

FLORIDA FINANCIAL SERVICES CLUSTER INITIATIVE COMPETITIVENESS ASSESSMENT

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CITY SNAPSHOTS

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Overview

In this study the Internet was used to find out how several cities around the globe are promoting and trying to develop their clusters. Particular attention was given to Financial Services initiatives, although this was not always possible because it was not the main focus of some cities. In such situations we sought what lessons could be transposed to the Financial Services Sector. Below we give a brief overview of each of the cities reviewed:

Tampa: Tampa's Financial Services Cluster is the largest in the state of Florida. It has its origins in 1969 when MetLife opened offices there. Later the cluster was strengthened when Citicorp, Chase Manhattan and Salomon Brothers opened operations in the region. The presence of these companies, the good quality of life, and competitive costs have been important factors that continue to contribute to the cluster's development.

Orlando: Orlando is currently more focused on developing its IT cluster. Hospitality and tourism are by far the regions main source for employment. However, the city has a well-structured web site, good economic development agencies, actions, and ideas that do a good job promoting the city as a future IT center.

Miami: Miami has strong cultural links with Latin America, which helped develop strong commercial ties and consequently a local international financial center. However, hospitality and tourism, transportation and logistics are the regions most significant clusters.

Jacksonville: Jacksonville has the second largest Financial Services cluster in the state of Florida. The presence of a local branch of the Federal Reserve and the low cost of living can be important factors in promoting the region for a Financial Services expansion.

Charlotte: Charlotte has a Financial Services cluster slightly smaller than Jacksonville. However, the region has aggressive marketing and strong cluster development strategies that deserve a close analysis.

Atlanta: Atlanta has the seventh largest Financial Services Cluster in the nation. The region houses the Southeast branch of the Federal Reserve Bank and the headquarters of Suntrust Bank. The region is becoming somewhat specialized in real estate finance and the development of some back-office applications.

New York: New York is the world's leading financial center. The region has been losing market share due to the high costs of living and real estate. September 11th and the recent blackout events will contribute to accelerate the erosion of NY cluster. The city is actively working to try to solve the energy reliability problems.

London: London has an exceptional amount of research and supporting organizations behind its financial services cluster including some devoted to developing policies for the cluster and others dedicated to maintaining the highly skilled workforce that exists in the region. The city also faces many of the same problems as other major financial centers such as high costs of living and labor. The region is also recognized as having some of the leading finance schools in the world.

Toronto: Toronto also has high quality research and organizations supporting its Financial Services cluster. The region has excellent reports and strategies devoted to understanding its competitiveness and gaining market share in the sector.

Dublin: Dublin is an interesting case because it is the only situation where the cluster was developed from scratch. A tax break had a major impact in stimulating the formation of this planned cluster.

São Paulo: São Paulo is not actively promoting its cluster. The Brazilian Mercantile and Futures Exchange (BM&F) has interesting ideas for promoting the derivatives market in the country.

Mumbai: Mumbai's good quality schools and large availability of inexpensive labor are its strongest assets. The city faces an enormous strain in its basic infrastructure due to its large population.

Best Practices

This section intends to highlight important findings and actions that some regions are using to promote and develop their clusters.

Orlando has good economic development organizations. The region has an excellent website that does a good job marketing the region. The available data is well structured, easy to find and follows the IEDC data standard. Organizations such as the Central Florida Technology Partnership (CFTP), the Central Florida Innovation Corporation (CFIC) and the Orlando Economic Development Commission are geared towards developing their technology cluster, but offer good models for Financial Services counterparts.

The Charlotte region has a sound, objective, strategic plan to try to bring companies to the metropolitan area. Advantage Carolina breaks the problem into logical steps and meaningful actions. The plan touches not only on some cluster specific actions but also on other issues that are important to supporting all clusters such as affordable housing, venture capital, and the development of research institutions and specialized resources.

One such resource was Charlotte's Financial Services Exchange (FSE), which had the objective of discovering trends and developing applied research for the Financial Services Cluster. This research was used to attract the best minds in the field to the region as well as to draw the attention of major corporations to the region. The FSE was closed because of a lack of funding probably because its research was not as "applied" as it should have been. Future attempts should ask financial institutions for topics they have interest in being researched.

Charlotte also has a "road warrior" with the function of identifying expiring leases and potential relocating companies and to personally visit them to sell the region to the key decision-makers. The city also has an excellent web site with good marketing and well-structured and meaningful information. The regions diversified economy also was an important factor to the strengthening of all clusters.

New York has had its recent share of problems with energy reliability and costs. However, the cities IT infrastructure and development of technology related to financial services is studied by the leading centers in the world. Obviously, the New York Stock Exchange, Wall Street and the immense number of banks in the area are the biggest drivers for development of this cutting edge technology. A lot of this technology is geared towards the stock exchange but other parts such as basic and wireless infrastructure can be replicated.

The NY cluster is also supported by a number of good colleges, universities and professional schools. Some of the programs available in these schools can be used as models for the development of financial services curriculum and research.

Toronto has created the Toronto Financial Services Alliance with the objective enhancing and promoting the competitiveness of Toronto as a premier North American financial services center. The TFSA is a major contributor to the development of several high quality cluster study reports and a good cluster development plan. These reports include an analysis of the competitiveness of the city and of its Financial Services cluster, and excellent economic and workforce development strategies.

London's financial services cluster is supported by some world-class organizations. The Corporation of London, the International Financial Services London, and the London Development Agency produce several outstanding studies with the objective of maintaining London as a leading Financial Services Center. These include "Financial Services Clustering and its significance for London", "International Financial Markets in the UK", "Sizing Up The City – London's Ranking as a Financial Center" and other significant strategic development plans.

Also, a London survey of top financial institutions showed that the city's schools rank high in supplying the skills these companies are looking for. Like New York, an analysis of their curricula can help model similar programs in Florida.

Dublin's tax incentives and planning were able to build a financial services cluster from the ground up. A special corporation tax regime for institutions involved in international financial services was an important factor. Instead of the normal tax rate of 40% applying to the profits of such business, a 10% tax rate was used spurring the start of the cluster.

Scorecard Definitions

In this section we will define the dimensions evaluated in the scorecard.

Information and communications Infrastructure: This dimension evaluates the current situation of the telecommunications, data transmission and wireless infrastructure. It was evaluated based on available information on the Internet and other sources noted for each city.

Transportation Infrastructure: This dimension evaluates the available transportation infrastructure in terms of the supply of public transit, commute times, and connectivity with other metro areas via national highways, air services, and rail services. The Places Rated Almanac was the main source used to evaluate this dimension. The almanac evaluates and ranks this and other quality of life dimensions for 354 cities in the US and Canada.

Energy Infrastructure and Resiliency: This dimension evaluates the quality, adequacy, and resiliency of the electrical energy sources. It was evaluated based on available information provided by economic development agencies in the regions and other sources noted for each city.

Skilled Workforce: This dimension evaluates how well prepared the workforce is to supply skills demanded by Financial Services companies. It was evaluated based on information available on cluster size, workforce development plans, and on economic development agency websites for the cities being studied.

Overall regional education: This dimension evaluates the overall regional education based on college options, enrollment, school support, and library popularity. The Places Rated Almanac was the main source used to evaluate this dimension. The almanac evaluates and ranks this and other quality of life dimensions for 354 cities in the US and Canada.

Quality of life: This item evaluates the overall quality of life. The Places Rated Almanac was the main source used to evaluate this dimension and includes a combination of factors such as cost of living, transportation, climate, crime, arts, health care, education, recreation, and job availability.

Cost of Living: This dimension evaluates the overall cost of living. The Places Rated Almanac and current ACCRA Cost of Living Indexes were the main sources used.

Incentives (Tax, training, etc): This dimension evaluates how large, varied, and available the incentives are that are supplied by the city, county, and state. It was evaluated based on information available in the Federation of Tax Administrators website and on CNNMoney.com.

Supporting Services: This dimension evaluates the availability of supporting services in relation to the size of the regions cluster. Employment data for NAICS codes 518210 (data processing), 522 (credit intermediation and related activities), 523 (securities, commodity contracts and investments), 524 (insurance carriers), 541 (professional and technical services), and 5614 (management and technical consulting services) from the US Department of Labor and other complementary Internet information sources were used to evaluate this dimension.

Existence of regional institutions of collaboration: This dimension evaluates the availability of organizations that directly support and promote a Financial Services cluster. It was evaluated based on available information on the Internet and other written sources noted for each city.

Presence of specialized education & research: This dimension evaluates the availability of educational programs and research specifically targeted to Financial Services. It was evaluated based on information present on the websites of the local universities and colleges.

Sophistication of the demand for the cluster's products and service: This dimension evaluates how demanding the requirements of the cluster's customers are for sophisticated and innovative financial services products, i.e. are they pushing for cutting edge technologies for global markets? The dimension was evaluated based on available information on the Internet, articles and other written sources noted for each city.

Marketing: This dimension evaluates how well each city markets itself. It was based on documents and materials found on their websites, how well established their city brand was, and how aggressively they promote and actively seek to new companies.

Tampa Bay

Region Background and Overview

According to the HBS Cluster Mapping Project, Tampa Bay's Financial Services cluster ranks 20th in the nation in terms of domestic employment. It is the largest Financial Services cluster in the state of Florida. As of 2001 the cluster employed 40,984 workers and it is one of the fastest growing Financial Services regions in the nation with a 36% change of the national share in the years 1990 through 2001. The average wage for this cluster was \$47,357, in 2001, which is below the national average of \$75,004. The Financial Services sector is the second largest Cluster in the Tampa Bay area. It ranks as the fifth highest paying cluster in the Tampa-St. Petersburg-Clearwater MSA region (1).

The cluster has its origins when MetLife opened offices in the region in 1969. In 1983 Citicorp relocated their Travelers Checks processing center from Manhattan to Tampa. Chase Manhattan followed in 1987 and Salomon Brothers in 1991. On that same year a Strategic Plan for economic growth and prosperity was developed focused on developing business and financial services clusters.

During 1993, 94, and 95 Citicorp started developing criteria for a Worldwide Prototype Corporate Center for the year 2005. In 1996 Tampa was chosen over Atlanta and Dallas for the initial center and in December 127 acres were purchased for the center. Inducements/Incentives for Citibank Center Tampa were discussed and by September 1998 certificates of occupancy had been issued for all the buildings, which included two parking garages two office buildings and an Amenities facility. Citicorp announced a 1500 employee expansion/relocation in August 1998, bringing their total Tampa/Hillsborough County employment commitment to 3000. Citibank Center Tampa today is "home" to several corporate divisional headquarters among 23 global and domestic business units of Citigroup.

Currently, the major FS employers include JP Morgan Chase with 4800 associates, Bank of America with 3400, Raymond James and Citigroup with 3000 employees each, Metropolitan Life Insurance with 1150, and Franklin Templeton with 1100 (2).

Some factors that appear to be contributing to the expansion of the cluster include the inexpensive real estate, labor, and cost of living. Tampa is also considered to have a good quality of life and pleasurable climate. As a matter of fact, the region has been ranked the fourth best place to live in the nation according to the Places Rated Almanac (3).

The city has a diverse multilingual work force, which facilitates the creation of a business bridge with the International branches of multinational institutions. The state's lower tax rates and the presence of some major financial institutions also have been important factors in the expansion of the Financial Services sector.

Electricity costs play an important role in the costs of back-office operations and according to the Edison Electric Institute Tampa's consumer electricity cost (below 3000 KW) is \$89/1000KW, which is lower than the National average of \$94/1000KW. However, in the commercial and

industrial range (40 KW, 500KW) the city has a cost of \$815/10,000KW and 11,195/150,000KW, which are higher than the national averages of \$812/10,000KW and \$10582/150,000KW respectively (4).

According to Enterprise Florida's web site, the city ranks 51st in the nation in high-tech capacity and has a lower concentration of high-tech activity than the nation on average. No publicly disclosed actions to improve this situation were found (5).

The region lacks a school with a strong program geared towards financial services. As a result many of the talents in this area are still being brought from other states. The region's ACCRA cost of living is 94.2, making it the second cheapest place to live, after Jacksonville, from the domestic cities analyzed in this study (10). Patent output stands at 3.41 patents per 10,000 employees, which is lower than the national average of 7.71.

Regional Economic Development Strategies

Enterprise Florida, Inc. (EFI) is the public-private partnership responsible for leading Florida's statewide economic development efforts. EFI's mission is to "diversify Florida's economy and create better paying jobs for its citizens by supporting, attracting and helping to create businesses in innovative, high-growth industries. EFI focuses on high-value sectors such as: international commerce, information technology, life sciences, aviation/aerospace, homeland security/defense, modeling/simulation/training (part of IT), and financial/professional services." (6)

Enterprise Florida has a Regional Strategic Plan for the area. The main objectives for this plan are:

- 1) Improve workforce training
- 2) Increase funding for new workforce agenda
- 3) Nationally market the Tampa Bay Region as a business location.
- 4) Market the Partnership within the region. Increase the focus on Partnership stakeholders and the community at large.
- 5) Coordinate international marketing efforts to establish the regional image.
- 6) Improve regional transportation so that transportation systems lead – rather than follow – development.
- 7) Communicate link between water and economic development.

The accomplishments section of the plan mentions that as of May 2002 only the establishment of the regional goals had been done.

