CARLOS A. GIMENEZ
MAYOR
MIAMI-DADE COUNTY

March 15, 2012

The Honorable Hilda L. Solis
U.S. Secretary Department of Labor
200 Constitution Ave., NW
Washington, DC 20210

Dear Secretary Solis:

I am writing in support of the invitation from the Greater Miami Chamber of Commerce for you to join the Chamber and its business and public leadership Chamber's annual Workforce Summit on Tuesday, March 29, 2012 as keynote speaker for the event and as anchor of an invitational roundtable discussing regional workforce development planning.

The invitational roundtable will focus on our ONE COMMUNITY ONE GOAL initiative, a regional target industry strategic plan that identifies priority industries for our economic growth and related high demand occupations essential to a sustainable economy (enclosed). Leaders from across the private sector, public sector, and education are involved, and there is comprehensive community engagement in the planning process as well as a high level of community consensus on the course and outcomes of planning.

I believe your participation in this Chamber event to be important and timely, as we would most sincerely welcome your thoughts and your contributions to our dialogue on these vital economic development matters.

As Mayor of Miami-Dade County, and as Co-Chair of the One Community One Goal Initiative, it would be my honor to welcome you to our community for this important regional event.

Respectfully,

Carlos A. Giménez
Mayor

Enclosures

c: Dr. Gabriela Lemus, Senior Advisor and Director
U.S. Department of Labor
Millie Herrera, Southeast Regional Representative for Secretary
U.S. Department of Labor
Cortney Bright, Director of Scheduling and Advance
U.S. Department of Labor
Ana Ma, Chief of Staff, U.S. Department of Labor
Barry E. Johnson, President/CEO
Greater Miami Chamber of Commerce
Jack Osterholt, Deputy Mayor

greater miami chamber of commerce

January 19, 2012

The Honorable Hilda L. Solis
U.S. Secretary Department of Labor
200 Constitution Ave., NW
Washington, DC 20210

Dear Secretary Solis:

On behalf of the Greater Miami Chamber of Commerce, I cordially invite you to anchor a roundtable of Miami-Dade and Broward County business leaders and serve as our keynote speaker at the seventh annual regional workforce event, **HR INSIGHTS: WORKFORCE 2012 SUMMIT**, which will take place on March 29, 2012 in Miami.

Our workforce summit annually brings together hundreds of regional business, civic and community leaders to focus on the critical human resource and workforce issues facing the economic health of our region. The summit will assess regional workforce needs and set regional priorities. The roundtable is designed to allow you to engage with the leaders in South Florida business community for a discussion on workforce and job growth issues essential to restoring the health and vitality of the South Florida economy.

The Greater Miami Chamber of Commerce is the voice of business in South Florida, representing more than 400,000 employees of member companies. To carry out its mission, the Chamber involves the private sector in community leadership. For more than a century, the Chamber has been widely recognized and respected for its extraordinary record of economic development and community improvement. The Greater Miami Chamber is a proactive chamber, regularly getting engaged in issues important to its member companies and individuals through a program of work across five areas: Domestic Business Development, Governmental Affairs, International Business Development, Leadership Programs and Marketing & Member Services.

Please let me know if you are able to accept our invitation. My direct line is 305 577-5424; and my email address bjohnson@miamichamber.com.

Sincerely,

Barry E. Johnson
President/CEO

ONE Community Goal
Supported by: Wells Fargo

Beacon Council Access Event

February 2, 2012

The Beacon Council foundation

WELCOMING REMARKS, RECOGNITION OF PARTNERS AND INTRODUCTIONS

***Alan Becker*, Chair, The Beacon Council**

ONE Community Goal

Supported by: Wells Fargo

Who is funding One Community One Goal?

Present Contributors

- BlueCrossBlueShield
- Dosal Family Foundation
- Greater Miami Convention and Visitors Bureau
- John S. and James L. Knight Foundation
- Miami Downtown Development Authority
- Ryder Charitable Foundation
- The Beacon Council
- The Beacon Council Economic Development Foundation
- The Miami Foundation
- The Miami Herald and El Nuevo Herald
- Wells Fargo
- World Trade Center Miami

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OCOG Partners List Continues to Expand

The Beacon Council foundation

American Airlines
Baptist Health South Florida
Barry University
Becker & Poliakoff, P.A.
BlueCrossBlueShield
CAMACOL (Latin Chamber of Commerce of the U.S.A.)
Catalyst Miami (Human Services Coalition)
Coalition of Chambers
Coral Gables Chamber of Commerce
DelancyHill
Doral Business Council
Esslinger-Wooten-Maxwell Realtors
Flagler Real Estate Services
Florida International Bankers Association
Florida International University
Florida Memorial University
Florida Power and Light
Gibraltar Private Bank and Trust Co.
Goldfarb Management Services
Greater Miami Chamber of Commerce
Greater Miami Convention & Visitors Bureau
HEICO Corporation
Homestead/Florida City Chamber of Commerce
MCM Corp.
Miami Dade College
Miami Free Zone
Miami-Dade Broadband Coalition
Miami-Dade Chamber of Commerce
Miami-Dade County
Miami-Dade County Board of County Commissioners
Miami-Dade County Cultural Affairs
Miami-Dade County League of Cities
Miami-Dade County Public Schools
Miami-Dade County Sustainability, Planning, and Economic Enhancement
Miami Downtown Development Authority
Miami International Airport
North Dade Regional Chamber of Commerce
Perry Ellis International, Inc.
Port of Miami
Sandler, Travis & Rosenberg, P.A.
Sant La Haitian Neighborhood Center
Seaboard Marine
South Florida Hospital & Healthcare Association
South Florida Workforce
St. Thomas University
The Beacon Council
The Miami Foundation
The Miami Herald and El Nuevo Herald
United Way of Miami-Dade
University of Miami
Wells Fargo
World Trade Center Miami

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Co-Chairs of One Community One Goal

Mayor Carlos A. Gimenez
Miami-Dade County

Alexandra Villoch
Senior Vice President, Advertising and Marketing
Miami Herald Media Company

Adolfo Henriques
Vice Chairman, President and COO
Gibraltar Private Bank & Trust

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The Beacon Council foundation

MIAMI-DADE COUNTY PARTNERSHIP

***Mayor Carlos A. Gimenez*, Co-Chair, OCOG**

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The Beacon Council foundation

OCOG REPORTS PROCESS AND TIMELINE

Alexandra Villoch, Co-Chair, OCOG

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Miami-Dade County Targeted Industry Strategic Plan - Background

The Beacon Council foundation

- 1984 - The Beacon Council was founded and developed business retention, expansion and recruitment strategies

- 1996 - One Community One Goal initiative identified Targeted Industries

- Given extreme changes in global economy and competition from cities throughout the world for new investment and job creation – a comprehensive update on strategic opportunities was needed

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What will the One Community One Goal Targeted Industry Strategic Plan do?

The Beacon Council foundation

- ✓ Identify **strengths and challenges** of Miami-Dade County's economy
- ✓ Identify and refine T**arget Industries** for future economic development efforts
- ✓ Identify **education** and **training** requirements
- ✓ Provide an economic development marketing **plan of action that will create new jobs and investment** in those industries and across the economy

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OCOG Launch

The Beacon Council foundation

Step 1 of the process was to conduct a nationwide RFP to choose a consultant team.

A nationally-known team was selected with experience in

- Economic development strategic planning
- Site selection and analysis, and
- Education, training, and workforce

The project team is led by Avalanche Consulting, along with McCallum Sweeney Consulting (a leading site location consultant) and the Council for Adult and Experiential Learning.

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OCOG Launch

The Beacon Council foundation

Step 2 of the launch was the development of the One Community One Goal Steering Committee.

- Composed of over 55 member organizations
- Representing the public sector, private sector, education, and community organizations

We have received unprecedented cooperation between the public sector, private sector, and our education community to develop the plan.

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Process

Project Set-Up → **PHASE 1: Competitive Evaluation / SWOT** → **PHASE2: Target Industry Identification** → **PHASE 3: Education Assets Inventory and Target Industry Strategies** → **Roll-Out**

Project Set-Up	PHASE 1	PHASE2	PHASE 3	Roll-Out
April – May 2011	May – Oct 2011	Oct – Jan 2011	**Dec 2011 – Mar 2012**	May 2012

3-phased project
11 months to complete

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OCOG Timeline Update and Deliverables

The Beacon Council foundation

Report 1: Competitive Assessment
(*Completed December 6, 2011*)

Report 2: Target Industries
(*February 2012*)

Report 3: Education Assets Inventory
(*February 2012*)

Report 4: Strategic Plan for Implementation
(*May 2012*)

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Stakeholder Input To-Date

The Beacon Council foundation

- 4,133 OCOG survey responses
- New Leaders meetings
- GMCC Goals Conference workshop
  - 100+ participants
- Life sciences sector survey
- 4 Steering Committee meetings
- OCOG Entrepreneurship + Innovation Session
  - 50+ participants

Continued…

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The Beacon Council foundation

Stakeholder Input To Date, *continued*

- 40+ Personal Interviews
- 7 Target industry focus groups
  - Aviation / Aerospace
  - Banking / Professional Services
  - Design / Creative / Fashion - Lifestyle
  - IT / Telecommunications
  - Life Sciences (survey)
  - Logistics / Trade
  - Tourism / Hospitality

Preliminary Education Findings

The Beacon Council foundation

- From the launch of OCOG, the education community has been involved in every step of the way. Development of Report #2 (Target Industries) and Report #3 (Education Assets Inventory) have been on parallel tracks.

- The recommended Target Industries were selected as a result of an analysis of Miami-Dade County's present education infrastructure and training programs.

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Highlights: Education Assets as Target Drivers

The Beacon Council Foundation

- Trade
  - Formidable array of International Business, Marketing and Law programming
  - Airport and Port Partnerships with area schools
- Information Technology
  - UM Center for Computational Science enabling Genomics and Bioinformatics capabilities
  - Center for Southeastern Remote Tropical Advanced Sensing (CSTARS) enables advanced GIS for a variety of applications
- Life Sciences
  - UM Life Science and Technology Park, Miami-Dade College partnership along with broad strength in biology, chemistry and healthcare (clinical and administrative) offerings
  - Life Tech Florida collaboration among area institutions
- Education
  - Miami's strength and diversity of public and private educational opportunities is itself a draw
- Existing Hospitality Workforce
  - Strength in hospitality programs provide foundation from which graduates can bridge to further learning in Trade, Finance, Healthcare and Medical Tourism

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The Beacon Council foundation

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What is a Targeted Industry?

The Beacon Council Foundation

Selected industries with the highest potential for increased wages, new investment and new jobs

To ensure success:

1. Local strengths and assets must match selected industries' specific requirements
2. Economic development strategies and resources must yield the highest ROI

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Target Selection Factors

The Beacon Council foundation

What is happening with industry clusters in the region?
Cluster Concentration, Shift Share, and Forecasted Growth

What assets are platforms for industry growth?
Competitive Assessment and Educational Programs

What do residents and industry leaders want in the future?
Surveys, Interviews and Focus Groups

Finalist List

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The Beacon Council foundation

With the new OCOG Targeted Industries, strategies will be created for:

- New Recruitment
- Retention and Expansion
- Marketing strategies for Economic Development Missions, Trade Shows, Communications, Contacts and Outreach

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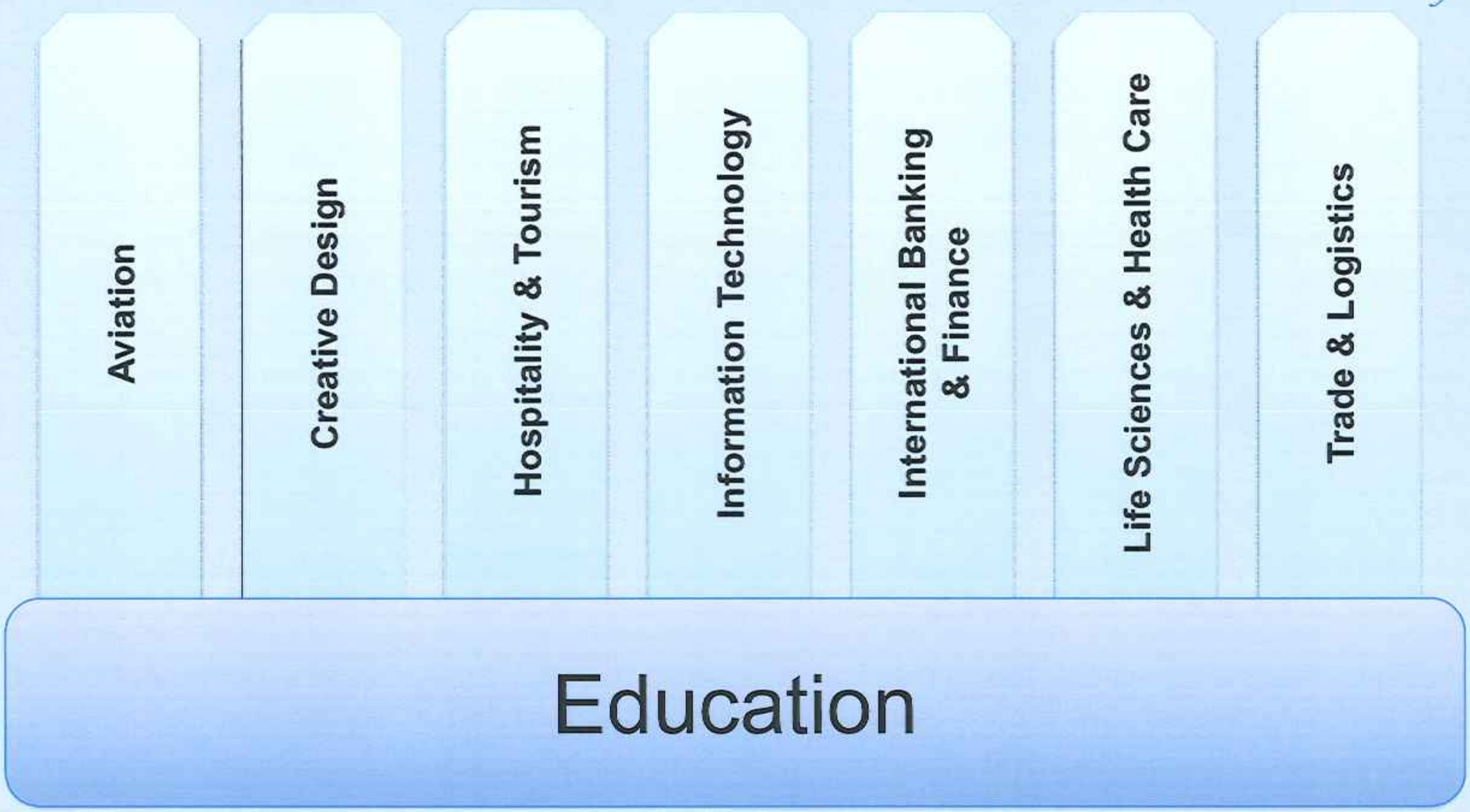
Education is the foundation of growth for all target industries.

The Beacon Council foundation



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Recommended
Target Industries and Niche Sectors

The Beacon Council foundation

Aviation

- Aircraft parts & MRO
- Assembly & Manufacturing
- Composite Shops
- Flight Simulation & Training

Creative Design

- Advertising & Marketing
- Architecture & Engineering
- Fashion / Lifestyle
- Music, Film, TV Production & Digital Content
- Industrial Design

Continued on following slide

Listed in alphabetical order – does not imply prioritization or timing

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Recommended
Target Industries and Niche Sectors, *continued*

The Beacon Council foundation

Hospitality & Tourism

- Cruise Tourism
- Cultural Arts
- High Income Int'l Tourists
- Medical Tourism
- Meetings, Conventions & Conferences
- Tourism IT

Information Technology

- Back Office Support & IT
- Computational Science & Health IT
- Data Centers
- Digital Content
- Logistics IT
- Mobile Applications
- Simulation Technology
- Tourism IT

Continued on following slide

Listed in alphabetical order – does not imply prioritization or timing

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Recommended
Target Industries and Niche Sectors

The Beacon Council foundation

International Banking & Finance

- International Banks
- International Insurance & Wealth Management
- Maritime Services & Trade Finance
- Mobile Applications
- Technical Customer Support & Back Office
- Venture Capital & Private Equity

Life Sciences & Health Care

- Agricultural Sciences
- Back Office
- Biologics
- Computational Science & Health IT
- Medical Devices
- Medical Tourism
- Pharmaceuticals

Continued on following slide

Listed in alphabetical order – does not imply prioritization or timing

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Recommended
Target Industries and Niche Sectors, *continued*

The Beacon Council *foundation*

Trade & Logistics

- Distribution Centers
- Logistics IT
- Maritime Services & Trade Finance
- Perishables
- Value-Added Services – Assembly & Kitting

Continued on following slide

Listed in alphabetical order – does not imply prioritization or timing

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Aviation	Creative Design	Hospitality & Tourism	Information Technology
• Aircraft Parts & MRO • Assembly & Manufacturing • Composite Shops • Flight Simulation & Training	• Advertising & Marketing • Architecture & Engineering • Fashion / Lifestyle • Music, Film, TV Production & Digital Content • Industrial Design	• Cruise Tourism • Cultural Arts • High Income International Tourists • Medical Tourism • Meetings, Conventions, & Conferences • Tourism IT	• Back Office Support & IT • Computational Science & Health IT • Data Centers • Digital Content • Logistics IT • Mobile Applications • Simulation Technology • Tourism IT
International Banking & Finance	**Life Sciences & Health Care**	**Trade & Logistics**	
• International Banks • International Insurance & Wealth Management • Maritime Services & Trade Finance • Mobile Applications • Technical Customer Support & Back Office • Venture Capital & Private Equity	• Agricultural Sciences • Back Office Operations • Biologics • Computational Science & Health IT • Medical Devices • Medical Tourism • Pharmaceuticals	• Distribution Centers • Logistics IT • Maritime Services & Trade Finance • Perishables • Value-Added Services – Assembly & Kitting	

The Beacon Council Foundation

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The Beacon Council foundation

QUESTIONS AND ANSWERS

***Amy Holloway*, President, Avalanche Consulting**

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The Beacon Council foundation

OCOG PARTNER EVENTS, OCOG ROLL-OUT EVENT, CLOSING REMARKS

Frank R. Nero, President and CEO, The Beacon Council

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OCOG Hosted Events

The Beacon Council Foundation

Date	Event
June 3, 2011	Greater Miami Chamber of Commerce Goals Conference
September 7, 2011	Coalition of Chambers Meeting
September 13, 2011	Greater Miami Chamber of Commerce Education Summit
October 20, 2011	Coral Gables Chamber of Commerce
November 2, 2011	Coalition of Chambers Meeting
November 3, 2011	North Dade Regional Chamber of Commerce
November 9, 2011	Community Breakfast
November 17, 2011	Miami Foundation Miami Fellows Class
November 18, 2011	University of Miami/The Launch Pad's Good Government Initiative Panel
December 6, 2011	Miami-Dade County Board of County Commissioners
December 13, 2011	Doral Business Council
December 15, 2011	Greater Homestead/Florida City Chamber of Commerce
January 13, 2012	Greater Miami Chamber of Commerce Economic Summit
January 18, 2012	Community Update Workshop
January 27, 2012	American Association of Community Colleges (AACC) Conference
February 2, 2012	OCOG Access Breakfast
February 3, 2012	Miami-Dade County Public Schools ELITE 12
February 6, 2012	South Florida Regional Planning Council Board of Directors Meeting
May 7, 2012	OCOG Roll-Out Event

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One Community One Goal Roll-Out Event

May 7, 2012

At Miami Dade College

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One Community One Goal

The Beacon Council foundation

For further information go to

www.onecommunityonegoal.com to access:

- Project Updates
- OCOG Competitive Assessment Report (#1)
- OCOG Target Industries Report (#2)
- Additional OCOG documents

ONE Community Goal
Supported by: Wells Fargo

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ONE COMMUNITY ONE GOAL STRATEGIC PLAN

REPORT 2: TARGET INDUSTRIES

Presented to the Beacon Council Economic Development Foundation and the Miami-Dade Beacon Council

by Avalanche Consulting, McCallum Sweeney Consulting, and the Council for Adult and Experiential Learning

February 2, 2012

ONE Community Goal

Supported by: Wells Fargo

WELLS FARGO

Acknowledgements

The Beacon Council Foundation thanks all of the business leaders, education institutions, community organizations, foundations, and individuals involved in helping to support the One Community One Goal strategic planning process.

Their active engagement and commitment have been essential to the success of the One Community One Goal initiative. Funding for One Community One Goal is currently provided by the following contributors.

BlueCrossBlueShield
Dosal Family Foundation
Greater Miami Convention and Visitors Bureau
John S. and James L. Knight Foundation
Miami Downtown Development Authority
Ryder Charitable Foundation
The Beacon Council
The Beacon Council Economic Development Foundation
The Miami Foundation
The Miami Herald and El Nuevo Herald
Wells Fargo
World Trade Center Miami

One Community One Goal Partners

The Beacon Council Foundation is working in partnership with many community and business organizations, and thanks all of them for their continued assistance and involvement in One Community One Goal. These organizations and their leadership have provided their expertise and time by hosting One Community One Goal reporting events, distributing and promoting the completion of the OCOG surveys and Focus Groups, providing input, research and data for analysis, and serving on the One Community One Goal Steering Committee. As One Community One Goal continues to develop, this list will expand.

American Airlines
AT&T
Baptist Health South Florida
Barry University
Becker & Poliakoff, P.A.
BlueCrossBlueShield
CAMACOL (Latin Chamber of Commerce of the U.S.A.)
Catalyst Miami (Human Services Coalition)
Coalition of Chambers
Coral Gables Chamber of Commerce
DelancyHill
Doral Business Council
Esslinger-Wooten-Maxwell Realtors
Flagler Real Estate Services
Florida International Bankers Association
Florida International University
Florida Memorial University
Florida Power and Light
Gibraltar Private Bank and Trust Co.
Goldfarb Management Services
Greater Miami Chamber of Commerce
Greater Miami Convention & Visitors Bureau
HEICO Corporation
Homestead/Florida City Chamber of Commerce
John S. and James L. Knight Foundation
MCM Corp.
Miami Dade College
Miami Free Zone
Miami Dade Broadband Coalition
Miami-Dade Chamber of Commerce
Miami-Dade County
Miami-Dade County Board of County Commissioners
Miami-Dade County Cultural Affairs
Miami-Dade County League of Cities
Miami-Dade County Public Schools
Miami-Dade County Sustainability, Planning, and Economic Enhancement
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Sant La Haitian Neighborhood Center
Seaboard Marine
South Florida Hospital & Healthcare Association
South Florida Workforce
St. Thomas University
The Beacon Council
The Miami Foundation
United Way of Miami-Dade
University of Miami
Wells Fargo
World Trade Center Miami

For more information on One Community One Goal, please go to www.onecommunityonegoal.com or call 305-579-1390

TABLE OF CONTENTS

EXECUTIVE SUMMARY: *ONE COMMUNITY ONE GOAL* TARGET INDUSTRIES

EXECUTIVE SUMMARY

This *Target Industries* report recommends and describes potential target industries for Miami-Dade County's future economic development initiative, *One Community One Goal.* This report will educate area leadership and the public on the inner workings of each target industry, provide a list of recommended niche sectors within each target, and establish the direction of the final phase of this project, the *Target Industry Strategies.*

The report begins with an explanation of target selection methodology, then recommends target industries and niche sectors, and concludes with profiles of each recommended target. Profiles highlight growth trends and local assets that can be leveraged to support the industry.

