).

Under **social capital** we looked for ZIP codes with large numbers of community organizations and union members as an indicator of high capacity for collective action (Tables 20-21).

Key **economic capital** indicators for prioritization included low income, concentrations of workers in blue collar and service jobs, and people employed in the five key industries for development identified by the study (Tables 22-39).

The team identified as strong prospects those ZIP codes with the least **environmental capital**, including those with a large numbers of brownfields, high levels of energy consumption, and poor air quality (Tables 40-46).

ZIP codes with **physical capital** indicators that pointed to rapid increases

in housing units were examined closely. Significant increases in Section 8, low-income housing were often accompanied by large influxes of immigrants. However, in ZIP codes with rapid increases in housing units alone (not Section 8), gentrification was more likely the explanation. Areas with low homeownership rates and high rates of vacant land were also prioritized, as were areas zoned for mixed and commercial uses, given the desirability of such land for development purposes (Tables 47-56). High concentrations of municipally owned land in the southwest Bronx, was considered suggestive of opportunities to influence the use of the land by harnessing local political capital (Table 54).

Considering **transportation capital**, the team prioritized ZIP codes with high levels of transit availability and use.

In an effort to determine where BCDI's strongest **political capital** might reside, the team looked at political subdivisions from borough community boards to Congressional districts (Tables 59-63); focusing on subdivisions with large concentrations of minority, voting-age population (Tables 64-66). The team also sought to identify the areas where community-based organizations (CBOs) might have the greatest influence, prioritizing the ZIP codes in which such organizations had significant catchment areas.

However, the team also sought to isolate meaningful measures of political marginality—in this case, lack of influence and control over policies with extreme negative effects on the community. For this, the team examined impact on minority neighborhoods of New York City’s controversial “stop and frisk” program, which authorizes police stops on the basis of, among other things, suspicion of drug possession. Data show that in New York City, although self-reported marijuana use is highest among whites, African Americans and Latinos are much more likely to be arrested for this behavior. (Tables 68-

69). The persistence of the program despite widespread minority communities’ outrage, suggests minorities’ diminished political capital.

As the diagram below indicates, Bronx ZIP codes were then ranked based on the relative strength of the capital forms relevant for development purposes, as well as significant needs, yielding a suggested priority list of critical areas for development under the BCDI effort.

SPATIAL ANALYSIS BY ZIP CODES

- Geographical Analysis by Zip Codes: Prioritization Areas for Intervention



14

From this data analysis, the two priority areas to emerge were in the Northwest and Southwest Bronx. Compared to other sections of the borough, these areas shared the following set of characteristics:

- Higher population density
- Lower homeownership rates
- Higher levels of health needs
- Lower educational levels
- Lower household income
- Higher unemployment rates
- Higher degrees of environmental problems
- Lower percentages of workers with management or professional jobs

At the same time, these areas in the Northwest and Southwest Bronx had significant development assets:

- High density of CBOs and strong levels of civic leadership
- Higher number of anchor institutions
- Significant health and environment assets, including the FRESH program, and the Million Tree Program
- Zoning designations more conducive to mixed-use development including small, clean advanced manufacturing uses.

Following the geographic prioritization, the data on the seven forms of capital were subjected to structural, spatial, and thematic analyses. Structural analysis reveals the mechanisms, practices, and processes that tend to create and perpetuate marginality; procedural mechanisms that skew decision-making and resource allocations; financial arrangements that tend to ensure resources and wealth flows out of the Bronx; and cultural practices and identities that legitimize and reinforce the previous three processes.

APPENDIX D: BUSINESS AND PROCUREMENT TRENDS

BUSINESS TRENDS

Overall Business Trends

Healthcare

Healthcare, a critically important sector for the Bronx, continues to show robust growth nationally and locally. Over the last five years, healthcare job growth nationally has outpaced employment trends overall. The healthcare sector accounts for one out of every six of the jobs created in 2012 so far, according to calculations made by the US Bureau of Labor Statistics. Health sector employment in New York grew by almost 9 percent between 2003 and 2008. By 2008, the New York City region had more than 424,400 health sector jobs*. In New York City, occupational growth areas include home health aides, registered nurses, licensed practical nurses, emergency medical, and laboratory technicians.

Green Jobs

According to a 2011 study by the New York City Labor Market Information Service, and the New York State Department of Labor, the largest industrial sectors are greening substantially, with 31,000 employees in the renewable-energy sector statewide. Though

* New York State Department of Labor ES-202

to some extent, growth of the category is the result of transformation of existing jobs, there is some evidence of expansion in building services (janitors/cleaners/porters, supervisors of building and grounds workers, and general maintenance and repair workers; as well as emerging job categories like energy manager, commissioning/retro-commissioning agent, energy auditor, and head of sustainability), professional services (civil engineer, drafter, mechanical engineer and electrical engineer), efficiency component manufacturing (such as heating equipment, photovoltaic panels, and energy storage systems), transportation, and urban forestry.

New York City enacted the Greener, Greater Buildings Plan in 2009. Local laws now require, among other things, annual benchmarking of building energy performance and retro-commissioning. The City estimates that the laws will generate \$700 million in savings and create roughly 17,800 construction jobs over 10 years.** In addition, on-bill financing legislation enacted

** thinkprogress.org/climate/2012/10/16/1014011/how-energy-efficiency-creates-high-value-well-paying-jobs/

in 2008 is providing a vehicle for financing retrofits and creating opportunities for expansion of this work, particularly in the residential sector. Finally, sophisticated building management systems and energy information portals are becoming more common among real estate companies and larger buildings, bringing together IT, telecommunications, and energy data management to address demand for lower carbon footprints and higher energy-efficiency standards. Current green jobs

employers indicate that their employees require enhanced skills and numerous New York City programs now are seeking to meet the demand for a more highly skilled workforce.*

* E.g., Thomas Shortman Fund's 1000 Superintendents Program, the CUNY Institute for Urban Systems Building Performance Lab training for Operating Engineers and New York City Public School Custodians, and the Urban Green Council's G-PRO program, developed in cooperation with a number of labor unions, targeted to construction and building services workers.