The Tampa Bay Partnership is a regional organization that supports economic development. It's stated mission is "to market the region nationally, conduct regional research, and influence business and government issues that impact economic growth and development." The current main goals of this organization is to deliver effective economic development marketing, build a public policy process for unified regional influence at the state and federal levels, become the center of business intelligence for regional economic development issues, and develop regional leadership (7).

Another important player is the Tampa Chamber of Commerce. The mission of this organization is to create quality of life and development by growing and cultivating business leadership; implementing programs that engage and assist business start-ups; entrepreneurs and the technology community; Operating as a Chief Information Officer for demographic standards and economic development agencies (8).

The Florida High Tech Corridor Council also plays an important role as a supporting institution. It is an economic development initiative of the University of South Florida (USF) and the University of Central Florida (UCF) designed to attract, retain and grow high tech industries in the 21 counties serviced by the universities. These universities support and provide services to make possible a variety of programs in partnership with local economic development organizations, corporations and community colleges (9).

The Pinellas County Economic Development was created in late-1997. Their mission is “to strive to retain existing businesses as well as attract new high-quality businesses that pay a living wage. We aim to improve the business climate within the county by acting as a liaison between public and private sectors while facilitating the availability of a qualified workforce.” The organization has a website called siliconbay.org with several statistics, tax rates and marketing information about Pinellas county (10). The County seems to be more focused on High-tech rather than Financial Services.

Specialized Resources

The Florida Financial Services Cluster Initiative is one of the few institutions in the nation geared specifically towards attracting companies from this sector. It is a statewide, industry-led, public-private partnership. According to their website “The objectives of the FFSCI are the expansion, attraction, and creation of high value financial services companies in Florida. Its mission is statewide, allowing for specialization by city and region. The FFSCI is committed to helping Florida become the "knowledge leader" for the international financial services industry. Specific goals include establishing the financial services industry as a "high-impact designated sector" for Florida economic development, and establishing specialized technology and education programs.” The FFSCI is currently developing extensive research including a current situation assessment and a strategic needs analysis (11).

Scorecard

A scorecard will be developed for each of the cities studied. This scorecard will evaluate each of the key factors of the matrix. The following key was used to grade each item:

Score	CURRENT SITUATION
1	Seriously Inadequate. Not meeting basic/essential needs.
2	Marginally adequate. Not meeting current needs.
3	Adequate for present. Meets current needs.
4	Adequate for near future. Meets anticipated needs for 3-5 yrs.
5	Highly developed. Meets needs for 3-5 yrs & is cutting edge/model.

COMMON DIMENSIONS	Tampa	Comments
Information and communications Infrastructure	3	51 st in the nation
Transportation Infrastructure	3	31 st in North America*
Energy Infrastructure and Resiliency	3	Multiple power grids. Energy quality issues are present.
Skilled Workforce	3	Exists but not very specialized in FS. 20 th cluster in the nation.
Overall regional education	3	114 th in North America*
Quality of life	5	4 th in North America*
Cost of Living	4	72 nd in North America*
Incentives (Tax, training, etc)	2	Limited incentives. Low overall tax structure.
Supporting Services	3	Adequate for present
Existence of regional institutions of collaboration	2	FFSCI
Presence of specialized education & research	1	None specifically targeted to FS.
Sophistication of the demand for the cluster's products and services	4	Some sophisticated back-office operations.
Marketing	3	Information dispersed. More focus on FS needed.
OVERALL SCORE	3.00	

*Source: Places Rated Almanac 2000.

Observations

Tampa Bay has the largest Financial Services Cluster in the state of Florida. Its cluster is 38% larger than the second place in Florida, which belongs to the Jacksonville area. The Tampa Bay cluster is also significantly larger than other national competitors such as Charlotte. 2001 statistics show that Tampa Bay's cluster hires 45% more employees than its counterpart in North Carolina.

On the other hand, the average FS wage for Tampa Bay is the lowest of all three regions. In 2001 it stood at \$47,357 against \$56,768 for the Charlotte region and \$50,229 for the Jacksonville area.

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Orlando

Region Background and Overview

Orlando's Financial Services cluster ranks 51st in the nation. As of 2001 the cluster employed 18,158 workers. The cluster had 16% growth in relation to the national share in the years 1990 through 2001. The average wage in 2001 was \$49,016.

The region's largest cluster is the Hospitality and Tourism cluster with 93,850 jobs. However, this cluster is not mentioned as a sector of expertise on the web site of the Metro Orlando Economic Development Commission. Their focus is on sectors such as photonics, simulation modeling, digital media, advanced manufacturing, aviation & aerospace, and international trade. This is because Orlando is focusing on attracting technology companies to the region to strengthen the High-Tech corridor (1). The average salary for the Information Technology cluster in Orlando is \$115,946 but the cluster has only 6,477 jobs in it.

According to the Orlando EDC the city's consumer electricity cost is \$78.90/1000KW, the commercial rate is \$719/10,000KW and the industrial rate is 8,355/150,000KW. All are below the national averages (\$94/1000KW, \$812/10,000KW and \$10582/150,000KW respectively).

Enterprise Florida ranks the city 36th in the nation in high tech capacity and it states that it has a higher concentration of high-tech activity than the nation on average. The Central Florida Technology Partnership has the mission of developing the infrastructure needed by high tech companies. The CFTP hired Angelou Economics, an internationally recognized consulting group based in Austin, Texas to develop MOTS (Metro Orlando Technology Strategy) with the objective of providing "a roadmap designed to strengthen and expand Metro Orlando's existing technology business base" (2).

In 2001 the Orlando MSA had a patent rate of 4.30 patents per 10,000 employees versus 7.71 for the US average. The region's ACCRA cost of living is 97.2, making it the third cheapest place to live, in this study.

Regional Economic Development Strategies

Some important assessments plan found were the Southeast Orlando Sector Plan and the Metro Orlando Region Workforce Development Plan. The later contains a good evaluation of the current workforce profile, gaps that need to be filled, some existing problems and the available resources. The plan contains actions that need to be taken to improve the workforce as well as performance indicators used to measure the results of those actions. On the other hand, the plan does not assign champions that will monitor, push and lead the accomplishments of those actions as well as deadline dates for the accomplishments of those actions.

The Southeast Orlando Sector Plan promises to touch on important variables such as housing, balanced land use, transportation, schools, and preservation of natural systems. The Neighborhood Horizons Program is another interesting initiative that involves residents in the

process of planning the future of some aspects of the city (3). Other projects can be found at <http://www.cityoforlando.net/planning/deptpage/curproj.htm>.

An interesting model was created to keep film and television productions from going overseas. On average it is 15% - 21% less expensive to produce outside of the United States. The Orlando Film & Television Program cuts the production costs within the Orlando market by 15%, by distributing the extra costs to the partners of the program. The city assumes 4%, the state 4%, Universal Studios 4%, and vendors and facilities 3%. This allows the city be competitive keeping a number of high wage, high value jobs that support this target industry (4).

Orlando is taking some actions to attract a specialized talent base to the region. They are recruiting students nationally and internationally to the regions colleges and developing a graduate retention program to keep these talents here when they graduate. As an example, one of the incentives used to attract students in the fields of interest is the removal of out-of-state tuition requirements for students on research or teaching assistantships.

Specialized Resources

The Orlando Economic Development Commission contains extensive data and regional studies for the Orlando area. The organization manages studies such as MOTS and works together with other initiatives to promote the regions development. It is “dedicated to meeting the needs of today's industries and creating a competitive economic climate where businesses can thrive.” The EDC states that, in the past five years, it has promoted \$6.9 billion in capital investment, and indirectly created almost 125,000 jobs and over 58.5 million square feet of office and industrial space (5).

The Orlando City Hall has a website dedicated to economic development. Cityoforlando.net states that its mission is to create a stable and diversified economy for the 21st century. To reach that objective it intends to promote the City's targeted growth industries; nurture small business development; engage in innovative programs that educate the workforce; supporting neighborhood economic development; and encourage infill and redevelopment within the city. This organization focuses on the strategic development of variables such as transportation, quality of life, and schools.

The Central Florida Technology Partnership (CFTP) collaborates by studying and developing the infrastructure needs of the cluster they are trying to develop (technology). The CFTP partners instituted a system of eight working groups dedicated to responding to the key focus areas first identified in the MOTS. These groups are Digital Media; Entrepreneurship; Investment Capital; Legislative Action; Marketing; Regional Collaboration; Telecommunications; Work Force Training/Education (7).

The Central Florida Innovation Corporation (CFIC) creates, builds and causes investment in high growth, high wage potential companies. CFIC acts as a catalyst in the process of new company formation. It brings together technology, market opportunities, financing, executive management, and access to labor. The corporation tries to actively secure investment capital through its Innovation Club, which is a pool of private accredited investors that meet to review

high upside investment opportunities in emerging growth technology companies. The CFIC also works with the UCF Technology Incubator to provide starting companies with venture capital and networking opportunities (8).

Orlando also participates in the Florida High Tech Corridor Initiative through UCF.

The Orlando Regional Chamber of Commerce promotes business programs such as the Leadership Orlando. This program is designed to make Central Floridians become connected and engaged community leaders. It looks at issues such as quality of life, K-20 education, and healthcare. Another interesting program being developed through the Chamber is Myregion.org. It is a tool that Central Florida intends to use during the next three years to break down the barriers between the counties of Polk, Lake, Brevard, Volusia, Orange, Osceola and Seminole. The organization has Regional Implementation teams that focus on six key areas: Economic Leadership, Environmental Collaboration, Quality of Life, Education, Fragmentation/Branding, and Smart Quality Growth. Their website also discusses current issues related to infrastructure, environment, transportation, economy/workforce, education, development, tourism, culture, government, and public safety (9).

Scorecard

Score	CURRENT SITUATION
1	Seriously Inadequate. Not meeting basic/essential needs.
2	Marginally adequate. Not meeting current needs.
3	Adequate for present. Meets current needs.
4	Adequate for near future. Meets anticipated needs for 3-5 yrs.
5	Highly developed. Meets needs for 3-5 yrs & is cutting edge/model.

COMMON DIMENSIONS	Orlando	Comments
Information and communications Infrastructure	3	36 th in the nation
Transportation Infrastructure	2	46 th in North America.
Energy Infrastructure and Resiliency	3	Multiple power grids. Energy quality issues present.
Skilled Workforce	2	Not geared towards Financial Services. 51 st cluster in the Nation.
Overall regional education	2	157 th in North America.
Quality of life	4	22 nd in North America.
Cost of Living	4	105 th in North America.
Incentives (Tax, training, etc)	3	Some incentives. Low overall tax structure.
Supporting Services	2	Small presence of supporting services.
Existence of regional institutions of collaboration	2	Institutions not directly related to FS.
Presence of specialized education & research	1	No institution specialized on Financial Services.
Sophistication of the demand for the cluster's products and services	2	Demand not very sophisticated.
Marketing	1	Not a lot of marketing geared towards FS.
OVERALL SCORE	2.38	

Observations

Orlando is definitely going in the right direction. They have established a way for the counties to unite, are fostering entrepreneurship, have good support organizations, and an exceptional data center through the Orlando EDC web site.

On the other hand, the regions patent output is still low. Actions to attract and maintain a specialized talent base can be improved. A specialized research center focused on high-tech/financial services could be created with the focus of studying and developing world-class knowledge in the area. This could help attract key researchers to the region and raise the bar of the local talent pool.

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Miami

Region Background and Overview

According to the HBS Cluster Mapping Project, Miami's Financial Services cluster ranks 42nd in the nation. As of 2001 the cluster employed 22,753 workers. The cluster's national share of employment shrank about 18% from 1990 to 2001. The average wage in 2001 was \$64,418 and it was the highest paying cluster in the Miami region.

The Financial Services Cluster is Miami's fifth largest cluster with Hospitality and Tourism being the first. The tourism industry has infused approximately \$12 billion into the local economy. Efforts to develop a strategic plan were initiated on May 2002 when the Board of County Commissioner's endorsed the milestones that provided the foundation for Miami-Dade's first strategic plan. The plan, unveiled on June 2003, focuses on six strategic areas, none of them related to Financial Services. One of the desired outcomes of the plan is to "increase the number of businesses and employment opportunities in higher-paying, targeted industries". The report mentions that periodic reviews should be made to identify appropriate targeted industries.

Miami-Dade County has strong relations with the Americas, attracting businesses worldwide that choose to open their Latin American headquarters in South Florida. During 2003, a total of 1,200 multinational corporations including Apple, Oracle Corp., IBM, Clorox, Burger King and Porsche were established in South Florida. America Economia Magazine for 3 consecutive years has crowned the city the top metropolis for conducting business with Latin America (1).

The Miami-Dade County economy has a gross county product exceeding \$75 billion. A major economic sector driving the local economy is trade, one of Miami-Dade's largest business sectors. The 2002 total merchandise trade was \$50 billion. Fifty-four percent of all U.S. trade with Central America flows through Miami, 40 percent of the Caribbean trade and 34 percent of its trade with South America. This vigorous economic trade has caused a number of Latin American Banks to have offices there (1 & 2). These include banks from Brazil, Argentina, Venezuela and other Latin Countries. The city is also house to a sub-branch of the Atlanta Federal Reserve Bank.

Enterprise Florida ranks the city 82nd in the nation in high-tech capacity and it states that it has a lower concentration of high-tech activity than the nation on average (2). Regarding innovation output, in 2001 the Miami region had a patent rate of 2.80 patents per 10,000 employees versus 7.71 for the US average. The region's ACCRA cost of living is 111.9, making it the fifth cheapest place to live in this study.