Target Industry Recommendations

Upon completion of the project team's review of Miami-Dade County's industry clusters, competitive assets, and community vision, the project team prepared the following target industries and niche sectors. **The foundation for growth in all industries is *education* -** one of Miami-Dade County's greatest assets. Niche sectors are listed in alphabetical order. Targets are presented first in table format and next in list format for ease of viewing.

Aviation	Creative Design	Hospitality & Tourism	Information Technology
• Aircraft Parts & MRO • Assembly & Manufacturing • Composite Shops • Flight Simulation & Training	• Advertising & Marketing • Architecture & Engineering • Fashion / Lifestyle • Film, TV Production, & Digital Media • Industrial Design	• Conventions, Conferences, & Trade Fairs • Cruise Tourism • Cultural Arts • High Income International Tourists • Medical Tourism • Tourism IT	• Back Office Support & IT • Computational Science & Health IT • Data Centers • Digital Media • Logistics IT • Mobile Applications • Simulation Technology • Tourism IT
International Banking & Finance	**Life Sciences & Health Care**	**Trade & Logistics**	
• International Banks • International Insurance & Wealth Management • Maritime Services & Trade Finance • Mobile Applications • Technical Customer Support & Back Office • Venture Capital & Private Equity	• Agricultural Sciences • Back Office Operations • Biologics • Computational Science & Health IT • Medical Devices • Medical Tourism • Pharmaceuticals	• Distribution Centers • Logistics IT • Maritime Services & Trade Finance • Perishables • Value-Added Services – Assembly & Kitting	

AVIATION

- Aircraft Parts & MRO (Maintenance, Repair, Overhaul)
- Assembly & Manufacturing
- Composite Shops
- Flight Simulation & Training

CREATIVE DESIGN

- Advertising & Marketing
- Architecture & Engineering
- Film, TV Production, & Digital Media
- Fashion / Lifestyle
- Industrial Design

HOSPITALITY & TOURISM

- Conventions, Conferences, & Trade Fairs
- Cruise Tourism
- Cultural Arts
- High Income International Tourists
- Medical Tourism
- Tourism IT

INFORMATION TECHNOLOGY

- Back Office Support & IT
- Computational Science & Health IT
- Data Centers
- Digital Media
- Logistics IT
- Mobile Applications
- Simulation Technology
- Tourism IT

INTERNATIONAL BANKING & FINANCE

- International Banks
- International Insurance & Wealth Management
- Maritime Services & Trade Finance
- Mobile Applications
- Technical Customer Support & Back Office
- Venture Capital & Private Equity

LIFE SCIENCES & HEALTH CARE

- Agricultural Sciences
- Back Office Operations
- Biologics
- Computational Science & Health IT
- Medical Tourism
- Medical Devices
- Pharmaceuticals

TRADE & LOGISTICS

- Distribution Centers
- Logistics IT
- Maritime Services & Trade Finance
- Perishables
- Value-Added Services – Assembly & Kitting

Target Opportunity Matrices

On the following pages, each target is described in its own one-page "Target Opportunity Matrix", which summarizes the key growth trends, local assets, goals, niche sectors, and target occupations for the target.

TARGET OPPORTUNITY MATRIX

Aviation

Global Growth
"Is it a growing market?"

Opportunities
- ✓ Growing international airline fleets
- ✓ Government replacement of military fleet
- ✓ Rising market for replacement parts

Threats
- o Rising fuel costs
- o Consolidation of airline activities to specific hubs
- o Competition from overseas manufacturers

Community Goals
"What do we want to accomplish?"

- ➢ Build Miami-Dade County's reputation as a global aviation hub
- ➢ Increase aircraft and engine part manufacturing employment
- ➢ Develop a regional MRO center

Action ROI
"What can we influence?"

- ➢ Market Miami-Dade County's distribution capabilities for aerospace
- ➢ Support flight training programs
- ➢ Work with MIA to develop maintenance capacities and agreements
- ➢ Attract global air show

Local Asset Fit
"Can we compete?"

Strengths
- ✓ Geographic location
- ✓ Distribution linkages to emerging markets
- ✓ Heavy passenger and freight traffic at MIA
- ✓ Existing employment concentrations in Aviation industries

Weaknesses
- o Competition from other manufacturing regions domestically and abroad
- o Relatively small technical workforce
- o Utility capacity and cost

Niche Sectors
- Aircraft Parts & MRO
- Assembly & Manufacturing
- Composite Shops
- Flight Simulation & Training

Target Occupations
- Aerospace engineers
- Aircraft/avionics technicians
- Industrial engineers
- Industrial technicians
- Machinery/equipment repair technicians
- Network analysts
- Software engineers

TARGET OPPORTUNITY MATRIX

Opportunities
- ✓ Digitalization of content
- ✓ Growing Hispanic markets in Latin America and US

Threats
- o Lower ad budgets remain post-decline
- o Other states' incentives for film
- o Global outsourcing lowers job demand

Global Growth
"Is it a growing market?"

Community Goals
"What do we want to accomplish?"

- ➢ Attract and grow firms in advertising & marketing, architecture & engineering
- ➢ Enhance reputation as destination for fashion, art, film industry and strengthen connection to tourism
- ➢ Retain creative talent

Creative Design

Action ROI
"What can we influence?"

- ➢ Boost recruitment of creative industry for economic development
- ➢ Attract creative industry conferences
- ➢ Boost entrepreneurial resources for creative firms
- ➢ Strengthen Miami's external creative brand

Local Asset Fit
"Can we compete?"

Strengths
- ✓ Strong assets in creative, engineering education
- ✓ Global awareness of Miami brand
- ✓ Creative-friendly local amenities
- ✓ Spanish language content capability

Weaknesses
- o Job losses in creative industries
- o Challenges retaining creative workers
- o Entrepreneurial infrastructure - improving but needs more

Niche Sectors
- Advertising & Marketing
- Architecture & Engineering
- Fashion / Lifestyle
- Film, TV Production & Digital Media
- Industrial Design

Target Occupations
- Artists, animators, & graphic designers
- Audio equipment technicians
- Fashion designers
- Industrial designers
- Translation experts
- Video editors
- Video equipment technicians

TARGET OPPORTUNITY MATRIX

Opportunities	**Threats**
✓Growing number of tourists from emerging markets ✓Increased US tourism as international flight costs increase ✓Visa waiver legislation	o Increased international competition for visitors o Less discretionary income for cultural art purchases, event attendance o Restrictive Visa rules

Global Growth
"Is it a growing market?"

Community Goals
"What do we want to accomplish?"

- Continue to build international reputation as an arts hub
- Increase the number of visitors for business and vacation
- Retain and expand the cruise ships based in the County

Hospitality & Tourism

Action ROI
"What can we influence?"

- Actively market art events and featured artists
- Promote the County as a business destination
- Refine attraction efforts for major and niche cruise lines
- Continue infrastructure investments
- Attract industry conferences

Local Asset Fit
"Can we compete?"

Strengths	**Weaknesses**
✓Traditional reputation as a global destination ✓Existing cruise industry concentration ✓Miami International Airport ✓Culinary schools	o Cruise ship relocations o Business image of Miami as mainly tourism o Visa & security delays at MIA o Size and age of convention center

Niche Sectors

- Conventions, Conferences, & Trade Fairs
- Cruise Tourism
- Cultural Arts
- High Income International Tourists
- Medical Tourism
- Tourism IT

Target Occupations

- Culinary
- Customer Service
- Maintenance & Repair
- Network Analysts
- Operations Analysts
- Surveillance & Security Officers

TARGET OPPORTUNITY MATRIX

Information Technology

Opportunities
- ✓ Web 2.0 reshaping software platforms
- ✓ Growing data traffic worldwide
- ✓ Lat. Am. offshoring
- ✓ Cloud-based models

Threats
- o Low US output of IT grads
- o Further clustering of IT in top tier markets
- o Offshoring models may limit US growth
- o Security concerns

Global Growth
"Is it a growing market?"

Community Goals
"What do we want to accomplish?"

- ➢ Increase education in IT
- ➢ Adopt new IT across local business and gov't sectors
- ➢ Expand broadband access
- ➢ Create a downtown software cluster/nexus
- ➢ Retain IT firms as they grow

Action ROI
"What can we influence?"

- ➢ Recognize growing value of IT to regional ED & education
- ➢ Celebrate success stories
- ➢ Attract IT conferences
- ➢ Elevate Miami's IT brand
- ➢ Form an IT CEO Council
- ➢ Recruit/retain small firms that can grow

Local Asset Fit
"Can we compete?"

Strengths
- ✓ NAP of the Americas
- ✓ Data centers
- ✓ Lat. Am. data traffic
- ✓ Growing software cluster
- ✓ UM LaunchPad
- ✓ IT use in banking, logistics, biomedical
- ✓ IT graduates

Weaknesses
- o Difficulty in retaining IT workforce
- o Lack of capital
- o More IT jobs in suburban Broward
- o Strengths are in back-end IT, not apps
- o Low industry collaboration

Niche Sectors
- Back Office Support & IT
- Computational Science & Health IT
- Data Centers
- Digital Media
- Logistics IT
- Mobile Applications
- Simulation Technology
- Tourism IT

Target Occupations
- App. programmers
- Computational Scientists
- Database admins
- Information, systems analysts
- MIS (Mgrs Info Systems)
- Network admins, security experts
- Software engineers

TARGET OPPORTUNITY MATRIX

International Banking & Finance

Global Growth
"Is it a growing market?"

Opportunities
- ✓ Bank expansion into emerging markets
- ✓ Technology increasing mobile transaction viability
- ✓ Expanding international trade
- ✓ Captive Insurance bill

Threats
- o Regulatory uncertainty
- o Slowed growth tied to risk averse investment post-recession
- o Slow recovery in real estate markets

Community Goals
"What do we want to accomplish?"

- ➢ Expand Miami-Dade's role as a global financial city
- ➢ Increase foreign investment in the County
- ➢ Build multinational presence
- ➢ Support and expand the finance of trade activities

Action ROI
"What can we influence?"

- ➢ Attract banks to establish regional HQs
- ➢ Market opportunities for investment
- ➢ Create supportive regulatory and tax environment
- ➢ Expand educational programs in finance

Local Asset Fit
"Can we compete?"

Strengths
- ✓ Significant foreign bank & multinational presence
- ✓ International trade finance cluster
- ✓ Geographic position
- ✓ International insurance legislation

Weaknesses
- o Real estate market slowdown
- o Limited venture capital availability
- o Formal business language capabilities

Niche Sectors
- International Banks
- International Insurance & Wealth Management
- Maritime Services & Trade Finance
- Mobile Applications
- Technical Customer Support & Back Office
- Venture Capital & Private Equity

Target Occupations
- Compliance
- Customer service
- Database administrators
- Financial analysts
- Human resources
- Legal assistants
- Mgmt., operations, & research analysts
- Operations managers

TARGET OPPORTUNITY MATRIX

Opportunities	Threats
✓Technological change driving new devices, therapies, and diagnostics ✓Aging population increasing demand ✓Health IT and cost-cutting	o Uncertainty related to healthcare reform o Slow development process and high cost for pharmaceuticals and medical devices o Threat from imported generics

Global Growth
"Is it a growing market?"

Community Goals
"What do we want to accomplish?"

- Become a global destination for high-quality tertiary healthcare
- Expand commercialization of university research
- Build a reputation as a life sciences research center
- Become a Life Sciences startup hub

Life Sciences & Health Care

Action ROI
"What can we influence?"

- Strengthen programs to retain college graduates
- Support commercialization and entrepreneurial efforts
- Attract life sciences companies and conferences
- Support regional corridor initiatives

Local Asset Fit
"Can we compete?"

Strengths	Weaknesses
✓Significant health care, research, and education presence ✓High output of health degrees ✓Strong ties to Latin American patients ✓Life Sciences centers at UM and FIU	o Limited retention of local college grads o Competition with other FL regions o Limited early venture capital access o Commercialization efforts at local universities

Niche Sectors

- Agricultural Sciences
- Back Office Operations
- Biologics
- Computational Science & Health IT
- Medical Devices
- Medical Tourism
- Pharmaceuticals

Target Occupations

- Agricultural engineers
- Biomedical engineers
- Industrial engineers
- Medical equip. techs
- Medical lab techs
- Medical scientists
- Mgmt., operations, & research analysts
- Nurses & aides
- Physician assistants

TARGET OPPORTUNITY MATRIX

Opportunities

- ✓ Rapidly rising exports
- ✓ Expansion of the Panama Canal
- ✓ Technology changing logistics capabilities
- ✓ Trade agreements opening up new markets

Threats

- o Rising fuel costs
- o Demand for goods affected by fluctuating economy
- o Competition from US and global hubs

Global Growth
"Is it a growing market?"

Community Goals
"What do we want to accomplish?"

- ➢ Increase global recognition of Miami-Dade's position
- ➢ Increase cargo traffic
- ➢ Grow local trade financing and logistics sectors
- ➢ Leverage trade to support other value-added industries

Trade & Logistics

Action ROI
"What can we influence?"

- ➢ Increase distribution capacities and expand industrial real estate
- ➢ Global image marketing
- ➢ Attract additional multinational firms
- ➢ Expand trade assistance programs

Local Asset Fit
"Can we compete?"

Strengths

- ✓ Geographic location
- ✓ Port and airport expansions
- ✓ Cultural connectivity with Latin America
- ✓ Spanish language skills in workforce
- ✓ Foreign Trade Zone

Weaknesses

- o Competition from other expanding ports
- o Limited warehouse facilities
- o Significant pass through of goods

Niche Sectors

- Distribution Centers
- Logistics IT
- Maritime Services & Trade Finance
- Perishables
- Value-Added Services – Assembly & Kitting

Target Occupations

- Agricultural engineers
- Cargo equip. operators & handlers
- Industrial engineers & technicians
- Inspectors
- Logisticians
- Machinery/equipment Maintenance
- Transport drivers

ABOUT *ONE COMMUNITY ONE GOAL* AND THE TARGET INDUSTRIES REPORT

ABOUT ONE COMMUNITY ONE GOAL

Miami-Dade County is among the most dynamic communities in the world. The *One Community One Goal Targeted Industry Strategic Plan* will provide the unified vision and direction needed to translate those visionary initiatives and many others into long-term economic development opportunities for all Miami-Dade County residents.

The strategic planning process involves four major phases as described and illustrated on the following pages.

PHASE 1: Competitive Assessment / SWOT

The *One Community One Goal Targeted Industry* strategic planning process began with the *Competitive Assessment*, which analyzes Miami-Dade County's strengths and challenges from a corporate site selector's perspective. This phase of the report combines mock site selection tours, stakeholder focus groups and interviews, data analysis, a community survey, and an examination of existing studies to evaluate the County's assets and opportunities.

Prior to starting the *Assessment*, the project team read more than 50 past studies, reports, and strategic plans conducted for Miami-Dade County, its neighboring metros, and the State of Florida over the past 15+ years. Our objective is not to duplicate the good work that has already taken place. Instead, it is to update information, draw together ideas, and offer a fresh external perspective on future opportunities.

The *Competitive Assessment* report was completed in December 2012.

PHASE 2: Target Industry Identification

During the current Phase 2, the team is evaluating Miami-Dade County's current target industries utilizing a series of analytical tools, including location quotient and shift-share analysis, and exploring local potential for expansion in emerging sectors. This phase has culminated in detailed profiles of recommended target industries and niche sub-sectors.

PHASE 3: Education Assets Inventory

One of the most significant differentiators of *One Community One Goal* is the extraordinary involvement of the educational community and the desire to closely align economic development and workforce development activities. This collaboration gives Miami-Dade County an advantage.

Immediately following the selection of target industries, the consulting team will deliver an *Education Assets Inventory* report. The Inventory report will examine how well Miami-Dade County is prepared to meet the talent needs of the target industries. For each industry, the report will describe related educational offerings, throughput, initiatives aimed at attracting individuals into those programs, and programs in which educators and industry are collaborating. Based on those findings, the report will identify topic areas that are currently underserved relative to industry needs, best practice examples, career transition models, and other recommendations to boost availability of and participation in programs that fuel Miami-Dade County's target industry growth.

PHASE 4: Target Industry Strategies

One Community One Goal will conclude with an action plan for each target industry. These strategy recommendations will be custom tailored for Miami-Dade County and will address workforce development, community development, and marketing. Phase 4 will also generate an implementation calendar, task assignment, and performance metrics.

The following diagram illustrates the *One Community One Goal* strategic planning process and how each phase of the project feeds into the final target industry action plans.

Strategic Planning Process

ABOUT THIS REPORT

The purpose of this *Target Industries* report is to identify and describe the target industries for Miami-Dade County's future economic development initiative, *One Community One Goal.* This report provides an in-depth examination of the recommended targets for Miami-Dade County. The findings will educate area leadership and the public on the inner workings of each target, provide marketing content for future outreach activities, and establish the direction of the final phase of this project, the *Target Industry Strategies.*

The report begins with an explanation of target selection methodology then recommends target industries and niche sectors. It concludes with profiles of each recommended target. Specific components of the report include:

Section 1: Target Selection

Methodology

The first section of this report addresses the basic concepts of target industry selection, answering questions such as: Why target? What is a target industry? How are targets selected for a community?

Current Industry Dynamics

This section begins the evaluation of industry dynamics in Miami-Dade County. It examines local and national growth trends for 20-25 industry clusters within the County, including cluster concentrations ("location quotients") and growth forecasts. This analysis results in a long-list of potential targets for Miami-Dade County.

Platforms for Industry Growth

Platforms for Industry Growth contains a deeper review of the County's strengths they relate to each prospective target. A summary of the *Competitive Evaluation* report is included in this section, which reflects both quantitative (economic research and benchmark analysis) and qualitative (interviews, focus groups, surveys, and consultant observations) perspectives on Miami-Dade County's assets.

Miami-Dade County's Vision

Before finalizing the target industry list, it is important to ensure that those industries complement the vision and goals of Miami-Dade County's residents. In the past six months, the consulting team has conducted focus groups and interviews with more than 100 area leaders and received more than 4,100 responses in three languages to the One Community One Goal resident survey. This input was not only valuable in the development of the *Competitive Assessment* report, but it also serves as the final target filter: What types of businesses do Miami-Dade County residents want to grow in the community in the future?

Section 2: Target Recommendations

All prior steps in the One Community One Goal planning process inform the selection of Miami-Dade County's recommended target industry list, which is provided in this section.

Section 3: Target Profiles

The last section of this report contains profiles of each of the final target industries. Profiles highlight growth trends, location requirements, and local assets that can be leveraged to grow the industry. Niche sectors are provided and described for each.

SECTION 1:
TARGET SELECTION

METHODOLOGY

What is an Industry Cluster?

Industry clusters are concentrations of interrelated businesses, suppliers, and support institutions that locate within close proximity to one another. Companies operating in the same field often cluster together to increase productivity, access a broader base of talent, reduce transportation costs, and share research and knowledge.

Why Target?

Targeting ensures that a community's economic development resources are focused on industry clusters that will generate the highest return on investment. Economic development organizations have limited funding and staff time and must prioritize activities. Targeting allows an economic development organization to hone in on expanding industry clusters in which their community is most competitive, thus maximizing every dollar spent. Most economic development organizations have between four and six target industries and concentrate on primary employers (see side bar).

A target industry cluster initiative yields even greater results when educational curricula, workforce development programs, public policy decisions, and infrastructure investments are aligned around the same set of targets. This level of coordination reassures businesses that area leaders are committed to their success, thus making a community a more attractive location.

Targeting a particular industry does not mean that other industries are ignored and will not grow. Conversely, targeting catalyzes overall economic growth. Every industry benefits from the heightened business activity and new spending that results from investments in a target industry cluster.

What is a Primary Employer?

Primary employers are businesses that export goods and services outside of the local economy. These exports inject new dollars into the economy, resulting in increased wages and jobs as revenue earned by the business is spent on employee salaries and goods and services that it purchases from local suppliers. As this funding is earned, it is redistributed throughout the rest of the economy, multiplying in impact. Manufacturing and software companies are examples of primary employers.

What is a Secondary Employer?

Secondary employers serve the local community. A majority of the goods and services created by those organizations are consumed within the community. While these goods and services are important staples of a community, the multiplier effect of spending is less than that by primary employers. Retail and construction are examples of secondary employers.

Target Selection Process

Target selection is not a perfect science. There is no single mathematical formula for determining the eligibility of target candidates. Instead target selection is an iterative process that considers a mix of quantitative and qualitative inputs. The process is further complicated because traditional government terminology and NAICS codes (North American Industry Classification System) do not always ideally describe or define modern industries, particularly for marketing purposes. As a result, target industry clusters and subsector definitions must often be tailored to a specific community.

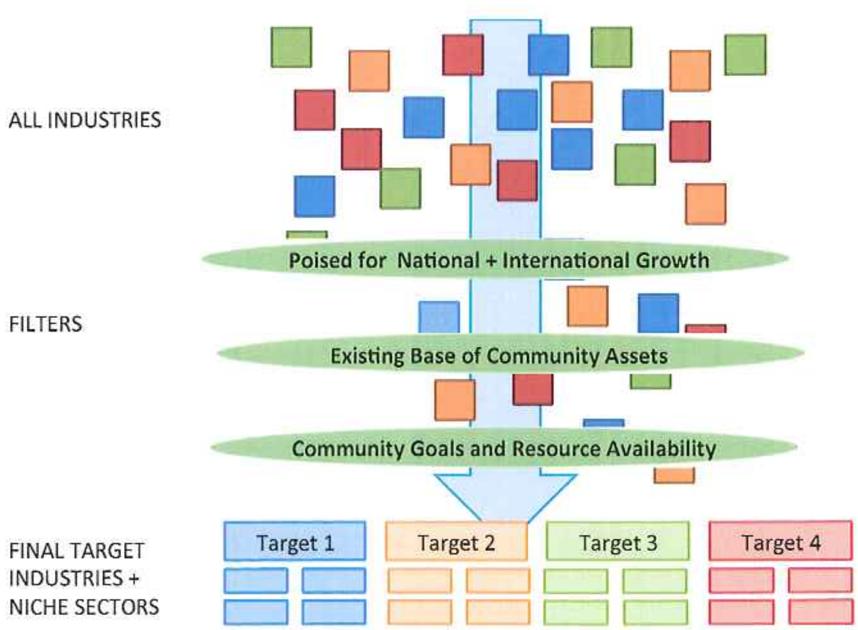
Three major questions serve as filters in the target identification process:

1. **What are current industry dynamics?** Answering this question involves examining cluster concentrations within the County, shift-share industry trends, and industry growth.
2. **What assets are platforms for industry growth?** Many aspects of this question are addressed in the *Competitive Assessment* and *Education Assets Inventory* reports, which examine the competitive strengths of the County through data, interviews, and surveys and identifies those that will be the most effective levers for growth.
3. **What do residents and area leaders want in the future?** Surveys, interviews, and focus groups help the project team better understand Miami-Dade County's vision for itself and the specific goals hoped to be achieved through economic development.

