

Health and Wellness Village Employment Center Plan

Green City Miami, Miami-Dade County, Florida

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Planning | Urban Design
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1.0 Background

A recent Florida International University study entitled *West End Strategy: A Vision for the Future* challenged the community to re-think its current role in the regional economy by capitalizing on its unique assets and hidden value, and to diversify employment opportunities for residents. Among the significant findings in this research is data showing that 78% of workers that live in Commission District 11, leave the District to commute to work. The study went on to identify the West End Strategy Study Action Agenda to position the community to concentrate its efforts in six distinct areas:

1. Brand the District and its Neighborhoods
2. Create Immediate Employment and Work Opportunities in the West End
3. Leverage Major Assets for New Employment Opportunities
4. Re-Connect the District Using Alternative Transportation, Place Making and Streetscape Design
5. Transportation Capacity Investments and Policy
6. Re-Think New and Future Development Patterns

The Green City Miami proposal addresses all six Action Agenda items. The Master Plan developed by Valle & Valle Partners demonstrates how the design of the overall project implements the West End Strategy Study Action Agenda items by providing a more livable and walkable community.

The economic centerpiece of the Green City Miami proposal is the establishment of the Health and Wellness Village. This initiative has grown out of collaboration between Green City Miami and West Kendall Baptist Hospital (WKBH), and is designed to establish a new economic base in West Kendall focusing on clinical medicine, medical education, and public health research.

2.0 Implementing the West End Strategy Action Agenda

The economic and employment focus of the Health and Wellness Village is founded in the aspiration of creating a new source of economic activity for the West End. The Green City Miami project provides an ideal location to build a new collaboration between existing community institutions, to grow a new 'niche' sector of the economy, and to provide employment opportunities throughout the economic spectrum for the residents of the West End. The Health and Wellness Village will be the organizing place that will foster a new economic cluster founded in the life sciences: clinical medicine, medical education, research, and commercialization.

In the *West End Strategy: A Vision for the Future* study conducted by FIU, regional growth trends were analyzed to understand what industries represent the greatest opportunities for Miami-Dade County through 2022. According to the State of Florida Department of Economic Opportunity, over 110,000 jobs will be created by 2022, with 70,000 occurring within the top ten sectors. Four of the top ten growth sectors in Miami-Dade will be:

- Ambulatory Health Care Services
- Professional, Scientific, and Technical Services
- Educational Services
- Nursing and Residential Care Facilities

All of these industries will be present within the collaborative life sciences cluster at the Health and Wellness Village.

3.0 Characteristics of a Life Science and Medical Cluster

A life science and medical cluster represents a geographic concentration of interconnected companies and institutions in life sciences, medical education and clinical medicine devoting the majority of its focus in the various stages of teaching, service delivery, research, development, technology transfer and commercialization. The life sciences include, but are not limited to biotechnology, pharmaceuticals, biomedical technologies, life systems technologies, nutraceuticals, cosmeceuticals, and biomedical devices. The participating institutions can include governmental agencies, universities, research institutes, think tanks, vocational training providers, and trade associations.

In an economic cluster, companies and institutions are linked together for the purposes of shared intellectual property and accelerated exploration of new technologies, as well as for the provision of enhanced services. The ability to collaborate to achieve complimentary objectives enhances the linkages between companies and institutions. Cluster boundaries are typically defined by common linkages and complementary associations that are most important to competition, including the sharing of physical infrastructure, resources such as technology and equipment, and appointment of personnel (PhD's, MD's, etc.)

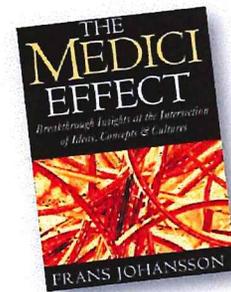
A cooperative association, or alliance of entities, typically oversees the cluster's economic purpose forming objectives to improve its targets. This umbrella organization can guide the interaction of the partners to achieve the following:

- Stimulating the formation of new businesses
- Acceleration of job creation
- Driving the direction and pace of innovation
- Increasing the productivity of commercial output
- Managing the delivery of advanced telecommunication services

Sharing among the cluster's partners can be formal or informal. Informal alliances may just involve simple proximity to one another giving rise to access to specialized support services and a commonly trained labor pool. Formal partnerships can include joint pursuit of research grants and the common ownership of intellectual property, leading to important commercialization endeavors.