Regional Economic Development Strategies

Miami-Dade's strategic plan is called "Peoples Vision County Mission". The plan lays out some goals and priority outcomes for each of the targeted areas. All areas have strategies with well-defined performance indicators. Some actions related to economic development include providing incentives for businesses to pursue international commerce, and improving

infrastructure. However, no publicly disclosed actions geared towards promoting Financial Services were found (3).

The Statewide Strategic Plan for the Southeast region has two main objectives: 1) Develop a unified marketing image/program for the region; and 2) Address key competitive issues on a regional basis. The “tactics” used to handle these objectives are still on the planning stages (4).

Specialized Resources

The Florida International Bankers Association (FIBA) is headquartered in Miami and is composed of 72 domestic and foreign financial institutions, from 24 countries, operating in the state of Florida. Some of its objectives are:

- To promote international banking, finance and commerce in Florida.
- To promote and sustain ethical standards and practices in the conduct of international banking.
- To represent the common interests of its membership.
- To actively participate in community betterment
- To expand trade and finance opportunities.
- To enhance the professional development of its members

FIBA promotes courses on General Banking, Human Resources, International Trade, Management, Operations, and E-Banking. The organization also holds some conferences on topics such as Money Laundering (5).

The Beacon Council is Miami-Dade County's official economic development partnership. The organization has been successful in bringing to Miami-Dade County companies like Caterpillar, Porsche, Volkswagen, Federal Express, Eastman Kodak and Discovery Channel Latin America and has completed over 500 new location and expansion projects. These projects resulted in over 59,000 direct and indirect jobs and \$1.7 billion in new capital investment in our community. Although their actions are not targeted specifically to FS, the bringing of major companies to the areas obviously nourishes the sector by increasing the number of businesses that will need Financial Services (1).

The Department of Economic Development of the City of Miami has information on business incentives, tax exemptions, and empowerment zones (zoning incentives). The city provides exemptions to new and expanding businesses located in Enterprise Zones. Enterprise Zones offer opportunities for entrepreneurial initiatives and small business expansion in targeted areas around the state. Because many of these incentives are state or federal programs, Miami lacks incentives that truly set them apart. (6)

Scorecard

Score	CURRENT SITUATION
1	Seriously Inadequate. Not meeting basic/essential needs.
2	Marginally adequate. Not meeting current needs.
3	Adequate for present. Meets current needs.
4	Adequate for near future. Meets anticipated needs for 3-5 yrs.
5	Highly developed. Meets needs for 3-5 yrs & is cutting edge/model.

COMMON DIMENSIONS	Miami	COMMENTS
Information and communications Infrastructure	3	82 nd in the nation.
Transportation Infrastructure	3	34 th in North America.
Energy Infrastructure and Resiliency	3	No problems found.
Skilled Workforce	2	Small FS cluster but high salaries. 42 nd cluster in the nation.
Overall regional education	3	94 th in North America.
Quality of life	4	17 th in North America.
Cost of living	3	230 th in North America.
Tax policy (e.g. Incentives)	3	Some incentives. Low overall tax structure.
Supporting Services	2	Marginally adequate.
Existence of regional institutions of collaboration	3	FIBA.
Presence of specialized research centers	1	No research centers dedicated to FS.
Sophistication of the demand in the region for the cluster's products and services	4	Major international banking hub.
Marketing	2	Key information is lacking or scattered.
OVERALL SCORE	2.77	

Observations

Miami is not a financial services oriented city. From the domestic cities studied its FS cluster surpasses only the Orlando cluster in terms of number of employees (22753 versus 18158). The area does not have any strong institutions of collaboration or research centers dedicated to the subject.

The region has a strong cultural link to Latin America, which spurred economic trade and eventually caused many banks to open regional offices there. However, the city is not actively promoting its Financial Services Cluster.

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Jacksonville

Region Background and Overview

Jacksonville's Financial Services cluster ranks 30th in the nation. As of 2001 the cluster employed 29,656 workers. The cluster had 23% growth in relation to the national share in the years 1990 through 2001. The average wage in 2001 was \$50,229.

The Financial Services sector is the largest Cluster in the Jacksonville area. Major FS employers include Blue Cross/Blue Shield Health Insurance, which has 9,200 employees; Bank of America, which has a regional banking system headquarters with 5,500 employees, Citibank with a division of 3,800 employees, Wachovia with 3,046 and Merrill Lynch with 1,500 employees. The city also houses a sub-branch of the Atlanta Federal Reserve Bank (1).

According to Enterprise Florida, Jacksonville metropolitan area ranks 104th in the nation in high-tech capacity (2). Concerning innovation output, in 2001 the region had a patent rate of 2.05 patents per 10,000 employees versus 7.71 for the US average.

The region markets itself as an ideal environment for industries such as Information Technology, Aviation/Aerospace, Semiconductors, and for headquarter relocations. Financial Services, however, is not specifically mentioned.

Regional Economic Development Strategies

Jacksonville has an economic development plan in place called the "2010 Comprehensive Plan". It is very general and deals with topics such as housing, transportation, and land use. As of the time of this research, no public information concerning how to bring Financial Services companies to the region was found (3).

A few of the most important objectives of the Statewide Strategic Plan for the Northeast region were:

- 1) Focus on industries with knowledge based jobs;
- 2) Develop Small Business / Entrepreneurship programs;
- 3) Identify and develop technology infrastructure.

So far, only the establishment of these regional goals was accomplished (4).

Jacksonville was chosen as a pilot city for TradeRoots, an initiative of the U.S. Chamber of Commerce and the National Chamber Foundation. TradeRoots focuses on the benefits that trade brings to local communities by highlighting how trade - both imports and exports - creates jobs, raises the standard of living, and builds prosperity (1). Although Jacksonville's intention in promoting trade is not directly related to fomenting the Financial Services industry, as we saw in Miami's situation, it helped spur its International Finance Cluster.

The region's ACCRA index cost of living is 92, making it the cheapest place to live from the cities analyzed in this study. Patent output stands at 2.05 patents per 10,000 employees and therefore lower than the national average of 7.71.

Specialized Resources

Jacksonville does not have any institutions specifically devoted to promoting and supporting its FS Cluster. The region has the presence of some back-office operations from banks such as Bank of America, Citibank and Wachovia probably justified by the existence of the local sub-branch of the Federal Reserve.

Scorecard

Score	CURRENT SITUATION
1	Seriously Inadequate. Not meeting basic/essential needs.
2	Marginally adequate. Not meeting current needs.
3	Adequate for present. Meets current needs.
4	Adequate for near future. Meets anticipated needs for 3-5 yrs.
5	Highly developed. Meets needs for 3-5 yrs & is cutting edge/model.

COMMON DIMENSIONS	Jacksonville	Comments
Information and communications Infrastructure	3	104 th in the nation.
Transportation Infrastructure	2	65 th in North America.
Energy Infrastructure and Resiliency	2	Growth challenges capacity
Skilled Workforce	2	Exists but not very specialized in FS. 30 th cluster in the nation.
Overall regional education	1	196 th in North America.
Quality of life	3	40 th in North America.
Cost of Living	4	102 nd in North America.
Incentives (Tax, training, etc)	2	Limited incentives.
Supporting Services	2	Needs to be strengthened for FS.
Existence of regional institutions of collaboration	1	None Present.
Presence of specialized education & research	1	None Present.
Sophistication of the demand for the cluster's products and services	2	Demand not very sophisticated.
Marketing	1	Not a lot of marketing geared towards FS.
OVERALL SCORE	2.00	

Observations

Jacksonville's website, expandinjax.com is well organized, and contains a lot of good information for companies that are planning to relocate to the region. However, the site does not have any marketing specifically targeted to financial services companies.

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Charlotte

Region Background and Overview

Charlotte's Financial Services cluster ranks 33rd in the nation. As of 2001 the cluster employed 28,146 workers. The cluster had about 29% growth in relation to the national share in the years 1990 through 2001. The average wage in 2001 was \$56,768. Financial Services is Charlotte's second largest cluster after the Business Services sector, which hires 32,101 employees (1).

The city is headquarters for eight Fortune 500 companies including two major banks: Bank of America and Wachovia and also has a regional branch of the Federal Reserve. It is striving to become a major transportation hub, which is now its third largest cluster employing 25,820 workers. It is a regional hub for US Air and it claims to also have a significant airport, rail and trucking system. The city is also trying to form tight connections to the research triangle to attempt to attract talents from that region.

In its analysis of the Financial Services Cluster the Chamber defines the sector as being composed of the Banking, Insurance, Securities and support industries such as telecommunications. The critical issues identified were:

Weak linkages between education and the cluster, quality of public schools, difficulty in attracting and keeping employees, inadequate public transportation, and lack of focus on global markets.

Similar evaluations are available on the Charlotte Chamber website for the Innovative Technology and other clusters the city is targeting (2). According to the chamber, the main reason for the success of Charlottes FS cluster is the regions diversified economy and the number of supporting clusters that exist.

Regional Economic Development Strategies

One of Charlotte's mains strengths is its sound Strategic Development Plan. The plan has actions devoted to nourishing general business development and cluster-specific initiatives with the objective of strengthening the regions existing clusters, especially Financial Services. The Charlotte Chamber states "Advantage Carolina is not a plan with a completion date. It is an evolving, growing effort designed to continually have Charlotte's best interest as its main interest."

The region is targeting a number of clusters. Its strategy groups the targeted clusters into the following categories:

Clusters of the Present:	Financial Services, Transportation & Distribution Services, and High Growth Manufacturing
Emerging Clusters:	Innovative Technology, Professional Services, Travel & Entertainment
Clusters of the Future:	Motor Sports, Medical Devices, Optics

To understand these clusters and to “ensure the continued prosperity” of the region, The Charlotte Chamber hired, a consulting firm to provide assistance for the effort of creating an economic development plan which was later called Advantage Carolina. According to the Charlotte Chamber website: “The consultants conducted over 400 exchanges with business and civic leaders, and approximately 50 individual interviews to go beyond the numbers in learning of strengths and weaknesses of the Charlotte economy. The project also involved six industry working groups, each comprised of 15 to 30 private and public sector leaders, who spent hours serving as a source of industry specific information.” The resulting economic analysis yielded a guide to the “implementation of concrete action initiatives designed to boost the economy and improve quality of life for all.”

One of these actions was to create a division focused on serving the Financial Services Cluster. The division holds meetings twice a year where information is shared about the progress of the initiatives presented in the plan and to gather feedback regarding new issues that might be facing these industries. This information is then passed onto the Advantage Carolina Leadership Board, which determines how to address emerging issues.

The plan has three main “development strategies”:

1. Accelerate cluster development by strengthening the economic foundations;
2. Balance the interrelated goals of cluster growth, quality of life and social equity;
3. Link regional efforts: work together creatively to ensure Charlotte’s future.

These main strategies were broken down into fourteen flagship initiatives where the following were somewhat related to Financial Services:

- UNC Charlotte to Research University: Seek opportunities for private endowments of “chair of excellence” linked to Charlotte’s FS cluster and others.
- Charlotte International Institute for Financial Services: Focused on advanced technology for financial centers
- Affordable Housing initiatives: Charlotte is worried that the lack of affordable housing could make it difficult to recruit an adequate labor supply for the FS sector.
- A Unifying Brand for Charlotte: Develop a clear image of Charlotte nationally and internationally
- Information Technology Collaborative: Meet the local demand for IT skills, attract top talent from outside the region, and position Charlotte as one of the country’s best supported “knowledge centers”.

Besides these general economic development initiatives, four key cluster-specific initiatives were created. Two were related to Financial Services:

1. Center City Transportation Planning: Created to deal with a future problem Charlotte will have. Since they are currently expanding the center city office complexes, they are predicting that the increased traffic “will require action to provide transportation, transit and parking solutions to maintain vitality within the area.”

2. Regional Software Council/Market Assessment: IT is an important supporting cluster to FS. A shortage of skilled workers in IT has been detected. This initiative intends to develop new ways to inform students of job opportunities in the industry and develop a marketing theme for communicating that the region is a strong market for IT-related people.

The Chamber keeps the community updated on the progress of these initiatives by publishing progress reports on their website (3). As of the time of this writing they were last updated on November 6, 2003. Other progress reports worth analyzing include the Technology Workforce Development, UNC Charlotte to Research University, Leadership Center, Venture Capital Forum, Regional Center for Entrepreneurship, Housing our Workforce, and Quality of life.

Advantage Carolina also lists some trends in financial services

Information Technology (IT) has and continues to penetrate nearly every aspect of every industry in the Financial Services cluster. Technology investments have grown dramatically and technologies continue to grow in sophistication serving a widening array of applications. The Internet, the latest major technological shift, is still relatively new with implications likely to play out for many years.

IT is increasingly used to offer entirely new delivery systems as well as services. Banks offer "home banking" via the Internet, stocks can be purchased and sold in similar fashion, and a host of new applications are on the horizon.

In a context where services are ubiquitous in cyberspace and physical proximity matters less and less, branding may become more critical than ever. Investments in "brick-and-mortar" are rapidly declining, and in some cases new mega-centers are being created to consolidate operations that might have been served at one time by local branches.

Globalization has increased the need to consolidate to achieve economies of scale for serving international markets. A "shake out" is beginning to leave a few large, global competitors.

The plan has a competitive analysis, which compares the performance of Charlotte against several other national cities. The information from the plan retrieved was from 1997 and probably is not reliable any more.