Numerous other questions are asked along the way, which vary depending on the community. For example: Will the industry come to the community naturally without being targeted? Will the industry cluster generate higher wages for residents? Are there adequate economic development resources available to compete for the target?

The diagram below illustrates this filtering process.

Target Selection Process



CURRENT INDUSTRY DYNAMICS

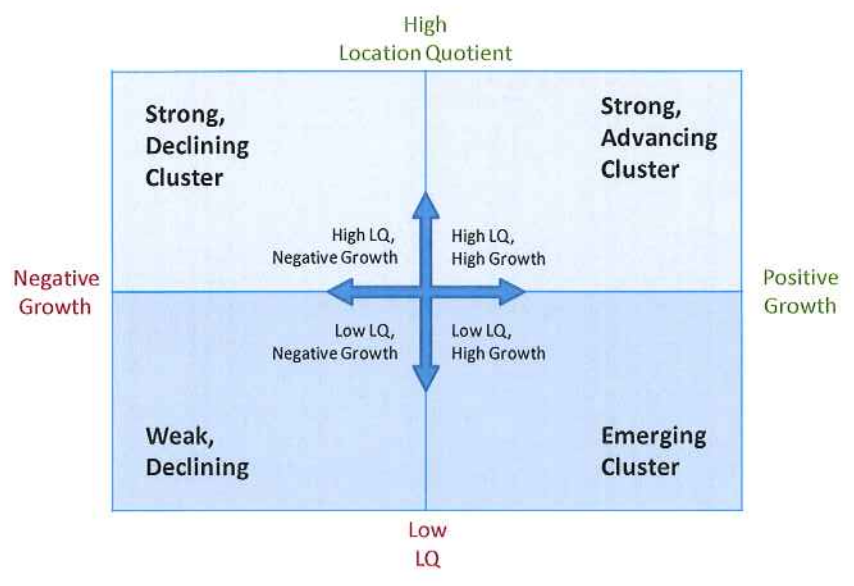
Cluster Concentration

An important step in examining the competitiveness of industry clusters is calculating the location quotients for all industries in Miami-Dade County. Location quotients (LQs) compare the relative concentration of a sector in a local economy with the average concentration seen at the national level. An LQ of 1.5 indicates that the local economy has 50% more jobs per capita in that industry than witnessed at the national level. An LQ of 1.0 indicates parity and an LQ below 1 indicates a below-average concentration. The example diagram below plots industries as bubbles on an X-Y axis where the industry's LQ is on the vertical axis and growth rates are on the horizontal axis. The size of the bubble indicates the local employment base of the sector.

To help examine industry dynamics even further, we aggregate detailed data for 30 industry clusters versus the traditional 10 major industry sectors as defined by the North American Industrial Classification System (NAICS).

As shown in the sample diagram below, each of the four quadrants tells a different story for the clusters. While clusters in the top-right quadrant are viewed as competitive and should be priorities for talent development, clusters to the bottom-right (which are growing, but have below-average concentrations) are viewed as emerging sectors for the County and can grow to parity (1.0) with support from the community, such as

Sample Cluster Bubble Chart



workforce training or entrepreneurial assistance.

Each quadrant is characterized in detail as follows:

- **Top-Right (Competitive):** A cluster in the upper right quadrant is more concentrated in the County than average and is becoming more concentrated over time due to above-average growth rates. These clusters are "standouts" that distinguish the County's economy and are typically growing every year. They are especially important if they are also large in terms of jobs. Large clusters in this quadrant are both important and high performing, which means they will have increasing workforce demand. Small clusters in this quadrant are "high-flyers" and may have high-potential export capabilities and should be developed further.
- **Lower-Right (Emerging):** The lower right quadrant contains clusters that are not yet as concentrated in the County as they are at the national level, but they are becoming more concentrated over time. If they continue this trend, they will eventually move across the horizontal axis into the upper right-hand quadrant. These can be called emerging clusters, having the potential to contribute more to the County's economic base. They can be new sectors of the economy, or support sectors that are historically under-represented in the County (such as Software or Professional Services). These clusters typically require special attention such as entrepreneurial assistance or new workforce training programs.
- **Top-Left (Declining):** The upper left quadrant contains industries that are more concentrated in the County than average, but whose concentration is declining. Having a mid to large-sized cluster in this quadrant is a warning that the County is losing a major part of its export base and should take action to retain existing jobs. If the County does not bolster these industries or replace them with other export industries, then it will likely enter a general recession.
- **Bottom-Left (Low Potential):** Finally, the lower left quadrant contains clusters that are less important regionally than nationally and are also declining in employment. Industries here could be warning signs that your region needs to attract more businesses in those industries in order to maintain an economy that is sufficiently balanced and diversified in comparison to the national economy (particularly in support/supplier industries). In general, clusters in this quadrant indicate a lack of competitiveness and should not be targeted.

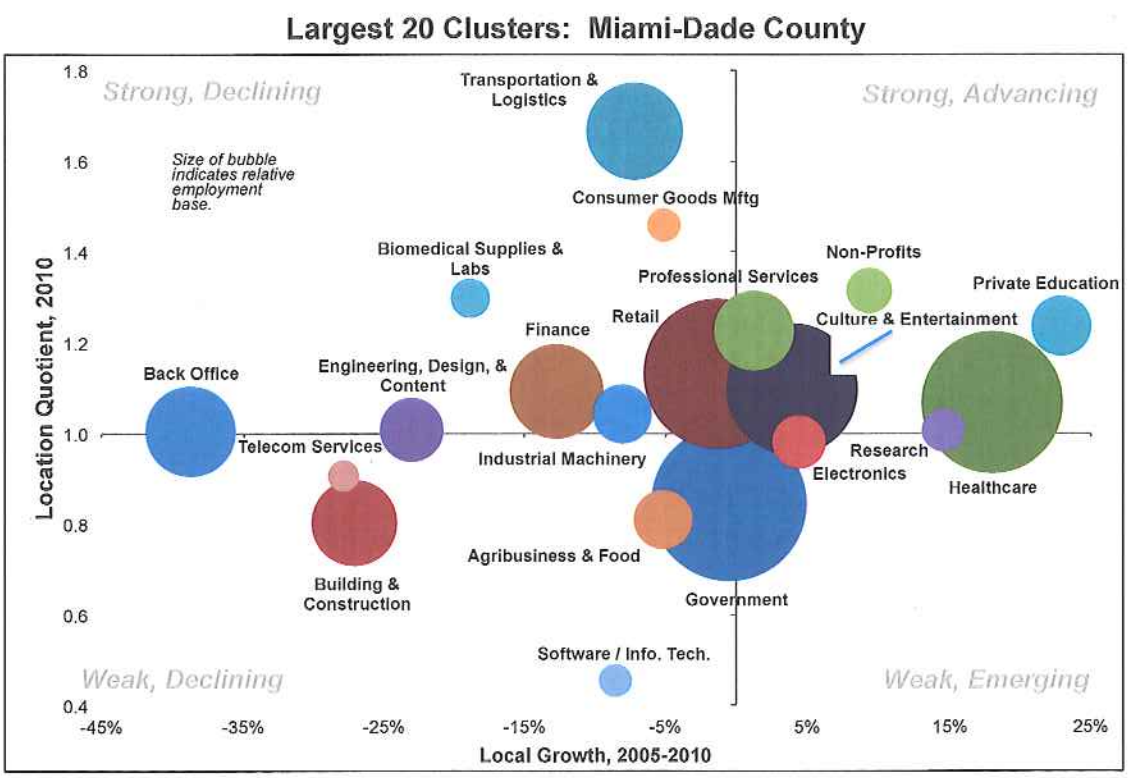
Results of Cluster Concentration

Initial results of the cluster analysis led to the selection of 11 prospective target industries for further evaluation. Examining all industries in Miami-Dade County, it becomes clear that Healthcare is the most sizable growing industry and that the County has a slightly higher than average concentration of employment in this field, making it an obvious prospective target industry.

Fast growing, emerging industries of note are Electronics and Research. Although both of these industries currently have relatively low employment and concentrations, they have both been growing and can be expected to continue to create jobs in the future. Although Software and IT has low concentration and has seen employment decline, this sector provides a great opportunity for growth if nurtured, as it provides a backbone for many other Miami-Dade County industries.

Retail and Culture & Entertainment are two of the County's largest employment industries, but growth has been stagnant in Retail and only slightly above average for Culture & Entertainment in recent years.

Strong but declining industries are frequently good targets for business retention and expansion efforts. In this case, Logistics, Finance, and Biomedical Supplies & Labs stand out as strong targets, with high local concentrations but declining employment in recent years. Whether growth declines are due to local factors or national can be better understood through the shift-share analysis. For now, these will remain as initial prospective target industries.



 Prepared by Avalanche Consulting, McCallum Sweeney Consulting, and the Council for Adult and Experiential Learning

Professional Services has a high LQ and has experienced modest growth despite the recession. This makes it a prospective target, because like Software and IT, Professional Services provide a critical backbone to support other industries.

Engineering, Design, and Content is another industry that has declined in recent years, likely due to close ties to the Construction industry, but will remain a prospective target based on additional input received in the targeting process.

Lastly, Back Office and Telecom Services are considered as initial prospective targets.

The following table provides additional summary of the industry cluster analysis alongside national growth projections produced by and purchased from a national economic modeling firm, EMSI (Economic Modeling Specialists Inc.). EMSI's forecasts are widely considered to be an industry standard. (*According to EMSI, EMSI's basic forecasting methodology is to create a projection for the most current year – 2010 – from past Quarterly Census of Employment and Wages data alone, then adjust it using annual percent changes from the most recent Current Employment Statistics data, is turned into a seasonally-adjusted annual average if not all months of the given year are available.)*

Cluster Competitiveness

Miami-Dade County

Cluster	2010		2005-2010		Forecast Ann. Growth, 2010-2020	
	Job Base	LQ	Ann. Growth	Net New	Miami-Dade	US
Aerospace	1,362	0.4	1.5%	-153	-5.6%	0.1%
Agribusiness & Food	22,262	0.8	-1.1%	-2,100	1.3%	0.3%
Apparel & Textiles	4,934	1.2	-8.8%	-4,050	-2.8%	-1.8%
Automotive	3,002	0.4	-0.5%	-137	2.1%	-0.6%
Back Office	51,652	1.0	-9.3%	-22,008	2.0%	1.5%
Biomedical Supplies & Labs	9,761	1.3	-4.1%	-3,919	0.6%	1.4%
Building & Construction	47,305	0.8	-6.1%	-7,791	1.6%	0.7%
Consumer Goods Mftg	7,160	1.5	-1.0%	-544	0.6%	0.0%
Culture & Entertainment	108,797	1.1	0.8%	5,541	1.1%	1.0%
Private Education	22,853	1.2	4.2%	3,660	1.3%	2.0%
Electronics	18,042	1.0	0.9%	1,164	1.0%	0.2%
Energy	5,503	0.5	0.8%	1,277	1.4%	0.0%
Engineering, Design, & Content	26,062	1.0	-5.1%	-5,312	-0.1%	0.2%
Financial & Real Estate	56,368	1.1	-2.7%	-3,141	1.0%	0.4%
Furniture	2,904	0.9	-9.5%	-2,168	-2.5%	-0.3%
Government	153,197	0.8	-0.1%	1,478	0.7%	0.7%
Healthcare	127,873	1.1	3.4%	18,089	1.3%	1.9%
Industrial Machinery	22,215	1.0	-1.7%	-1,794	1.1%	0.0%
Logging & Metal/Mineral Mining	301	0.2	-17.0%	-355	8.2%	-0.2%
Materials	5,839	0.4	-6.3%	-2,255	0.3%	-0.9%
Metalworking	3,915	0.3	-6.9%	-935	1.1%	-0.6%
Non-Profits	13,092	1.3	1.8%	714	1.3%	0.9%
Professional Services	40,378	1.2	0.2%	856	1.0%	0.9%
Research	12,056	1.0	2.8%	2,546	5.1%	3.1%
Retail	141,121	1.1	-0.3%	-390	0.8%	0.6%
Shipbuilding	662	0.7	-12.4%	-293	-8.1%	-1.0%
Software / Info. Tech.	7,068	0.5	-1.8%	-1,038	2.3%	2.5%
Telecom Services	6,298	0.9	-6.3%	-5,111	-1.2%	-0.2%
Transportation & Logistics	59,673	1.7	-1.5%	-4,546	0.5%	0.5%
Total	**981,590**	**1.0**	**-1.2%**	**-32,747**	**1.0%**	**0.9%**

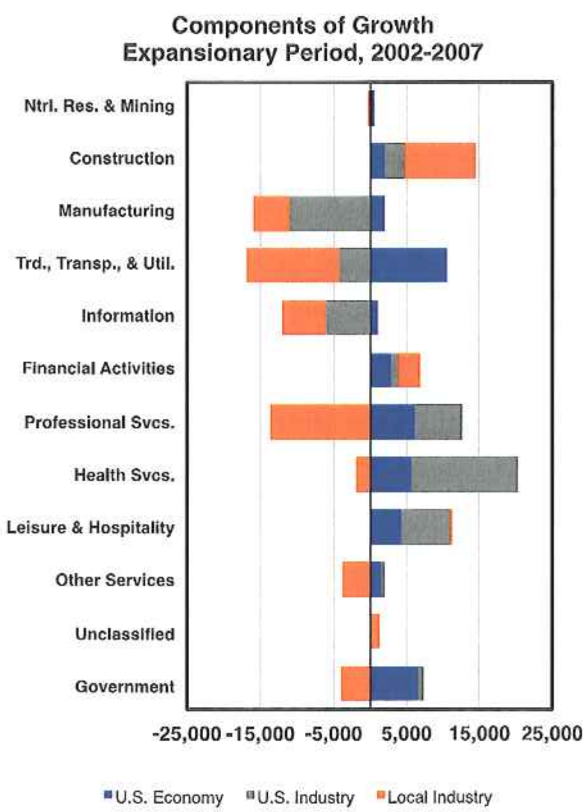
Shift-Share Analysis

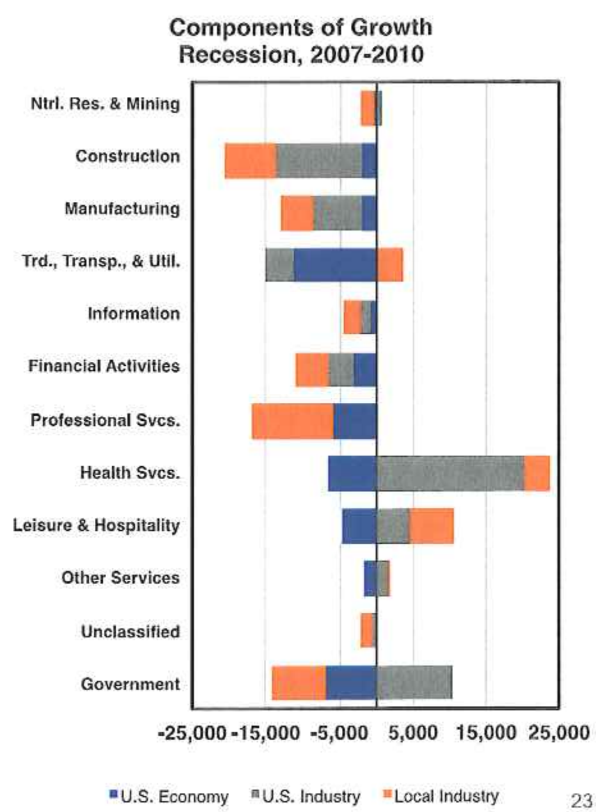
The second step of examining industry clusters in the County involves performing a shift-share analysis. Shift-share analysis looks at broader industry groupings than the location quotient analysis, offering another type of insight regarding Miami-Dade County industry strengths. Within a shift-share analysis, three variables contributing to an industry's growth or decline are revealed: (1) growth/decline of the overall US economy (blue bar in the graphic below), (2) growth/decline related to industry-specific trends at the US level (grey bar), and (3) growth/decline related to related to industry-specific trends at the local level (orange bar). This analysis shows whether an industry is advancing beyond US trends, indicating that the County has a competitive advantage for the industry.

For this analysis, Miami-Dade is examined both before the recession and during. Before the recession (2002-2007), Miami-Dade County's local industry strengths spurred job creation in Construction, Financial Activities, and Hospitality. Other industries grew primarily because of a strong US economy and strong overall national industry growth. In these cases, local industry factors negatively affected employment growth potential.

During the recession (2007-2010), local strengths buoyed growth in Health Services, Hospitality, and Trade, Transportation, & Utilities. Local industry dynamics caused greater job losses than the US economy and US industry factors for the following industries: Financial Activities, Professional Services, Manufacturing, Construction, and Government.

This shift-share analysis reinforces the findings of the cluster concentration analysis. Professional Services





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stands out as an industry that follows overall population and economic growth patterns, and therefore may not be an ideal target industry. However, it will remain on the list for further evaluation due to its important support role for other industry clusters and the potential for export of these services.

Forecasted Growth

An examination of forecasted industry growth serves as the final piece of the cluster analysis and helps narrow the prospective target list. In this section, the consulting team contrasts forecasted industry growth for both the US and Miami-Dade County. The most successful prospective target industries tend to be those with high projected local and national growth.

According to EMSI, between 2010 and 2020 the fastest growing industries in the US will be:

- Research
- Software / Information Technology
- Private Education
- Healthcare
- Back Office
- Biomedical Supplies

Job Growth Forecasts, 2010-2020

Miami-Dade County vs. the U.S.

Cluster	Miami-Dade County Forecast	Miami-Dade County Net New	US Forecast	Target Potential
Aerospace*	-43.8%	-597	0.6%	
Agribusiness & Food	14.2%	3,154	3.5%	
Automotive	22.6%	677	-5.6%	
Back Office	22.3%	11,504	15.7%	
Biomedical Supplies & Labs	6.7%	652	14.8%	
Building & Construction	17.2%	8,142	7.3%	
Consumer Goods Mftg	6.2%	446	-0.1%	
Culture & Entertainment	11.3%	12,332	10.9%	
Private Education	13.4%	3,062	21.5%	
Electronics	10.0%	1,808	1.7%	
Energy	15.3%	841	-0.4%	
Financial & Real Estate	10.4%	5,844	3.9%	
Healthcare	14.2%	18,207	20.9%	
Non-Profits	13.5%	1,763	9.7%	
Professional Services	10.2%	4,132	8.9%	
Research	64.5%	7,779	35.2%	
Software / IT	26.0%	1,840	28.0%	
Transportation & Logistics	4.9%	2,927	5.3%	
Total	**11.0%**	**107,568**	**9.1%**	

*Note that Aviation Services is primarily found in the Transportation & Logistics cluster. Aircraft Parts & Equipment Manufacturing is found in Aerospace, along with Space Research.

Also according to EMSI, between 2010 and 2020 the fastest growing industries in Miami-Dade County will be:

- Research
- Software / Information Technology
- Back Office
- Building and Construction
- Energy

Some of the above industries are starting from a smaller, undeveloped level and won't translate to large job numbers. Research is forecasted to create 7,800 jobs and Back Office could create 11,500 jobs.

This table contrasting forecast industry growth rates for the US and Miami-Dade County offers a quick indicator of prospective targets, but does not provide a complete picture. A green, yellow, or red light does not mean that an industry should be automatically eliminated or accepted as a target. Other factors must be considered before finalizing the list of target industries, including local assets and the community's vision for its future.

PLATFORMS FOR INDUSTRY GROWTH

Competitive Assessment Report Highlights

The following section provides a summary of findings from the *Competitive Assessment* report by section. These findings highlight the diverse range of assets located in Miami-Dade County and their potential to support various prospective target industries.

WORKFORCE

- Education leaders engaged in the community and economic development
- High concentration and volume of college students and graduates
- Significant number of technical degrees awarded, particularly in health fields
- High concentration of regional medical workers
- Highly rated programs, positive perception, and increasing prestige of all area colleges and universities – a higher education destination
- Strong expansion of higher education R&D
- Culturally diverse, multi-lingual workforce
- Major strides are being taken to improve Miami-Dade County schools
- Culture of population is historically entrepreneurial-minded
- Education faculty are experienced in multi-cultural education
- Success in leveraging state incumbent worker funding
- Small business

BUSINESS CLIMATE

- Hub of global business between the US, Latin America, and the Caribbean
- No personal income tax and competitive corporate income tax rates
- Competitive sales tax rates
- Nearly $400M in research activity at local universities and growing fast
- Global economy with strong international connections
- Strong cultural, business, and infrastructure assets for global trade
- NAP of the Americas and other data centers
- Market-adjusted real estate costs, housing and office
- Strong and growing healthcare and life sciences sector, international banking
- Emerging and energized IT sector
- Tradition of robust small business community
- Multi-lingual business community

INFRASTRUCTURE

- Excellent diverse distribution infrastructure
- Competitive airfares
- MIA with high passenger traffic, cargo activity, and $6+ billion in recent upgrades
- 5 regional airports
- Port of Miami – greatly increasing capacity to handle international trade and is #1 cruise port
- NAP of the Americas and other data centers
- Expanding mass transit from MIA to downtown
- Strong medical community
- Creative traffic management

QUALITY OF LIFE

- Beautiful climate and natural environment
- Outdoor recreation
- Ethnic diversity
- Robust cultural opportunities
- Moderate housing affordability relative to other global metropolises
- High quality healthcare
- Creative approaches to city development that reflect Miami-Dade County's character
- Continued investment in world-class arts and cultural facilities and events
- Professional sports teams
- International visitor destination and visibility

MIAMI-DADE COUNTY'S VISION

Stakeholder input and collaboration in the *One Community One Goal* (OCOG) strategic planning process has been significant. This input will be considered in every step of the plan, including the selection of target industry clusters. It is important that the clusters align with the community's vision of the future.

