Clusters and Economic Development: Towards a New Model for Regions and Inner Cities

Professor Michael E. Porter Harvard Business School

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This presentation draws on ideas from Professor Porter's articles and books, in particular, The Competitive Advantage of Nations (The Free Press, 1990), "Clusters and the New Competitive Agenda for Companies and Governments" in On Competition (Harvard Business School Press, 1998), the Clusters of Innovation Initiative (www.compete.org), a joint effort of the Council on Competitiveness, Monitor Group, Professor Porter, and the Cluster Mapping Project at Harvard Business School, and on "Competitiveness in U.S. Rural Regions: Learning and Research Agenda," a project report on rural economic development for the EDA with Christian Ketels, Kaia Miller, and Richard Bryden.

Additional information may be found at the website of the Institute for Strategy and Competitiveness, www.isc.hbs.edu

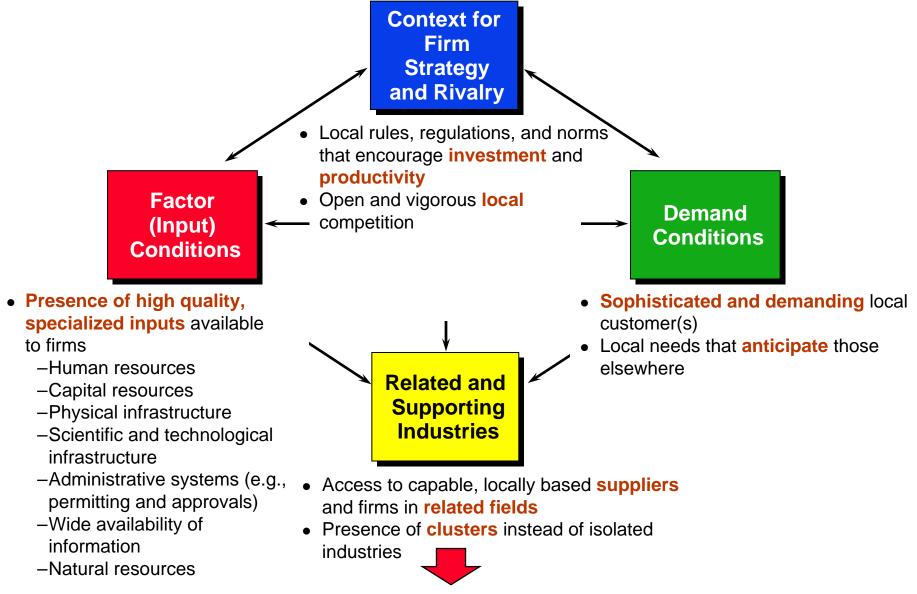
What is Competitiveness?

- Competitiveness is the productivity (value per unit of input) with which a nation or region utilizes its human, capital, and natural resources. Productivity sets a region's standard of living (wages, returns on capital, returns on natural resources)
 - Productivity depends both on the value of products and services (e.g. uniqueness, quality) as well as the efficiency with which they are produced.
 - It is not what industries a region competes in that matters for prosperity, but how firms compete in those industries
 - Productivity in a region is a reflection of what both domestic and foreign firms choose to do in that location.



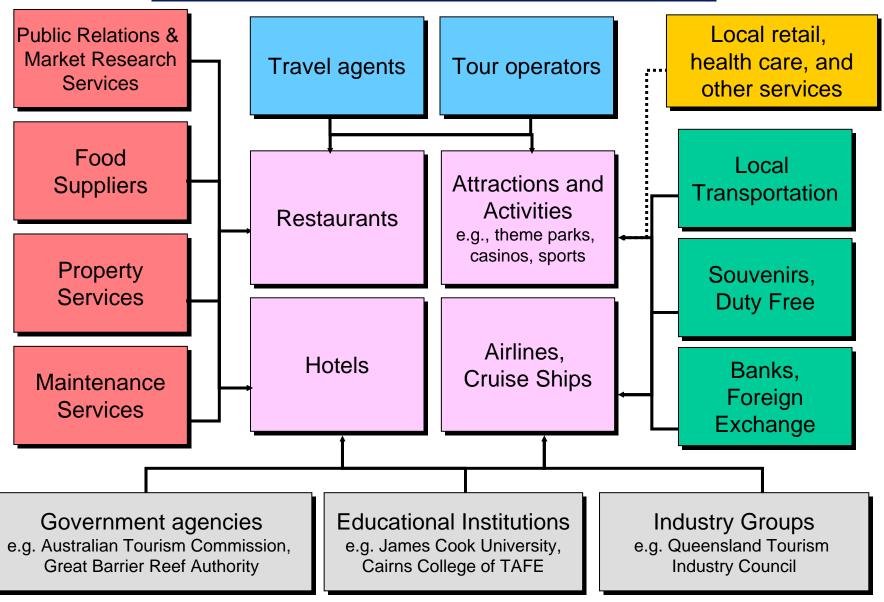
- Nations and regions compete in offering the most productive environment for business
- The public and private sectors play different but interrelated roles in creating a productive economy.