The region's patent output is below the national average (7.71) and as of 2001 stood at 3.49 patents per 10,000 employees. Charlotte is trying to improve these ratings by developing a Regional Center for Entrepreneurship, a Leadership Center and the Venture Capital Forum. The ACCRA cost of living for this region was not publicly available. However, the year 2000 edition of Places Rated Almanac ranks the city's cost of living higher than Miami and lower than New York making it the second most expensive place to live.

Specialized Resources

The Financial Services Exchange was one of the main supporting initiatives specifically geared towards the Financial Services industry. The program functioned for three years and was deactivated in the summer of 2003 because of a lack of funding. Its mission was to be a "non-profit center of excellence focused on advanced technology and competitive advantage for the world's financial services companies. The Exchange would harness the brainpower of UNC

Charlotte, Belk College of Business Administration, UNC Chapel Hill, Kenan-Flagler School of Business, and Queens University of Charlotte, McColl School of Business to leverage the expertise of leading industry practitioners and academics from the United States and abroad.”

The FSE objectives were to:

- Develop a Think Tank to attract eminent scholars, educators, and practitioners to conduct research on subjects of relevance to the financial services industry.
- Establish a Neutral Forum to identify, analyze, discuss, and debate the hottest and most current industry issues.
- Institute a Leadership Center to expand strategic thinking, leadership capabilities, and skills acquisition through seminars, goal-based training, and experiential learning.
- Create a VC Accelerator to provide venture capitalists and angel financiers with a "deal review forum" to foster innovation and technology transfer.

The program's success was determined by the amount and reputation of research commissioned on subjects of greatest relevance to the industry, as well as an increased number of venture capital deals that fund innovation and technology transfer for the financial services industry.

Some research topics housed at the FSE included:

- Business-level Strategies for the Electronic Marketplace: An Examination of Online Financial Services Firms
- An examination of Competition in the Mutual Fund Industry
- Measuring and Managing Operational Risk in Financial Service Providers
- Capability Building on the Internet: E-Commerce and Internet Adoptions at Banks
- Using Data Mining Techniques to Define Key Drivers of Customer Satisfaction and Loyalty in the Banking Industry
- Securities Fraud Class Actions: A Theoretical & Empirical Inquiry into the Determinants of Primary & Secondary Exposure
- A Survival Analysis of Financially distressed Firms: The Impact of Corporate Governance Characteristics on the Probability & Timing of Bankruptcy.

With the loss of the Financial Services Exchange the city of Charlotte lost a powerful marketing tool. The research developed at the center was made available to companies that relocated to the region. According to an article in the Charlotte Business Journal UNC Charlotte will continue the work of the FSE.

Charlotte has a headquarters recruitment initiative focused on increasing CEO recognition of Charlotte as a headquarters city. Marketing research is being developed and thus far has identified 167 Fortune 1000 companies that are geographically isolated from the 35 largest airports in America. Present studies include those corporations whose physical location restricts successful recruitment of technical and managerial people. A marketing plan with specific media recommendations was completed in April/03 targeting key decision makers and influencers in the corporate relocation process.

The Charlotte Chamber plays an active role in promoting all clusters in the region. As an example, the Financial Services Exchange has its roots in the chamber. Their website was one of the best found in this research in terms of content and marketing. It contains extensive information on the strategic planning as well as demographic trends, quality of life, transportation, labor force, real estate, incentives, maps, utility costs, and initiatives being developed. Progress reports on Financial Services and other initiatives can also be found.

Scorecard

Score	CURRENT SITUATION
1	Seriously Inadequate. Not meeting basic/essential needs.
2	Marginally adequate. Not meeting current needs.
3	Adequate for present. Meets current needs.
4	Adequate for near future. Meets anticipated needs for 3-5 yrs.
5	Highly developed. Meets needs for 3-5 yrs & is cutting edge/model.

COMMON DIMENSIONS	Charlotte	Comments
Information and communications Infrastructure	3	Meeting current demands but under pressure from rapid growth.
Transportation Infrastructure	2	22 nd in North America.
Energy Infrastructure and Resiliency	4	Charlotte markets itself as having dependable and cheap energy.
Skilled Workforce	2	Continuing to develop. 33 rd cluster in the nation.
Overall regional education	4	59 th in North America.
Quality of life	3	55 th in North America.
Cost of Living	2	258 th in North America.
Incentives (Tax, training, etc)	4	Extensive state support and low overall tax structure.
Supporting Services	2	Marginally adequate. Rapid growth will stretch capacity.
Existence of regional institutions of collaboration	3	Attempts to develop a FS center.
Presence of specialized education & research	2	FSE functions moved to UNC Charlotte.
Sophistication of the demand for the cluster's products and services	4	Presence of some bank headquarters drives demand up.
Marketing	5	Very focused, well targeted marketing, excellent website.
OVERALL SCORE	3.08	

Observations

Charlotte has a very powerful strategy to attract companies to the region. Their strategic plan was elaborated by talking to several business leaders to discover what needed to be improved and what could be marketed. Advantage Carolina was then created based on those needs. The plan is well structured and it has significant actions and a champion assigned to each initiative being developed. Some of those initiatives, such as the FSE and The Center City Transportation Planning are targeted specifically towards Financial Services while others are targeted to general economic development and to other clusters. All initiatives have progress reports posted at the Charlotte Chamber's Web Site.

The city actively searches for companies that are relocating and develops specific marketing to the decision makers of those companies. This marketing includes printed material and a “road warrior” that travels around the nation advertising the region to these decision makers.

The Chamber web site, which is one of the main sources of information for relocation agents, is well structured, contains most statistical information needed, and powerful marketing. The information is easy to find but the statistical and marketing data is mixed so the user is forced to read or skim through some marketing to get to the raw statistical data.

Lessons can be learned from the FSE, which was a very interesting model to attract knowledge, talents, and companies to the region. Although their mission statement advertised that the center should focus on applied research, apparently it did not bring results significant enough to keep a reasonable level of funding. Perhaps, some topics to be studied should be gathered from the companies that are interested in relocating while others could focus on the future direction of the Financial Services industry.

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Atlanta

Region Background and Overview

Atlanta's Financial Services cluster ranks 7th in the nation. As of 2001 the cluster employed 67,500 workers. The cluster had 20% growth in relation to the national share in the years 1990 through 2001. The average wage in 2001 was \$75,433 (1). The major employers in the sector include SunTrust Bank, which houses its headquarters in the region and has 6,835 workers; Wachovia Banking & Finance with 6,000 employees; and Bank of America with 5,638. The city has also been successful in attracting some international banks such as ABN Amro, Bank of Tokyo-Mitsubishi, and Deutsche Bank and houses national headquarters of ten Fortune 500 companies such as Home Depot, Coca-Cola, UPS, Bell South and others.

The Atlanta FS Cluster is well diversified containing firms in all subclusters. It is particularly strong in real-estate investment and benefits from the presence of the Regional Federal Reserve Bank for the Southeast. Atlanta has lost many bank headquarters to other regions such as Charlotte, but most of these banks maintain large regional offices in the city (Bank of America and Wachovia are examples). New banks, securities and brokerage firms, and financial planning companies have established or expanded offices in the region and have helped to develop leading electronic commerce applications for the sector.

A study by the Council of Competitiveness has shown that "the large client base, the strong cluster rivalry, the regional technology infrastructure, and access to leading information technology services have been important in spurring the financial service cluster's growth." (2)

The cluster has its origins in Atlanta's transportation hub and grew with it to support its commerce. By the 70's the city had important banks such as First Atlanta and Georgia Trust. Real estate development had also achieved significant growth. In the 1980's real estate took off and financing was easy to obtain. Regional governments placed little limitations on commercial development, further strengthening the process. Eventually, local banks that had profited from the real estate boom became targets for mergers and relocations. Banks in North Carolina and Alabama had an opportunity unveiled by their favorable intra-state branch banking regulations and Georgia's restrictive regulations.

In 1984 Wachovia Corp, based in North Carolina, acquired First Atlanta. Other mergers followed leaving Atlanta without any major bank headquarters in the 90's. Nevertheless, about 40,000 jobs were added in the segment from 1990 to 1999.

Atlanta is becoming somewhat specialized in real estate finance, being leveraged by its traditionally aggressive real estate development. It also has developed a few successful Internet banks such as Security First and Atlanta Internet Bank. The region's information technology base has been supportive of financial services technology development and companies like Equifax and TSYS develop applications for back-office bank operations including credit card processing and check clearing. Banks in the area have traditionally been leaders in embracing technology such as ATMs, automatic direct deposit, and Internet bill payment (2).

According to the Clusters of Innovation report these were the strengths found on the Atlanta Financial Services cluster:

- Leading real estate developers and lenders
- Regional operations of many major U.S and international banks
- Strong rivalry among local financial institutions
- Strong local presence in most sub-clusters
- Strong “back-office” infrastructure in nearby Columbus
- Growing venture capital and angel investor community
- Increasingly sophisticated local demand for banking products and services

Challenges found included:

- Lack of major national bank corporate offices
- Little presence in sophisticated and high wage financial service segments like investment banking and asset management
- Reputation for financial innovation limited to a few sectors: web-banking and ATM adoption
- Sporadic cooperation among local firms on technology development and cluster improvement (2).

In regards to the availability of a specialized talent base, interviewees from the Cluster of Regional Innovation study, report satisfaction with the quality of local training and talent, but forty-six percent of the financial services executives surveyed are worried about future availability of skilled workers (2).

The region’s ACCRA cost of living is 97.6, making it the fourth cheapest place to live from the domestic regions in this study. Patent output stands at 5.23 patents per 10,000 employees, which is lower than the national average of 7.71.

Regional Economic Development Strategies

Atlanta’s Economic development plan deals with general economic development. No specific actions were found focused specifically on financial services. More information can be found at the Central Atlanta Progress website

<http://www.atlantadowntown.com/Plans%20and%20Documents/CA2P.pdf>

The city also has a workforce study and an advanced and comprehensive transportation plan. They can be found in the Atlanta Regional Commission homepage:

<http://www.atlreg.com/index.html>.

Specialized Resources

Atlanta has no tradition as a center for research in financial services, but innovation in this sector is usually developed by companies and not by research centers.

The Georgia Credit Union Association/Cooperative Services Inc. (GCUA) started with the six largest credit unions in the state (five are based in Atlanta), to obtain economies of scale in check collection and processing. By centralizing this back-office function, the six credit unions were able to reduce check-processing costs by an average 25%. Based on this success, the association encouraged other credit unions to join the venture. In addition, the GCUA expanded collaboration by negotiating a volume-based contract with a company to print checks for association member institutions at a 50% discount. More recent initiatives include a joint agreement by the member institutions to end ATM service fees for each other's customers and a public relations/marketing campaign to support credit union membership.

The Intellectual Capital Partnership Program (ICCAP) has been used by a number of financial services companies. ICAPP Advantage prepares people to be knowledge workers - workers who generate value for others by creating, sharing or using ideas - in occupations that are in high demand and short supply in specific regional labor markets. ICAPP Advantage is directly tied to specific job commitments by employers. It was created to help employers succeed in Georgia. ICAPP is company-focused, and is not intended to create new degree programs at institutions. ICAPP Advantage is used as an economic development incentive to encourage a company or other employer to either expand in or relocate to Georgia. ICAPP Advantage students earn credit hours that can count toward earning a degree. Students may also earn career-related certificates with the academic credit earned (3).

Atlanta houses the Southeast branch of the Federal Reserve Bank. The Atlanta Fed staff examines banking institutions in Alabama, Florida, Georgia, and parts of Louisiana, Mississippi, and Tennessee--the states that make up the Sixth Federal Reserve District. Recognizing the growing economic and financial relationship between Latin America and the United States the Federal Reserve Bank of Atlanta launched a specialized research and analysis group in late 1994. As part of the Regional group in the Atlanta Fed's Research department, the Latin America Research Group (LARG) studies economic, financial, and political developments in Latin America and the Caribbean. The analysis is used to assist in monitoring Latin American financial systems and in providing general assessments of macroeconomic conditions in the region (4).

Scorecard

Score	CURRENT SITUATION
1	Seriously Inadequate. Not meeting basic/essential needs.
2	Marginally adequate. Not meeting current needs.
3	Adequate for present. Meets current needs.
4	Adequate for near future. Meets anticipated needs for 3-5 yrs.
5	Highly developed. Meets needs for 3-5 yrs & is cutting edge/model.

COMMON DIMENSIONS	Atlanta	Comments
Information and communications Infrastructure	4	Extensive investment in infrastructure to support current FS cluster
Transportation Infrastructure	5	7 th in North America.
Energy Infrastructure and Resiliency	3	Adequate but continued growth will stretch capacity.
Skilled Workforce	4	7 th FS cluster in the nation.
Overall regional education	4	62 nd in North America.
Quality of life	4	33 rd in North America.
Cost of Living	3	215 th in North America.

Incentives (Tax, training, etc)	3	The state offers extensive incentives. Overall high tax structure.
Supporting Services	4	Large regional capacity that serves the southeast.
Existence of regional institutions of collaboration	4	Presence of the Southeast branch of the Fed., ICAPP, etc.
Presence of specialized education & research	3	Several major universities and colleges.
Sophistication of the demand for the cluster's products and services	3	Presence of the Southeast branch of the Fed., Suntrust headquarters.
Marketing	3	Could be improved for FS.
OVERALL SCORE	3.62	

Observations

Atlanta is part of the Cluster of Innovation Initiative. This research intended to develop a methodology, data infrastructure, and a model that could be used across America for the study of clusters. Atlanta was chosen as a case study for the Financial Services Cluster. The material contains the SIC codes used to defined the FS Cluster, the surveys used and provides a good framework to develop a detailed study for any cluster.