The OCOG public survey received 4,133 responses. At the time of this report, more than 100 people have participated in focus groups. The consulting team has conducted more than 40 individual and small group interviews. More than 200 people attended the Greater Miami Chamber of Commerce's Goals Conference at which the consulting team facilitated a question and answer session. More than 50 people attended an Entrepreneurship and Innovation workshop led by the consulting team. In addition, the consulting team conducted a two-day mock site selection tour of the County.

A 50+ member Steering Committee has provided strong guidance from the beginning of the strategic planning process. The Steering Committee has participated in four, two-hour workshops with the consultants to-date.

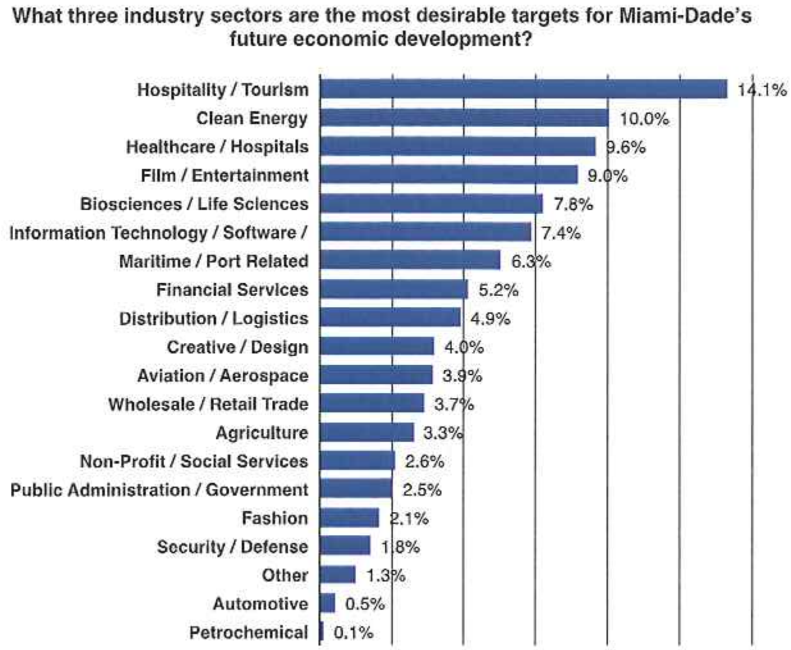
Survey

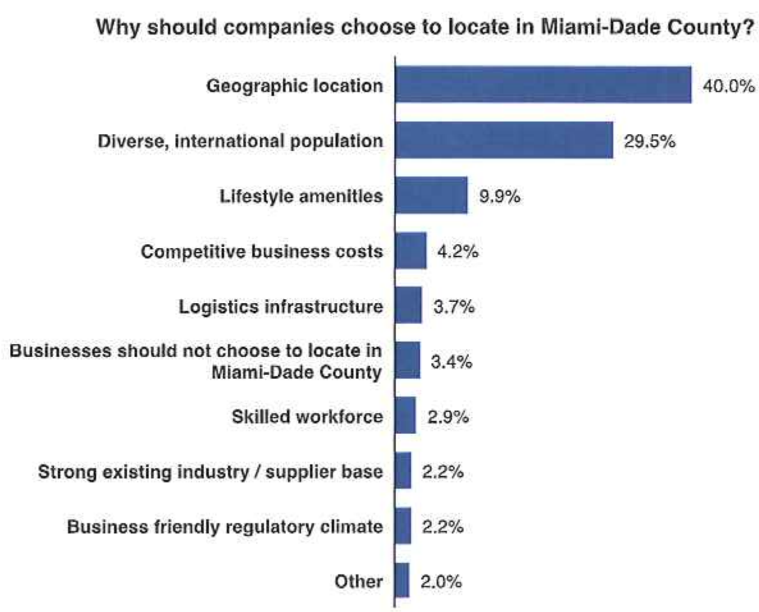
The *OCOG Survey* was offered to residents of Miami-Dade County and received 4,133 responses. Survey respondents were asked to rate industry sectors most desirable for targets in Miami-Dade County, to rate most desirable types of business activities, and evaluate the competitive attraction strengths of the County. These responses very closely align with and complement the findings of the *Competitive Assessment* and cluster analysis, reinforcing the match between prospective targets and local goals.

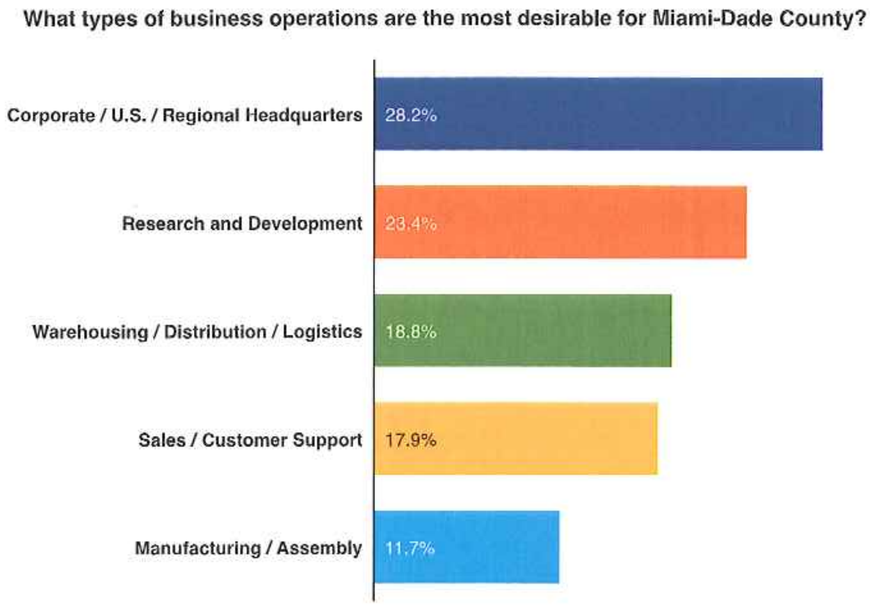
The Top 10 most desirable target industries identified by survey respondents were:

- Hospitality / Tourism
- Clean Energy
- Health Care / Hospitals
- Film / Entertainment
- Bioscience / Life Sciences
- IT / Software / Telecom
- Maritime / Port Related
- Financial Services
- Distribution / Logistics
- Creative / Design

Following are selected results and rankings from the OCOG Survey, which was completed in August 2011.


What three industry sectors are the most desirable targets for Miami-Dade's future economic development?
Hospitality / Tourism 14.1%
Clean Energy 10.0%
Healthcare / Hospitals 9.6%
Film / Entertainment 9.0%
Biosciences / Life Sciences 7.8%
Information Technology / Software / 7.4%
Maritime / Port Related 6.3%
Financial Services 5.2%
Distribution / Logistics 4.9%
Creative / Design 4.0%
Aviation / Aerospace 3.9%
Wholesale / Retail Trade 3.7%
Agriculture 3.3%
Non-Profit / Social Services 2.6%
Public Administration / Government 2.5%
Fashion 2.1%
Security / Defense 1.8%
Other 1.3%
Automotive 0.5%
Petrochemical 0.1%


Why should companies choose to locate in Miami-Dade County?
Geographic location 40.0%
Diverse, international population 29.5%
Lifestyle amenities 9.9%
Competitive business costs 4.2%
Logistics infrastructure 3.7%
Businesses should not choose to locate in Miami-Dade County 3.4%
Skilled workforce 2.9%
Strong existing industry / supplier base 2.2%
Business friendly regulatory climate 2.2%
Other 2.0%



Interviews and Focus Groups

Over the course of this assessment, the consulting team conducted more than 40 personal and small group interviews. In addition, the consulting team facilitated seven focus groups with executives from the following industries:

- Aviation / Aerospace
- Banking / Professional Services
- Design / Creative / Fashion – Lifestyle
- Information Technology
- Life Sciences (via survey)
- Trade / Logistics
- Tourism / Hospitality

During the focus groups, participants helped the consulting team assess their industries' needs and opportunities for growth. They also provided input on niche sectors within their industries that could be targets of future economic development and workforce development initiatives. In addition, a New Leaders group was convened. The following highlights findings from each focus group.

AVIATION / AEROSPACE

Why should your industry be an economic development target?

- "Rich history in aviation"
- "Geographic location"
- "Mechanical skills"
- "Port means we can bring in heavy equipment"
- "MIA and other airports"
- "Base of small aircraft repair shops"
- "Cargo and military presence"
- "Pratt & Whitney leftover engineers"
- "Capacity of Opa-locka and Tamiami"

What niche sectors of your industry should be targeted for Miami-Dade County?

- "Sales and marketing"
- "Simulation and training"
- "Civic aircraft MRO"
- "MRO"
- "Smaller parts and electronics manufacturing"
- "An airshow"

BANKING / PROFESSIONAL SERVICES

Why should your industry be an economic development target?

- "We are an international financial hub"
- "70-80 banks doing international banking currently"
- "Direct connection to Latin America"
- "Multi-lingual workforce"
- "International law firms"
- "Latin American customer support"
- "Trade industry"
- "Wealth management, wealthy residents"
- "Safe place for Latin Americans to keep their money"

What niche sectors of your industry should be targeted for Miami-Dade County?

- "15-20 person executive, regional HQ"
- "Asian and European banks"
- "Trade banks"
- "Major IT headquarters"
- "Venture and small cap financiers"
- "Mobile banking"
- "Banking IT and back office"

DESIGN / CREATIVE / FASHION - LIFESTYLE

Why should your industry be an economic development target?

- "Creativity and design is everywhere in Miami-Dade County"
- "It permeates our community"
- "We have everything from local artists to international festivals"
- "Art Basel"
- "Miami Art Museum"
- "New World Symphony"
- "Ultra Music Festival"
- "Swimwear, fashion"
- "Culinary"
- "Architectural style"
- "Cultural diversity"

What niche sectors of your industry should be targeted for Miami-Dade County?

- "Digital content"
- "Film and television production"
- "South American creative everything"
- "All creative businesses"
- "International advertising agencies"
- "International marketing agencies"
- "Architecture and planning"
- "Events"
- "Fashion"
- "Culinary"
- "Art / creative education"

INFORMATION TECHNOLOGY

Why should your industry be an economic development target?

- "Terremark / NAP"
- "Miami is 6th largest telecom hub"
- "Life Sciences Park"
- "Launch Pad"
- "Fun, weather, hip, young"
- "Knight Foundation"
- "Refresh Miami conference"
- "Many back office IT jobs here categorized in other industries"
- "Cluster is growing here"

What niche sectors of your industry should be targeted for Miami-Dade County?

- "Data security"
- "Advanced persistent threat detection"
- "Logistics IT"
- "Data storage"
- "International banking / banking IT"
- "Mobile banking"
- "Bioinfomatics" / "Care Cloud"
- "Back-end IT" / "Outsourced IT"
- "Mobile apps"

LIFE SCIENCES (SURVEY)

Why should your industry be an economic development target?

- "Significant academic presence"
- "Growing academic infrastructure"
- "Year-round outdoor living"
- "Hospitals and patients"
- "Access to emerging markets"
- "Stable workforce"
- "Capacity to support commercial companies"
- "Research and Development"
- "Climate"
- "Multilingual workforce"
- "Diversity"
- "Logistics, multimodal center"

What niche sectors of your industry should be targeted for Miami-Dade County?

- "Manufacturing"
- "None at this time, we need to stop the outflow of life sciences companies from FL"
- "Boost UM biotech programming"
- "Biomedical, biotech"
- "Medical IT"
- "Genomics"
- "Stem cells"
- "Regenerative medicine"
- "Medical diagnostics"

TRADE & LOGISTICS

Why should your industry be an economic development target?

- "Getting cargo from airport to seaport, in Miami we're 15 minutes away from everything"
- "Overnight services until 9 pm"
- "MIA"
- "Port of Miami"
- "650 licensed forwarding companies"
- "No place is as close"
- "Communication between companies and their peers is great"
- "Regional knowledge of every Caribbean and Central America market"

What niche sectors of your industry should be targeted for Miami-Dade County?

- "Logistics is an underlying competency, not necessarily a target industry"
- "Distribution businesses, not logistics"
- "We don't need to be a target, we are already here and will come here anyway"
- "Logistics IT companies"
- "Opportunities to add value"
- "Deconsolidating and reconsolidating"
- "Pre-positioning for export companies"
- "Advanced manufacturing"
- "Kitting"

TOURISM / HOSPITALITY

Why should your industry be an economic development target?

- "Assets too numerous to list"
- "#1 cruise port"
- "Two national parks"
- "Beaches"
- "Boutique hotels"
- "South Beach"
- "NASCAR"
- "BCS Championship"
- "Summit of the Americas"
- "Homestead Airshow"
- "Doral Golf Tournament"
- "Arts Festivals"

What niche sectors of your industry should be targeted for Miami-Dade County?

- "Convention Center"
- "Wealthy international tourists"
- "Sustainable / green tourism"
- "Visitors from emerging markets – Russia, India, China"
- "GLBT visitors"
- "Medical tourism"
- "Entertainment, film, and fashion"
- "IT services and software for tourism"
- "Cruise industry to port in Miami"
- "Major only tourism companies – Orbitz, Expedia, etc."

SECTION 2:
TARGET RECOMMENDATIONS

TARGET RECOMMENDATION LIST

Upon completion of the project team's review of Miami-Dade County's industry clusters, competitive assets, and community vision, the project team prepared the following target industries and niche sectors. **The foundation for growth in all industries is *education*** - one of Miami-Dade County's greatest assets.

A table containing all target industries and niche sectors is provided below, followed by a list of targets for ease of viewing.

Aviation	Creative Design	Hospitality & Tourism	Information Technology
• Aircraft Parts & MRO • Assembly & Manufacturing • Composite Shops • Flight Simulation & Training	• Advertising & Marketing • Architecture & Engineering • Fashion / Lifestyle • Film, TV Production, & Digital Media • Industrial Design	• Conventions, Conferences, & Trade Fairs • Cruise Tourism • Cultural Arts • High Income International Tourists • Medical Tourism • Tourism IT	• Back Office Support & IT • Computational Science & Health IT • Data Centers • Digital Media • Logistics IT • Mobile Applications • Simulation Technology • Tourism IT
International Banking & Finance	**Life Sciences & Health Care**	**Trade & Logistics**	
• International Banks • International Insurance & Wealth Management • Maritime Services & Trade Finance • Mobile Applications • Technical Customer Support & Back Office • Venture Capital & Private Equity	• Agricultural Sciences • Back Office Operations • Biologics • Computational Science & Health IT • Medical Devices • Medical Tourism • Pharmaceuticals	• Distribution Centers • Logistics IT • Maritime Services & Trade Finance • Perishables • Value-Added Services – Assembly & Kitting	

AVIATION

- Aircraft Parts & MRO (Maintenance, Repair, Overhaul)
- Assembly & Manufacturing
- Composite Shops
- Flight Simulation & Training

CREATIVE DESIGN

- Advertising & Marketing
- Architecture & Engineering
- Film, TV Production, & Digital Media
- Fashion / Lifestyle
- Industrial Design

HOSPITALITY & TOURISM

- Conventions, Conferences, & Trade Fairs
- Cruise Tourism
- Cultural Arts
- High Income International Tourists
- Medical Tourism
- Tourism IT

INFORMATION TECHNOLOGY

- Back Office Support & IT
- Computational Science & Health IT
- Data Centers
- Digital Media
- Logistics IT
- Mobile Applications
- Simulation Technology
- Tourism IT

INTERNATIONAL BANKING & FINANCE

- International Banks
- International Insurance & Wealth Management
- Maritime Services & Trade Finance
- Mobile Applications
- Technical Customer Support & Back Office
- Venture Capital & Private Equity

LIFE SCIENCES & HEALTH CARE

- Agricultural Sciences
- Back Office Operations
- Biologics
- Computational Science & Health IT
- Medical Tourism
- Medical Devices
- Pharmaceuticals

TRADE & LOGISTICS

- Distribution Centers
- Logistics IT
- Maritime Services & Trade Finance
- Perishables
- Value-Added Services – Assembly & Kitting

In the following section, we provide profiles of each target and its niche sectors. These profiles provide a discussion of national trends and drivers for each target, and supporting local assets are highlighted.

We also provide a "Target Opportunity Matrix" which captures the key elements and drivers of each target. This matrix is to serve as a "one-page game plan" for the target industry, which can be shared with stakeholders for easy communication about the target and its opportunities. This Matrix should be kept up-to-date and refined by industry stakeholders as the overall plan is implemented.

In the forthcoming recommendations report, each target industry will be flagged for the types of organizational efforts required to support them: recruitment, retention, expansion, and/or startup. Each will also be characterized by their stage of opportunity, which will help prioritize implementation activities: immediate, mid-term, or long-term. The recommendations report will also provide key sales messages that can be used in marketing Miami-Dade County to the target industry.

SECTION 3: TARGET PROFILES

AVIATION

The Aviation industry includes a range of manufacturing and service companies related to the production, maintenance, and operation of aircraft.

Based on a review of local assets and interviews with leaders from the field, the following niche sectors were identified for Miami-Dade County.

- **Aircraft Parts & MRO (Maintenance, Repair, Overhaul):** Miami-Dade County is well-positioned to support aircraft parts and maintenance and repair operations, with an existing workforce and distribution capability. Miami International Airport (MIA) and other regional airports can provide space for independent operations that serve general aviation and commercial airlines for the southeastern US as well as the Caribbean and Latin America. Miami-Dade County already hosts AAR Corp's Landing Gear Services division, which provides MRO services for commercial and military aircraft.
- **Assembly & Manufacturing:** The after-market replacement part industry has grown rapidly, as aging fleets across the globe require new or remanufactured parts for repairs. Miami-Dade County is positioned as a location for the manufacture and assembly of aircraft parts and equipment, particularly for international sales, with a highly connected distribution network to the rapidly expanding South American aircraft market. The County has a small but steady aircraft manufacturing employment base focused on small aircraft, including manufacturers such as Britten-Norman, Inc.
- **Composite Shops:** The aviation industry requires constant design and material innovation to reduce manufacturing and operations costs, and over the years, the development of increasingly complex composite materials has helped drive new aircraft capabilities. As a major airline hub, Miami-Dade County hosts numerous repair and maintenance companies specializing in composite materials, including American Composites. Global growth in composites-based aircraft will force a transformation in the suppliers and workforce skills in Miami-Dade County.
- **Flight Simulation & Training:** Miami-Dade County has a large cluster in flight training, serving several aviation firms. Flight simulation technology has evolved significantly in recent years with advances in computer speed. Simulators are used to train pilots and flight crew for both civilian and military aircraft. Simulation technology can also be helpful for training engineering and maintenance crews.

On the following page, we provide a "Target Opportunity Matrix" for the Aviation industry in Miami-Dade County.

TARGET OPPORTUNITY MATRIX

Opportunities

- ✓Growing international airline fleets
- ✓Government replacement of military fleet
- ✓Rising market for replacement parts

Threats

- o Rising fuel costs
- o Consolidation of airline activities to specific hubs
- o Competition from overseas manufacturers

Global Growth
"Is it a growing market?"

Community Goals
"What do we want to accomplish?"

- ➢Build Miami-Dade County's reputation as a global aviation hub
- ➢Increase aircraft and engine part manufacturing employment
- ➢Develop a regional MRO center

Aviation

Action ROI
"What can we influence?"

- ➢Market Miami-Dade County's distribution capabilities for aerospace
- ➢Support flight training programs
- ➢Work with MIA to develop maintenance capacities and agreements
- ➢Attract global air show

Local Asset Fit
"Can we compete?"

Strengths

- ✓Geographic location
- ✓Distribution linkages to emerging markets
- ✓Heavy passenger and freight traffic at MIA
- ✓Existing employment concentrations in Aviation industries

Weaknesses

- o Competition from other manufacturing regions domestically and abroad
- o Relatively small technical workforce
- o Utility capacity and cost

Niche Sectors

- Aircraft Parts & MRO
- Assembly & Manufacturing
- Composite Shops
- Flight Simulation & Training

Target Occupations

- Aerospace engineers
- Aircraft/avionics technicians
- Industrial engineers
- Industrial technicians
- Machinery/equipment repair technicians
- Network analysts
- Software engineers

Trends and Drivers

Aircraft manufacturing is a highly concentrated industry, with a few large Original Equipment Manufacturers (OEMs) and primary subcontractors performing a significant share of the aircraft and parts production. Nonetheless, subcontractors receive a growing share of manufacturing orders, particularly for highly specific component pieces, engine parts, and system integration services. Demand for after-market parts has also risen in recent years, as aging global airline fleets require regular maintenance and modernization. This high demand for parts has created numerous opportunities for small, independent replacement part manufacturers.

The US aerospace industry is export-heavy, with more than half of all products going overseas. Major destination markets for engines and parts are Japan, South Korea, and Australia, but emerging markets in the Caribbean, Latin America, and South America are continuing to provide new opportunities as regional airline services expand. With strong distribution connections to global markets, Miami-Dade County is well positioned to act as an aviation product distribution hub and potentially as a location for assembly and manufacturing. Distribution capacities could enhance the County as competitive location for these operations.

Demand for new aircraft is expected to continue to rise in the future, as airlines in the developing world expand their fleets and the US government replaces existing military and civilian craft. Despite continued demand for new aircraft and replacement parts, aviation employment is projected to remain relatively steady in the US over the next decade. Aviation employment in Miami-Dade County is highly concentrated in passenger and freight air transportation. In particular, nonscheduled air freight transportation has grown rapidly over the past five years and is projected to nearly double over the next ten years, as scheduled freight air transportation declines.