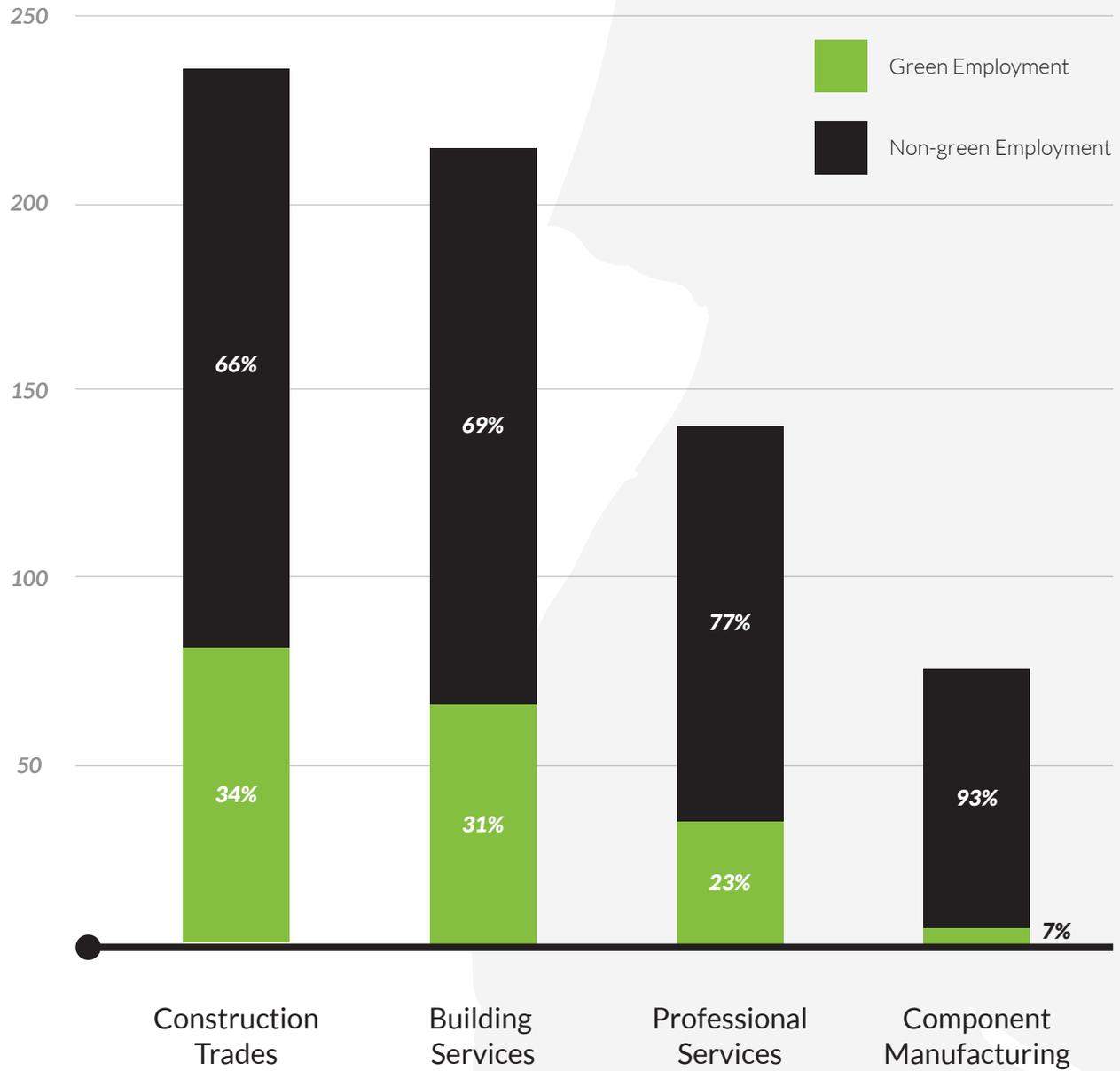
New York City Employment Projections for Healthcare Occupations, 2006 - 2016

Occupation	2006	2016	2006 - 2016 Growth		Average Annual Openings
			Number	Percentage (%)	
Home Health Aides	81,830	115,200	33,370	40.8%	4,070
Registered Nurses	69,620	78,930	9,310	13.4%	2,080
Nursing Aides, Orderlies, and Attendants	44,090	48,460	4,370	9.9%	840
Licensed Practical Nurses	14,800	16,110	1,310	8.9%	530
Medical and Health Services Managers	13,800	14,500	700	5.1%	330
Medical Assistances	7,060	9,440	2,380	33.7%	330
Dental Assistants	5,520	7,080	1,560	28.3%	260
Pharmacy Technicians	4,760	5,530	770	16.2%	230
Pharmacists	5,480	6,630	1,150	21.0%	220
Medical and Public Health Social Workers	5,250	6,120	870	16.6%	200
Physical Therapists	4,540	5,590	1,050	23.1%	160
Emergency Medical Technicians and Paramedics	6,040	6,650	610	10.1%	130
Clinical, Counseling, and School Psychologists	5,390	5,710	320	5.9%	110
Medical and Clinical Laboratory Technicians	4,560	4,990	430	9.4%	110
Surgical Technologists	2,610	2,870	260	10.0%	110
Medical and Clinical Laboratory Technologists	4,770	5,110	340	7.1%	100
Medical Records and Health Information Technicians	3,010	3,240	230	7.6%	100
Occupational Therapists	3,260	3,710	450	13.8%	100
Radiologic Technologists and Technicians	3,860	4,260	400	10.4%	90
Dental Hygenists	1,590	2,050	460	28.9%	80
Medical Secretaries	2,790	3,170	380	13.6%	80
Physican Assistants	2,820	3,210	390	13.8%	80