Enhancing Competitiveness: Improving the Business Environment

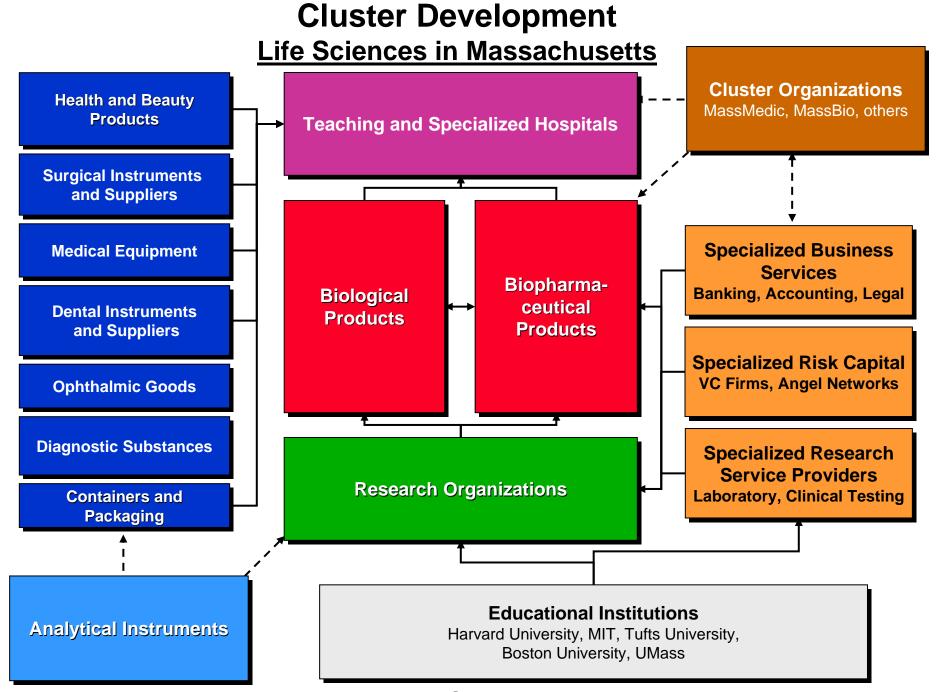


 Successful economic development is the process of enhancing the business environment to support and encourage increasingly sophisticated ways of competing

Enhancing Competitiveness: Cluster Development Hospitality and Tourism in Cairns (Australia)



Sources: HBS student team research (2003) - Peter Tynan, Chai McConnell, Alexandra West, Jean Hayden



Institutions for Collaboration Massachusetts Life Sciences, Selected Organizations

Life Sciences Industry Associations

- Massachusetts Biotechnology Council
- Massachusetts Medical Device Industry Council
- Massachusetts Hospital Association

General Industry Associations

- Associated Industries of Massachusetts
- Greater Boston Chamber of Commerce
- High Tech Council of Massachusetts

Economic Development Initiatives

- Massachusetts Technology Collaborative
- Mass Biomedical Initiatives
- Mass Development
- Massachusetts Alliance for Economic Development

University Initiatives

- Harvard Biomedical Community
- MIT Enterprise Forum
- Biotech Club at Harvard Medical School
- Technology Transfer offices

Informal networks

- Company alumni groups
- Venture capital community
- University alumni groups

Joint Research Initiatives

- New England Healthcare Institute
- Whitehead Institute For Biomedical Research
- Center for Integration of Medicine and Innovative Technology (CIMIT)