4.0 Learning from the Past

The concept of bringing together different perspectives and backgrounds to forge new approaches to problem solving can be traced back to the House of Medici beginning in 14th Century Florence. The Medici's sponsored art, architecture and scientific research that drew from diverse backgrounds, cultures and industries.



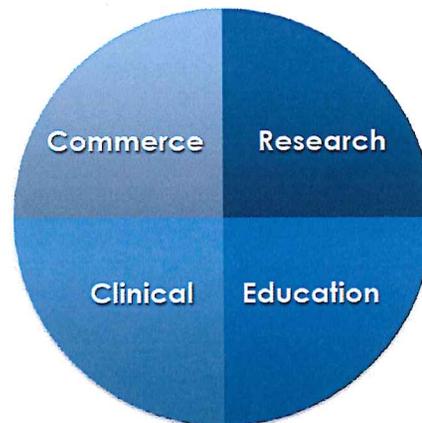
In his book *The Medici Effect*, Frans Johansson explains how extraordinary innovation came from the way in which the Medici's created the opportunity for different views to intersect and engage in collaborative problem solving. Life science and medical clusters are places where diverse

perspectives from clinical medicine, medical education, and research can co-locate to forge new economic activity.

5.0 Cluster Formation

Life science and medical clusters typically contain different sub-sectors. These interrelated functions are illustrated in a conceptual model below and are shown as being of theoretical equal weight in economic importance. In reality, the early stages of development of each cluster will take on a unique character as participants and opportunities emerge.

Figure 1 – Economic Model of Life Science Cluster

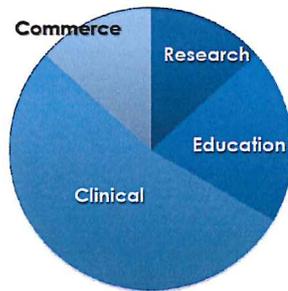


There are many examples of life science and medical clusters throughout the U.S. Examples

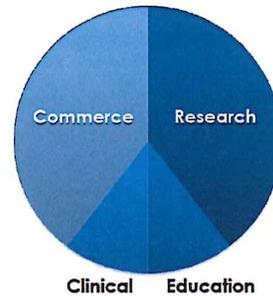
of more mature clusters from around the country show how different the mix of sub sectors can evolve over time to create unique economic activity and shape the character of employment.

Figure 2 – Models of Existing Life Science Clusters

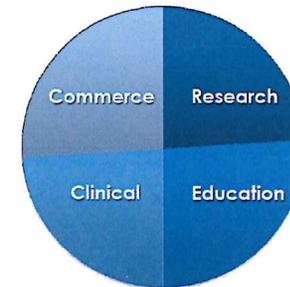
Houston Cluster



San Diego Cluster



Boston Cluster



The Texas Medical Center in Houston is characterized by a grouping of internationally known hospitals and is dominated by employment in *clinical medicine*. In comparison, San Diego's cluster is *research* centric with its world-renowned institutions in La Jolla. *Education* and *research* comprise half of Boston's cluster with its research universities driving major employment. In the spirit of *The Medici Effect*, these examples demonstrate that bringing together different institutions proves that a cluster of healthcare and bioscience facilities in proximity to one another can and will accelerate innovation and create economic activity.

6.0 Lake Nona Medical City

Among the many life science and medical research centers throughout the U.S., few include residential components where employees can live and work in relative proximity. One recent example in Florida is Lake Nona, in Orlando. The health and life sciences park known as Lake Nona Medical City is a burgeoning location for clinical medical care, education and research. It is co-located with the new Laureate Park residential community. The entire Lake Nona Medical City project is approximately 2000 acres.