Source: NYS Department of Labor, Labor Market Information, Occupational Outlook, 2006 - 2016

Distribution of Jobs across Sectors

New York Statewide Employment
(in 1000s)



Adapted from: Center for American Progress, New York City Green-Collar Jobs Roadmap (2009)

Manufacturing

Though dramatic, the decline in manufacturing jobs also represents a significant shift toward offshore, low-skill, low-wage manufacturing. In 2010, the nation had 11,000,000 relatively high-paying manufacturing jobs. Manufacturing enterprises in New York City face formidable barriers, including high labor and utility costs, overworked infrastructure, a dense urban fabric, and zoning and land-use policies that encourage real estate speculation. Yet the city's prime location, its diverse and talented workforce, and its large and sophisticated local consumer base offset these disadvantages. In the Bronx, 222 manufacturing firms currently leverage these and other assets to produce a wide variety of goods.

Moreover, the Brooklyn Navy Yard, a City-owned, multiuse industrial park on 300 acres along the Brooklyn waterfront housing over 330 businesses and 5,800 employees, has emerged as a successful model of urban industrial development. Its economic output of nearly \$2 billion annually supports 10,350 direct and indirect jobs and \$390 million in earnings.* With a long and growing waitlist for businesses seeking to locate in the Brooklyn Navy Yard, there may be a market for additional flexible, campus-based multiuse space that leverages the significant unused industrial spaces in the Bronx.

* Brooklyn Navy Yard, An Analysis of Its Economic Impact and Opportunities for Replication." Pratt Center for Community Development (2013).

Advanced manufacturing—involving the use and coordination of information, automation, computation, software, sensing, and networking, and/or use of cutting-edge materials and emerging capabilities enabled by the physical and biological sciences—is growing.** Between 2004 and 2008, employment numbers in advanced manufacturing, including computer and electronics, increased by nine percent. Advanced manufacturing has the potential to build the local capacity for creativity, flexibility, and innovation, fostering greater economic resilience and furthering key BCDI development goals.

** President's Council of Advisors on Science and Technology, *Report to the President on Ensuring American Leadership in Advanced Manufacturing*, June 2011, p. ii.

Small Business Growth Trends

In the small business sector (comprised of firms with up to 50 employees) growth areas include:

Health services:

This industry will continue to grow as healthcare reform takes root and the US population continues to age. Areas of particular growth include home care provision, elderly and disabled services, and physical therapy.

Green products and services

Despite the recession, green products and services continue to thrive both with consumer and business buyers. The biggest opportunities are on the business-to-business front, as businesses begin to hire in-house sustainability experts to think about their overall environmental impact. Green and environmental consulting services are projected to grow nine percent a year through 2016, as are remediation and environmental cleanup services, such as removing hazardous waste or cleaning up wastewater.

Educational support

Educational testing, trade and technical schools, business coaching, and employment recruiting are areas predicted to show steady growth. IBISWorld reports the industry grew an average of six percent each year for the past five years and is projected to sustain this level for the next five, netting out at an approximately \$19 billion market in 2016.

Internet and technology

Increases in broadband availability and technology devices as part of daily life continue to drive demand for innovative technology. Work in this sector is divided into two types at a high level: (1) highly innovative startups that tend to be creating a new technology and are well capitalized for R&D; and (2) businesses that provide services to help other businesses with their technology needs.

Residential and commercial construction

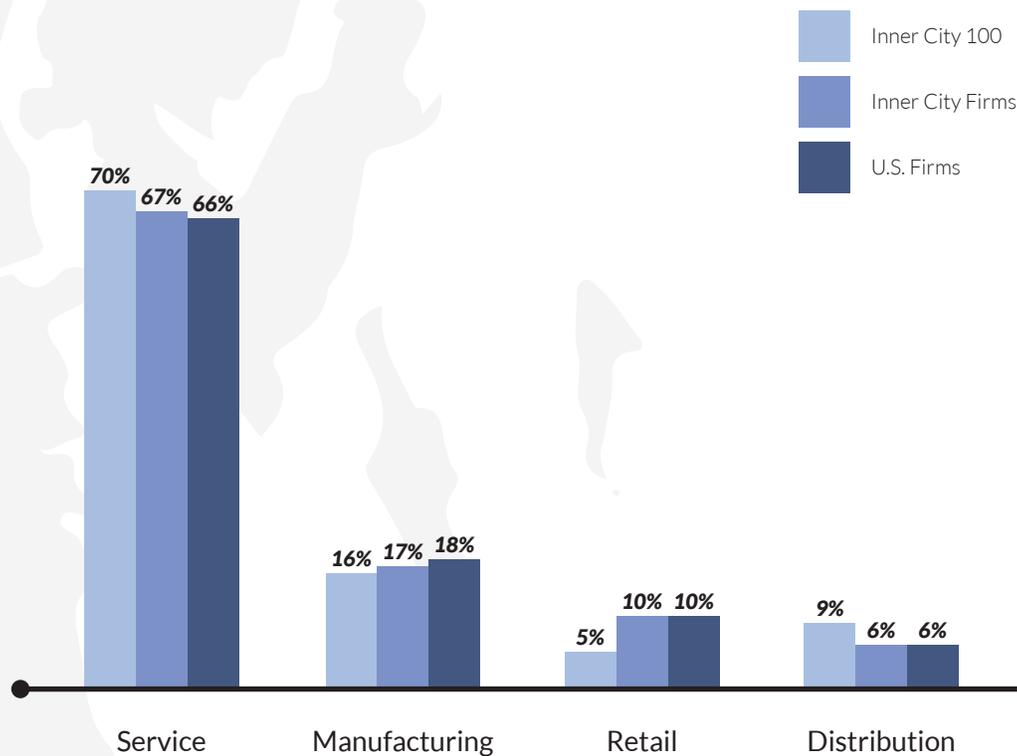
Although hard hit by the recession, analysts project that construction is going to bounce back, with projected growth of 12 percent annually in the next five years. This will result in the need for contractors and specialty subcontractors such as drywall and glass contractors.