The Composition of Regional Economies <u>United States, 2004</u>

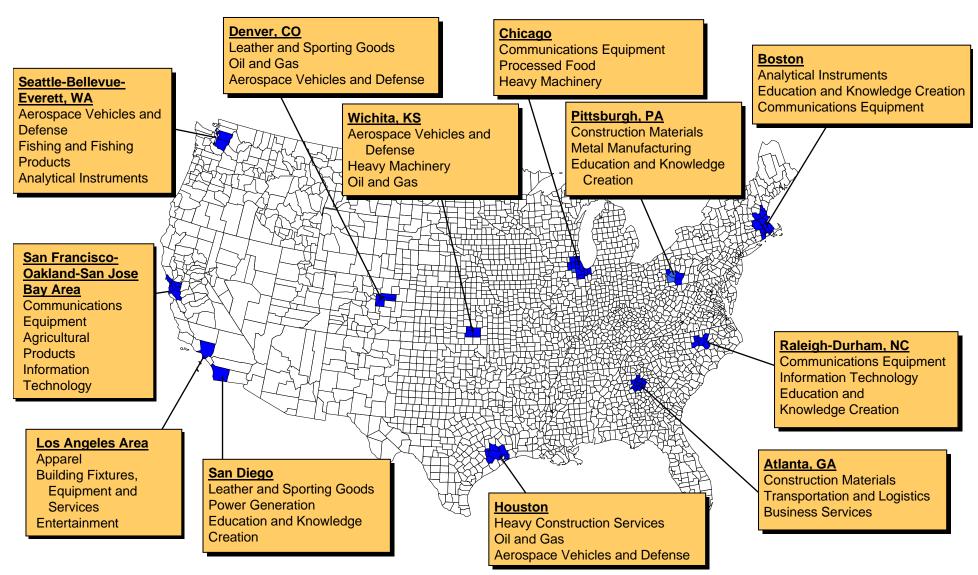
	Traded	Local	Natural Resource-Driven
Share of Employment Employment Growth Rate, 1990 to 2004	29.3% 0.7%	70.0% 2.4%	0.7% -1.2%
Average Wage Relative Wage Wage Growth	\$49,367 137.2% 4.2%	\$30,416 84.5 3.4%	\$35,815 99.5 2.1%
Relative Productivity	144.1	79.3	140.1
Patents per 10,000 Employees	20.4	0.4	3.0
Number of SIC Industries	590	241	48

Note: 2004 data, except relative productivity which uses 1997 data.

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

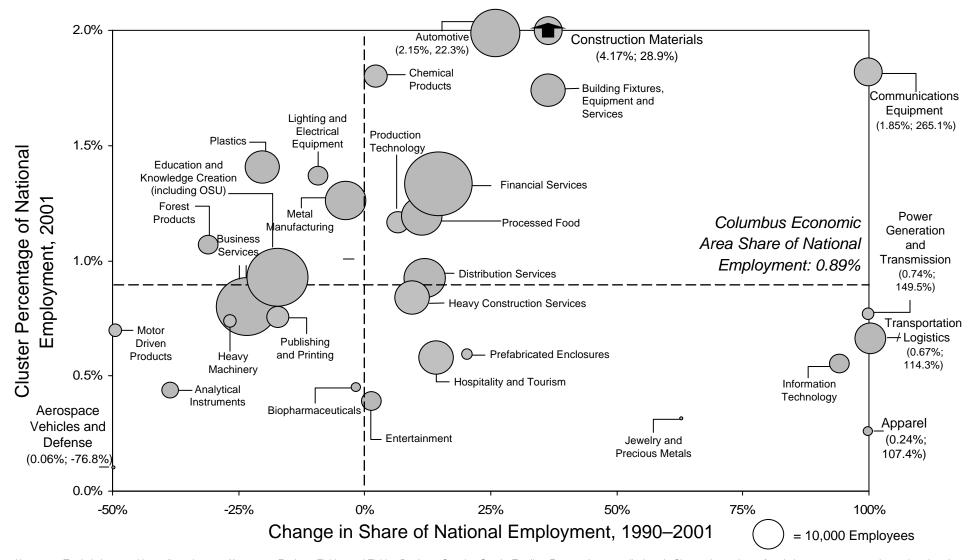
20061113 Brownfields - Draft 20061106

Specialization of Regional Economies <u>Selected U.S. Metropolitan Areas</u>



Note: Clusters listed are the three highest ranking clusters in terms of share of national employment Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School 20061113 Brownfields – Draft 20061106

Specialization by Traded Clusters Columbus, Ohio Economic Area



Note: Traded clusters with small employment (Aerospace Engines, Fishing and Fishing Products, Sporting Goods, Textiles, Footwear) are not displayed. Clusters located out of scale have border with coordinates labeled (Percent of national cluster employment; percent change in national cluster employment share).

been placed on the

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School, Monitor Analysis. 2001 Is the Most Recent Underlying Data Made Available by the U.S. Government. Education / 20061113 Broken Agreement Gluster Revised Using Data from the Bureau of Labor Statistics 9 Copyright © 2006 Professor Michael E. Porter