Aviation Employment Trends
Miami-Dade County

Subindustry		2010		2005-2010		Forecast Ann. Growth, 2010-2020	
NAICS	Description	Job Base	Density*	Ann. Growth	Net New	Miami-Dade	US
336411	Aircraft Manufacturing	357	0.2	-0.6%	-10	-13.6%	-0.3%
336412	Aircraft Engine and Engine Parts Mfg.	811	1.4	4.3%	153	-3.9%	-0.5%
336413	Other Aircraft Parts and Auxiliary Equip. Mfg.	165	0.2	-6.9%	-71	-13.7%	0.9%
336414	Guided Missile and Space Vehicle Mfg.	29	0.1	42.1%	24	12.9%	1.0%
481111	Scheduled Passenger Air Transportation	11,677	3.9	-2.2%	-1,367	-0.6%	0.7%
481112	Scheduled freight air transportation	912	11.6	-8.1%	-483	-22.3%	-1.6%
481211	Nonsched. Chartered Passenger Air Transp.	786	3.3	-4.0%	-179	-8.4%	1.1%
481212	Nonscheduled air freight chartering	905	15.8	34.7%	701	6.9%	1.5%
4881	Support activities for air transportation	4,762	4.2	0.6%	135	1.6%	1.8%
611512	Flight Training	126	1.0	-26.8%	-473	-18.2%	0.3%
	TOTAL	**20,530**	**2.5**	**-1.5%**	**-1,570**	**-0.5%**	**0.6%**

Source: Avalanche Consulting using U.S. Bureau of Labor Statistics, forecast data from EMSI
Density = Per capita concentration of the industry as % of US concentration (Location Quotient)

CREATIVE DESIGN

Creative Design encompasses the industries of Advertising & Marketing, Architecture & Engineering, Fashion, Industrial Design, and Film & Entertainment:

- **Advertising & Marketing:** This industry provides message development, message distribution services, and branding services to a variety of industries to more effectively reach their target markets. The Advertising & Marketing industry includes Advertising agencies, Public Relations agencies, and Media Buying and Distribution agencies. Agencies in Miami-Dade County leverage unique strengths in serving the Hispanic market in the US and Latin America.
- **Architecture & Engineering:** Firms in this subsector are the designers of the construction industry, from residential properties to infrastructure. Architecture and Engineering services are now globally oriented, which positions Miami-Dade County firms to continue to serve and expand into international markets.
- **Fashion / Lifestyle:** Miami-Dade County has global brand awareness and hosts several international fashion shows and a small corporate base led by Perry Ellis International, whose roots stretch back decades to the time when a bustling apparel industry thrived in West Dade.
- **Film, TV Production, and Digital Media:** These subsectors have a long history in South Florida, from TV shows to blockbuster movies, and increasingly digital content and publishing. The widespread use of computers, tablets, and smart phones has transformed the way content is created and distributed. Miami's strengths in video production are a natural blend with the growing software industry. Additionally, strong Spanish language skills among the local workforce are a major strength for Latin and South American production opportunities.
- **Industrial Design:** Industrial design is a broad subsector focused on improving the aesthetic appeal and functionality of products. The field is similar to architecture but more generally references the design of manufactured products as opposed to structures.

On the following page, we provide a "Target Opportunity Matrix" for the Creative Design industry in Miami-Dade County.

TARGET OPPORTUNITY MATRIX

Opportunities
- ✓ Digitalization of content
- ✓ Growing Hispanic markets in Latin America and US

Threats
- o Lower ad budgets remain post-decline
- o Other states' incentives for film
- o Global outsourcing lowers job demand

Global Growth
"Is it a growing market?"

Community Goals
"What do we want to accomplish?"

- ➢ Attract and grow firms in advertising & marketing, architecture & engineering
- ➢ Enhance reputation as destination for fashion, art, film industry and strengthen connection to tourism
- ➢ Retain creative talent

Creative Design

Action ROI
"What can we influence?"

- ➢ Boost recruitment of creative industry for economic development
- ➢ Attract creative industry conferences
- ➢ Boost entrepreneurial resources for creative firms
- ➢ Strengthen Miami's external creative brand

Local Asset Fit
"Can we compete?"

Strengths
- ✓ Strong assets in creative, engineering education
- ✓ Global awareness of Miami brand
- ✓ Creative-friendly local amenities
- ✓ Spanish language content capability

Weaknesses
- o Job losses in creative industries
- o Challenges retaining creative workers
- o Entrepreneurial infrastructure - improving but needs more

Niche Sectors
- Advertising & Marketing
- Architecture & Engineering
- Fashion / Lifestyle
- Film, TV Production & Digital Media
- Industrial Design

Target Occupations
- Artists, animators, & graphic designers
- Audio equipment technicians
- Fashion designers
- Industrial designers
- Translation experts
- Video editors
- Video equipment technicians

Trends and Drivers

The Creative Design industry has struggled in the recent recession. The industry shed more than 20% of its jobs in Miami-Dade County over the last five years (2005-2010), a higher job loss than seen at the US level. Today, the Creative Design industry employs just over 15,000 workers in the county and is relatively concentrated locally (with a location quotient of 1.3, i.e. 30% more jobs per capita than the US average). Higher rates of growth for "creative" are found inside other industries, in the form of creative workers helping design and market new products in traditional industries.

Miami-Dade County brings a unique combination of assets to its Creative Design industry, from sunny weather for film shooting, to its hip global brand in fashion, to its focus on Latin America in television production. International festivals – new and old – in Miami-Dade County are bringing renewed attention to local artistic talent: Art Basel, various music festivals, and prominent fashion shows. New performance halls and museums have also boosted the cultural economy in South Florida, which further strengthens the brand for all creative industries. A large student body population is learning creative skills and trades at local universities as well as private schools such as the Art Institute of Miami.

Creative Design Employment Trends
Miami-Dade County

Subindustry		2010		2005-2010		Forecast Ann. Growth, 2010-2020	
NAICS	**Description**	**Job Base**	**Density***	**Ann. Growth**	**Net New**	**Miami-Dade**	**US**
314	Textile product mills	656	0.7	-7.1%	-294	-1.0%	-1.8%
315	Apparel manufacturing	1,318	1.1	-13.4%	-1,384	-4.3%	-2.8%
51111	Newspaper publishers	1,150	0.6	-12.1%	-1,042	-9.1%	-2.7%
51112	Periodical publishers	687	0.8	-11.9%	-607	0.4%	-1.2%
51211	Motion picture and video production	927	0.7	-9.1%	-567	-3.8%	1.1%
51212	Motion picture and video distribution	86	1.6	-3.0%	-14	-6.5%	-4.5%
51213	Motion picture and video exhibition	727	0.7	-1.4%	-52	4.5%	0.5%
51219	Postproduction and other related industries	152	1.1	6.9%	43	0.9%	-0.7%
51223	Music publishers	35	1.1	-26.6%	-129	-17.7%	3.9%
51224	Sound recording studios	64	1.6	-12.5%	-61	-22.5%	-8.0%
51511	Radio broadcasting	777	1.1	-3.5%	-153	-6.7%	-0.8%
51512	Television broadcasting	2,716	3.1	-1.3%	-188	4.9%	0.5%
5152	Cable and other subscription programming	1,038	1.6	-1.2%	-65	-13.1%	1.4%
54131	Architectural services	1,620	1.4	-9.1%	-988	-2.2%	0.9%
54133	Engineering services	5,326	0.8	-3.3%	-982	2.4%	1.5%
54141	Interior design services	703	3.0	-6.0%	-254	2.1%	2.0%
54142	Industrial design services	95	1.1	-1.0%	-5	3.6%	5.3%
54143	Graphic design services	662	1.4	-3.1%	-112	3.6%	1.5%
54149	Other specialized design services	163	1.7	0.4%	3	0.4%	5.5%
54181	Advertising agencies	1,820	1.5	-3.9%	-404	-5.1%	0.7%
54182	Public relations agencies	517	1.4	3.9%	89	3.3%	1.1%
54183	Media buying agencies	112	1.5	7.5%	34	3.2%	2.8%
54184	Media representatives	269	1.4	-1.3%	-18	-2.4%	-0.1%
54185	Display advertising	149	0.6	-3.6%	-30	-3.7%	1.9%
54186	Direct mail advertising	519	1.3	4.8%	109	-30.8%	-3.4%
54187	Advertising material distribution services	206	2.0	6.0%	52	0.9%	-1.3%
54189	Other services related to advertising	836	1.8	-5.3%	-264	0.6%	1.5%
7114	Agents and managers for public figures	194	1.4	-1.8%	-18	0.6%	0.9%
7115	Independent artists, writers, and performers	443	1.3	3.4%	68	5.5%	1.8%
	TOTAL	**23,967**	**1.1**	**-5.1%**	**-7,233**	**0.1%**	**0.4%**

Source: Avalanche Consulting using U.S. Bureau of Labor Statistics, forecast data from EMSI
Density = Per capita concentration of the industry as % of US concentration (Location Quotient)

Each creative industry in Miami-Dade County has unique drivers and growth trends:

Advertising & Marketing: While employment in Advertising agencies has declined during the recession, the region remains a strong hub for advertising to Latin American markets. Smaller niches such as direct mail and advertising material distribution services increased locally by 30% in the last five years, counter to a national decline.

Architecture & Engineering: This industry, which is highly dependent on construction and investment spending, shed almost 40% of its jobs in Miami-Dade County while the US decreased almost 20%. Numerous architectural and engineering firms in Miami-Dade County have specializations in maritime, sustainable, and municipal projects, and many serve international projects. Many higher education institutions in the area have strong engineering programs. Long-term, the industry is expected to rebound from its job losses as construction projects return and global markets continue to provide opportunities.

Fashion / Lifestyle: Miami's apparel and fashion industry also has deep roots, from the rise of the apparel industry in the mid-20th century to the South Beach preeminence in modeling and photo shoots. Today, Miami remains a global fashion capital, particularly for swimwear. Up five positions from 2009, Miami was ranked 8th globally as a fashion capital according to the Global Language Monitor in 2010. Miami International University of Art and Design delivers fashion talent each year, and several international fashion shows brings thousands of fashion leaders to the region.

Film, TV, and Digital Media: Video production has a long history in Miami-Dade County, from TV shows in the 1960s and 1980s, to blockbuster films such as True Lies and Bad Boys, to recent TV hits such as Dexter and Burn Notice. Miami remains the dominant location for Spanish language media in the United States, and Spanish language productions should continue to be a target. Miami also hosts the Miami International Film Festival, which attracts 70,000 film enthusiasts and 400 filmmakers. Florida's film industry has been threatened by hyper-competitive incentives from other states such as New Mexico, Louisiana, and the Carolinas seeking the dollars and brand value in film shoots. In response, the Florida Legislature last year passed a $242 million tax incentive (income tax credits) for film productions in the state. The program has been oversubscribed and is still overshadowed by incentives from other states, but is still a bold recruitment effort for the industry. New digital media opportunities will emerge as the industry moves from film to digital cameras and post-production relies more on graphic designers and equipment technicians.

Industrial Design: Although a relatively small field of employment, Miami-Dade County has a high concentration of industrial design service employees. Industrial design services are generally sold to product manufacturers and incorporate both artistic and practical elements as designers develop aesthetically pleasing products that also best perform their functions. This subsector enjoys the benefit of overlap with other Creative Design subsectors, and employment is projected to grow in Miami-Dade County and the US.

HOSPITALITY & TOURISM

Hospitality & Tourism encompasses industries in the visitor and entertainment. This includes hotels, restaurants, car rental companies, cruise lines, tour operators, travel agencies, attractions, and other amenities that add to a visitor's experience.

Miami-Dade County, with the addition of 10,000 + new hotel rooms in the past 10 years, multi billion-dollar airport investments, and other infrastructure improvements is positioned to be a global leader in year-round tourism in the years to come. The following niche sectors have been identified as continued opportunities for growth in Miami-Dade County.

- **Conventions, Conferences, & Trade Fairs:** Today, competition among communities for tradeshows and events is high while corporate budgets for hosting events is low. Miami-Dade County is a natural destination for business and consumer events, and has experienced resurgence in event traffic despite trends. It will, however, be difficult to continue to attract more meetings and conferences without adequate, modern convention space.
- **Cruise Tourism:** Traditionally one of the nation's primary cruise ports. In the past year, however, multiple new ships have come to Port Miami. Fort Lauderdale's increased capacity comes from their $75 million investment to create the world's largest cruise terminal. The industry has seen increased consolidation. Miami-Dade County, which has long standing relationships with Carnival, Norwegian, Royal Caribbean, and others, can leverage this situation. Recent new investments in Port infrastructure will help accelerate cruise tourism in Miami-Dade even further.
- **Cultural Arts**: Miami-Dade County is home to a large number of art dealers and artists due to its high population and large pool of discretionary income. Another key part of Miami's arts community is music and music festivals, which draw additional visitors to the community. Miami-Dade County has tremendous potential to continue increasing its renown as an international arts hub. Miami-Dade County already has a vibrant art scene that extends across Miami-Dade County including expansion into new areas like the Wynwood Art District. Miami-Dade County has been a key player in the world of art exhibitions by hosting Art Basel Miami Beach (which attracts over 40,000 attendees annually) and other major art festivals.
- **High Income International Tourists**: New investments in tourism amenities and rising incomes in the developing world have increased tourism volumes and competition for visitors. Miami-Dade already has a well-established global image but must expand efforts to market international visitors from emerging countries as well as younger domestic tourists. As the Baby Boomers near retirement, they also are expected to increase their travel over upcoming years and present a potentially strong market for the County.
- **Medical Tourism**: Offering world-class healthcare facilities alongside traditional hospitality amenities, Miami-Dade County is a global destination for medical tourism, drawing increasingly wealthy visitors seeking advanced medical care from Latin and South America.
- **Tourism IT**: Tourism information technology describes systems designed to promote and streamline tourism activities. Software applications generally offer internet-based systems for booking hotel, flight, car, tour, and other tourist reservations. Tourism IT can also provide marketing services for regions,

hotels, or other destination activities. Miami-Dade County is home to a leading tourism software company, Amadeus. This is a major economic development opportunity.

On the following page, we provide a "Target Opportunity Matrix" for the Hospitality & Tourism sector in Miami-Dade County.

TARGET OPPORTUNITY MATRIX

Opportunities
- ✓Growing number of tourists from emerging markets
- ✓Increased US tourism as international flight costs increase
- ✓Visa waiver legislation

Threats
- o Increased international competition for visitors
- o Less discretionary income for cultural art purchases, event attendance
- o Restrictive Visa rules

Global Growth
"Is it a growing market?"

Community Goals
"What do we want to accomplish?"

- ➢Continue to build international reputation as an arts hub
- ➢Increase the number of visitors for business and vacation
- ➢Retain and expand the cruise ships based in the County

Hospitality & Tourism

Action ROI
"What can we influence?"

- ➢Actively market art events and featured artists
- ➢Promote the County as a business destination
- ➢Refine attraction efforts for major and niche cruise lines
- ➢Continue infrastructure investments
- ➢Attract industry conferences

Local Asset Fit
"Can we compete?"

Strengths
- ✓Traditional reputation as a global destination
- ✓Existing cruise industry concentration
- ✓Miami International Airport
- ✓Culinary schools

Weaknesses
- o Cruise ship relocations
- o Business image of Miami as mainly tourism
- o Visa & security delays at MIA
- o Size and age of convention center

Niche Sectors
- Conventions, Conferences, & Trade Fairs
- Cruise Tourism
- Cultural Arts
- High Income International Tourists
- Medical Tourism
- Tourism IT

Target Occupations
- Culinary
- Customer Service
- Maintenance & Repair
- Network Analysts
- Operations Analysts
- Surveillance & Security Officers

Global Trends and Drivers

The tourism industry is extremely sensitive to economic fluctuations, as it is a discretionary expense that is among the first to be cut when consumers are faced with tight budgets. As a result, although there has been an overall decrease in tourism since the start of the recession in 2007 across the globe, domestic tourism has had an increased share due to the relatively lower costs of domestic versus international travel. This has led to increased employment at attractions such as historical sites and nature parks, but a decrease in travel accommodation employment. The proliferation of online travel sites that reduce travel costs have led to a 25% decrease in travel agency employment from 2005 to 2010.

The success of the tourism industry in any given region is contingent on several factors. It is critical to have the supporting infrastructure to attract visitors to the area. This includes having a strong airport and public transit system to increase ease of travel and flight options. This is supported by sanctioned and focused efforts to market the destination. In many communities, tourism boards area leading the way of integrating technology and new mediums to promote to their target audiences.

International tourism is entering a new era as a result of globalization. The cost of a vacation including transportation was previously too high for many in the developing world, but rapidly growing incomes in emerging markets have led to high growth in international tourists from these regions. The years preceding the recession created a large amount of wealth that consumers in those countries are beginning to spend in

Hospitality & Tourism Employment Trends
Miami-Dade County

Subindustry		2010		2005-2010		Forecast Ann. Growth, 2010-2020	
NAICS	Description	Job Base	Density*	Ann. Growth	Net New	Miami-Dade	US
4871	Scenic and sightseeing transportation, land	46	0.6	-7.2%	-21	1.0%	2.1%
4872	Scenic and sightseeing transportation, water	207	2.0	8.6%	70	2.6%	1.7%
4879	Scenic and sightseeing transportation, other	5	0.3	-12.9%	-5	0.0%	-0.3%
561510	Travel agencies	1,554	2.4	-1.8%	-147	-2.7%	0.2%
561520	Tour operators	756	4.2	5.7%	184	2.4%	-1.4%
56159	Other travel arrangement services	2,466	4.1	0.8%	93	6.0%	1.9%
7112	Spectator sports	3,014	3.0	3.9%	519	1.6%	1.0%
71211	Museums	365	0.7	5.5%	86	1.0%	1.2%
71212	Historical sites	34	0.3	9.1%	12	1.1%	1.0%
71213	Zoos and botanical gardens	595	2.5	11.7%	253	2.5%	1.9%
71219	Nature parks and other similar institutions	5	0.1	-24.2%	-15	0.0%	1.4%
7131	Amusement parks and arcades	349	0.3	-1.9%	-36	0.1%	0.5%
7132	Gambling industries	29	0.0	-25.0%	-93	7.7%	2.9%
71391	Golf courses and country clubs	1,155	0.5	-12.5%	-1,093	-11.2%	1.4%
71393	Marinas	303	1.4	-1.8%	-28	-0.3%	0.2%
71394	Fitness and recreational sports centers	3,106	0.8	7.0%	890	3.7%	2.2%
71395	Bowling centers	161	0.3	-13.1%	-163	-2.0%	-1.0%
72111	Hotels and motels, except casino hotels	23,971	2.3	0.4%	460	1.4%	0.8%
72112	Casino hotels	5	0.0	n/a	5	0.0%	0.6%
72119	Other traveler accommodation	40	0.2	-12.0%	-36	-18.8%	-0.7%
7212	RV parks and recreational camps	58	0.1	-6.7%	-24	-1.7%	1.7%
7213	Rooming and boarding houses	5	0.1	0.0%	0	0.0%	-0.1%
7221	Full-service restaurants	33,050	1.0	2.4%	3,628	0.7%	1.1%
722211	Limited-service restaurants	22,154	0.9	-0.8%	-949	0.2%	0.9%
722212	Cafeterias, grill buffets, and buffets	978	1.0	-7.4%	-458	-0.6%	-0.6%
722213	Snack and nonalcoholic beverage bars	2,836	0.8	5.5%	662	3.3%	2.5%
72231	Food service contractors	3,342	1.2	-2.0%	-352	1.7%	1.0%
72232	Caterers	1,638	1.5	2.7%	201	1.4%	0.1%
72233	Mobile food services	83	1.5	11.1%	34	2.2%	2.6%
7224	Drinking places, alcoholic beverages	2,779	1.1	4.8%	579	3.3%	0.6%
	TOTAL	93,433	1.1	0.8%	3,590	0.9%	1.0%

Source: Avalanche Consulting using U.S. Bureau of Labor Statistics, forecast data from EMSI
Density = Per capita concentration of the industry as % of US concentration (Location Quotient)

international markets, with visitors from Brazil and China the largest growing markets. These international tourists tend to spend more money in destinations than North American visitors. Not surprisingly, tourist boards around the world are targeting these visitors as the industry growth driver of the future.

Miami-Dade Trends and Drivers

Miami-Dade County has a large tourism industry and is an international visitor destination. Over 80% of visitors to Miami listed leisure or vacation as their reason for visiting. While hotel employment decreased in the US by almost 3% between 2005-2010, it increased in Miami-Dade County by almost 6%. Room and boarding housing employment also increased by 175%. Miami-Dade County's temperate climate, shopping, culinary experiences, sparkling beaches, bustling nightlife, and multitude of other attractions draw millions of tourists. Many visitors stay in resorts on or close to the beach. Tourists are a significant economic force in the County, generating significant sums of tax revenues and local spending. Overnight visitors spent nearly $19 billion in direct expenditures and averaged almost $1,500 per visit.

The health of Miami-Dade County's tourism industry is to some extent dependent on external factors. These include natural disasters and broad macroeconomic conditions. The effects of these factors are mitigated to some extent by the County's established reputation as a tourist hub and its strong and rapidly growing international presence. Brazil recently became Miami-Dade County's first billion-dollar international market, with Canada and Argentina close behind. There is great potential to increase tourism spending when a Visa waiver program exists for Latin American countries.

Miami-Dade County is also widely considered to be the "Cruise Capital of the World." The location, climate, and international flair of the area make it a particularly attractive destination for tourists. The Port of Miami is the originating port for over 4 million passengers in 2010. Many of the top global cruise lines, including Carnival, Norwegian, Royal Caribbean, and others operate in the region. Current and planned renovations to the airport and port will allow Miami-Dade County to accommodate an even greater number of tourists in the future.

Miami-Dade is home to a high concentration of world-class events and visitor amenities. There is potential for more. The Miami Beach Convention Center ("MBCC") is a good starting point needs modernization and expansion to become competitive. A commitment to a MBCC renovation strategy will be needed before Miami-Dade County becomes a truly competitive meeting, convention, and conference destination.

INFORMATION TECHNOLOGY

The Information Technology industry encompasses companies engaged in software production, Internet services, computer systems design, data hosting, and consulting services. The industry is characterized by fast-paced technological innovation and is highly supportive to a wide range of industries.

Based on a review of local assets and interviews with leaders from the field, the following niche sectors were identified for Miami-Dade County.

- **Back Office Support & IT**: IT systems are critical to customer service centers for a variety of industry. Miami-Dade County's strength in traditional banking and health care industries should yield new opportunities to improve the customer experience through software systems and personal support.
- **Computational Science and Health IT:** The use of software and large database clusters is transforming research in Miami-Dade County in areas of medicine and marine research. The University of Miami's Center for Computational Science provides a unique resource, supporting research areas like genomics. The Center is also a major hub of marine and atmospheric research and the vast data that is collected. Health IT also has large data demands and is a growing focus area for hospitals and health care systems across the country due to a desire for cost-cutting and a constantly changing regulatory environment.
- **Data Centers:** Outsourcing IT functions to off-site data centers has been around for more than a decade, but recent growth in cloud-based applications has accelerated the storage needs and data throughput rates for the Internet. Miami's NAP of the Americas (Network Access Point) serves as a hub for a renewed content-based software cluster. Telefónica USA operates the Key Center, a category 5 data center in Miami-Dade County.
- **Digital Media**: The widespread use of computers, tablets, and smart phones has transformed the way content is created and distributed. Miami-Dade's strengths in film and design can fuel content generation for the growing software industry.
- **Logistics IT**: "Logistics" refers to the integration of the entire distribution chain of goods from point of departure to point of entry/acceptance and is entirely reliant on the analysis and sharing of information across suppliers. Manufacturing supply chains use advanced IT systems to shrink the time for delivery, and customs offices are increasingly information-driven for faster processing and improved security. Miami-Dade County's strengths in Trade and IT will yield new opportunities for a Logistics IT cluster, alongside existing companies headquartered in the County, like Ryder System.
- **Mobile Applications**: Changes in consumer technologies, from smart phones and tablets, to new browser-based technologies are resulting in a complete re-do of many of the user-oriented services used by major industries. Banking has long been a heavy user of IT technologies for back-end systems and now relies on customer-facing mobile applications to reduce costs. Mobile transactions are emerging as a new alternative for the banking industry to traditional credit cards.
- **Simulation Technology:** Flight simulation technology has evolved significantly in recent years with advances in computers and is used to train pilots and flight crew for both civilian and military aircraft. Simulation technology can also be helpful for training engineering and maintenance crews.
- **Tourism IT**: Tourism IT describes systems that promote and streamline tourism activities. Software applications generally offer internet-based systems for booking hotel, flight, car, tour, and other tourist reservations. Tourism IT can also provide marketing services for regions, hotels, or other destination

activities. Miami-Dade County is home to a leading tourism software company, Amadeus.