The study concluded that the strong presence of all sub-clusters helped the city to build products and services that “incorporate a variety of factors and provided the region with diversification within a large sector.” Furthermore, the intersection of some clusters, such as IT and FS, became a fertile ground for new technology development.

The Clusters of Innovation Report also mentions that Atlanta has some important industries that support their Financial Services Cluster. IT and Communications providers are readily available and in some cases are national leaders. The air service at Hartsfield allows FS firms to service a national clientele. Somewhat low costs and a concentration of highly skilled workers have made nearby Columbus a national center for back-office data processing and bill payment services. Legal and consulting services and the regional branch of the Federal Reserve also play important roles as supporting entities. On the other hand, government regulations – in this situation designed to protect smaller banks – played a negative role in the development of the cluster.

The city is using an interesting idea to collect information about businesses workforce needs. It is inviting human resources managers, hiring managers and IT professionals to participate in a series of webex roundtables and web surveys. The purpose of this study is to find out if businesses have the skilled workforce they need to grow; if people are being trained for the right jobs; and if students are choosing to remain in Atlanta or if they are going somewhere else to start their career. The Atlanta study is geared mainly towards IT professionals but the idea can be applied to any sector (5).

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New York

Region Background and Overview

New York's Financial Services cluster is the largest in the nation in terms of employment. As of 2001 the cluster employed 316,922 workers. The cluster's national share of employment shrank about 10% from 1990 to 2001 even though it added 50,000 jobs in that time frame. The average FS Cluster wage in 2001 was \$197,932. The city has the largest number of headquartered banks in the nation and is home to giants such as Citigroup, J.P. Morgan Chase, and Merrill Lynch.

According to the Edison Electric Institute, New York's consumer electricity cost (below 3000 KW) is \$171/1000KW, commercial and industrial range (40 KW, 500KW) the city has a cost of \$1570/10,000KW and 21,871/150,000KW, all are considerably higher than their national averages. As a matter of fact, energy costs and reliability appear to be a serious threat to the region.

On the other hand, a London study shows that New York ranks number one on some key dimensions concerning what makes a successful financial center. These include favorable personal & corporate tax regime, government responsiveness, attractiveness of living and working environment, and the pool of skilled workers. London ranked better in terms of the competence of its regulating authority and regulatory environment, and financial innovation capacity (1).

The same study evaluated the labor market according to four dimensions: Flexibility of labor legislation, size of skilled labor pool, total cost of skilled labor, and ancillary services. New York outranked London on all of these dimensions.

The amount of information available on New York's Economic Development Agencies about their FS cluster is limited – perhaps because they do not have to market themselves strongly. Their web sites www.nylovesbiz.com and www.nycedc.com have only superficial information and they suggest that you contact a FS Specialist to discover how the city can help companies “grow and prosper”. The site has some statistics available but most significant strategic information and studies about the city were found in competitor analysis of other cities.

The Manhattan area ACCRA cost of living is 217.1, making it the most expensive place to live from the domestic cities analyzed in this study. Patent output stands at 4.71 patents per 10,000 employees, which is lower than the national average of 7.71.

Regional Economic Development Strategies

Apparently, one of New York's main problems is the unreliable energy infrastructure and high energy costs. Given these problems, the New York State Energy Research and Development Authority has released a Strategic Outlook entitled “Securing New York's Energy Future.” The plan intends to put the State on a path toward greater energy self-sufficiency, improved energy-efficiency, smart economic growth and a cleaner environment.

The plan is quite detailed and contains strategies, goals, budget amounts and solicitation numbers for each initiative. More information can be found on the NYSERDA web site (2).

The region recognizes that IT infrastructure plays a key supporting role for its Financial Services Cluster. The New York State Information Technology Strategic Plan was developed by The Office for Technology (3) in May 2003 and has the central focus of supporting state and local governmental entities through the development of policies that guide a unified information technology investment strategy. The report mentions some technology trends that the state should be aware when establishing the IT strategic initiatives to be prepared for “future growth and fiscally sound operations”:

Pervasive Connectivity - Always connected, yet mobile constituents; through remote and mobile computer technologies in a multitude of form factors (e.g., handheld, cellular, pager, information appliances)

Information On Demand - The expectation of continual access to information anytime, anywhere, in a more personalized context.

Collaborative tools & Expanded bandwidth - Instant Messaging, Team ware, Video Conferences, etc.

Security Customization - Increasing legislative mandates and pervasive information access.

- Gramm-Leach-Bliley, HIPAA, USA Patriot Act, etc.
- Security profiling (identification, authorization and validation)
- Centrally managed, remotely executed security vs. distributed computing, and constituencies

Workforce Virtualization - An increasingly digitally connected workforce having access to information anywhere, anytime.

These are the technologies that will be supporting all business in the next few years. They will change the way people work and the skills required from them. They could allow an employee that works in a New York firm to live in a much cheaper region and work collaborative from home solving the cost of living and transportation problems that many top financial centers are currently facing.

The Empire State Development (ESD) is New York State's economic development agency. The organization, with co-headquarters in Albany and New York City, is supported by a network of 18 additional ESD Offices throughout the state and around the world. The organization helps all businesses including Financial Services: Start up a company in New York State; Relocate to or establish a presence in New York State; Expand already existing operations in New York State; Retain and enlarge their work force in New York State; Compete more effectively and profitably in the domestic and global marketplace. (4).

Specialized Resources

The Financial Services Technology Consortium is a consortium of North American-based financial institutions, technology vendors, independent research organizations, and government agencies. It brings forward, tests, proves, and validates the next generation of critical financial services technologies. Formed in 1993 the FSTC does side-by-side comparisons of emerging technologies, validates critical industry specifications, and proves or prototypes new infrastructures. Members of the consortium include most major domestic banks, technology vendors such as IBM, Sun Microsystems, and HP; and partners such as the American Bankers Association, Master Card International and the World Wide Web Consortium (6).

New York also has strong finance and business schools that help form labor for their Financial Services Cluster. New York is one of the few places in the nation where research for Financial Services is being intensively developed outside of private institutions. Some well recognized names include Columbia University, NYU and Fordham. Rutgers, one of the top accounting schools in the nation, is in New Jersey but is close enough to be considered an important contributor. According to CNNMoney.com the city ranks as number three in the nation regarding the availability of colleges, universities and professional schools (6).

The New York Clearing House is the nation's first and largest bank clearing house. In 1853, they helped simplify the chaotic exchange and settlement process among the banks of New York City. Before the Federal Reserve System was established in 1913, The Clearing House stabilized currency fluctuations and carried the monetary system through recurring times of panic. Since then, they have developed technological innovations to meet the demands of the rapidly evolving payments industry. The Clearing House processes in excess of \$1.4 trillion in payments each day for more than 1,300 financial institutions nationwide and around the world (7).

The New York Stock Exchange has existed for more than 200 years, and it dates back to the signing of the Buttonwood Agreement by 24 New York City stockbrokers and merchants in 1792. An average of 2.8 million shares of some 2,800 companies are traded daily in the NYSE. These companies are valued at nearly \$15 trillion in global market capitalization. They include a cross-section of leading U.S. companies, midsize and small capitalization companies. Non-U.S. issuers are playing an increasingly important role on the NYSE. The 470 non-U.S. companies listed are valued at \$4.6 trillion. The NYSE also plays an important role in pushing the development of technologies used in Financial Services. Information on these technologies and how they benefit their users can be found in the organizations web site (8).

The Federal Reserve Bank of New York plays a leadership role in the monetary policy, financial supervision and in the nations payment system. The New York Fed opened its doors in 1914 and together with the other 11 Regional Federal Reserve Branches it has the objective of:

- formulating and executing monetary policy,
- supervising and regulating depository institutions,
- providing an elastic currency,
- assisting the federal government's financing operations, and
- serving as the banker for the U.S. government.

However, the New York Fed is the only regional Bank that buys and sells U.S. Treasury securities through open market operations with the objective of regulating the federal funds rate, which ultimately impact interest rates.

Scorecard

Score	CURRENT SITUATION
1	Seriously Inadequate. Not meeting basic/essential needs.
2	Marginally adequate. Not meeting current needs.
3	Adequate for present. Meets current needs.
4	Adequate for near future. Meets anticipated needs for 3-5 yrs.
5	Highly developed. Meets needs for 3-5 yrs & is cutting edge/model.

COMMON DIMENSIONS	New York	Comments
Information and communications Infrastructure	5	Ranked as one of the world leaders
Transportation Infrastructure	5	3 rd in North America.
Energy Infrastructure and Resiliency	2	Recent grid failure and outdated infrastructure.
Skilled Workforce	5	Highly specialized. 1 st cluster in the nation.
Overall regional education	5	20 th in North America.
Quality of life	3	65 th in North America.
Cost of Living	1	Very high. 354 th in North America.
Incentives (Tax, training, etc)	3	Extensive state and city incentives. High overall tax rate.
Supporting Services	5	Extensive availability of supporting services.
Existence of regional institutions of collaboration	5	NYSE, NYCH, Schools, NY Fed.
Presence of specialized education & research	5	Top finance schools and research organizations.
Sophistication of the demand for the cluster's products and services	5	Strong competition makes demand highly sophisticated.
Marketing	3	Could be improved but known brand. Limited reason to market.
OVERALL SCORE	4.00	

Observations

Although New York is the top Financial Services Center in the world, the amount of information available about the cluster is very limited. The city does not have a significant amount of studies about its cluster available to the public and many of the facts about New York were learned by studying competitor analysis of other cities such as London. The region's lack of studies and assessments probably happens because New York is established as a leading Financial Center.

The region has a noticeable position in developing and applying leading edge technology that can be useful to Financial Services and is focused on solving problems, such as quality of life, energy reliability and cost of living, which are causing many operations to relocate to different areas.

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London

Region Background and Overview

London's Financial Services cluster is one of the largest in the world. The city considers New York and Tokyo as its main competitors. As of the end of 2002 the cluster employed 305,000 workers, down 6% from the previous year due to a downturn in the industry. In the year 2000 the cluster employed 330,000 workers.

The city is a major center for trading in international bonds and foreign equities. The 419 foreign companies listed on the London Stock exchange are second only to New York's 472 companies. However, London's total cross-border trading volume, \$2,100bn in 2002, was almost three times New York's volume, \$702bn. This represented 56% of the world market for foreign equities. The city has a significant derivatives market and also the largest Dollar volume in the world managed by institutional equity funds, followed by New York and Tokyo. (1)

London is a major center for international legal services, accounting, and management consulting companies, which provide important support services for the FS Industry. These services include corporate finance, corporate and commercial law, banking/project finance, international insurance, tax and dispute resolution. Four out of the top six international law firms in the world, in terms of revenue, are in the UK. These firms have between 45% and 65% of their lawyers based outside the UK giving them a competitive edge over U.S. firms who usually have between 10% and 25%.

The main advantages of having a London location are to have a credible address; proximity to customers, skilled labor force, professional bodies, support services and competitors; and to have cultural diversity and cosmopolitanism. A London study, which evaluated four key quality of life factors, showed that the city is recognized as having leading educational facilities. However, New York ranked better in public transportation, housing and medical facilities (3).

The main challenges London is facing are the high cost of premises; the poor quality and reliability of transport, particularly the Underground and links to airports. Increasing regulations and lack of policy coordination, are not a huge problem yet, but could lead to the erosion of London's business friendly environment (2).

A report called "Sizing up the City", developed for the Corporation of London found that the city scored well on regulation, tax and the quality of its talent pool, but poorly on government responsiveness and the living and working environment. New York was stronger than London in all areas except regulation, though on labor and tax it was a "photo finish" (3). The report also found that "A culture that encourages innovation is key to London's success – and to its prospects. Unless London constantly comes up with new ideas, other centers will be able to imitate it."

The high cost of doing business in London is one important threat. Businesses are trying to save money by cutting staff, moving more operations outside of the city, and slashing budgets. Especially for smaller institutions, cost has forced many to make difficult decisions about the

scale of their London presence. However, it is yet to provoke any great exodus. Decision makers still believe that the credibility and prestige of having a London address still outweigh the costs of doing so.

In relation to IT capacity, a dimension that plays a key role in supporting London's FS Cluster, some trends and weaknesses were found on the report "The City of London ICT Infrastructure Review" (4). The report stated:

NETWORK INFRASTRUCTURE

- Cost-effective, available, high capacity, wire-based telecom are vital for today's business. The City of London is particularly well served with a number of suppliers offering many different varieties of service. This is well appreciated by almost all users (and suppliers) surveyed in the City.

WIRELESS INFRASTRUCTURE

- Wireless telecoms are expected to become important in the coming years for many City companies. The City is particularly well placed to exploit the new third generation (3G) services currently being developed.

INTERNET DATACENTERS

- Because Internet Data Centers and Back-office operations base their choice of location on a variety of factors such as power feeds, telecom links, skills availability and accommodation costs, close proximity to users is not likely to be a major factor for these operations. If these needs are fulfilled from the point of view of their users, Internet data centers do not need to be located in the City of London and are relocating to cheaper areas.
- Consolidation of suppliers in the Internet data center industry is very likely over the next few years.