The Evolution of Regional Economies San Diego

Climate and Geography **Hospitality and Tourism**

Transportation and Logistics

Sporting and Related Goods

U.S. Military Aerospace Vehicles and Defense

Communications Equipment

Analytical Instruments

Power Generation

Information Technology

Education and Knowledge Creation

Medical Devices

Bioscience Research Centers **Biotech / Pharmaceuticals**

1910 1930 1950 1970 1990

The Process of Economic Development

Old Model

 Government drives economic development through policy decisions and incentives



New Model

 Economic development is a collaborative process involving government at multiple levels, companies, colleges and universities, and other institutions

 Competitiveness must become a bottom-up process in which many individuals, companies, clusters, and institutions take responsibility

Towards a Strategic Direction for Regions

Regional Strategy

What unique competitive position for the region?

Cluster Development

General Business Environment

Organization for **Economic Development**

What clusters?

What cross-cutting issues?

What organizational structure?

Columbus Assessing the General Business Environment

Advantages

- Central location to 60% of the **North American population**
- Good transportation infrastructure: highways, railroad and airports
- Easy, convenient lifestyle
- Well-educated workforce
- Moderate cost of doing business
- Large university
- Prime research institution (Battelle)
- Proximity to assets in Cleveland and Cincinnati (e.g., capital, research, arts)

Disadvantages

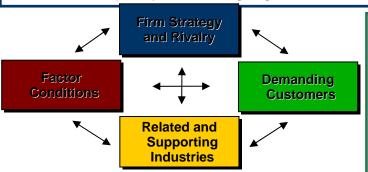
- · Relatively few direct flights and lack of a hub airport
- Lack of first-tier research universities
- Difficult to recruit (not retain) talent
- Little venture capital
- · Lack of natural attractions

Advantages

- Several large corporate headquarters
- Appropriate regulatory framework in financial services

Disadvantages

- Limited support for entrepreneurship and startups
- Cumbersome / outdated regulations in several sectors
- Weak tax policy combining high tax rates with high relocation



Advantages

 Positions in several interrelated clusters (e.g. transportation and distribution; construction materials, plastics, lighting and heavy construction services)

Disadvantages

 Broad economic diversification has resulted in limited clustering and specialization

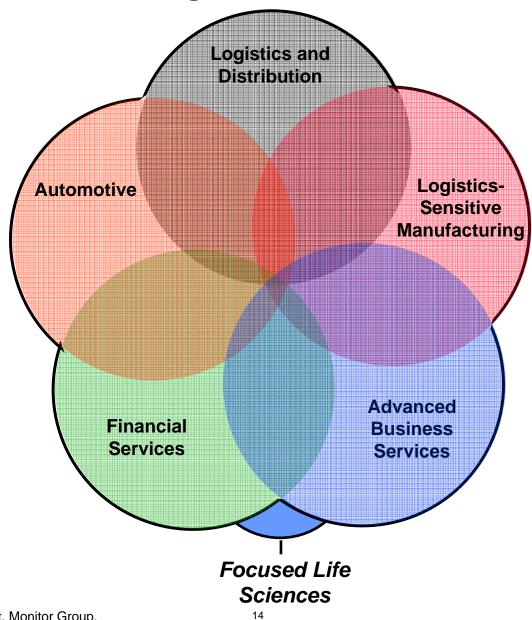
Advantages

- Population resembles the average U.S. consumer market
- Core group of demanding clients for information services