On the following page, we provide a "Target Opportunity Matrix" for the Information Technology industry in Miami-Dade County.

TARGET OPPORTUNITY MATRIX

Opportunities
- ✓ Web 2.0 reshaping software platforms
- ✓ Growing data traffic worldwide
- ✓ Lat. Am. offshoring
- ✓ Cloud-based models

Threats
- Low US output of IT grads
- Further clustering of IT in top tier markets
- Offshoring models may limit US growth
- Security concerns

Global Growth
"Is it a growing market?"

Community Goals
"What do we want to accomplish?"

- Increase education in IT
- Adopt new IT across local business and gov't sectors
- Expand broadband access
- Create a downtown software cluster/nexus
- Retain IT firms as they grow

Information Technology

Action ROI
"What can we influence?"

- Recognize growing value of IT to regional ED & education
- Celebrate success stories
- Attract IT conferences
- Elevate Miami's IT brand
- Form an IT CEO Council
- Recruit/retain small firms that can grow

Local Asset Fit
"Can we compete?"

Strengths
- ✓ NAP of the Americas
- ✓ Data centers
- ✓ Lat. Am. data traffic
- ✓ Growing software cluster
- ✓ UM LaunchPad
- ✓ IT use in banking, logistics, biomedical
- ✓ IT graduates

Weaknesses
- Difficulty in retaining IT workforce
- Lack of capital
- More IT jobs in suburban Broward
- Strengths are in back-end IT, not apps
- Low industry collaboration

Niche Sectors
- Back Office Support & IT
- Computational Science & Health IT
- Data Centers
- Digital Media
- Logistics IT
- Mobile Applications
- Simulation Technology
- Tourism IT

Target Occupations
- App. programmers
- Computational Scientists
- Database admins
- Information, systems analysts
- MIS (Mgrs Info Systems)
- Network admins, security experts
- Software engineers

Trends and Drivers

The Information Technology (IT) industry in the US is large and growing, with over 100,000 companies and revenues over $300 billion, according to First Research. Employment statistics from the Bureau of Labor Statistics show that the IT employs over 2 million workers nationwide and this job base grew 16% from 2005-2010 while the rest of the economy fell 3%.

IT firms are but one part of the IT industry. IT workers are found in all industries and many large companies in other industries have dedicated IT departments and staff focused on software development, mobile applications, and Internet management. Over 3.3 million Computer workers are found across all industries in the US. Employment is forecasted to continue its rapid growth as firms invest in new applications and cloud-based services that use more and more data centers.

Rapid technological advances in recent years have given rise to an increased demand for IT services. Even as technology pushes the development of new and more complex hardware such as smartphones and tablet computers, these new devices serve as platforms for a growing demand for custom software and applications.

Internet-based software is now pervasive, as more and more desktop functions are moved toward cloud-based applications (word processing, email, customer management, etc.). According to the non-profit trade association for the information technology industry, CompTIA, there is a trend towards cloud computing and "Software as a Service" with 72 percent of organizations stating that they feel more positive about cloud computing now than they did one year ago. Cloud services allow organizations to store data remotely without being dependent on their own physical servers. This allows firms and application providers to scale up their infrastructure on a per-use basis without having to manage their own servers. The rise of "virtual servers" and massive low-cost storage further simplifies this process. With 2 billion Internet users worldwide and growing, the demand for IT services is expected to remain strong for years to come. Data-related software services are expected to be one of the fastest-growing industries in the US over the next 10 years. (See the side box below, "Global Forces in the IT Industry," for more discussion.)

Within Miami-Dade County, the IT industry is still emerging. Less than 7,000 jobs are found in the local IT industry and local employment registered a decline despite growth seen at the national level. The story of IT is found in the County's non-IT industries: banking, trade and logistics, tourism, and life sciences. More than 17,000 computer professionals are employed across all sectors of the Miami-Dade economy. Distribution of

Information Technology Employment Trends
Miami-Dade County

Subindustry		2010		2005-2010		Forecast Ann. Growth, 2010-2020	
NAICS	Description	Job Base	Density*	Ann. Growth	Net New	Miami-Dade	US
5112	Software publishers	295	0.2	-4.8%	-82	3.6%	2.4%
5182	Data processing, hosting and related services	1,036	0.6	-11.9%	-916	1.6%	2.5%
51913	Internet publishing and web search portals	577	0.9	15.5%	296	3.9%	2.5%
51919	All other information services	31	0.4	-16.0%	-43	-10.7%	0.9%
541511	Custom computer programming services	2,288	0.5	5.7%	551	3.8%	2.7%
541512	Computer systems design services	2,335	0.5	-1.7%	-203	2.2%	3.1%
541513	Computer facilities management services	20	0.0	-7.2%	-9	-12.9%	-1.1%
541519	Other computer related services	231	0.3	-5.3%	-72	-8.6%	-0.4%
	TOTAL	**6,813**	**0.4**	**-1.3%**	**-478**	**2.6%**	**2.5%**

Source: Avalanche Consulting using U.S. Bureau of Labor Statistics, forecast data from EMSI
Density = Per capita concentration of the industry as % of US concentration (Location Quotient)

employment across subsectors roughly follows the US pattern, except for a smaller concentration of software publishers in Miami-Dade County. The only subsectors to grow from 2005 to 2010 were custom computer programming services and other information services.

Miami-Dade County's relatively low concentration of IT workers is reflective of the County's traditional industry concentration in tourism, construction, and healthcare. With a small young professional population and limited technological research activities, Miami-Dade County has not traditionally been considered a hub for information technology or a candidate for IT firm relocation and VC investment.

Despite these employment trends, Miami-Dade County is well positioned to support and accelerate growth in the IT industry. Information technology plays a critical support role for a wide range of business activities. Therefore, a large employer base in other industries can fuel growth in IT. With large financial services, professional services, healthcare, international trade, and tourism sectors, Miami-Dade County has many of the firms that drive demand for IT services. The presence of hundreds of multinational firms and high connectivity to the Caribbean, Latin America, and South America also present numerous opportunities for IT firms looking to capture a share of rapidly expanding markets in the developing world.

Miami-Dade County has numerous assets that will support the growth of the IT industry. The presence of Neoris and Terremark / NAP of the Americas, which is a major network access point and data center located in downtown Miami, have drawn various telecom companies and datacenters to the area, including Spain-based Telefonica. Several incubators are found in the County, including Incubate Miami, Miami Shared, and LaunchPad UM. A growing base of application software success stories has demonstrated the potential of blending the County's traditional industries with creative design and software talent to create new companies.

Global Forces in the IT Industry

The Mobile Economy: Smart phones will change how we consume information, connect with our peers and conduct marketing. Mobile computing is enabling "context aware" applications whereby location- and time-based data and services are delivered to people when and where they need it.

Open Source and The Cloud: A decade of open-source volunteer communities has yielded free software that anyone can use to run their business or website: Apache server software, MySQL databases, and content management systems. Web hosting providers now manage more virtual servers (the Cloud) than physical machines, which are distributed across the Internet and provide lower costs and limitless, on-demand scalability and pricing. It is expected by Gartner that all global 2,000 companies will be using cloud services within 5 years.

Social Networking: New social media such as Facebook, Twitter, and LinkedIn now impact the way companies market to their customers (particularly Generation Y), workers collaborate with each other, and social agendas are pursued.

Virtual Incubators and Bootstrapping: After years of subsidizing incubator facilities, governments and investors alike are considering new models for helping the next generation of startups. Virtual incubators promise all of the services without the centralized location. "Virtual tenants" are still hand-picked, and services are provided by members of the business community, not the incubator staff. Demand for high-cost incubator space is also down, as more startups are trying to "bootstrap" their development stage, rather than accept money at lower valuations so that they can afford incubator space and salaried workers.

INTERNATIONAL BANKING & FINANCE

The international banking industry encompasses banks that provide financial services to global clients. These services include commercial banking, corporate banking, wealth management, brokerage services, insurance services, and trade-related services.

The following niche sectors have been identified as targets for Miami-Dade County:

- **International Banks:** As global financial markets become more integrated, regions with high population and income growth, such as Latin America and South America, have become development targets of North American and, increasingly, European and Asian banks. When establishing operations in emerging markets, international banks tend to operate out of a regional headquarters, often located in a more developed and familiar market. Miami-Dade County presents a number of competitive advantages for international banking operations and already hosts nearly 40 foreign banks. Alongside a globally recognized investment community, the County boasts a large Spanish-speaking population, a well-connected international airport, and opportunities for foreign real estate investment.
- **International Insurance & Wealth Management:** Recent legislative changes in Florida have decreased paperwork and lowered the costs for insurance businesses, increasing competitiveness for attracting international insurance firms. Additionally, pending legislation (HB 379 and SB 610) would make it easier for captive insurance companies to operate in Florida. These opportunities, combined with Miami-Dade County's existing international finance sector, including a large wealth management component, make the County highly competitive.
- **Maritime Services & Trade Finance:** Trade finance consists of banks funding transactions and providing support assistance such as letters of credit, trade credit insurance, and other activities. As transportation options, technology, and multilateral trade agreements have fueled the rapid growth of international trade, the trade finance sector has kept pace. Miami-Dade County has a very high concentration of international trade financing employment, reflective of many additional strengths stemming from the high volume of trade conducted locally. The County's geographic location, infrastructure, and multinational corporate presence make it a prime location for trade financing operations.
- **Mobile Applications**: Advanced mobile devices have become increasingly common, and with their rise, the mobile banking market has grown rapidly. With a large financial and banking sector, Miami-Dade County is well-positioned for mobile banking by leveraging the growing local software cluster. Mobile banking software developers, data management firms, and security specialists are a natural fit for Miami-Dade County.
- **Technical Customer Support & Back Office:** Large businesses operating in Miami-Dade County already have large IT service centers. Back office has been struggling nationally and even more so in Miami-Dade County, but opportunities will return through IT-driven investments and leveraging the County's Spanish-speaking population.
- **Venture Capital & Private Equity:** Overall venture capital investment in the US has nearly recovered to pre-recession levels, but Florida continues to only receive a small share, netting 1% of all VC investment in 2010. Despite the relatively small VC presence in Miami-Dade County, many signs point to a growing potential for investment. University research expenditures in Miami-Dade County grew 32% from 2004 to 2009 and a growing number of local software firms have received venture capital.

On the following page, we provide a "Target Opportunity Matrix" for the International Banking & Finance industry in Miami-Dade County.

TARGET OPPORTUNITY MATRIX

Opportunities
- ✓ Bank expansion into emerging markets
- ✓ Technology increasing mobile transaction viability
- ✓ Expanding international trade
- ✓ Captive Insurance bill

Threats
- o Regulatory uncertainty
- o Slowed growth tied to risk averse investment post-recession
- o Slow recovery in real estate markets

Global Growth
"Is it a growing market?"

Community Goals
"What do we want to accomplish?"

- ➢ Expand Miami-Dade's role as a global financial city
- ➢ Increase foreign investment in the County
- ➢ Build multinational presence
- ➢ Support and expand the finance of trade activities

International Banking & Finance

Action ROI
"What can we influence?"

- ➢ Attract banks to establish regional HQs
- ➢ Market opportunities for investment
- ➢ Create supportive regulatory and tax environment
- ➢ Expand educational programs in finance

Local Asset Fit
"Can we compete?"

Strengths
- ✓ Significant foreign bank & multinational presence
- ✓ International trade finance cluster
- ✓ Geographic position
- ✓ International insurance legislation

Weaknesses
- o Real estate market slowdown
- o Limited venture capital availability
- o Formal business language capabilities

Niche Sectors
- International Banks
- International Insurance & Wealth Management
- Maritime Services & Trade Finance
- Mobile Applications
- Technical Customer Support & Back Office
- Venture Capital & Private Equity

Target Occupations
- Compliance
- Customer service
- Database administrators
- Financial analysts
- Human resources
- Legal assistants
- Mgmt., operations, & research analysts
- Operations managers

Trends and Drivers

Industry employment is largely reflective of confidence in global economic conditions. Banks typically hire in large numbers during economic upswings to better service the increased banking activity during booms. Conversely, banks quickly move to reduce headcount during economic downturns as employee compensation typically account for a large portion of a bank's yearly expenses. Employment is not projected to return to pre-recession levels in the near future as banks continue to reduce their exposure, risk tolerance, and adapt to a changing regulatory environment (see side box below). Currently, the largest shares of US banking and finance employment are in commercial banking (24% of industry jobs), insurance carriers (22%), and insurance agencies (16%).

Job losses in banking and finance have been the highest in those subsectors engaged in the lending and investment practices that led to the recent housing crisis. These subsectors include real estate credit (-42% job growth from 2005-2010), consumer lending (-20%), mortgage and nonmortgage loan brokers (-58 %), and investment banking and securities dealing (-11%). Corresponding movement of investment into 'safe' markets has improved employment forecasts in other subsectors. Many of these subsectors focus on financial management, including investment advice (22% job growth from 2005-2010) and portfolio management (18%).

Emerging markets have increasingly become a key revenue driver for banks. As customer growth flattens in developed markets in the US and Europe, regions experiencing high population growth and wealth creation, such as Latin America and Asia, become prime targets for expanding banks. The recession also revealed the need for diversification of revenue sources, leading many banks to explore investment options abroad.

International Banking & Finance Employment Trends
Miami-Dade County

Subindustry		2010		2005-2010		Forecast Ann. Growth, 2010-2020	
NAICS	Description	Job Base	Density*	Ann. Growth	Net New	Miami-Dade	US
522110	Commercial banking	10,314	1.1	-1.9%	-1,034	1.7%	0.7%
522120	Savings institutions	3,269	2.3	1.2%	194	0.8%	-2.0%
522130	Credit unions	1,115	0.6	0.6%	34	3.1%	1.9%
522190	Other depository credit intermediation	140	1.2	-5.5%	-46	-12.0%	-5.1%
522210	Credit card issuing	61	0.1	5.4%	14	-22.1%	-1.9%
522220	Sales financing	380	0.6	-10.7%	-288	-11.8%	0.0%
522291	Consumer lending	604	0.9	-5.4%	-192	4.3%	1.1%
522292	Real estate credit	919	0.6	-21.3%	-2,116	-11.7%	-2.7%
522293	International trade financing	1,326	28.3	-2.4%	-168	-2.9%	-0.9%
522310	Mortgage and nonmortgage loan brokers	396	0.8	-23.1%	-1,072	-12.7%	-4.4%
522320	Financial transaction processing and clearing	857	1.1	-3.3%	-159	6.2%	2.8%
522390	Other credit intermediation activities	849	1.3	10.9%	342	0.4%	0.2%
523110	Investment banking and securities dealing	1,444	1.2	8.4%	479	5.4%	1.0%
523120	Securities brokerage	2,706	1.3	-2.0%	-288	1.5%	0.3%
523130	Commodity contracts dealing	198	2.1	-4.2%	-48	-0.6%	2.1%
523140	Commodity contracts brokerage	66	0.7	-3.8%	-14	-6.7%	0.9%
5232	Securities and commodity exchanges	5	0.1	-28.1%	-21	0.0%	0.1%
523910	Miscellaneous intermediation	320	1.7	5.7%	78	1.8%	-0.7%
523920	Portfolio management	804	0.8	6.1%	207	2.2%	0.9%
523930	Investment advice	1,003	1.0	-1.5%	-80	0.4%	1.6%
523991	Trust, fiduciary, and custody activities	127	0.9	-10.6%	-96	-7.1%	-4.2%
523999	Miscellaneous financial investment activities	121	0.7	21.3%	75	0.2%	-0.4%
5241	Insurance carriers	6,881	0.8	-1.8%	-638	0.0%	-0.4%
5242	Insurance agencies and brokerages	7,081	1.1	-0.9%	-334	1.3%	1.2%
5259	Other investment pools and funds	134	0.5	-5.3%	-42	0.9%	0.5%
	TOTAL	**41,120**	**1.0**	**-2.4%**	**-5,213**	**1.1%**	**0.3%**

Source: Avalanche Consulting using U.S. Bureau of Labor Statistics, forecast data from EMSI
Density = Per capita concentration of the industry as % of US concentration (Location Quotient)

International banking has been a major part of the Miami-Dade County economy for decades. The County is widely considered an industry hub. Many banks use Miami-Dade County as a regional headquarters for their Latin American interests due to the County's large Spanish speaking population, strong transportation infrastructure, and significant international trade connectivity. Over 70 banks operate within the County, including over 38 foreign banks with a deposit base of over $12 billion, according to the County government. The operations of foreign banks typically include salespeople and customer service representatives that serve a specific international region.

Banking and finance employment in Miami-Dade County largely mirrors national trends. Miami-Dade County's large real estate market was strongly affected by the recession, leading to a 70% loss of jobs in real estate credit from 2005 to 2010, accounting for nearly half of all jobs lost in the industry. Miami-Dade County's other banking and finance subsectors have performed relatively well. The County has strong concentrations of employment in securities, commodities, and investments. Miami-Dade County's greatest banking employment strength is in the international trade finance subsector, which employs over 1,000 and has an unparalleled location quotient of 25.5. This cluster of international trade firms provides a distinctive edge for Miami-Dade County in the international banking industry.

Large banks are increasing their focus on rapidly expanding international markets, creating an opportunity for Miami-Dade County to further develop this industry. With strong cultural and infrastructure ties and geographic proximity, Miami-Dade County is well positioned as a banking launching point for operations in the Caribbean, Latin America, and South America. At the same time, competition from outside the US in the Caribbean and Central America is increasing.

The Changing Financial Regulatory Environment

The recent housing and financial crisis has led Congress to draft new legislation designed to help prevent a similar crisis from occurring in the future. Under the Dodd-Frank Bill:

- Capital requirements are increased for banks and will now be established in line with the bank's risk levels.
- Increases investor protection at banks through the establishment of the Consumer Financial Protection Bureau.
- Compliance costs for the banking industry will likely rise.
- Places restrictions on various financial products such as derivatives.

A shift towards transparency has placed further strain on banks. The IRS reached a $780 million settlement with Swiss bank UBS in 2009, with UBS admitting it had "participated in a scheme to defraud the United States." Banks now show a greater tendency to comply with regulatory demands in order to deflect negative publicity associated the public perception that a lack of banking oversight was a direct cause of the recession.

LIFE SCIENCES & HEALTH CARE

The Life Sciences & Health Care industry includes a range of sectors concerned with human health such as biotechnology research and development, pharmaceutical manufacturing, medical device manufacturing and health care services. Health care, which is broad category, is included and encompasses hospital operations, doctors' offices, nursing homes, and medical diagnostic labs.

The following niche sectors have been identified as targets for Miami-Dade County:

- **Agricultural Sciences:** With a large agricultural base and significant bioscience research activities, Miami-Dade County is well positioned to continue development of biofuels, new biological technologies, and agricultural production.
- **Back Office Operations:** The Health Care industry has significant administrative needs that include the management of medical records, patient relationships, and regulatory assurance. While Health IT focuses on the efficient management of health information, back office operations that rely on human interaction are still highly demanded by the industry. Spanish-language operations are required to serve the growing Hispanic community in the US.
- **Biologics:** Biologics are organic medicinal products used to treat various diseases. As opposed to pharmaceuticals, which are chemically synthesized, and devices that are mechanical, biologics are created through biological processes. Miami-Dade County already hosts a number of small biologics firms and developmental research at local universities.
- **Computational Science and Health IT:** The use of software and large database clusters to conduct life sciences research (pharmaceutical discovery, clinical trials, etc.) is commonly referred to as bioinformatics or computational science. The University of Miami's Center for Computational Science provides a unique resource for future drug development, such as research in genomics which supports the discovery of therapies and drugs through modeling of the human genome. Furthermore, Health IT has been a growing focus area for hospitals and health care systems across the country due to a desire for cost-cutting and a constantly changing regulatory environment.
- **Medical Devices**: Medical device manufacturers produce complex surgical and ophthalmic instruments used in the delivery of health care. Example products include syringes, hypodermic needles, catheters, and surgical tools. Medical equipment, which includes X-ray machines, surgical robots, and sterilization machines, are a separate subcategory. Currently, several medical device companies that employ 2,200 workers are found in Miami-Dade County and the State of Florida ranks #2 in medical device production.
- **Medical Tourism**: Miami-Dade County is home to doctors and facilities that provide globally-renowned medical care services and specialty medical practices, with four hospitals nationally ranked by the *US News and World Report*. Miami-Dade County already serves an international patient population and will undoubtedly serve more as Latin and South American consumers become more wealthy and connected to the Miami economy through trade, tourism, and business.
- **Pharmaceuticals:** Miami-Dade County's existing pharmaceutical companies and research activities, as well as the large research cluster in the South Florida region, create a competitive advantage for continued growth in the pharmaceutical.

On the following page, we provide a "Target Opportunity Matrix" for the Life Sciences & Health Care industry in Miami-Dade County.

TARGET OPPORTUNITY MATRIX

Life Sciences & Health Care

Global Growth
"Is it a growing market?"

Opportunities
- ✓Technological change driving new devices, therapies, and diagnostics
- ✓Aging population increasing demand
- ✓Health IT and cost-cutting

Threats
- o Uncertainty related to healthcare reform
- o Slow development process and high cost for pharmaceuticals and medical devices
- o Threat from imported generics

Community Goals
"What do we want to accomplish?"

- ➢Become a global destination for high-quality tertiary healthcare
- ➢Expand commercialization of university research
- ➢Build a reputation as a life sciences research center
- ➢Become a Life Sciences startup hub

Action ROI
"What can we influence?"