Urban Business Growth Trends

Research by the Initiative for a Competitive Inner City (ICIC) suggests that high-growth urban businesses are more likely to be in the

service sector (particularly distribution) and to focus on the business-to-business market, where demand is more stable and regionally focused than in the retail sector, which tends to serve local consumers.

Distribution of Jobs across Sectors



Sources: ICIC analysis of Inner City 100 survey data, 1997-2007, n = 134
Kauffman Firm Survey Data, 2004-2006: Inner City firms, n = 426, U.S. firms, n = 4,920

Fast-growing urban firms tend to share these characteristics:

- **Service Area:** They focus beyond the local to build a broader footprint in the region.
- **Foundational Demand:** They share a strong base of government contracts or predictable demand from a large anchor institution.
- **Investment in Workers:** They invest more in training and employee benefits than the average urban or small business, reaping higher levels of employee satisfaction, retention, and productivity.

The top 40 ranked firms in the ICIC's 2012 Inner City 100 show a clear bias toward higher-skill and higher-tech service jobs, many of which are in the technology sector. Inner City 100 businesses were adept at leveraging unmet business-to-business service needs in their local markets, for which there might be an advantage to

having a local service provider. Many of these businesses capitalized on areas in which other, larger businesses might want to outsource activities for cost-savings or to gain access to specialized technical skills that would improve the overall quality of their end product/service to their clients.

ICIC TOP 40 FIRMS

Company Name	Revenue	5 Year CAGR [^]	Description
Coyote Logistics	\$327,948,040	295%	Trucking transportation and logistics services for businesses
Revolution Foods	\$17,860,869	144%	Food, vending, nutrition education to schools and other institutions
DMC Consultants	\$4,605,097	115%	Consulting, construction, demolition, and environmental work for government clients.
CSI	\$24,303,879	104%	Information technology (IT), advisory and assistance, engineering, and professional services
InGenesis	\$51,595,021	102%	Medical staffing / contract healthcare
Neutron Interactive	\$14,484,333	93%	Online marketing
Prometheus Research	\$3,788,413	92%	Integrated data management services for research organizations and funding agencies
PMG Project Management Group	\$3,066,064	91%	Project Management
The Menkiti Group	\$4,963,365	81%	Real estate
Ace Exhibits	\$4,968,552	75%	Provider of pop up displays and trade show exhibits displays
Hillard Heintze	\$6,885,379	71%	Security and investigative services
Sunset Healthcare Solutions	\$3,174,755	66%	CPAP (breathing therapy) and oxygen supplies manufacturer and distributor
Ortega Group	\$6,724,100	63%	Real estate
Bevilacqua Research Corporation	\$30,767,478	62%	Provides scientific consulting services to government clients
Rise Interactive	\$2,255,121	60%	Online marketing
Gonzalez Companies	\$5,475,558	59%	Construction management services
Sensis	\$8,606,299	58%	Cross-cultural advertising agency with digital focus
Dean Media Group	\$9,006,302	56%	Media and technology company working exclusively in the financial category
Accurate Autobody	\$13,892,752	55%	Auto detailing
AIL	\$12,979,548	55%	Provides life insurance and supplemental health benefits to working families in several countries**
Luggage Forward	\$2,611,400	55%	Guaranteed luggage, ski, and golf club delivery to more than 200 countries worldwide

Company Name	Revenue	5 Year CAGR [^]	Description
Gelato Giuliana	\$1,171,039	54%	Manufacturer of high quality gelato
TCG	\$10,111,144	53%	Government technology strategy and IT consultancy
NewBath	\$7,914,443	53%	Bathroom remodeler serving homeowners in Houston, Baton Rouge, and New Orleans
SEER Interactive	\$2,131,033	50%	Analytics professional services firm
Atomic Data	\$5,140,741	48%	Data center facilities offer highly secured, redundant, and bandwidth-rich web services
Emma	\$13,594,404	47%	Email marketing for small and mid-size businesses, nonprofits, and agencies
Centro	\$115,722,271	46%	Technology support for ad agencies across platforms
Astyra	\$14,520,068	45%	IT Outsourcing
Network Deposition Services	\$2,038,124	45%	Court reporting & legal videography
DeatschWerks	\$1,497,359	44%	Fuel injectors, fuel pumps and accessories
Sunago Builders	\$3,490,666	40%	Building and construction (primarily commercial)
Red Door Interactive	\$12,152,962	39%	Interactive marketing
Federated IT	\$12,290,114	39%	Technology support for ad agencies across platforms
Premier Organics	\$4,309,267	38%	Maker of organic butters and spreads
Specialized Therapy Services	\$3,759,496	37%	Myofascial release therapy
Navigator Management Partners	\$13,732,755	36%	Business systems consulting firm
Petrelocation.com	\$3,527,305	36%	Domestic and international, door-to-door pet transport and pet travel services
Net Health Systems	\$7,472,083	35%	Integrated clinical, financial, regulatory software for wound management
Aptera	\$3,166,519	35%	Custom software and web marketing