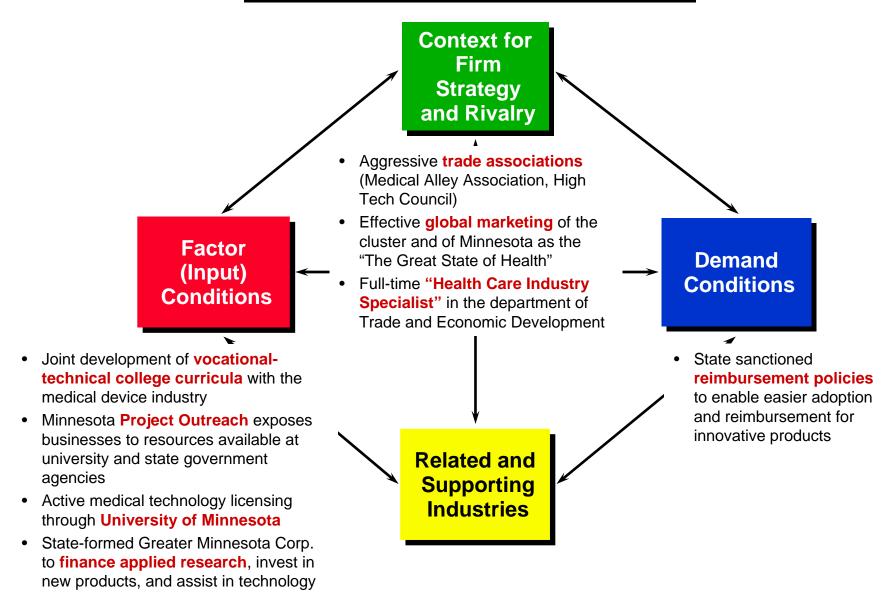
Disadvantages

 Local and regional customers generally not the most sophisticated (e.g., apparel, financial services), nor perceived as driving product and technology innovation

Towards a Strategic Direction for Columbus



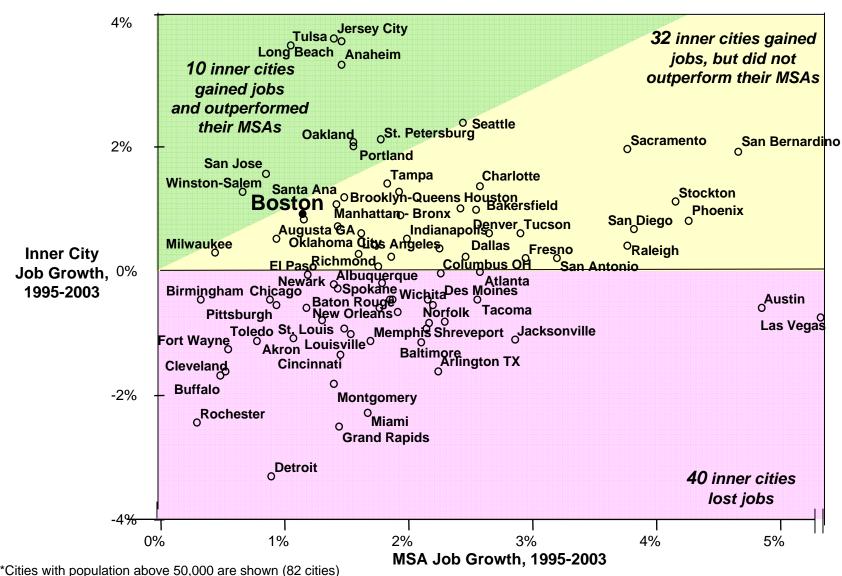
Public / Private Cooperation in Cluster Upgrading Minnesota's Medical Device Cluster



Inner City Economic Revitalization Premises of the New Model

New Model Traditional Approach Create Jobs and **Reduce Poverty** Wealth Need: Need: **Business Growth and Social Services** Investment **Geographic Space: Geographic Space:** The Neighborhood The Region Focus on Focus on **Deficiencies Advantages** Lead: Lead: **Private Sector** Government

Economic Performance of Inner City Economies Job Growth, 1995 – 2003, Largest U.S. Cities



Inner City Economic Development The Competitive Advantages of Inner Cities

Strategic location

 Located near regional transportation and telecommunications nodes

Underserved local market

- \$90 billion of annual spending power
- 800,000+ business establishments
- Urban customers are growing and mirror future
 U.S. demand patterns