Figure 3 - Aerial Photo of Lake Nona Medical City



This master planned community is a deliberate strategy to create a centralized focus of sophisticated medical treatment, research, and education where people live and work in proximity. Lake Nona Medical City has become home to some of the nation's top hospitals, universities, research

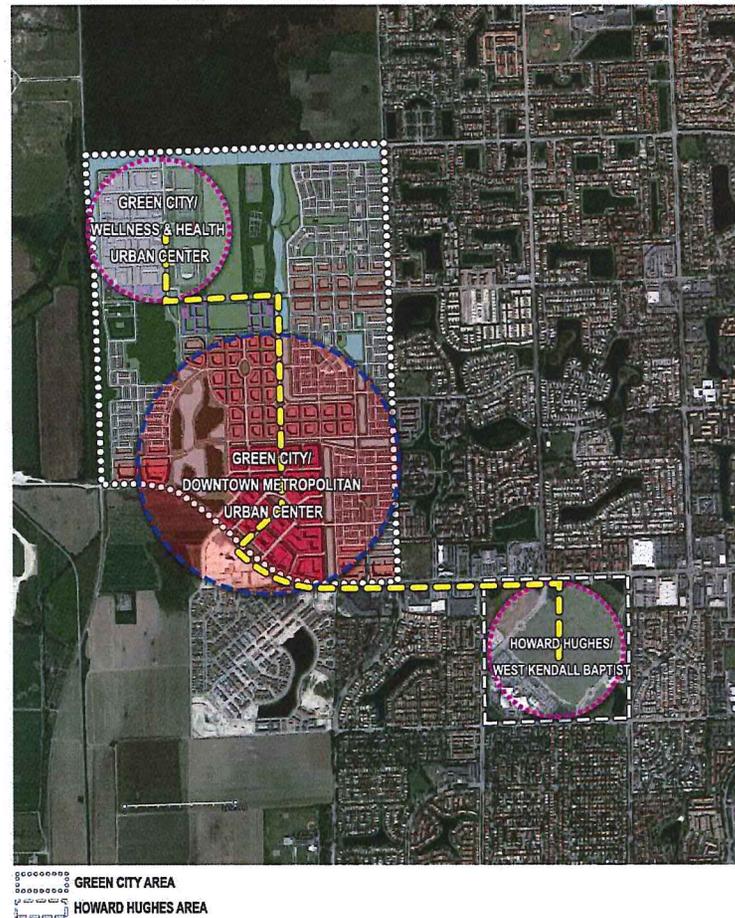
institutions and health and life science companies. These institutions are forming networks and synergies, creating an economic development and job creation engine for the region. Since its original planning and initial development, Lake Nona has caught the attention of numerous Fortune 500 companies who have chosen to establish a presence in the project. While most other healthcare and life science clusters are only employment centers, Lake Nona shows the value of a new model where people live and work within the cluster.

7.0 The Health and Wellness Village Employment Center Plan

The Health and Wellness Village represents an opportunity to establish a new thrust of economic activity in West Kendall, building on the existing foundation already established by West Kendall Baptist Hospital and Florida International University. The fundamental pieces are in place to set this course. However, a new economic development strategy involving all partners must be established. Miami-Dade County can recognize and accelerate this strategy by implementing recommendation #6 of the West End Strategy Action Agenda – Rethink New and Future Development Patterns.

The *West End Strategy* report identified the need to rezone and re-plan for New Town Centers. One of those centers – the Howard Hughes Corporation property at Kendall Drive and 162nd Avenue has been designated under the CDMP as a location for urban center development. The creation of a new life science and medical cluster in West Kendall cannot be fully realized by thinking in terms of a single property. The national examples of life science and medical clusters cited above exist at a much larger scale with multiple land ownerships and institutions. In order to fully benefit from the full engagement of research and clinical partners, Miami-Dade County should broaden its thinking to include additional lands where a strategy of new and symbiotic residential communities can be included, similar to the Lake Nona Medical City approach.

Figure 4 – Conceptual Life Science Cluster in West Kendall



The addition of the Health and Wellness Village to the urban center development strategy for West Kendall allows for the full implementation of a new life science and medical cluster. Including

these additional lands will advance a mixed-use approach and create the opportunity to take advantage of some initial activities already established in the community by West Kendall Baptist Hospital (WKBH) and Florida International University.