[^] Compound annual growth rate

^{**} United States, Canada, New Zealand and Ireland

PROCUREMENT TRENDS

Overall Procurement Trends

Around the US, local sourcing efforts have been successful in a multitude of areas including:

- Local food and food services
- Building and grounds services
- Office supplies & printing and marketing collateral
- Waste removal, management and recycling
- Couriers and car services
- Information technology services, such as IT support
- Temporary employment agencies
- Conversion of paper records to electronic records
- Installation of solar panels, building retrofitting, and weatherization services

Small local minority- and women-owned businesses (M/WBEs) face two threshold obstacles to accessing anchor procurement streams: (1) procurement officers may have difficulty finding them; (2) they may not have the capabilities needed to serve the complex and niche needs of large procurement institutions. In addition, three major forces currently shape procurement practices nationally and locally, presenting barriers and opportunities for small and M/WBE business development:

Supplier consolidation

Procurement officers in major institutions

are focusing on lowering the aggregate number of vendors in their supply chain to leverage economies of scale. Proliferation of large contracts and complex request-for-proposal (RFP) processes through group purchasing organizations (GPOs) keep small vendors from competing. GPOs are gaining a particularly strong foothold in hospital and education procurement. M/WBEs have succeeded in working around this trend by partnering with larger vendors seeking to fulfill diversity requirements in large government contracts. Also by pursuing “on demand” work—institutions’ last-minute needs that require quick turnaround—nimble and smart small businesses have won inclusion on these institutions’ “preferred list” of companies willing to work on a moment’s notice. Though not providing the stable demand most businesses seek, this approach can serve as a potential starting point for evolving to a longer-term contract.

Supplier Diversity

For government contracting, firms are typically measured on the percentage of procurement dollars spent with diverse suppliers. Some will focus on increasing procurement spending with existing M/WBE suppliers rather than on creating a broader set of relationships. Legal precedents requiring “baselining” levels of prior discrimination can frustrate efforts to diversify the vendor base in certain industries.*

* Adarand, 1995

E-Commerce

Many large companies are moving to an electronic vendor system that invites vendors to apply to become part of their procurement database. This opens the door for smaller businesses to join the purchasing pool, particularly of companies that are specifically seeking to diversify their suppliers and/or support local procurement. Successful small businesses need in-house technological capacity to connect with these systems.

An additional factor can spur nonprofit hospitals' interest in local procurement: in return for the millions of dollars in tax advantages tax-exempt nonprofit hospitals receive, they are required to provide benefits to the communities in which they are located. Under the Affordable Care Act, hospitals now face additional pressure to quantify those benefits. Revised regulations broaden the categories of qualifying activities to now include job creation and other community development goals. Such new requirements could encourage hospitals to more aggressively pursue local procurement.

Bronx Healthcare Procurement

New York City is home to Greater New York Hospital Association (GNYHA) and its for-profit subsidiary GNYHA Ventures, Inc., a large general purchasing organization (GPO) that manages \$10 billion a year in demand for goods and services from hospitals and other institutions. BCDI has begun to

develop a relationship with GNYHA, which has launched a “buy local” campaign. Among other things, GNYHA has commissioned BCDI partners to compile a directory of local Bronx vendors to begin to inform its procurement practices.

Montefiore Medical Center is the largest healthcare provider in the Bronx, and in terms of revenue, it is the largest Bronx anchor institution to support local procurement through its “Buy Bronx” program. Montefiore currently contracts locally in the areas of food distribution, facilities companies, and landscaping. Interviews with procurement officers at Montefiore revealed that the institution prefers services and distribution, rather than goods, as a starting place for local procurement. Specifically, the key areas identified for potential local sourcing include:

- Food distribution (and potentially some food production) to leverage Montefiore’s \$6.7 million in annual food expenditures;
- Green construction such as retrofitting and servicing Montefiore’s real estate portfolio and supporting new construction;
- Green transportation services given Montefiore’s large annual spending on couriers and car services for employees;
- Human resources and temp scouting services, given that Montefiore has over 18,000 employees and currently spends a great deal on sourcing new employees;
- Information technology (IT) services;
- Home aid patient navigator services; and
- Maintenance and cleaning services, though this might be a lower priority for BCDI given

the likely difficulty of securing livable wages. Best practices in other cities suggest that additional opportunities could include:

- Medical assembly services (such as prepping intravenous sets for nurses), clinical engineering, and maintenance of surgical devices;
- Specialized products such as springs for medical devices, which require more training and enable employment of highly skilled workers at above minimum wage rates; and
- High quality product niches where existing vendor quality has declined.