ICT IN THE CITY

- The City of London is rated favorably by the survey respondents in terms of technology, due to its competitive supply of ICT and wide availability of technical skills. Research indicates, however, that New York and Hong Kong may have a more coherent approach to ICT than London and that there may be lessons here for the City. The Corporation of London should take an active role in promoting and integrating ICT in the City, including within its own organization.

OTHER SIGNIFICANT FINDINGS

- Power provision appears to concern many respondents with one company specifically citing power supply problems as having driven it to relocate its data center in a different area (Note, however, that some respondents also admitted that delivery has improved in recent years). The City does not believe it will have problems such as those currently experienced in California and New York.
- Security is likely to become an important issue. Physical and logical security of key ICT infrastructures such as power substations and telephone exchanges should be constantly reviewed.

- Transport is universally detested by City users, although it is acknowledged that the City is well served compared to many other locations. This should be stressed in publicity material, particularly as the Underground investment program is due to begin very soon to improve the situation.

These findings illustrate that the city is aware of current and future technology trends that could affect its Financial Services Cluster. It also shows that the region is aware of some of their existing infrastructure gaps, such as power provision and transportation efficiency, and that they are actively trying to fill them. The City also understands that by promoting the use of high technology within its governmental offices it will foment the development of new technologies and strengthen the IT infrastructure needed to support several clusters.

Terrorism was addressed in one of the reports developed for the Corporation of London. The conclusion was that people had become inured after years of IRA bombings and that the rise in petty crime, burglary, and mugging were a much stronger concern on the security front (3).

Regional Economic Development Strategies

The London Development Agency (LDA) is the main organization responsible for the development of the region. The Agency is aware that London already has an enormous pool of specialized labor. Its main concern is in creating affordable housing, reasonable cost of living, sustainable growth, and a good quality of life to keep those talents in the region. To achieve this purpose the LDA has developed several strategic plans embracing topics such as transportation, culture, air quality and others. The Economic Development Plan tries to supplement London's most important needs. Its four guiding principles are economic growth; knowledge and learning; diversity; and sustainable development (5).

The four guiding principles were broken down into initiatives and actions. The list below shows some of them:

- 1.1) Develop London's role as a world business center and European business capital
- 1.2) Ensuring London continues to support a broad range of economic activity
- 1.3) Encouraging competitiveness, creativity and enterprise
- 1.4) Modernizing London's infrastructure
- 1.6) Building on London's position as a world leader in the application of Information and Communication Technologies (ICT)
- 2.3) Increasing Knowledge transfer and innovation

London understands that an easy commuting is important in attracting and maintaining a world-class labor force. The city admits that businesses and Londoners have complained about the transportation infrastructure and that this fact is causing many Financial Services executives, employees and firms to relocate out of the region.

To avoid losing its top talents, a transportation plan is being developed with significant actions to improve this situation. This transportation plan also complements another London idea. Because of the high costs of living in the downtown area, the city is planning to develop housing

in the suburbs and developing high-speed transportation to bring people in and out of these suburbs (10).

When creating its economic development strategy, London is watching out for some major drivers in the world economy. The ones most related to financial services are:

Globalization, Digitization and knowledge economy: These are the factors that are allowing several jobs to be outsourced to places such as Mumbai and Dublin.

European Integration & Enlargement: The European integration is actually strengthening the London Financial Services Cluster because as the economy integrates many smaller centers and skilled workers are being incorporated into the established Financial Centers such as London's.

Specialized Resources

London has a number of supporting organizations, which produce several high-quality studies on its Financial Services Cluster and also help assess the current situation of the city. The International Financial Services London is a private sector organization, predominantly funded by membership subscriptions. The entity has been promoting the UK-based financial services industry throughout the world for 30 years. This organization contains statistics and significant studies on London's FS performance and also on the sub-sectors that compose the London FS Cluster (6).

The Corporation of London "provides local government services for the financial and commercial heart of Britain, the City of London. It is committed to maintaining and enhancing the status of the business City as the world's leading financial center through the policies it pursues and the high standard of services it provides". The Corporation funds and houses several reports analyzing London's Financial Services sector, IT infrastructure, needs assessment, and overall competitiveness (7).

The Financial Services Authority is an independent body that regulates the financial services industry in the UK. Their mission is to maintain confidence in the UK financial system; promote public understanding of the financial system; secure the right degree of protection for consumers; and to help reduce financial crime (8).

The British Bankers Association publishes a wide range of financial literature, from public information booklets to market standard agreements. Some of the BBA's public information material such as the Banking Code, Dormant Accounts Leaflets are available on their web site (9).

The London Stock Exchange has existed for over 200 years. It is at the heart of global financial markets and has over 2600 companies listed. According to their website they are:

- The world's most international equities exchange by trading and Europe's largest pool of capital
- The leading provider of equity markets services in the European time zone
- Linked by partnerships to international exchanges in Asia and Africa
- Committed to removing cost and regulatory barriers of capital markets worldwide

- A successful business provider with an outstanding track record.

Furthermore, the organization claims to have the expertise, the technology and experience to offer exchange services on a global scale (11).

Finally, several good schools including some of the top business and finance schools in the world serve London. Some examples include the London School of Economics and the London Business School. Although not located in the London MSA, Oxford and Cambridge Universities are close enough to be able to contribute to the creation of talents for the London Financial Services Cluster.

Scorecard

Score	CURRENT SITUATION
1	Seriously Inadequate. Not meeting basic/essential needs.
2	Marginally adequate. Not meeting current needs.
3	Adequate for present. Meets current needs.
4	Adequate for near future. Meets anticipated needs for 3-5 yrs.
5	Highly developed. Meets needs for 3-5 yrs & is cutting edge/model.

COMMON DIMENSIONS	London	Comments
Information and communications Infrastructure	5	London report lists New York and London as leading cities in IT.
Transportation Infrastructure	5	Although somewhat obsolete London's public transportation is still world class. Heathrow provides excellent accessibility to the world.
Energy Infrastructure and Resiliency	3	Adequate but costly. Most growth located outside of the city.
Skilled Workforce	5	Several reports list London's workforce as world class.
Overall regional education	5	London has some of the top finance and economics schools in the world.
Quality of life	2	Crowded and expensive.
Cost of Living	1	The city was evaluated as one of the most expensive places to live in a London survey.
Incentives (Tax, training, etc)	3	Extensive incentives. High overall tax rate.
Supporting Services	5	Extensive availability of supporting services.
Existence of regional institutions of collaboration	5	The Corporation of London and the International Financial Services London do an excellent job supporting the cluster
Presence of specialized education & research	5	London schools, Corporation of London and the International Financial Services London all have a role supporting and developing specialized research
Sophistication of the demand for the cluster's products and services	5	Intense competition drives the need for highly sophisticated products and solutions.
Marketing	5	London's websites do an excellent job marketing the city.
OVERALL SCORE	4.15	

Observations

The quality and amount of research available on London's supporting organizations is amazing. The city does an excellent job assessing its current situation in relation to its competitors and is actively working to maintain its status as one of the leading world financial centers.

Because the city's main problems are related to transportation, housing, medical facilities and rising costs, these are the issues it is focusing on resolving. For that reason the LDA has developed a number of sound strategic plans with specific actions to try to improve these variables.

The city is losing much of its back office operations to places like Ireland and Asia, but it is gaining front office as the centralization of the European financial markets around the City progresses. The city also believes it could have the best regulatory environment in five years, but it should carefully watch out for the steady rise in the regulatory burden.

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Toronto

Region Background and Overview

Toronto is recognized as Canada's financial services center. The city houses the largest exchange in Canada and the headquarters of the country's five largest banks. About 80% of the headquarters of foreign banks operating in Canada are also present in Toronto (1).

Toronto metropolitan area is the 3rd largest financial services center in North America after New York and Chicago, based on direct employment in 2002. The Toronto Stock Exchange is the 3rd largest in North America based on market capitalization and 7th largest in the world. It is a leading exchange in global mining with over 50% of the world's mining and exploration companies listed (8).

Toronto has a concentration of 1,700 financial services firms. Employment in the financial services sector has grown steadily throughout the period between 1983 and 1999. According to the City's annual employment survey, the financial services sector grew from approximately 97,000 in 1983 to approximately 130,000 in 1999. The financial services sector has consistently employed between 9% and 11% of the City's total employment during the last decade (1).

Toronto exports Financial services to the provinces of Quebec, Alberta and British Columbia contributing the 7% annual growth Ontario has been experiencing since 1992. While the sector has shown steady growth, the composition of employment within the sector has been changing. The share of total Toronto financial services employment in bank and trust company branches decreased by from 21% in 1983 to 11% in 1999. The share employed in bank and trust company head offices doubled from 21% to 42% over the same period. The share of employment in investment services has grown steadily from 11% in 1983 to 17% in 1999. Apart from the concentration of the industry itself, the cluster is further strengthened by a number of supporting institutions. The region believes that strong linkages between these institutions and the industry will be a key factor in maintaining the cluster's future competitive advantage.

All of the large Canadian banks are actively pursuing the U.S. and international markets through the establishment of subsidiaries, or through acquisitions, joint ventures and strategic alliances. This trend will continue as Canadian banks attempt to build economies of scale to compete against large international institutions. To put Canadian banks in a global perspective the largest Canadian Bank, the Royal Bank places 55th in the world.

Canadian banks have an international reputation as leaders in e-commerce applications. The banking industry continues to invest billions of dollars in IT, product development and the employment of IT professionals. E-commerce and overall technology development was identified as a primary focus for bank investment activity in order to remain competitive globally and to reach a wider market. The Toronto Stock Exchange (TSE) faces challenges with respect to adopting new information technology and consolidation of global exchanges. In addition, the merging of international exchanges could lead to a system of very few dominant players, threatening the existence of the TSE and smaller exchanges around the world.

Between 1996 and 1999 Toronto's employment in the insurance industry decreased by approximately 11%. The City's ability to retain the insurance industry will be dependent on improving the skilled labor pool, advanced telecommunications infrastructure, and transportation infrastructure.

The strengths of the Toronto cluster include: the existing concentration of the financial services cluster, the linkages that exist within and between industry groups, the growth of the higher order head office and administrative functions in the banks, a large available, skilled labor pool, the availability of a public transportation system and the existing critical mass of financial services and educational institutions.

Opportunities include: the growth of alliances using holding companies, building upon Toronto's image as the nation's financial services center and regulatory changes allowing for easier entry of U.S. firms into Canada. There are also opportunities for the City to work with the existing industries, institutions, and educational infrastructure to strengthen the linkages within the Financial Services Cluster and develop programming to facilitate the long-term growth and competitiveness of the cluster.

The most frequently stated weakness of the Financial Services Cluster in Toronto is the regulatory system that is now being examined by the Federal government. Proposed legislation covers four key areas: promoting efficiency and growth of the sector, fostering greater domestic competition, empowering and protecting consumers, and improving the regulatory environment. Canada is also the only major economy in the world to levy capital taxes annually on its financial sector. Alberta has recently agreed to eliminate capital taxes on financial institutions. The presence of the capital tax may affect the City's ability to retain and attract investment from the banking industry. Issues related to homelessness, traffic congestion and transit accessibility were also cited as weaknesses along with a general lack of political support for the cluster.

Threats to the cluster include: regulatory uncertainty and the recent expansions and investments by financial services companies south of the border resulting in the flow of capital outside of the City and county. Labor and skills shortages may affect the future growth potential of the cluster. Changes to foreign ownership rules could result in a movement of corporate decision-making functions to foreign companies, resulting in a loss of high-end employment in Toronto.

The success of the financial services cluster in Toronto will depend largely on the ability of its financial services firms to adapt to the external forces shaping the sector, namely globalization, deregulation and consolidation, increasing cross pillar activities, and technological adoption and advancements. The City of Toronto can play an important role in assisting to create an environment that enables rather than inhibits the sector's ability to compete locally and internationally (1).

Regional Economic Development Strategies

Toronto has a strategic plan geared specifically to the development of its Financial Services Sector. The extractions of the main ideas of the plan include:

Marketing and Promotion

Position Toronto as a major financial services center in North America. Collaborative marketing efforts between industry, academia and the City could focus on promoting Toronto's Financial Services Cluster both internally (citywide and nationwide) and externally to the world and on attracting foreign financial services firms to the city. For example, this could be accomplished by developing a Canadian financial services Internet portal to market the City's Financial Services Cluster and its capabilities in information technology and e-commerce. A financial services conference could be organized to launch the web portal and to showcase the Financial Services Cluster to political decision-makers. Additionally, a partnership with the University of Toronto's Mathematical Finance Program and Capital Markets Institute could be developed to market the city's role as an industry innovator by showcasing local financial engineering expertise. The Economic Development Division has successfully leveraged resources, such as the Program for Export Market Development (PEMD) for cooperative marketing purposes. This and other available programs should be explored with respect to developing specific initiatives.

Advocacy/Information/Education

Activities to advocate on behalf of Toronto's Financial Services Cluster could begin with a seminar to bring members of the Economic Development Committee and the rest of council together with representatives of Toronto's Financial Services Cluster. In addition to providing a networking opportunity, the seminar could include presentations from representatives of each of the industries to address: global competitiveness of the Canadian Financial Services Cluster, changing employment patterns in financial services, and the short-, medium-, and long-term outlook for the Toronto area. At the federal level, the City of Toronto through its role as the largest urban and economic center of the country could in partnership with industry, make representations to the House of Commons and Senate regarding issues affecting Toronto's Financial Services Cluster.