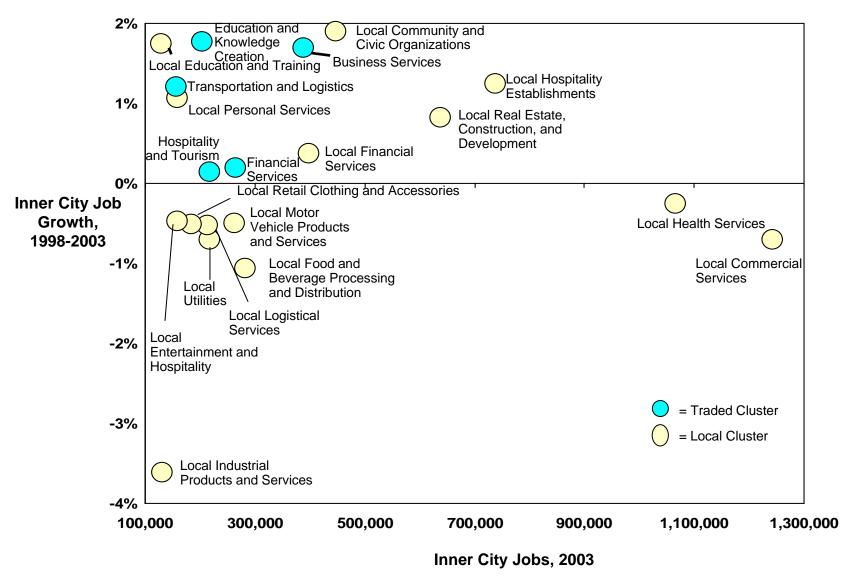
Linkages to regional growth clusters

• Efficient location for cluster support functions

Underutilized workforce

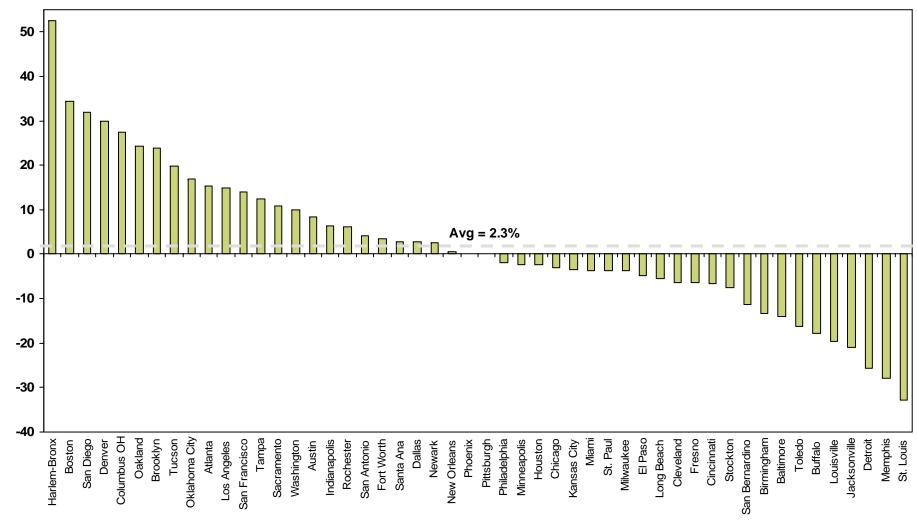
 Largest pool of available workers amid a tight longterm labor market

Composition of Inner City Economies Top 20 Clusters, 100 Largest Inner Cities



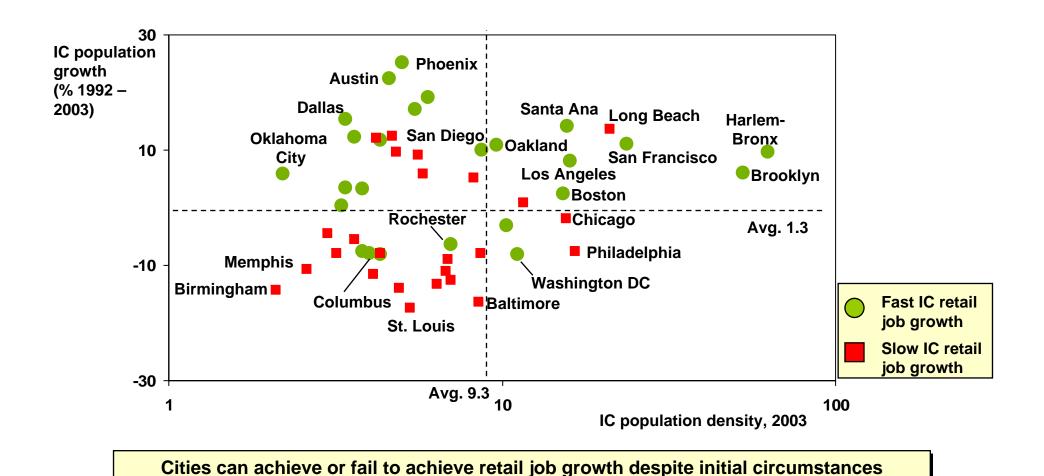
INNER CITY RETAIL JOB GROWTH: TOP 50 INNER CITIES 1992 – 2003(1)

Percent Retail Job Growth



⁽¹⁾ Top 50 population cities represent ~80% of inner city retail market both by number of jobs and number of establishments Source: Census 2003 Zip Code Business Patterns; ICIC Inner City Zip Code Definitions

Inner City Retail Performance versus Growth Drivers



LARGE RETAILERS ARE NOW FOCUSING MORE ON HOW TO OPTIMIZE THEIR OPERATIONS FOR THE INNER-CITY

"In the past 10 years that I've been looking at this, I think the discussion has definitely changed from one of making the business case, to one of 'How do I do it successfully?"