- ➢Strengthen programs to retain college graduates
- ➢Support commercialization and entrepreneurial efforts
- ➢Attract life sciences companies and conferences
- ➢Support regional corridor initiatives

Local Asset Fit
"Can we compete?"

Strengths
- ✓Significant health care, research, and education presence
- ✓High output of health degrees
- ✓Strong ties to Latin American patients
- ✓Life Sciences centers at UM and FIU

Weaknesses
- o Limited retention of local college grads
- o Competition with other FL regions
- o Limited early venture capital access
- o Commercialization efforts at local universities

Niche Sectors
- Agricultural Sciences
- Back Office Operations
- Biologics
- Computational Science & Health IT
- Medical Devices
- Medical Tourism
- Pharmaceuticals

Target Occupations
- Agricultural engineers
- Biomedical engineers
- Industrial engineers
- Medical equip. techs
- Medical lab techs
- Medical scientists
- Mgmt., operations, & research analysts
- Nurses & aides
- Physician assistants

Trends and Drivers

Technological development and an aging population have led to consistently high growth in the Life Sciences & Health Care industry over the past two decades. Over just the past five years, employment in Life Sciences & Health Care increased 11% to nearly 15 million workers.

The US population age 65 and older has surpassed 40 million and is expected to grow over 50% between 2015 and 2030. These demographic trends will continue to drive rapid growth in Life Sciences & Health Care, particularly in expanding sectors such as outpatient care, nursing/home care, and chronic disease treatment.

Development of new medical and support technologies play a pivotal role in the growth of Life Sciences & Health Care. Biotechnology research continuously creates new methods for performing diagnostic testing, conducting disease therapy, producing vaccines, and manufacturing pharmaceuticals and therapeutics. Also, development of technologies and new software influence how health care is managed and delivered. "Health IT" is widely anticipated to be an emerging trend in the industry – one that will hopefully drive down recordkeeping costs and provide greater safety and reliability. Providing health care services to remote locations via new telecommunications networks and medical devices is another growing trend.

Medical manufacturers continue their rebound in the US while specialized health services is experiencing high rates of growth. From 2005-2010, medical device companies grew 10% and medical laboratories grew 15-20%. The fastest growing health service sub-sectors from 2005-2010 include outpatient care (+27%) and home health care (+32%).

Within Miami-Dade County, the Life Sciences & Health Care industry already has a strong presence, accounting for nearly 120,000 jobs. Growth has been sporadic within the industry, with significant job growth from 2005-2010 seen in home health care (81%), outpatient care (27%), psychiatric care (223%), nursing care (26%), and mental health (13%). Manufacturers in the industry employ 3,700 workers but have shed jobs in the past five

Life Sciences & Health Care Employment Trends
Miami-Dade County

SubIndustry		2010		2005-2010		Forecast Ann. Growth, 2010-2020	
NAICS	Description	Job Base	Density*	Ann. Growth	Net New	Miami-Dade	US
3254	Pharmaceutical and medicine mfg.	1,323	0.6	4.3%	250	1.7%	1.1%
339112	Surgical and medical instrument mfg.	2,064	2.4	-9.0%	-1,248	-1.6%	1.0%
339113	Surgical appliance and supplies mfg.	109	0.1	-14.1%	-124	-13.4%	0.0%
339114	Dental equipment and supplies mfg.	36	0.3	n/a	n/a n/a	9.6%	0.2%
339115	Ophthalmic goods mfg.	225	1.0	-5.3%	-71	-15.9%	-0.9%
339116	Dental laboratories	216	0.6	-2.1%	-24	4.5%	0.1%
4242	Druggists' goods merchant wholesalers	4,193	2.8	-4.1%	-968	2.2%	1.7%
6211	Offices of physicians	21,664	1.2	2.4%	2,419	2.2%	2.3%
6212	Offices of dentists	5,949	1.0	0.7%	200	1.1%	1.9%
6213	Offices of other health practitioners	4,965	1.0	2.7%	626	2.5%	2.7%
6214	Outpatient care centers	6,640	1.6	3.2%	959	1.5%	2.6%
621511	Medical laboratories	658	0.6	0.8%	27	-14.3%	2.3%
621512	Diagnostic imaging centers	936	1.8	-2.8%	-142	2.8%	3.3%
6216	Home health care services	10,696	1.3	12.7%	4,800	3.4%	3.2%
6219	Other ambulatory health care services	893	0.5	-3.0%	-149	-3.8%	1.1%
6221	General medical and surgical hospitals	40,150	1.2	2.8%	5,167	0.1%	1.0%
6222	Psychiatric and substance abuse hospitals	758	1.0	27.5%	533	-2.7%	0.8%
6223	Other hospitals	1,835	1.2	0.3%	23	-1.0%	2.3%
6231	Nursing care facilities	11,562	0.9	5.1%	2,532	2.5%	1.9%
6232	Residential mental health facilities	3,050	0.7	2.8%	399	-1.2%	1.5%
6233	Community care facilities for the elderly	2,173	0.4	-1.5%	-170	-3.0%	1.9%
6239	Other residential care facilities	865	0.7	-2.2%	-102	0.8%	1.5%
	TOTAL	**120,960**	**1.1**	**2.7%**	**14,968**	**1.2%**	**1.8%**

Source: Avalanche Consulting using U.S. Bureau of Labor Statistics, forecast data from EMSI
Density = Per capita concentration of the industry as % of US concentration (Location Quotient)

years, with the exception of pharmaceutical/medicine firms.

On a per capita basis, Miami-Dade County has strong industry concentrations in medical instrument manufacturing, pharmacy wholesale/distribution, diagnostic imaging centers, and outpatient care. These industries leverage several historical strengths for the County: its history of medical research, service to international patients that come for unique outpatient care or trauma services (e.g., Haiti disaster), and the large number of elderly that require imaging services.

Miami-Dade County has clear strengths in health care service provision, with several hospitals that are highly rated by *US News & World Report* (see side box). Furthermore, Miami-Dade County's strongest asset in Life Sciences may prove to be its research activities, which includes the new UM biotechnology research park. The broader South Florida region has additional assets, including the Scripps Institute. Miami-Dade County's logistics assets, geographic location, and international presence support sales of medical goods and services to large emerging markets such as Brazil.

Despite these strengths, the research and manufacturing portions of the industry remain in a "developing" stage. Efforts are underway across South Florida to increase availability of venture capital (and firms) and to assist high-growth, smaller companies.

Top-Ranked Local Hospitals

- UM's Bascom Palmer Eye Institute has been ranked #1 in the nation for ophthalmology for the eighth year in a row.
- Jackson Memorial Hospital ranks in specialties such as neurology and neurosurgery (#33); ear, nose and throat (#34); urology (#43); and nephrology or kidney disorders (#45).
- Miami Children's Hospital ranks in the top 14 in Cardiology & Heart Surgery and Neurology & Neurosurgery and ranks in the top 50 in eight other pediatric specialties: Cancer, Diabetes & Endocrinology, Gastroenterology, Neonatology, Nephrology, Orthopedics, Pulmonology, Urology.
- Mount Sinai Medical Center in Miami Beach is ranked #42 in Geriatrics nationally.
- Numerous other hospitals in Miami-Dade County are considered "high-performing": Doctors Hospital, South Miami Hospital, Baptist Hospital of Miami, and Mercy Hospital.
- Several nationally ranked and high performing hospitals are also found in nearby Broward County.

Source: US News & World Report

Select Research Activities at Local Colleges

- The University of Miami receives the most NIH funding among Florida universities and was ranked 55th nationally in 2010. The University's new Life Science and Technology Park is constructing $107 million investment in advanced incubator space, including wet labs, offices, and surgical facilities.
- Florida International University is engaged in nanotechnology research and plans to boost its investments in Life Sciences research facilities.
- Barry University has a strong podiatry and nursing program.
- Miami Dade College is scheduled to being its 4-year biological sciences degree program in the fall of 2012. The program has tracks in biotechnology, biopharmaceutical sciences, and science education.

TRADE & LOGISTICS

Trade and logistics encompasses a wide range of services generally related to the import and export of goods and services, including air, sea, and land distribution, as well as maritime services. The following niche sectors have been identified as targets for Miami-Dade County.

- **Distribution Centers**: The trend in distribution centers is towards a more broad logistics services approach, in which a company provides a full suite of services, including storage, distribution, and supply chain management to gain efficiencies. With the enhanced Miami Free Zone, the County is well positioned with the enhanced Miami Free Zone to host global distribution centers and their logistics command centers, particularly for air cargo and perishable goods. Florida is already recognized as a national leader in freight forwarding, and Miami-Dade County has a high concentration of employment in freight transportation arrangement, with an LQ of 6.6.
- **Logistics IT:** In an effort to increase the efficiency of logistical management systems, software developers have been creating new applications and wireless technologies to coordinate and manage logistics activities. Miami-Dade County's significant logistics and distribution industry make the County a prime candidate for logistics IT firms seeking to develop and sell their products.
- **Maritime Services & Trade Finance:** Maritime commerce includes a range of professional services related to seaborn trade activities, including maritime law, accounting and finance. These services are a major component of international trade, including freight rate setting, marine insurance, ship registration, ship mortgages, transportation of goods, chartering of vessels, and stevedore activities. In addition to its large distribution cluster, Miami-Dade County has one of the few universities in the world offering an LL.M in Maritime Law – the University of Miami Law School.
- **Perishables:** Miami-Dade County's agricultural community produces perishables for export and US distribution, and the perishables are imported by air – which require unique facilities and skill sets.
- **Value-Added Services – Assembly & Kitting:** Some trade in and out of local airports and seaports involves the repackaging of goods for re-export. This includes repacking containers for export to smaller Caribbean destination, and importing individual products at tariffs that are lower than their combined products, which are then distributed throughout the US.

On the following page, we provide a "Target Opportunity Matrix" for the Trade & Logistics industry in Miami-Dade County.

TARGET OPPORTUNITY MATRIX

Opportunities
- ✓ Rapidly rising exports
- ✓ Expansion of the Panama Canal
- ✓ Technology changing logistics capabilities
- ✓ Trade agreements opening up new markets

Threats
- o Rising fuel costs
- o Demand for goods affected by fluctuating economy
- o Competition from US and global hubs

Global Growth
"Is it a growing market?"

Community Goals
"What do we want to accomplish?"

- ➢ Increase global recognition of Miami-Dade's position
- ➢ Increase cargo traffic
- ➢ Grow local trade financing and logistics sectors
- ➢ Leverage trade to support other value-added industries

Trade & Logistics

Action ROI
"What can we influence?"

- ➢ Increase distribution capacities and expand industrial real estate
- ➢ Global image marketing
- ➢ Attract additional multinational firms
- ➢ Expand trade assistance programs

Local Asset Fit
"Can we compete?"

Strengths
- ✓ Geographic location
- ✓ Port and airport expansions
- ✓ Cultural connectivity with Latin America
- ✓ Spanish language skills in workforce
- ✓ Foreign Trade Zone

Weaknesses
- o Competition from other expanding ports
- o Limited warehouse facilities
- o Significant pass through of goods

Niche Sectors
- Distribution Centers
- Logistics IT
- Maritime Services & Trade Finance
- Perishables
- Value-Added Services – Assembly & Kitting

Target Occupations
- Agricultural engineers
- Cargo equip. operators & handlers
- Industrial engineers & technicians
- Inspectors
- Logisticians
- Machinery/equipment Maintenance
- Transport drivers

Trends and Drivers

US exports have risen to record highs despite the recent recession. Exports of goods and services were up 16% in the first three quarters of 2011 over the same period of 2010. With current conditions and a national objective of doubling exports during the five-year period from 2010 to 2015, exports are expected to continue rapid growth. Imports into the US still outweigh the nation's exports, but exports are growing faster than imports. (See the Appendix of this report, "International Trade Trends," for more discussion and data on US and Miami-Dade County imports and exports.)

The US logistics and distribution industry supports nearly 2.7 million jobs today. Overall employment declined 4% from 2005 to 2010, but a majority of these lost jobs were in freight trucking and express delivery services, the largest domestic logistics subsectors. Job cuts in these subsectors were directly related to decreased domestic demand for consumer goods caused by the recession. Many logistics and distribution sectors that support international trade saw employment grow or remain steady through this period. General warehousing and storage employment rose 9%, and although deep sea freight transportation saw 9% job losses, coastal and inland water freight transportation rose 16% and 15% respectively.

Although national deep sea freight employment has declined in recent years, advances in shipping container technology and increased ship size have led to a 75% increase in container ship trade over the past decade according to First Research. Containerized freight now represents 70% of the value of all US cargo shipments, up from 25% in 1980. The rise of container ships and increased demand for upgraded ports capable of handling these high volume vessels is a prime example of how technological innovation has boosted the capacity of the sector. Technology is expected to continue to change trade dynamics, with advanced logistics software, global positioning systems, and new fuel sources constantly reshaping the industry.

Trade & Logistics Employment Trends
Miami-Dade County

Subindustry		2010		2005-2010		Forecast Ann. Growth, 2010-2020	
NAICS	Description	Job Base	Density*	Ann. Growth	Net New	Miami-Dade	US
481112	Scheduled freight air transportation	912	11.6	-8.1%	-483	-22.3%	-1.6%
481212	Nonscheduled air freight chartering	905	15.8	34.7%	701	6.9%	1.5%
483111	Deep sea freight transportation	824	9.3	3.1%	115	-1.9%	-1.7%
484110	General freight trucking, local	1,180	0.8	-6.5%	-475	-2.3%	0.3%
484121	General freight trucking, long-dstance TL	463	0.1	-9.4%	-294	2.4%	1.1%
484122	General freight trucking, long-dstance LTL	1,231	0.8	-3.8%	-266	3.9%	0.9%
484230	Specialized Freight Trucking, Long-Distance	159	0.2	-9.4%	-102	-4.2%	1.5%
4881	Support activities for air transportation	4,762	4.2	0.6%	135	1.6%	1.8%
488310	Port and harbor operations	250	1.7	6.6%	68	-2.6%	-0.2%
488320	Marine cargo handling	1,354	4.5	-8.8%	-791	-3.8%	0.2%
488330	Navigational services to shipping	79	0.6	-5.4%	-25	-2.2%	-0.4%
488390	Other support activities for water transport	119	1.6	-7.7%	-59	-3.5%	-0.8%
4884	Support activities for road transportation	1,024	1.7	-7.1%	-455	3.6%	2.0%
4885	Freight transportation arrangment	8,256	6.5	1.4%	552	1.9%	0.7%
488991	Packing and crating	253	2.0	11.9%	109	-0.9%	-1.1%
492110	Couriers and express delivery services	5,334	1.5	-1.3%	-358	0.3%	0.3%
493110	General warehousing and storage	1,907	0.5	-7.4%	-899	0.8%	1.1%
493120	Refrigerated warehousing and storage	302	0.8	-1.6%	-26	2.5%	1.0%
493130	Farm Product warehousing and storage	31	0.5	-4.5%	-8	-7.6%	-0.8%
493190	Other warehousing and storage	276	0.8	20.6%	168	6.3%	1.3%
	TOTAL	**29,621**	**1.5**	**-1.5%**	**-2,393**	**1.1%**	**0.9%**

Source: Avalanche Consulting using U.S. Bureau of Labor Statistics, forecast data from EMSI
Density = Per capita concentration of the industry as % of US concentration (Location Quotient)

The international trade and logistics industry plays a significant role in Miami-Dade County and has for decades. Although Miami-Dade County is not a manufacturing hub, it is a major international point of entry and exit for goods and services, with globally renowned air and sea ports. The County's strong logistics and distribution industry also supports a significant presence of multinational firms, professional services firms, international banks, and regional headquarters.

In contrast to the United States, Miami-Dade County exports are nearly double the value of goods that are imported through the County. Additionally, while 70% of US goods move via container ship, 71% of Miami-Dade County imports and exports (by value) move by air through Miami International Airport, with the rest traveling through the Port of Miami. Florida has set a goal of doubling exports by 2016 and then doubling them again by 2021. Following current export growth trends and with strong federal, state, and local support, Miami-Dade County is already on a path to achieve this goal.

Logistics and distribution activities account for nearly 37,000 jobs in Miami-Dade County. The industry lost jobs during the recession, declining 4.5% from 2005 to 2010. Job losses during this period were mostly concentrated in scheduled air freight transportation, trucking, road transportation support, marine cargo handling, and general warehousing and storage. Significant job creation in Miami-Dade County occurred in support activities for air transportation (32% growth), freight transportation arrangement (8%), port and harbor operations (33%), other warehousing and storage (138%), and nonscheduled air freight chartering (274%).

Logistics and distribution employment concentrations in Miami-Dade County also differ from the US, with the largest share of jobs focused on air transportation, sea transportation, and freight services and a much smaller share in trucking, warehousing, and express delivery services. These data underscore Miami-Dade County's existing strengths: the quick movement of goods through MIA and the Port of Miami and the provision of logistical services for domestic and international companies. Miami-Dade County currently has a relatively low concentration of warehouse activities and facilities (a recent study found that Miami was the 4th tightest industrial real estate market) and value-added assembly (beyond kitting and repackaging) is relatively non-existent. The lower concentration of these activities in the County reveals an opportunity for development, as businesses realize the potential for warehousing and assembly of goods locally.

For further detail on Miami-Dade County International Trade, please see the Appendix.

APPENDIX: INTERNATIONAL TRADE

INTERNATIONAL TRADE DYNAMICS

Introduction

Miami-Dade County is a highly international community, with strong cultural and physical ties to the global economy. Two of Miami-Dade County's strongest international assets are Miami International Airport and the Port of Miami. These two facilities account for 1.4% of all imports by value to the United States and 3.6% of all exports. Both imports and exports have been growing more quickly in Miami-Dade County than the US as a whole. Miami International Airport was ranked first among American airports for international freight and second for international passengers, highlighting the strength of local international infrastructure.

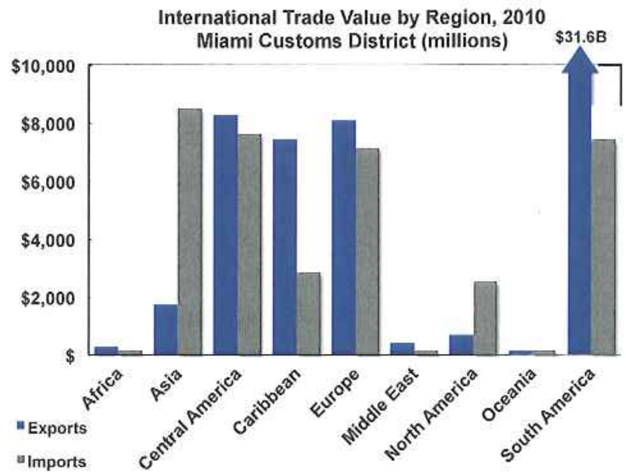
Along with strong distribution lines for international goods, Miami-Dade County hosts a significant number of multinational firms, including numerous regional headquarters for Latin American and Caribbean operations. International trade in services is not captured by most statistical measures, but the multitude of multinational firms and internationally renowned educational institutions in Miami-Dade County engage in a wide variety of international service exchanges, including education, banking, marketing, and many more.

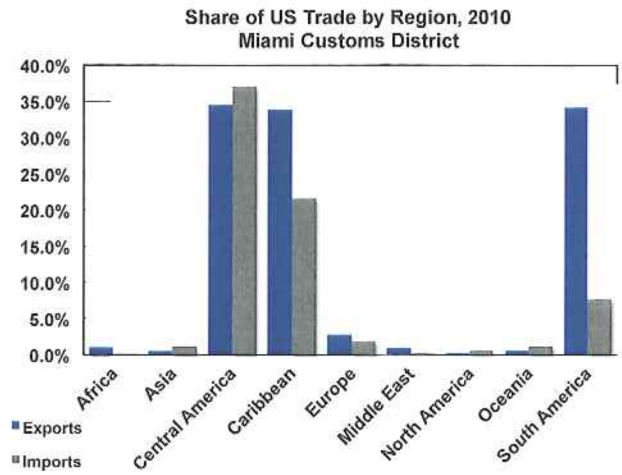
The Miami Customs District, which includes air and sea port facilities in Broward and Palm Beach Counties, conducts a large volume of trade with South America, the Caribbean, Central America, and Europe. Trade with Asia is primarily comprised of imports (largely from China). As a share of all United States trade with foreign regions in 2010, the Miami Customs District accounted for a significant share of trade to Central America (36%), the Caribbean (29%), and South America (21%). These numbers reveal an increase in the Miami Custom District's share of trade to the Caribbean (up 1.3% from 2005) and South America (up 2%), but a decline in trade to Central America (down -9.7%).

The composition of goods and trade partners is broken down in greater detail for Miami-Dade County specifically in the following sections.

INTERNATIONAL MIAMI-DADE COUNTY

- MIA ranked 1st for international freight and 2nd for international passengers in 2009
- Over 800 multinationals located in Miami-Dade County
- Top 10 Trade Partners - 2010 total trade:
  1. Brazil - $11.0 billion
  2. Colombia - $6.0 billion
  3. Switzerland - $5.3 billion
  4. Costa Rica - $4.2 billion
  5. China - $4.1 billion
  6. Dominican Republic - $3.7 billion
  7. Chile - $2.9 billion
  8. Venezuela - $2.9 billion
  9. Honduras - $2.5 billion
  10. Peru - $2.1 billion
- Top 5 Imported Commodities (2010):
  1. Industrial Machinery
  2. Precious Stones
  3. Electrical Machinery
  4. Knit Apparel
  5. Special Provisions
- Top 5 Exported Commodities (2010):
  1. Industrial Machinery
  2. Electrical Machinery
  3. Precious Stones
  4. Aircraft & Aerospace Parts
  5. Medical Instruments





Source: The Beacon Council & Enterprise Florida

Composition of Trade

Miami-Dade County exports and imports a diverse range of goods, with machinery and parts composing the largest share of commodities in both categories. Imports to Miami-Dade County grew 27% from 2005-2010, above the US rate of 15%, but well below the County's explosive export growth, which rose 68% during the same period as US exports grew 42%.

IMPORTS

Imports to Miami-Dade County include a wide range of materials, from machinery and electrical components to furniture and works of art, but a significant share of imports are perishable commodities. Miami International Airport and the Port of Miami import 52% of all US goods in the Live Trees, Plants, Bulbs, and Cut Flowers category as well as 11% of all US Seafood. Other imported commodities composing a significant share of US imports include Tobacco Products (20% of US imports), Apparel (7%), Precious Stones (7%), Prepared Meat and Seafood (7%), and Perfume (7%).