Trends in Education Procurement

In education, “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.”^{*} Focusing procurement priorities on local businesses could help improve relations with these institutions’ surrounding communities. Colleges and universities face the same obstacles as other large anchors seeking to expand local procurement – lack of information about local providers, capacity challenges of local providers and reconciling local purchasing with the drive to consolidate vendors. In higher education, procurement also can be compartmentalized across administrative units. Successful local procurement programs, such as the Columbia University “Look Local First” initiative, have incorporated specific goals into their overall urban revitalization strategic plans, assigning high-level coordinators to work with procurement managers across departments to meet those goals. Columbia University has benefitted from the initiative’s creation of an expanded local vendor network providing more efficient and personalized service.

^{*} Using Procurement to Grow Inner City Businesses.” ICIC. 2009

COLUMBIA UNIVERSITY'S "LOOK LOCAL FIRST" INITIATIVE

Columbia University has redirected over \$60 million in procured goods and services to local vendors, particularly those in the Upper Manhattan area. University Initiatives included:

- Hosting vendor fairs
- Holding detailed discussions with businesses, the Upper Manhattan Empowerment Zone (UMEZ), and other local organizations about ways to increase the university's local spending
- Developing an in-depth analysis of the local vendor base
- Setting local procurement goals for each academic and administrative department encouraging department heads to compare spending patterns by industry against local vendor lists
- Procurement managers working to establish relationships between synergistic larger and smaller businesses. For example, awarding a master car service agreement requiring use of smaller local cab companies within the network
- Creating a feedback system to enable local vendors to make operations more responsive and effective
- Reducing payment cycles to accommodate cash-strapped small businesses

Best Practices in Overcoming Barriers to Local Procurement

ICIC has identified several key practices that can help address systemic barriers to local purchasing efforts by anchors.

- Close the information gap. Hold vendor fairs and informational forums, conduct business-based research, and communicate procurement guidelines and opportunities.
- Close the relationship gap. Establish relationships between individual purchasing managers and local vendors.
- Make purchasing local-vendor friendly. Develop systems to reduce payment time and mitigate cash-flow problems for small business.
- Link major contracts to local vendors. Include local vendors into contracts with large vendors.
- Build the capacity of local businesses. Establish mentoring relationships with relevant university departments, offer consulting from business school or outside resources, and gradually increase transaction volumes.*

* BCG/ICIC



APPENDIX E: RECOMMENDATIONS FOR ADVANCING ANCHOR PROCUREMENT

Develop and Maintain a Current Local Vendor Database

One key barrier to local sourcing repeatedly cited in interviews and literature is lack of information about the range of local vendors available. Initiatives such as Cleveland Evergreen and Detroit Midtown are invested heavily in supporting the creation of such a

database, as they feel it is a vital support to their goals. BCDI could develop and maintain an up-to-date list of local vendors by industry to which procurement managers at anchor institutions could refer as they explore more local options.

Montefiore suggests using a broad definition of “Bronx-based” as some companies have most of their operations and employees in the Bronx but might be headquartered in another borough. This highlights the importance of considering the following additional steps:

- Define what *local* purchasing means by setting a geographic bound within which anchor institutions proactively identify vendors (e.g., a 10 mile radius of the institution).
- Set specific targets for how much of the organization’s procurement will be sourced locally over the next 1, 3, and 5 years.
- Communicate prioritization of local sourcing across the organization to ensure all department heads are aware and do their part.

Create an advisory board to help local vendors viably compete for anchor business

Such a board could include representatives from each of the anchor institutions to not only guide local vendors through complex RFP processes, but would also help vendors become certified to pursue contracts from the anchors. The advisory board could also help by convening local financing institutions able to offer financing for local vendors, and work with anchor institutions to ensure clear commitments for orders and timely, flexible payment structures.

Facilitate interactions between minority or small businesses and large procurement offices

Small businesses will need to build resources into their budgets and staffing to build relationships over time with procurement decision-makers at large organizations. BCDI could potentially play a uniquely pivotal role in this process by acting as a convener to help set procurement policies, incentives, and goals that support local procurement; facilitating coordination among anchors in

the same geography to build the capacities and the amount of spending directed to community vendors; and enabling feedback loops between local vendors and anchor institutions to strengthen performance and ensure longer-term relationships.

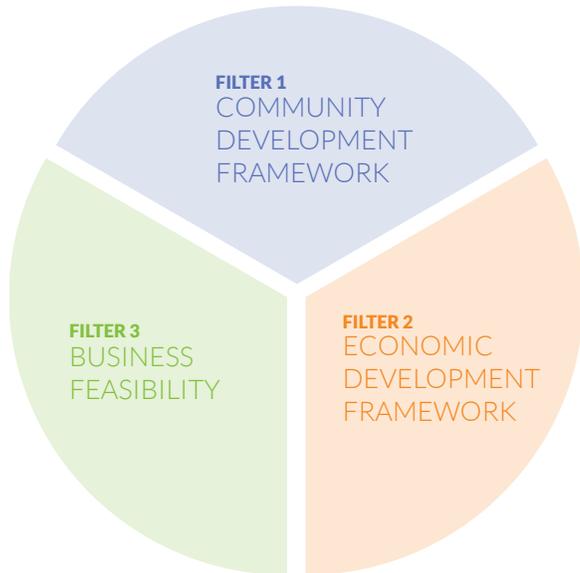
Develop a “buy local” strategy and communication effort

This will encourage anchor procurement officers to establish “buy local” initiatives within their institutions, potentially building on early lessons of the Greater New York Hospitals Association; help anchors set selective priorities for attracting established businesses to relocate to the Bronx; and advocate tax incentives that bolster existing suppliers and attract new ones to the area.