Competitive Intelligence

The City of Toronto must continue to broaden its view, from one that focuses on its position relative to the 905 areas, to a view that focuses on its position and relative competitive advantage to the U.S. (primarily New York City and Chicago) and the rest of the world. This could be accomplished by forming a partnership with academic groups such as the University of Toronto's Capital Markets Institute, industry, and other levels of government to create an ongoing and consistent program to regularly benchmark, monitor and anticipate the direction of the Canadian financial services sector in the North American and global context, focusing on the impacts on Toronto. The City would take a proactive role in developing an accurate assessment of the sector's international competitiveness while building a network of industry representatives with which to share industry intelligence.

Human Resources Development

The City must establish linkages within and between industry and academia and training institutions to identify and address specialized labor requirements of the Financial Services Cluster and associated business services such as accounting, management consulting and legal services, information technology and telecommunications.

Developing a labor force readiness plan to assist education and training providers to meet and anticipate the demands of industry would ensure an adequate supply of highly skilled labor for the Financial Services Cluster in Toronto and would enhance Toronto's attractiveness as a location.

Business Development

The City must work to ensure that its historical comparative advantages, for example, a strong public transportation network are strengthened and expanded to meet demand. Further building on the GO Transit and TTC would be important steps to facilitating commuting between the downtown core and other areas of the city and region. Additionally, the costs of doing business in Toronto compared to the rest of the GTA must be harmonized to ensure Toronto can compete for back-office functions of the Financial Services Cluster. The City must actively work with local companies to maintain a strong concentration of financial services in the City's core and the linkages within and between industry groups. The City should develop a strategy to capture as many back-office and subsidiary functions as possible.

The TFSA has highlighted a list of key projects that it wishes to focus on over the coming year:

- 1) Develop and implement an organizational, governance and funding structure that allows the initiative to continue, subject to approval by the Leaders Forum.
- 2) Increase TFSA membership by seeking out other companies and organizations that can add their perspective to the work of the TFSA, strengthening the voice of the TFSA and ensuring that it truly represents what is best for Toronto and the financial services sector.
- 3) Create the "information bank", a central information resource of statistical data and competitive analysis on Toronto, its financial services sector, its areas of specialization and its most relevant competition.
- 4) Complete an industry competitiveness survey and engage municipal, provincial and federal governments and industry regulatory authorities in discussions on the policy issues affecting the competitiveness of the sector.
- 5) Collaborate with Canadian-based financial services organizations and government agencies to raise national and international awareness of the strength of the Financial Services sector and new investment opportunities.
- 6) Undertake a needs assessment to facilitate the development of relevant and up-to-date curricula at academic institutions that provide graduates to Toronto's financial services industry and support the development of human resources tools for Toronto's financial services industry, its workers and potential workers.
- 7) Host a forum between the Toronto-based financial services industry and academic institutions to increase interaction and collaboration between the industry and academia. Items to be considered include electronic recruitment, portal development, and international trading competition etc.
- 8) Work with relevant authorities to examine ways to ease the transition of international financial services workers into Toronto's industry.
- 9) Co-operate with, and endorse where appropriate, existing organizations and efforts to seek improvement of Toronto's physical infrastructure and attributes critical to the City's quality of life.

- 10) Communicate actively with all relevant stakeholders on its findings, actions and positions on issues relevant to Toronto's competitive position as a leading financial center.

Specialized Resources

The Toronto Financial Services Alliance (TFSA) has the objective of to enhance and promote the competitiveness of Toronto as a premier North American financial services center. It is a public / private initiative of individuals representing the financial services industry and its trade associations, all levels of government and academic institutions (8). The main objectives of the organization are:

- 1) To develop and implement an awareness-building campaign for the financial services sector;
- 2) To enhance the competitiveness of Toronto's financial sector within the regional, national and global marketplace;
- 3) To establish partnerships with the financial services industry to identify and develop positions on key common policy issues and advocate for their adoption.

The TFSA and the Toronto Economic Development (2) have produced a number of high quality studies concerning the Toronto Financial Services cluster. These include a Financial Services Competitive Survey (3), Toronto: A Leading Financial Services Center (4), workforce assessment (5), the Toronto Economic Development Strategy (6) and Toronto Competes, an assessment of Toronto's overall competitiveness (7).

The Greater Toronto Marketing Alliance (GTMA) is a public-private partnership between the 29 municipalities and regions in the Greater Toronto Area, together with the Provincial and Federal governments, other non-profit organizations and a broad cross section of private sector corporations. Its mission is "to expand the economy of the Greater Toronto Area by raising the profile of the region internationally to attract new investment and employment". The GTMA is the key point of contact for exploring business opportunities in the GTA. With the resources of its public and private sector partners, the GTMA provides essential business information and site selection services to facilitate investment in the Greater Toronto Area (9).

Scorecard

Score	CURRENT SITUATION
1	Seriously Inadequate. Not meeting basic/essential needs.
2	Marginally adequate. Not meeting current needs.
3	Adequate for present. Meets current needs.
4	Adequate for near future. Meets anticipated needs for 3-5 yrs.
5	Highly developed. Meets needs for 3-5 yrs & is cutting edge/model.

COMMON DIMENSIONS	Toronto	Comments
Information and communications Infrastructure	4	Extensive and well-developed telecom and data.
Transportation Infrastructure	5	Found to be one of the strengths of the cluster. 8 th in North America

Energy Infrastructure and Resiliency	4	Abundant and reliable.
Skilled Workforce	4	Found to be one of the strengths of the cluster.
Overall regional education	4	Found to be one of the strengths of the cluster. 96 th in North America.
Quality of life	5	7 th in North America.
Cost of Living	1	333 rd in North America.
Incentives (Tax, training, etc)	2	Some incentives. High tax structure.
Supporting Services	4	Found to be one of the strengths of the cluster.
Existence of regional institutions of collaboration	4	TFSA, Toronto Financial Services Alliance.
Presence of specialized education & research	3	Collaborative institutions produce high quality reports.
Sophistication of the demand for the cluster's products and services	3	Third largest cluster in the Americas. Competition has raised the sophistication of demand.
Marketing	4	Good marketing and reports.
OVERALL SCORE	3.62	

Observations

The Toronto's Financial Services Alliance and the region's Economic Development Agencies produce excellent research and strategic plans. The region knows how competitive is its Financial Services Cluster, what are the gaps, and has action plans to fill them. Toronto's reports can show several valuable lessons specially because the region is focusing on gaining market share and attracting new companies to the area.

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São Paulo

Region Background and Overview

The city of São Paulo is the economic heart of Brazil. With one of the world's fastest growing metropolitan populations, it is also the largest city in the Southern Hemisphere. The metropolitan area is located inland and the nearest port, the port of Santos, is about 30 miles from the city.

Industrial development, beginning in the late 19th century, but especially since World War II, has transformed São Paulo into the primary industrial center in Latin America. Its leading industries produce textiles, automobiles, mechanical and electrical appliances, furniture, foodstuffs, and chemical and pharmaceutical products. To support and finance these industries a number of banks, both domestic and international, have opened headquarters in the region. Speculation, during the periods of hyperinflation, was another factor that attracted many institutions (1). In addition to important Brazilian banks, there are banking institutions representing interests in North and South America, Europe, Asia, and Africa. Among them are Citibank, ABN Amro, HSBC, Santander, Bank Boston, and others (2).

Capital markets are relatively underdeveloped in Brazil even though the São Paulo Stock Exchange – BOVESPA – was founded over a century ago in 1890. However, it is currently one of the foremost exchanges in Latin America. In 2002 the exchange listed 412 companies with a total market capitalization of US\$127 billion (3).

Brazilian management teams are considered world-class due to strong competition, necessity to rapidly adapt to changing environment in terms of exchange rates and inflation, and high compensation levels which attract the best people. However, the same is not true for the lower management levels. Also, high inflation rates helped create a world class real-time payment system; Brazilian banks have the capability to enable virtually instant credit on deposits across a continent size country (4).

Regional Economic Development Strategies

The Mayor's Office (Prefeitura de São Paulo) is the organization in charge of the economic development of the region. The city does not have any actions geared specifically towards developing financial services. Their strategic development plan is focusing on basic issues such as education, public transportation, social justice, and public health (5).

Specialized Resources

The BOVESPA is the São Paulo stock exchange. It operates under the supervision of the supervision of the Comissão de Valores Mobiliários (CVM), the Brazilian equivalent of the SEC. The BOVESPA is an important driver for the development of new infrastructure and technology for the São Paulo Financial Services Cluster. Among them, their web site lists the Home Broker and the After-Market softwares. Both of these have been developed to give access to the small and medium size investors to the exchange. The After-Market is a particularly interesting case because it allows the exchange to continue to function electronically during the nighttime (6).

FEBRABAN is the Brazilian equivalent to the American Bankers Association. It is an association that collects data on employment, industry performance, wages, and other data at the country level. The organization also interacts with the government and unions to defend the interests of the industry (7).

The Brazilian Mercantile and Futures Exchange (BM&F) also has its headquarters in São Paulo. The organization promotes research in derivatives; provides live and web training programs to students and professionals; offers seminars on topics of interest to financial institutions; publishes, translates and distributes articles to the top economic institutions in the country; organizes expos; and supports educational institutions interested in disseminating the use of derivatives in Brazil (8).

São Paulo has a well-developed system of primary and secondary education, both public and private, and a variety of vocational-technical schools. Among the institutions of higher education, the largest and most esteemed in all of Brazil is the state-supported [Universidade de São Paulo](#), established in 1934, which has good schools in Economics and Finance. The Pontifícia Universidade Católica de São Paulo was established in 1946, and the Universidade Mackenzie in 1952. Also well known is the Escola de Administração de Empresas of the Getúlio Vargas Foundation, established after World War II to train administrators (1).

Scorecard

Score	CURRENT SITUATION
1	Seriously Inadequate. Not meeting basic/essential needs.
2	Marginally adequate. Not meeting current needs.
3	Adequate for present. Meets current needs.
4	Adequate for near future. Meets anticipated needs for 3-5 yrs.
5	Highly developed. Meets needs for 3-5 yrs & is cutting edge/model.

COMMON DIMENSIONS	Sao Paulo	Comments
Information and communications Infrastructure	4	Privatization has supplanted most of the IT and communications infrastructure needs.
Transportation Infrastructure	2	International accessibility is good but public roads and transit need to be improved.
Energy Infrastructure and Resiliency	2	The Brazilian energy structure is highly dependent in hydroelectricity. Droughts have caused problems in the past.
Skilled Workforce	4	Brazilian management teams are considered world-class due to strong competition.
Overall regional education	3	São Paulo has some of the best Universities in the country.
Quality of life	2	São Paulo has considerable problems with pollution and traffic.
Cost of Living	4	Cost of living is high for Brazilian standards but low for US standards.
Incentives (Tax, training, etc)	1	The Brazilian government is traditionally not supportive of tax breaks.

Supporting Services	4	Good high quality capacity.
Existence of regional institutions of collaboration	3	Mainly private institutions.
Presence of specialized education & research	1	Although SP has good schools not many focus on research on FS.
Sophistication of the demand for the cluster's products and services	4	Strong competition and inflation have driven the need for highly sophisticated solutions.
Marketing	2	SP is not advertising its Financial Services Cluster.
OVERALL SCORE	2.77	

Observations

São Paulo is not actively promoting its Financial Services Cluster. The fact that the city had an early start in its industrial development and the size of the Brazilian economy spurred the development of the cluster.

The way the Brazilian Mercantile and Futures Exchange promotes the dissemination of the knowledge involving derivatives by going to schools, rewarding research, offering seminars, training and webcasts could be interesting ideas to apply in a future Financial Services Center in Florida.

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Mumbai

Region Background and Overview

India's financial markets have undergone rapid changes since the country embarked on a program of economic reforms in 1991. They have embraced technology, seen a substantial increase in the variety and volume of capital market transactions, and witnessed the emergence of securities and new instruments like derivatives as important instruments in financial intermediation.

Mumbai comes into play in this scenario as the most important financial and commercial capital of India. It is the highest contributor to India's income tax as well as corporate taxes. It is also the location of the oldest stock exchange in Asia, Bombay Stock Exchange established in 1875. The exchange has 1810 companies listed and had an average daily turnover of 1251.29 crore rupees (approx. 275 million US dollars) in 2002-03, although 2 years back the average daily turnover was much higher at 3984 crore rupees or 870 million US dollars (average number of daily trades in 2002-03 was 563,000) (1).

The national stock exchange and the debt markets are also located in Mumbai. Two thirds of the country's stock turnover and 90% of merchant banking are handled within the region. Over 9,000 brokerage firms operate on the main stock exchanges, a significant number of which are based in Mumbai. There are close to 500 foreign institutional investors and 800 merchant banks registered in India, most of them are located in Mumbai. The city also houses the headquarters of the Reserve Bank of India and handles over 35% of the check clearances in the nation (2).

Mumbai experienced the majority of its growth in industry after World War II. Up until that point it had relied mainly on the textile industry, with little other industrial growth occurring. After World War II, came Indian Independence and with that Mumbai's economy was inter meshed with the national Indian economy. More emphasis was put in internal trade; a vast change since previously Mumbai had been focused on foreign trade due to British control. Because of the strong British presence, Mumbai was the first Indian city to experience growth and changes associated with capitalism and have since become India's banking and finance capital (3).