Imports to Miami-Dade County have grown more quickly than the US in a wide variety of commodity categories. Some of the fastest growing high-value commodities from 2005-2010 include Aircraft and Parts (420% growth), Pharmaceutical Products (353%), Precious Stones (172%), Tobacco Products (103%), Medical Instruments (100%), and Fruits & Nuts (88%). Knit and Not-Knit Apparel, both Top Ten import commodities, were two of the few commodity categories to drop in value during the five-year period.

The importation of commodities to Miami-Dade County is roughly split between the two ports (Miami International Airport and the Port of Miami), with 59% of the value of goods coming through MIA. Almost all of the perishable goods, such as flowers, produce, and seafood, are imported through Miami International Airport, which has reliable refrigeration capacity and advanced Customs Clearance Capabilities.

Top 15 Import Commodities
Miami-Dade County

Commodity	Value of Imports (millions) 2005	Value of Imports (millions) 2010	Import Growth 2005-2010	Share of Miami-Dade Imports, 2010	Share of US Imports, 2010
84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	$2,188	$3,948	80.4%	14%	1.6%
71 Nat Etc Pearls, Prec Etc Stones, Pr Met Etc; Coin	$1,385	$3,767	172.0%	14%	7.0%
85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$2,493	$3,767	51.1%	14%	1.5%
61 Apparel Articles And Accessories, Knit Or Crochet	$2,796	$2,679	-4.2%	10%	7.0%
98 Special Classification Provisions, Nesoi	$1,206	$1,369	13.5%	5%	3.3%
03 Fish, Crustaceans & Aquatic Invertebrates	$1,055	$1,254	18.8%	5%	11.2%
62 Apparel Articles And Accessories, Not Knit Etc.	$1,510	$917	-39.3%	3%	2.7%
90 Optic, Photo Etc, Medic Or Surgical Instrments Etc	$423	$846	99.9%	3%	1.4%
06 Live Trees, Plants, Bulbs Etc.; Cut Flowers Etc.	$658	$787	19.7%	3%	53.1%
29 Organic Chemicals	$484	$669	38.1%	2%	1.4%
22 Beverages, Spirits And Vinegar	$805	$598	-25.7%	2%	3.8%
88 Aircraft, Spacecraft, And Parts Thereof	$113	$554	391.5%	2%	3.0%
33 Essential Oils Etc; Perfumery, Cosmetic Etc Preps	$375	$540	43.9%	2%	6.7%
94 Furniture; Bedding Etc; Lamps Nesoi Etc; Prefab Bd	$694	$448	-35.5%	2%	1.2%
97 Works Of Art, Collectors' Pieces And Antiques	$389	$358	-7.9%	1%	5.7%
All Commodities	**$21,610**	**$27,328**	**26.5%**	**100%**	**1.4%**

EXPORTS

Miami-Dade County exports a significant amount of advanced manufactured goods, including industrial machinery, electrical components, aircrafts & aerospace parts, medical instruments, pharmaceuticals, automobiles, and plastics. Alongside these manufactured goods, Miami-Dade County also still accounts for a large share of US exports of cotton (8% of US exports), manmade fibers (8%), knitted fabrics (14%), specialized woven fabrics (9%), and apparel (7%).

As discussed above, exports have grown 68% in Miami-Dade County from 2005 to 2010 and are currently nearly double the value of all imports to the County. By far the fastest growing export commodity has been Precious Stones (primarily gold), which grew 1121% during the five-year period. Other high-value commodities with significant growth in this period include Meat (251% growth), Toys & Sports Equipment (153%), Copper (138%), Cotton (103%), and Rubber (98%). Only a handful of goods saw a decline in exports during this period, primarily in apparel and other knit fabric categories.

Top 15 Export Commodities
Miami-Dade County

Commodity	Value of Exports (millions) 2005	Value of Exports (millions) 2010	Export Growth 2005-2010	Share of Miami-Dade Exports, 2010	Share of US Exports, 2010
84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	$7,330	$10,400	41.9%	23%	5.7%
85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$6,110	$9,408	54.0%	21%	6.2%
71 Nat Etc Pearls, Prec Etc Stones, Pr Met Etc; Coin	$452	$5,519	1120.9%	12%	10.6%
88 Aircraft, Spacecraft, And Parts Thereof	$2,387	$4,452	86.5%	10%	5.6%
90 Optic, Photo Etc, Medic Or Surgical Instrments Etc	$2,025	$3,645	80.0%	8%	4.9%
30 Pharmaceutical Products	$847	$1,389	63.9%	3%	3.4%
87 Vehicles, Except Railway Or Tramway, And Parts Etc	$988	$1,169	18.2%	3%	1.2%
98 Special Classification Provisions, Nesoi	$403	$820	103.6%	2%	2.0%
39 Plastics And Articles Thereof	$494	$677	37.0%	1%	1.3%
52 Cotton, Including Yarn And Woven Fabric Thereof	$291	$592	103.3%	1%	7.8%
95 Toys, Games & Sport Equipment; Parts & Access.	$201	$508	153.3%	1%	7.3%
33 Essential Oils Etc; Perfumery, Cosmetic Etc Preps	$323	$508	57.1%	1%	5.6%
38 Miscellaneous Chemical Products	$258	$448	74.0%	1%	2.1%
29 Organic Chemicals	$276	$318	15.3%	1%	0.8%
73 Articles Of Iron Or Steel	$163	$279	71.6%	1%	1.7%
All Commodities	**$27,062**	**$45,481**	**68.1%**	**100%**	**3.6%**

Miami International Airport plays a more prominent role in the export of goods than imports, accounting for 77% of the value of all exports from Miami-Dade County and 83% of the Top 15 exported commodities.

Trading Partners

Miami-Dade County trades with countries all over the world, but the County's most significant trading partners are located throughout South America, the Caribbean, and Central America. These trading connections are strengthened by strong cultural ties and Miami-Dade County's highly competitive geographical location.

IMPORTS

Miami-Dade County's largest source of imports is China, which composes 14% of all imports to the County, but these goods only account for 1% of all US imports from China. Imports from Costa Rica account for 10% of all goods coming into Miami-Dade County and 33% of all Costa Rican goods imported into the US. Imported goods generally follow this pattern, with a large share of Miami-Dade County imports coming from European markets such as France, Germany, and the UK, but these only accounting for a minor share of overall US imports from these countries.

Miami-Dade County serves as the point of importation for a much larger share of goods from Caribbean, South American, and Central American markets. The County imports 74% of all goods to the US from Grenada, 70% from Guyana, 64% from Haiti, 44% from Dominica, 44% from Panama, 43% from the Dominican Republic, 33% from Honduras, 33% from Costa Rico, 32% from Bolivia, 30% from Nicaragua, and 30% from El Salvador.

Top 15 Import Countries
Miami-Dade County

Country	Value of Imports (millions) 2005	2010	Import Growth 2005-2010	Share of Miami-Dade Imports, 2010	Share of US Imports, 2010
China	$2,233	$3,711	66.2%	14%	1.0%
Costa Rica	$846	$2,861	238.3%	10%	32.9%
Colombia	$1,458	$2,509	72.1%	9%	16.0%
France	$1,006	$1,615	60.5%	6%	4.2%
Dominican Republic	$1,746	$1,566	-10.3%	6%	42.6%
Honduras	$1,119	$1,307	16.8%	5%	33.2%
Mexico	$541	$1,004	85.4%	4%	0.4%
Brazil	$2,158	$954	-55.8%	3%	4.0%
Germany	$620	$745	20.2%	3%	0.9%
United Kingdom	$654	$730	11.6%	3%	1.5%
Peru	$465	$688	48.0%	3%	13.6%
El Salvador	$565	$649	14.8%	2%	29.4%
Guatemala	$565	$621	9.8%	2%	19.4%
Nicaragua	$219	$598	172.6%	2%	29.8%
Chile	$499	$584	17.1%	2%	8.3%
All Commodities	**$21,610**	**$27,328**	**20.4%**	**100%**	**1.4%**

EXPORTS

More than imports, Miami-Dade County accounts for a significant share of US exports to South America, the Caribbean, and Central America. Brazil is Miami-Dade County's largest export market, receiving 22% of all goods exported from the County (also comprising 28% of all US good exported to Brazil). Demonstrating high competitiveness, Miami-Dade County accounts for greater than 20% of all US exports to the County's Top 15 export markets.

As with imports, Miami-Dade County's strong trade connections to South America, the Caribbean, and Central America are revealed in their shares of the US export markets, with the largest shares going to Paraguay (72% of US exports), Bolivia (63%), Nicaragua (38%), Barbados (35%), Dominica (32%), Dominican Republic (32%), Haiti (31%), Uruguay (29%), Colombia (29%), Brazil (28%), and El Salvador (27%). As consumption continues to grow in these emerging markets, Miami-Dade County can expect to see rapid export growth to these regions.

Despite these existing market strengths and higher overall export growth in Miami-Dade County, US exports to these particular regions have generally grown more rapidly than Miami-Dade County exports, indicating a slow decline in market share. For example, US exports to Paraguay grew 102% from 2005-2010, but Miami-Dade County exports to Paraguay grew only 68%. These trends indicate a need for Miami-Dade County to continue to highlight and strengthen the County's exciting competitive advantage in trade to these regions.

Top 15 Export Countries
Miami-Dade County

Country	Value of Exports (millions) 2005	2010	Export Growth 2005-2010	Share of Miami-Dade Exports, 2010	Share of US Exports, 2010
Brazil	$5,425	$10,041	85.1%	22%	28.3%
Switzerland	$73	$4,993	6700.2%	11%	24.1%
Colombia	$2,021	$3,479	72.2%	8%	28.8%
Venezuela	$2,513	$2,819	12.2%	6%	26.5%
Chile	$1,168	$2,290	96.0%	5%	21.0%
Dominican Republic	$1,583	$2,108	33.1%	5%	32.0%
Argentina	$1,255	$1,676	33.6%	4%	22.7%
Peru	$608	$1,368	125.0%	3%	20.2%
Costa Rica	$1,691	$1,320	-21.9%	3%	25.5%
Paraguay	$775	$1,299	67.6%	3%	71.8%
Honduras	$884	$1,187	34.3%	3%	25.8%
Panama	$589	$1,185	101.3%	3%	19.5%
Ecuador	$729	$1,052	44.4%	2%	19.5%
Guatemala	$666	$996	49.5%	2%	22.3%
El Salvador	$587	$659	12.4%	1%	27.1%
All Commodities	**$27,062**	**$45,481**	**68.1%**	**100%**	**3.6%**

Top Markets

The following tables examine the composition of goods traded to Miami-Dade County's top five import and export markets. A careful examination of these tables reveals regional variation in the movement of goods. Of particular note among import markets, China and France are largely sources of advanced manufactured machinery and fashion accessories, whereas Costa Rica, Dominican Republic, and Honduras produce a larger share of natural products, such as food and flowers, and apparel.

Top 5 Import Markets & Commodities
Miami-Dade County

Country	Commodity	2010 Import Value (millions)	Growth, 2005-2010
China	84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	$668	24.5%
	85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$625	40.2%
	90 Optic, Photo Etc, Medic Or Surgical Instrments Etc	$26	-29.1%
	71 Nat Etc Pearls, Prec Etc Stones, Pr Met Etc; Coin	$19	10.7%
	29 Organic Chemicals	$11	31.8%
	97 Works Of Art, Collectors' Pieces And Antiques	$9	35.8%
	61 Apparel Articles And Accessories, Knit Or Crochet	$9	-68.8%
	64 Footwear, Gaiters Etc. And Parts Thereof	$8	-89.0%
	98 Special Classification Provisions, Nesoi	$8	478.1%
	62 Apparel Articles And Accessories, Not Knit Etc.	$8	-88.5%
Costa Rica	61 Apparel Articles And Accessories, Knit Or Crochet	$120	19.6%
	94 Furniture; Bedding Etc; Lamps Nesoi Etc; Prefab Bd	$63	15.1%
	90 Optic, Photo Etc, Medic Or Surgical Instrments Etc	$45	-23.5%
	62 Apparel Articles And Accessories, Not Knit Etc.	$32	15.2%
	85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$29	-86.8%
	39 Plastics And Articles Thereof	$23	164.3%
	08 Edible Fruit & Nuts; Citrus Fruit Or Melon Peel	$10	91.8%
	20 Prep Vegetables, Fruit, Nuts Or Other Plant Parts	$8	113.9%
	98 Special Classification Provisions, Nesoi	$7	-89.7%
	07 Edible Vegetables & Certain Roots & Tubers	$7	28.3%
France	33 Essential Oils Etc; Perfumery, Cosmetic Etc Preps	$401	67.6%
	22 Beverages, Spirits And Vinegar	$321	79.7%
	85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$29	-60.6%
	84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	$28	-88.5%
	39 Plastics And Articles Thereof	$17	29.7%
	94 Furniture; Bedding Etc; Lamps Nesoi Etc; Prefab Bd	$16	22.2%
	04 Dairy Prods; Birds Eggs; Honey; Ed Animal Pr Nesoi	$16	23.6%
	97 Works Of Art, Collectors' Pieces And Antiques	$9	-90.9%
	19 Prep Cereal, Flour, Starch Or Milk; Bakers Wares	$7	79.2%
	40 Rubber And Articles Thereof	$7	45.3%
Dominican Republic	71 Nat Etc Pearls, Prec Etc Stones, Pr Met Etc; Coin	$564	226.0%
	85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$136	4.4%
	90 Optic, Photo Etc, Medic Or Surgical Instrments Etc	$72	6.3%
	24 Tobacco And Manufactured Tobacco Substitutes	$72	37.3%
	61 Apparel Articles And Accessories, Knit Or Crochet	$57	-92.1%
	62 Apparel Articles And Accessories, Not Knit Etc.	$33	-91.0%
	98 Special Classification Provisions, Nesoi	$25	-16.4%
	64 Footwear, Gaiters Etc. And Parts Thereof	$18	-65.1%
	26 Ores, Slag And Ash	$14	4677.4%
	30 Pharmaceutical Products	$10	1960.6%
Honduras	71 Nat Etc Pearls, Prec Etc Stones, Pr Met Etc; Coin	$235	252.2%
	03 Fish, Crustaceans & Aquatic Invertebrates	$86	58.6%
	61 Apparel Articles And Accessories, Knit Or Crochet	$51	-90.5%
	62 Apparel Articles And Accessories, Not Knit Etc.	$24	-88.5%
	24 Tobacco And Manufactured Tobacco Substitutes	$21	-35.2%
	85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$19	-82.3%
	87 Vehicles, Except Railway Or Tramway, And Parts Etc	$9	24.6%
	88 Aircraft, Spacecraft, And Parts Thereof	$4	0.0%
	98 Special Classification Provisions, Nesoi	$3	-90.3%
	58 Spec Wov Fabrics; Tufted Fab; Lace; Tapestries Etc	$1	185.3%

While goods imported to Miami-Dade County from top markets are heavily weighted towards natural products, fashion, and apparel, goods exported from Miami-Dade County to top markets fall largely into the following categories: electric machinery, industrial machinery, aircraft & aerospace parts, vehicles, pharmaceutical products, and chemicals. This balance of trade generally reflects the higher value-added of goods manufactured in the United States, but also reveals that many products exported from Miami-Dade County are not necessarily manufactured locally, such as automobiles and aircraft (likely originating at Embraer in Broward County).

Top 5 Export Markets & Commodities
Miami-Dade County

Country	Commodity	2010 Export Value (millions)	Growth, 2005-2010
Brazil	85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$2,734	135.2%
	84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	$2,597	86.1%
	88 Aircraft, Spacecraft, And Parts Thereof	$2,230	63.4%
	90 Optic, Photo Etc, Medic Or Surgical Instrments Etc	$1,067	117.5%
	30 Pharmaceutical Products	$441	171.8%
	38 Miscellaneous Chemical Products	$112	74.8%
	98 Special Classification Provisions, Nesoi	$110	-22.3%
	39 Plastics And Articles Thereof	$96	34.5%
	87 Vehicles, Except Railway Or Tramway, And Parts Etc	$81	-26.9%
	73 Articles Of Iron Or Steel	$49	94.4%
Switzerland	71 Nat Etc Pearls, Prec Etc Stones, Pr Met Etc; Coin	$4,816	30600.0%
	30 Pharmaceutical Products	$62	595.8%
	88 Aircraft, Spacecraft, And Parts Thereof	$28	688.8%
	97 Works Of Art, Collectors' Pieces And Antiques	$28	275.4%
	91 Clocks And Watches And Parts Thereof	$15	233.0%
	33 Essential Oils Etc; Perfumery, Cosmetic Etc Preps	$14	710.0%
	84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	$6	-8.1%
	29 Organic Chemicals	$5	9450.5%
	90 Optic, Photo Etc, Medic Or Surgical Instrments Etc	$5	26.2%
	85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$3	-54.1%
Colombia	84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	$1,322	79.5%
	85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$681	58.7%
	90 Optic, Photo Etc, Medic Or Surgical Instrments Etc	$439	119.2%
	88 Aircraft, Spacecraft, And Parts Thereof	$214	160.5%
	30 Pharmaceutical Products	$104	149.8%
	87 Vehicles, Except Railway Or Tramway, And Parts Etc	$79	15.4%
	98 Special Classification Provisions, Nesoi	$54	72.2%
	39 Plastics And Articles Thereof	$54	25.0%
	95 Toys, Games & Sport Equipment; Parts & Accessories	$47	138.9%
	82 Tools, Cutlery Etc. Of Base Metal & Parts Thereof	$43	193.6%
Venezuela	85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$781	11.1%
	84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	$770	-25.1%
	90 Optic, Photo Etc, Medic Or Surgical Instrments Etc	$451	128.1%
	30 Pharmaceutical Products	$141	362.8%
	38 Miscellaneous Chemical Products	$125	373.5%
	29 Organic Chemicals	$57	373.8%
	88 Aircraft, Spacecraft, And Parts Thereof	$53	-36.2%
	87 Vehicles, Except Railway Or Tramway, And Parts Etc	$53	-47.6%
	39 Plastics And Articles Thereof	$47	1.5%
	40 Rubber And Articles Thereof	$21	41.4%
Chile	84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	$834	57.8%
	85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	$556	142.1%
	88 Aircraft, Spacecraft, And Parts Thereof	$239	522.6%
	90 Optic, Photo Etc, Medic Or Surgical Instrments Etc	$181	99.8%
	87 Vehicles, Except Railway Or Tramway, And Parts Etc	$135	50.9%
	95 Toys, Games & Sport Equipment; Parts & Accessories	$50	111.9%
	30 Pharmaceutical Products	$38	231.6%
	98 Special Classification Provisions, Nesoi	$29	148.2%
	39 Plastics And Articles Thereof	$25	73.9%
	33 Essential Oils Etc; Perfumery, Cosmetic Etc Preps	$24	93.4%

Multinational Presence

Miami-Dade County hosts over 800 multinational companies engaged in business outside the United States, supporting the area's strong international distribution industry. Nearly half of these companies are foreign-owned, representing 52 other countries. After US firms, the largest share of multinationals in Miami-Dade County are European-owned, having established their Latin American and Caribbean headquarters in Miami-Dade County to take advantage of geographical proximity to customer regions and a local workforce and corporate strengths.

The twenty largest multinationals by revenue located in Miami-Dade County include:

- Carnival Cruises – Global Division
- World Fuel Services – Global Division
- Hewlett-Packard – Latin America / Caribbean Division
- Ryder System – Global Division
- Nokia – Latin America / Caribbean Division
- American Airlines – Latin America / Caribbean Division
- Danone Americas – United States / Americas Division
- Caterpillar – Latin America / Caribbean Division
- Del Monte – Global Division
- AIG/Chartis – Latin America / Caribbean Division
- Kraft Foods – Latin America / Caribbean Division
- Brightstar – Global Division
- Burger King – Global Division
- NCL Corp. – Global Division
- Oracle – Latin America / Caribbean Division
- Cisco – Latin America / Caribbean Division
- TracFone Wireless – Global Division
- Hilton International – Latin America / Caribbean Division
- UPS – United States / Americas Division

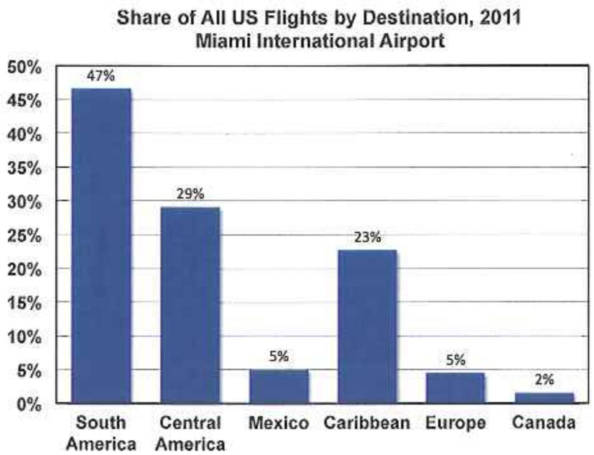
These multinationals represent an incredibly diverse range of industries, from advanced electronics to food distribution. The presence of these companies alongside existing trade routes demonstrates the highly competitive international business environment in Miami-Dade County.

Snapshot of Miami International Airport

Miami International Airport (MIA) is the one of the most significant international assets in Miami-Dade County. Offering non-stop flights to 51 domestic and 84 foreign destinations, MIA is a truly an international airport, ranked 2nd among US airports for international passengers. The prominent role MIA plays supporting Miami-Dade County's tourism and business visitors can easily distract from the equally important role MIA plays in the distribution of goods.

MIA ranked 1st among US airports for international freight and 3rd for total freight. The airport accounted for 77% of exports from Miami-Dade County and also ranked 10th for international freight among worldwide airports.

Miami International Airport plays an important role transporting passengers from the US to the Caribbean, Central America, and South America. MIA accounts for 47% of all US flights to South America, 29% to Central America, and 23% to the Caribbean. Although MIA has lost some flight market share to these regions in recent years as other US cities increase their flights to these emerging markets, Miami-Dade County's geographic location and strong business and tourist connectivity to these regions will ensure



continued travel to and from these regions.

Snapshot of Port Miami

Port Miami is both a significant international distribution and tourism asset for Miami-Dade County. As one of the world's largest cruise terminals, Port Miami saw over 4 million passengers in 2010. Also the 11th largest container port in the US, the Banner Center for Global Logistics estimates that Port Miami creates 176,000 jobs, $6.4 billion in wages, and $17 billion in economic output.

Planned rail connectivity between the air and sea ports will only enhance this economic development asset. Additionally, the planned deep dredge project will allow the port to accommodate larger ships and greater traffic after the expansion of the Panama Canal in 2014.

- A $150 million project, the deep dredging will be funded by through a partnership of the federal government, Army Corps of Engineers, and Port Miami.
- The project is projected for completion in 2014.
- Container activity is expected to double to 850,000 TEU's in the next five to ten years.
- The expansion is projected to create 33,000 new direct and indirect jobs over five years.