Create a local talent development strategy

By partnering with local educational institutions that can contribute research, incubators, and workforce development resources, BCDI can help anchors hire more talent locally, in addition to procuring more goods and services locally.

APPENDIX F: BUSINESS EVALUATION TOOL



Filter 1: Community Development Framework

Contributes to thickening social relationships through multiple developmental dimensions, and related projects.

Fits Areas of Opportunity:

Health
Food
Energy
Education
Manufacturing

Leverages Existing Bronx Assets:

Takes advantage of existing infrastructure, human, social and other forums of capital

Filter 2: Economic Development Framework

Fits Geographic Development Priorities: clear benefit to focus areas defined study team

Fits Business Creation Targets: right balance of new business establishment versus existing business expansion; right number of businesses

Fits Industry Sector Priorities: In industry showing clear positive growth trends; not highly regulated; “tradeable industry” with potential to provide services beyond the Bronx

Leverages Anchor Demand: business created in an area with big total anchor purchase volume and commitment to local purchase by anchors

Filter 3: Business Feasibility

Start Up Capital Requirement and other Barriers to Entry: max two year start-up capital requirement of \$5M and reasonable capital to job ratio

Job Creation Potential: Could create up to 50 jobs within three years

Wage Level: Potential to provide a “living wage” / life-sustaining job

Wealth Accumulation Potential: Conducive to employee ownership and will support wealth accumulation (\$50,000 dollars in employee accounts in five years).

Leverage BCDI Partnerships: Potential links to existing successful coops or other businesses open to Bronx expansion

Can Benefit from BCDI Ecosystem: Businesses have sufficient commonality to share pooled services with other companies (e.g. accounting, professional services)

FILTER 1: COMMUNITY DEVELOPMENT FRAMEWORK

JOB CREATION

QUESTION: Is BCDI helping to create jobs that allow for growth and advancement at work and connect workers to growth sectors in the economy?

RECOMMENDATIONS:

- BCDI should leverage connections with Bronx hospitals and SEIU Local 1199 to advance training and jobs programs that create career ladders in the healthcare sector, one of the fastest-growing nationwide. New requirements under the Affordable Care Act could facilitate such programs.
- BCDI might also leverage public resources such as New York State's \$1 billion health care training fund, the New York Alliance for Careers in Healthcare and the Bronx Healthcare Learning Collaborative for such purposes.

EDUCATION

QUESTIONS: Are the relationships built through education and training institutions promoting the development of skills and excitement needed for productive futures, or simply focused on passing tests and earning certifications? Is BCDI helping local community colleges and universities connect to areas of innovation and growth?

RECOMMENDATION:

- Potential BCDI Partnerships with Fordham University, Bronx and Hostos Community Colleges could help advance green worker training (e.g. Bronx Community College Center for Sustainable Energy), healthcare career training (Hostos) and advanced manufacturing initiatives. Fordham and Lehman College both have pre-Engineering curricula. Albert Einstein hospital has a growing focus on biomedical engineering. CUNY's Grove School of Engineering offers access to internationally renowned researchers and scholars + graduate students seeking real-world engineering challenges. Bronx Community College's Center for Sustainable Energy continues to prepare workers in the borough for leading edge jobs in the renewable energy and clean transportation sectors.

FOOD AND HEALTHCARE

QUESTION: In food and healthcare sectors is BCDI ensuring that Bronx residents will have both jobs and access to services, rather than only providing services that they do not themselves enjoy?

RECOMMENDATIONS:

- With eleven major hospitals and thirty-two percent of the labor force working in health, education, or social service, the Bronx has significant healthcare assets. BCDI must work with Montefiore and other leading hospitals in their current efforts to leverage these assets to ensure quality healthcare delivery with a strong focus on prevention.
- Leveraging the Affordable Care Act and developing residents' capacity to conduct health needs assessments and create implementation plans and investment strategies could go a long way towards addressing healthcare service needs in the Bronx.
- The Point CDC in the Bronx is working with upstate farmers through Corbin Hill Farm to deliver fresh produce to the borough. This project – and others like it – should be supported in an effort to increase the number of people with access to fresh food. Interactions between organizations to learn about current food projects would serve not only to grow the food ventures' impact, but would also work to build the connections and relationships that will strengthen the social economy sector of the Bronx and BCDI members.

GREEN SPACE

QUESTION: How can green spaces be utilized as opportunities for employment and environmental resource management, as well as safe places for recreation, exercise, and creative human development?

RECOMMENDATIONS:

- About 24% of the Bronx is green space and parkland, presenting opportunities for health and wellness programming, real estate development near parks, “destination events” such as annual festivals, and even some forms of urban agriculture
- New York City is one of the nation's leaders in articulating economic development goals connected to green infrastructure development, with projected job creation totals in the range of 200-600 entry level construction jobs annually associated with current investment levels.* In this sector as in others, BCDI could play a role in promoting local procurement.

* http://web.mit.edu/org/c/colab/gedi/pdf/Green%20Infrastructure/GI_and_ED_MIT_GEDI_Final_Report.pdf

QUESTION: With respect to physical infrastructure, energy efficiency planning, and strategic location of manufacturing jobs, is BCDI considering how energy consumption can be minimized and pollution and other environmental health hazards can be mitigated or eliminated?

RECOMMENDATIONS:

- Proposed district energy systems for major anchors – implementing efficiency measures including co-generation, aggregating demand across large institutions such as hospitals, universities, and public housing and building independent generation capacity – can both reduce carbon emissions and increase resilience in the face of disasters such as Hurricane Sandy, which left many Bronx healthcare facilities without power.
- Bronxites usually associate the abundance of industrially-zoned land with the borough’s preponderance of waste sites and recycling facilities; a manifestation of marginalization within NYC. But industrial zoning can become the borough’s competitive advantage as massive re-zoning in other boroughs threatens urban manufactures still operating in NYC. The Bronx could and should retain its industrial land, while encouraging cleaner advance manufacturing and other firms to relocate to the Bronx.