- Todd Turner, Food Marketing Institute

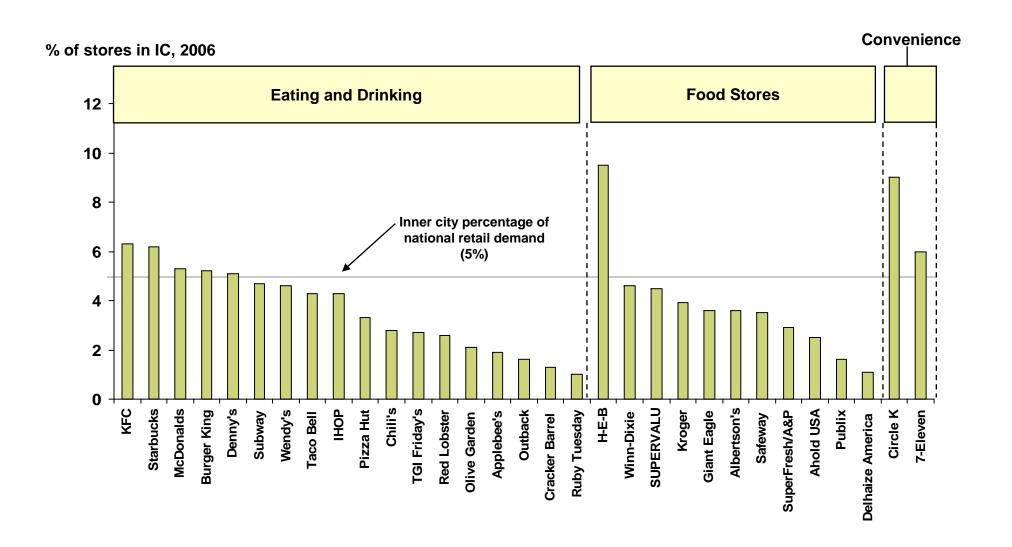
"The challenge of operating in urban markets is really the velocity of products and customers. We're operating the same size store that we are in smaller communities, but we have two to three times the sales."

- VP of Communications, Family Dollar

"We sometimes go where other retailers don't go because they're sticking to one footprint. We have a mix of store types to work with."

- Jeff Lowrance, spokesman for Food Lion

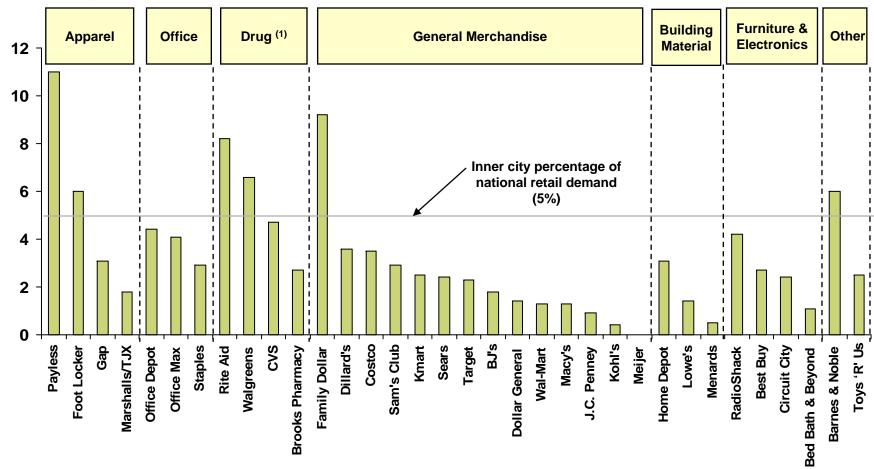
THE PENETRATION OF THE LARGEST RETAILERS VARIES MARKEDLY IN INNER CITIES (I)



⁽¹⁾ Drug stores are par of Health and Personal Care census category Source: Chain Store Guide, infoUSA, ICIC, BCG Analysis

THE PENETRATION OF THE LARGEST RETAILERS VARIES MARKEDLY IN INNER CITIES (II)





(1) Drug stores are par of Health and Personal Care census category Source: Chain Store Guide, infoUSA, ICIC, BCG Analysis