8.0 West Kendall Baptist Hospital

The involvement and direct engagement of a major clinical medical provider is critical in the development of a life science cluster. The Health and Wellness Village and WKBH will benefit from collaboration during the earliest days of the project. The FIU *West End Strategy* identified the need to leverage existing employment assets in the pursuit of more sustainable employment less dependent on population growth and more resilient to the economic cycle. The Strategy Agenda included a discussion of WKBH's ongoing service expansion and the Healthy West Kendall initiative, as examples of existing assets, which can grow into medically related service, technology and diagnostic businesses. While some land exists adjacent to WKBH for the near term, the long-term growth opportunities for the economic cluster will require additional nearby land. The Health and Wellness Village provides Miami-Dade County an ideal opportunity to take the long view and to plan for the larger success of the cluster. As was stated in the West End Strategy Agenda, proximity to WKBH and the existing employment base creates a significant economic opportunity for the community.

Healthy West Kendall Coalition

The Healthy West Kendall initiative is an example of a clinical medical institution taking a leadership role in activating community stakeholders to improve overall wellness. The WKBH's website describes the program:

The coalition grew out of a 2013 community needs assessment that identified five healthcare priorities for the 300,000 people in the hospital's service area:

- *Access to care*
- *Availability of primary and preventive care*
- *Chronic disease management*
- *Heart and vascular disease*
- *Exercise and nutrition*

An active, healthy lifestyle supports each of these priorities. West Kendall Baptist Hospital is currently addressing access to care, primary and preventive care and future availability of primary care physicians through its Family Medicine Center and Family Medicine Residency Program with Florida International University's Wertheim School of Medicine. The hospital's entire workforce of physicians, nurses and employees is engaged in educating and inspiring the community to live healthier.

The foundation of a larger and expanded partnership between WKBH and FIU can start with the Healthy West Kendall initiative. Greater economic potential exists between these two partners, and that potential can be accommodated in an expanded vision of a life science and medical cluster for the West End.

9.0 Florida International University

FIU is a major research institution in Miami-Dade County, and it can play a larger role in job creation in West Kendall. Universities are increasingly becoming the most important players in the economic development of their surrounding communities by leveraging their strength in knowledge creation. Innovation that originates in university-based partnerships and emerges through intellectual property and technology transfer to the private sector are the new engines of economic

growth in most U.S. cities (Shafer, 2015). This phenomenon is being played out in other cities across Florida. In addition to Lake Nona, the University of Central Florida is establishing a new downtown campus at the Creative Village in Orlando, and the University of South Florida is planning to move its College of Medicine to downtown Tampa to stimulate private sector job creation (Martinez, 2015). The Health and Wellness Village will be another example of a new incubator for researchers throughout FIU in a number of different fields and sciences. This collaborative model will result in real strides for the local economy.

Table 1 identifies the potential for applied research at the Health and Wellness Village, fostering a climate that can attract high value and high wage entities looking to collaborate in this rich research environment, and positioned to capitalize on the University’s technology transfer process.

Table 1 – Applied Research Opportunities for FIU and the Health and Wellness Village Employment Center

College	Department	Research Applications for Health & Wellness Employment Center
Wertheim College of Medicine	Medical and Health Sciences Research	Examining the intersection between community health status and the social determinants of health and wellness; evaluating the relationship between green community design and wellness outcomes at the neighborhood level
	Humanities, Health & Society	Determining the effect of the Health & Wellness Village on wellness outcomes and disease prevention
	Medicine	Serve as a laboratory for health outcomes research
	Orthopedics	Utilizing the facilities and programs at the Sports Village, serve as a community based laboratory for the management of sports and athletic related injuries