FILTER 2: ECONOMIC DEVELOPMENT FRAMEWORK

GEOGRAPHIC SCOPE

QUESTION:

Where should we locate the businesses to be created?

- a. Should BCDI concentrate business development activities in a particular part of the Bronx?
 - Adjacent to a subset of anchors? (Note: this was the strategy in the three other initiatives we've reviewed)
 - In an area with the most business supports or incentives? (e.g. BOEDC in south Bronx)
 - In area(s) with greatest social and economic need?
 - In an area that most positively impacts the success and viability of the business?
- b. Is locating the businesses in a "cluster" important? Or is a more distributed approach fine?

RECOMMENDATION:

- Concentrate businesses in the areas around the anchors, which also happens to be an area of significant economic need.

LEVERAGES ANCHOR DEMAND

QUESTION: What is the requirement for anchor demand to launch a new business or expand a business?

- a. Is having anchor demand (clear commitment) a requirement?
- b. Is having a procurement contact essential?
- c. What percentage of first year sales should the anchor commitment equate?

RECOMMENDATION:

- Do not launch a business without a clear commitment of anchor willingness to divert current purchases to provide a foundation of demand for the new/existing business. Anchor demand should provide at least 50% of first year projected sales volume needed en route to break even.

BUSINESS CREATION TARGETS

QUESTION:

What is the mix of businesses to be built in the first “set”?

- a. How many businesses should BCDI build in our first “set”?
- b. Should BCDI focus on expanding existing businesses to the Bronx or building new businesses or a mix?
 - Would expanding existing businesses mitigate risks (as BCDI will potentially benefit from track record of the company)?
 - Would building new businesses create something that is wholly “for the Bronx” and perhaps more clearly deliver on the mission of BCDI?

RECOMMENDATION:

- Launch a minimum of 3 businesses, after ensuring sufficient fund-raising/financing commitments. Launch at least 1 new business; but include expansion businesses if possible to mitigate risk.

FITS INDUSTRY SECTOR PRIORITIES

QUESTION:

Within which industries should we consider launch of businesses?

- a. Should BCDI only launch businesses in industry sectors that show positive growth trends?
- b. Should BCDI be limited to industry sectors with proven success in other urban environments?
- c. Should BCDI limit itself to businesses with potential for sales outside the Bronx or is local service area sufficient?
- d. Should BCDI limit itself to industry sectors with truly “green” potential?
- e. Should BCDI be limited to businesses that have the strongest anchor demand?

RECOMMENDATION:

- BCDI businesses should all be within sectors that show positive growth trends in the US overall and have low barriers to entry. The economic and environmental footprint should be positive, and the business should have a “green” focus. Prioritize businesses with potential for service area broader than the Bronx.

FILTER 3: BUSINESS FEASIBILITY

START UP CAPITAL

QUESTION: What is the maximum amount of startup capital per business over a two-year period?

RECOMMENDATIONS:

No more than \$5M in start-up capital required over a two-year period

- Average start-up capital for US small business is \$200,000, which includes lower start-up service businesses and distribution/manufacturing businesses which require significantly more capital
- BCDI businesses will require additional capital to enable worker training/development
- To avoid the typical small business pitfall – insufficient start-up and working capital – the pool of money per business should include “cushion” for the unexpected.

JOB CREATION POTENTIAL

QUESTION: What is the target number of jobs to be created by each business, within what period of time?

RECOMMENDATIONS:

Target businesses with potential to create no fewer than 50 jobs within 3 years’ time, but do not target extremely large businesses in this first tranche.

- Looking for clear proof points of BCDI concept, which requires creation of businesses at some degree of scale
- Evergreen Laundry employed 25 people in 2 years, with potential for 25 added jobs; Ohio Cooperative Solar targeted 50 employees within 3 years and currently employs 15 people. However: each Evergreen business required > \$5M in start-up capital, much of which was not modeled in original business plans

WAGE LEVEL

QUESTION: What is the minimum acceptable wage for an employee in a BCDI business?

RECOMMENDATIONS:

Wages for the lowest-paid employee in a given business must be no less than \$13/hour plus benefits.

- Bronx-based “living wage” bill was introduced in April 2012 that will force companies receiving \$1 million or more in city subsidies to pay employees at least \$11.50 an hour, or \$10 with benefits.
- Living wage for a single adult in the Bronx is estimated to be \$12.75/hour; this level jumps to \$24.69 for 1 adult supporting 1 child.*
- Local cluster jobs pay an average of \$40,000 a year (if you exclude retail, personal services, and hospitality, which are typically low paying). This is \$19/hour (using estimate of 2,080 hours a year for a full-time role).

* <http://livingwage.mit.edu/counties/36005>

WEALTH CREATION POTENTIAL

QUESTION: What is the minimum acceptable amount of funds accrued by employee owners three years post launch? Will funds be distributed annual or held in trust? Will the funds be allocated based on seniority, hours worked or some other criteria?

RECOMMENDATIONS:

- Financial modeling should be prioritized in phase 1 of business planning, to ensure the wealth creation promise of BCDI is realistic for the given set of businesses. An initial target for wealth accumulation is \$50,000 per worker, accrued in employee accounts within 3-5 years of launch.