Some banks present in the region include: CitiBank, American Express International Banking Corporation, Bank of America National Trust & Savings Association, Bank of Tokyo, Hong Kong Bank, ABN-AMRO, Banque Nationale De Paris and others (4). Some companies such as Morgan Stanley, J P Morgan Chase and Company, Moody's Investors Service and Zacks are also contracting out research or setting up their own support centers that include Indian chartered accountants and MBAs. Tata Consultancy Services, a major outsource player, is also exploring ways to offer research services at its back-office joint venture (5). The company already has some white papers written in the areas of banking, financial services, insurance and IT. A complete list can be found at http://www.tcs.com/0_whitepapers/index.htm#financial.

Regional Economic Development Strategies

The Mumbai Metropolitan Region Development Authority is in the process of developing an International Finance and Business Center (IFBC) on an area of 130 ha. in the Bandra-Kurla Complex. The proposal aims at creating necessary facilities and supporting services to promote growth of international finance and business activities in Mumbai. The IFBC will include offices of the merchant bankers, foreign financial institutions, commercial banks, public sector financial institutions, regional head quarters of multi-national companies and other business houses, offices of the professionals and database and computer software services. The new National Stock Exchange and the new Diamond Bourse being set up will form part of the proposed IFBC. A large International Convention Center with 5-star hotel is also planned in this area. Besides commercial activities, the IFBC will include Educational Institutions and some provision for housing for employees engaged in the IFBC.

In the first phase, an area of 20 ha. is being developed for this center. The IFBC will be served by high quality infrastructure, which will include state-of-the-art data transmission facilities. A new rail link between Bandra and Kurla Railway Stations, providing direct access to the IFBC, is being planned. A leading consultant has prepared a comprehensive plan and urban design proposal for the IFBC. The land required for the development is leveled and construction of access roads is in progress. The construction work on land allotted to CitiBank, Bharat Diamond Bourse, UTI, NABARD, ICICI, IL & FS, Mature Trading, Laxmi Finance, and others is nearing completion. Construction work is in full swing on the plot of land allotted to the American School.

Apart from the basic infrastructure required for the IFBC, the MMRDA is involved in promoting a number of projects for creating complementary facilities in the center. Besides the International Convention Center, the MMRDA has proposed construction of a Center for Contemporary Culture, Multiplex Theatre and Entertainment Center, shopping center, three-or four-star hotel and multistoried and underground car parks. A large utility complex providing for various utility services such as bus station, fire station, telephone exchange, post office, offices of small establishments, restaurants, eating place etc. in conjunction with the proposed Railway Station for IFBC, is also planned.

Mumbai also has a development plan, developed by the McKinsey and Company consulting firm, and entitled "Vision Mumbai" that intends to turn Mumbai into a "world-class" city by 2013. The plan was presented to the Maharashtra government in September 2003. The summary of recommendations, compiled in a report, essentially lays out a blueprint for Mumbai's overall development over the next decade. The plan focuses on six key areas: economic growth, transportation, housing, other infrastructure, financing and governance. The report has been criticized by several urban planners, environmentalists and civic activists as coming across as a "builders' lobby" because it recommends to privatize and build, build, build.

Population is currently the biggest problem facing Mumbai. Land is scarce and the cost of living is high for Indian standards. Population explosion has put a tremendous strain on the basic infrastructure and transport facilities of the city. In fact, Mumbai is set to replace Tokyo as the world's most populous city by 2020. Today, slum dwellers make up 60% of Mumbai's

population, which is approximately 7 million people. Many local political activists demand that unemployed immigrants to the city after 1995 must vacate, so that the population in the city's slums is reduced.

Specialized Resources

The Mumbai Metropolitan Region Development Authority (MMRDA) is responsible for the development of Mumbai Metropolitan Region (MMR), which comprises the Megacity of Mumbai - the capital of Maharashtra State. MMRDA was set up in 1975 as an apex body for planning and coordinating the development activities in the Region.

The goal of achieving a balanced development of the Region is attempted by the MMRDA through the following strategies:

- Preparation of perspective plans,
- Promotion of alternative growth centers,
- Strengthening of infrastructure facilities, and
- Provision of development finance.

The MMRDA is a key player in the development of the International Finance and Business Center in the city of Mumbai. The organization also prepares plans, formulates policies and programs and helps in directing investments in the Region.

Mumbai city boasts some high quality educational institutions. Among them are the University of Mumbai, the Indian Institute of Technology at Bombay, and The National Center for Software Technology (5). The Indian Institute of Technology (IIT) has worldwide recognition and is considered the MIT of India. The Bombay IIT develops research for companies such as Microsoft, AT&T, Purdue University, and the Bank of India (7).

Scorecard

Score	CURRENT SITUATION
1	Seriously Inadequate. Not meeting basic/essential needs.
2	Marginally adequate. Not meeting current needs.
3	Adequate for present. Meets current needs.
4	Adequate for near future. Meets anticipated needs for 3-5 yrs.
5	Highly developed. Meets needs for 3-5 yrs & is cutting edge/model.

COMMON DIMENSIONS	Mumbai	Comments
Information and communications Infrastructure	1	Present at Universities and private institutions.
Transportation Infrastructure	1	Heavy traffic jams & reasonable int'l connectivity.
Energy Infrastructure and Resiliency	1	Unreliable energy backed up by private power generation.
Skilled Workforce	4	Universities have supplied workforce with skilled labor.
Overall regional education	3	Good education for those who are able to get into the Universities.
Quality of life	1	Pollution, oversized population, water

		treatment problems
Cost of Living	5	High for Indian standards but low for US standards.
Incentives (Tax, training, etc)	5	Extensive tax incentives. Overall low tax structure.
Supporting Services	3	Adequate presence.
Existence of regional institutions of collaboration	2	MMRDA and International Finance and Business Center
Presence of specialized education & research	2	Some research specific towards FS.
Sophistication of the demand for the cluster's products and services	2	Some sophisticated IT solutions for FS.
Marketing	3	Reasonable marketing. Information very dispersed.
OVERALL SCORE	2.54	

Observations

Mumbai's large availability of inexpensive skilled workers seems to be its main competitive advantage. India has the third largest pool of scientists in the world and a labor force of 439 million. The state of Maharashtra, where Mumbai is located, has an average annual per capita income of US\$400. This, and the fact that English is widely spoken, opens countless outsourcing opportunities to take advantage of the talents developed by the high-quality schools available in the region.

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Dublin

Region Background and Overview

The Financial Services Sector is the major employer in the Dublin area. Statistics vary depending on the source but the cluster is believed to have between 41000 and 48000 employees (1 & 2). The Dublin International Financial Services Center (IFSC) is an interesting case because it represents an induced development process which is now maturing and shows signs of having attained a critical mass needed to sustain the long-term future of the sector/cluster.

Over one third of the jobs at the IFSC are involved in funds administration. Investment decisions continue to be primarily made in London and New York, with Dublin functioning as a back office and support center.

The cluster has its origins in 1986 when the Custom House Docks Development Authority was given planning and financial powers in order to secure the re-development of the area. In 1987 a special corporation tax regime for occupiers involved in international financial services conducted in non-Irish currencies spurred the start of the IFSC. Instead of the normal tax rate of 40% applying to the profits of such business, a 10% tax rate was used. Development at the IFSC by 1992 involved the completion of the IFSC and ancillary office space. A second and more rapid and sustained phase of development took place after 1994 and by 2000 over 8,000 persons were directly employed in over 485 international financial companies and a further 8,500 employed in related firms.

The state had an important role in the development process and resulting profits. Under the confidential master agreement, the development is funded by the developers who are guaranteed a specified minimum economic return. The initial agreement was that surplus development profits would be shared between the developer and the state on a 60/40 basis in favor of the state with the developers also paying a lump-sum premium to the state. Later interviews with the participants in the development process show that renegotiations had occurred on the above arrangements with subsequent alterations in favor of the development consortium. The details of such arrangements were not publicly disclosed.

Interviews with the members of the IFSC showed a largely positive view. The strengths included the low corporation tax rate, the International business culture developed in Dublin, the quality of the educated workforce and the general environment of the city. The international marketing of the center was also important in establishing Dublin as a financial services location.

Today the center has activities in the areas of Corporate Asset Financing and Leasing, Corporate Treasury Management, Fund Management and Investment Management, Futures and Options Trading, Securities Trading, and Insurance.

Regional Economic Development Strategies

The 2003 Master Plan from the Dublin Docklands Development Authority lays out the strategic approach of the Authority towards realizing the future reality of a truly excellent Docklands. The plan is a follow up to the 1997 original. The DDDA states that “it will be the constant reference point in the continuing roll-out of projects, programs and policies for the sustainable regeneration of the Docklands”. The plan contains a chapter dedicated to the International Financial Services Center. The policies section states that the Authority will:

- Promote the development of office accommodation within the Docklands Area in accordance with the Master Plan to:
 - a) Secure the IFSC as a world-class city quarter, and
 - b) Ensure the long-term provision of office/service/housing accommodation to permit sustained organic growth of the financial services industry within the Docklands
- Promote, where possible, the development of secondary office accommodation for back-offices within the Docklands Area;
- Promote the continued development of appropriate training and education, particularly at the NCI Docklands Campus, to meet the needs of IFSC service providers and the financial services industry generally;
- Promote education and training for residents of the Docklands to ensure that job opportunities in the IFSC are open and accessible to local residents;
- Work with IDA Ireland to assist in marketing Ireland as a financial services location, highlighting the particular locational benefit of Docklands for international financial services; and
- Seek the provision of accommodation for non-IFSC companies whose presence in the Area is complementary to the financial sector of the economy.

Specialized Resources

The International Financial Services Center website lists the following organizations as institutions of collaboration to the cluster (3):

Dublin Docklands Development Authority: The DDDA took over the role of the Custom House Docks Development Authority (CHDDA) in 1997 including development of the IFSC. The DDDA is working to develop Dublin Docklands into a World Class City Quarter (4).

Dublin Funds Industry Association: The Dublin Funds Industry Association (DFIA) represents the international investment fund community in Ireland, including custodian banks, administrators, managers, transfer agents, fund promoters and professional advisory firms. The association's membership represents the entire international funds industry. A key objective is to support and complement the continued development of this sector.

The DFIA has represented and participated on governmental and industry committees and working groups and has contributed to the development of Ireland's regulatory and legislative framework. It has also developed policy and guidance papers in the compliance, valuation,

accounting and share dealing areas, with input from a combination of administration, legal and audit member companies (5).

Dublin International Insurance & Management Association: Dublin International Insurance and Management Association (DIMA) represents more than 300 companies, which transact and manage international insurance businesses. It addresses issues of relevance to the maintenance of Dublin as an international insurance center (6).

Financial Services Ireland: An affiliate association to IBEC (Irish Business Employers Confederation), FSI is a dedicated trade association for the totality of the financial services industry in Ireland. It has a membership base of over 180 financial institutions from all areas of the financial services sector, including banks, building societies, insurance companies, fund administrators and managers, investment companies, leasing companies, stockbrokers, treasury companies and other financial services providers.

The core objective of Financial Services Ireland is to maintain the competitiveness of the industry and to ensure that the business and regulatory environment is supportive of its development. It also seeks to promote a greater awareness of the importance of the sector for the national economy. These aims are pursued through seminars, workshops, publications, special committees and lobbying activities (7).

IDA Ireland (Financial Services Section): IDA Ireland's core mission is to continue to try to secure the best available foreign direct investment, suitable to the country's national and regional needs. The financial services division of IDA Ireland is responsible for marketing the financial services sector in Ireland and for dealing with new business and established IFSC companies (8).

Irish Bankers' Federation: The Irish Bankers' Federation (IBF) has a membership of 60 financial institutions, including licensed domestic and foreign banks and institutions operating the IFSC. The IBF was established in 1973 and represents and promotes the interests of the Irish banking industry in this country and abroad. The Irish Banks' Information Service (IBIS), a division of the IBF, provides information about banking, money and finance and related matters to all interested parties (9).

Department of Finance (IFSC Section): The IFSC Section of the Department of Finance advises the Minister on tax policy and other issues affecting the international financial services industry and its future development. It is also liaises with IFSC companies and their advisors on issues relating to their tax certificates (10).

Scorecard

Score	CURRENT SITUATION
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COMMON DIMENSIONS	Dublin	Comments
Information and communications	4	Dublin is trying to become the

Infrastructure		e-city of Europe.
Transportation Infrastructure	3	Good rail but strained highway infrastructure.
Energy Infrastructure and Resiliency	3	Reliable but expensive.
Skilled Workforce	4	The development of the FS Cluster has contributed to the formation of skilled workers in the field.
Overall regional education	4	Numerous universities, colleges and technical centers.
Quality of life	5	Attractive sophisticated city.
Cost of Living	1	High cost of living.
Incentives (Tax, training, etc)	5	Tax breaks were the main incentive used to create the cluster.
Supporting Services	3	Adequate for present.
Existence of regional institutions of collaboration	4	DDDA, DFIA, DIMA, FSI, IDA, IBF.
Presence of specialized education & research	3	Institutions of collaboration produce some research.
Sophistication of the demand for the cluster's products and services	3	The development of the cluster has raised the need for new solutions specially in back office operations.
Marketing	4	Overall good marketing but a lot of the information is dispersed.
OVERALL SCORE	3.58	

Observations

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