Stempel College of Health & Social Work	Biostatistics	New methods for capturing health and medical data from resident population; tracking data over time
	Dietetics & Nutrition	Evidence based research on the relationship between food and wellness
	Health Policy & Management	Providing health economic evaluation of comprehensive community based wellness programs
	Health Promotion & Disease Prevention	Applied research which examines the behavioral, cultural and social factors related to community health and wellness outcomes
Wertheim College of Nursing & Health Sciences	Athletic Training	Practical experience for students at Sports Village; longitudinal research on training outcomes of wellness programs
	Physical Therapy	Health & Wellness Village community to serve as laboratory for training and applied research
College of Architecture + Arts	Architecture	Serve as real time studio for innovation and green building design; ability to research post occupancy health and wellness outcomes
	Landscape Architecture + Environmental and Urban Design	Serve as real time studio for sustainable design in tropical and sub-tropical climates, examining the relationship between the outdoor environment and community health and wellness
College of Engineering and Computing	Biomedical Engineering	The Sports Village can serve as a real-time laboratory for testing the performance of biomedical devices, particularly new products in the orthopedic specialty. Health and Wellness Village will provide development and manufacturing space for new advances in the commercialization of biomedical products

10.0 Health and Wellness Village as Research Laboratory

The Health and Wellness Village will provide a unique laboratory for the Healthy West Kendall Coalition and its research partners to directly study the overall factors in lifestyle that affect human wellness. Residents and employees of the Village will be able to participate in various research initiatives involving their own lifestyle, which can assess the effects of living or working in a community designed for health and wellness.

Public health investigators have limited opportunities to conduct research in a population where multiple variables can be controlled to produce unbiased results regarding lifestyle and wellness outcomes. The Health and Wellness Village is ideally suited for researchers affiliated with FIU's Wertheim College of Medicine and other colleges, who seek the ability to conduct multi-generational studies. The College's Strategic Plan calls for preparing its physicians, scientists and health professionals for socially accountable and community-based health care designed for the unique needs of south Florida's population. The goals of the College include delivering excellence in medical education with a "deep understanding of population health, health disparities, inter-professional interventions, and the social determinants of health" (FIU College of Medicine, 2015). The College looks to establish partnerships with the community for students, residents and faculty in many different types of research. Tapping into FIU's wealth of research talent and enabling advanced research associated with the Health and Wellness Village will accelerate job creation in the West End.

11.0 Employment/Housing Relationships

Other policy priorities of the community can be achieved by including the Health and Wellness Village into a wider vision for life science and medical employment in the West End. If WKBH and FIU can be fully engaged in establishing a larger cluster, then the trend of commuters leaving District

11 to travel to work can be slowed if not reversed. In Lake Nona Medical City, 4500 jobs were created in about five years, allowing for workers to shorten their journey to work and expand employment opportunities for nearby residents. The highest priority should be placed on establishing a bigger vision for the West End's new center of employment and shift the community toward one in which high value, high wage employment is closer to home.

12.0 Conclusions

There are examples throughout the U.S. of places where medical clusters have developed overtime, where hospitals, medical schools, and universities have evolved to create significant economic and employment centers. Newer models of these centers are emerging in more suburban locations where nearby universities play an increasingly important role in knowledge creation and technology transfer. The West End is in need of an economic spark to propel this new vision for its residents. The basic building blocks are in place between West Kendall Baptist Hospital and Florida International University. However, no blue print is in place to shape the economic future of these institutions into a new life science and medical cluster. The Health and Wellness Village at Green City Miami provides the catalyst around which just such a vision can be developed.

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The Author

Richard L. Levey, AICP is a Senior Advisor with the GAI Consulting firm in Orlando, Florida. He has over twenty-five years of City and County public sector planning experience at the senior management level in Florida. He finished his public service directing the day-to-day operations of the City of Orlando as its Chief Administrative Officer from 1998 to 2005. Mr. Levey is a graduate of the Program for Senior Executives in State and Local Government at the Kennedy School of Government at Harvard University. He has lectured at numerous state and national conferences and is an Adjunct Instructor with the School of Public Administration at the University of Central Florida. His consulting practice provides advisory services to public and private sector clients in the areas of city management, economic development strategy, land development entitlements, and governmental relations.

Following his public service, Mr. Levey applied his broad background in economic development, public finance, organizational management, and public-private partnerships, in serving as Vice President of the Lake Nona Land Development Company. He assisted Lake Nona in attracting new employment in all economic sectors, including healthcare, biotech, and medical education. In addition, he directed the place-making design for Lake Nona, incorporating the 'Medical City' concept and the design principles of sustainability and healthy living into the award winning community.