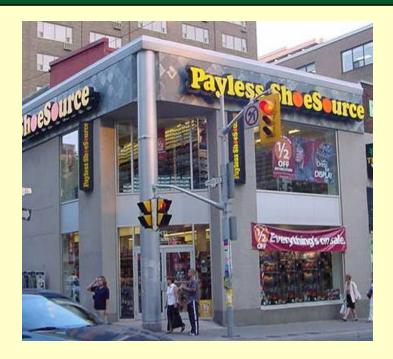
PAYLESS SHOES

Overview

Payless sees inner city locations as an integrated part of the company strategy

- Corporate vision to "democratize shoe fashion and design" has led to a longstanding presence in urban and inner-city markets
- The rise of mass discounters has created challenges which increased the importance of urban locations where Payless faces less competition
- Payless' target consumer is well represented in the inner city demographics
 - Price and fashion-conscious women

Payless has successfully adapted its concept to urban settings



Payless has modified its format to two stories for urban locations

ADDRESSING THE INNER CITY OPPORTUNITY

Payless Shoes

Identified market opportunity

Adapted store format and operations

Targeted product selection

Focused on employee training and retention

Connected with the community

Sees opportunity in the inner city

- The Payless development model uses high income density and foot traffic as the most important criteria for store locations
- Payless values co-tenants like drugstores, grocers and even mass discounters because it sees foot traffic is so important

Adapts store format and operations

- Payless has a two story format for inner cities with merchandise for certain sizes, or men's and kids' departments, upstairs
- Traditional security measures like product tagging and security cameras are sufficient
 - Need "greeters" in very few stores
 - Never allow one person to work in the store
- Little difficulty in recruiting and retaining employees
 - Stronger manager loyalty because of typically less competition for employees
 - Easier to recruit staff that live near the store

Tailors product selection

- Inner city customers are "more fashion conscious" than rural, suburban consumers
- Stocks different size selection based on customer demographics
 - "Fewer [women's] size 13 shoes in Hispanic and Asian neighborhoods and fewer size 5's in predominantly African American ones"
- Payless matches each new store to a "sister store" based on customer demographics

INDIGENOUS IC RETAILERS CAN BE SUCCESSFUL EVEN WITH INCREASING COMPETITION FROM NATIONAL STORES

Ashley Stewart

Identified market opportunity

Adapted store format and operations

Targeted product selection

Focused on employee training and retention

Connected with the community

Found that women's apparel retailers were severely underrepresented in the inner city

- Wanted to bring an upscale shopping experience to the inner city
 - "There was no place for a working woman to get a nice suit or a nice blouse to go out in"
- Grew exponentially through equity investment, strong demand, and lack of competition
 - 1995 5 stores
 - 2006 close to 200 stores located in urban areas from New York to Los Angeles
 - Looking to expand the number of stores throughout the United States

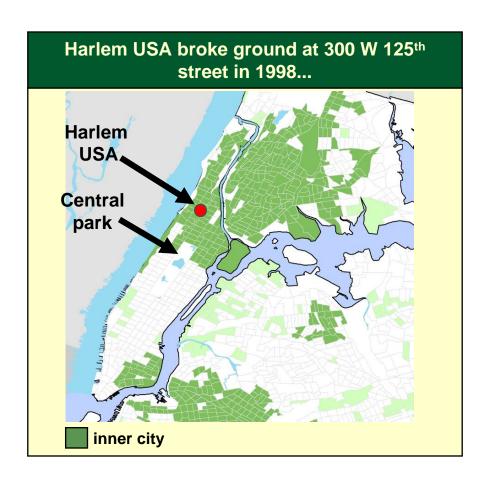
Reaches its core demographic through targeted product selection

- Specializes in "plus" sizes, catering to its core customer demographic
 - 50% of African American and 40% of Hispanic women wear "plus" sizes, versus only 30% of Caucasian women
- Success at building consistent brand image while micro-marketing to particular customer segments
 - The brand is an eclectic mix that is embraced by its fashion conscious clientele

Sees community involvement as key to success

- Organizes 300 to 350 fashion shows a year to raise money for the community
 - Free guerrilla marketing
 - Distribution of discount coupons drives business back to the store
- Community leaders drive business to the store through personal endorsements

INNER CITY RETAIL SITE DEVELOPMENT <u>Harlem</u>



and the upper Harlem-Bronx inner city retail sector has grown significantly since then				
1998	2003	Change		
1,556	1,622	4.2%		
543	565	4.1%		
25.5	25.6	0.3%		
60	63	4.2%		
Retail market				
3.7	4.1	11.5%		
5.2	5.9	13%		
37.5	46.8	25%		
	1998 1,556 543 25.5 60 3.7 5.2	1998 2003 1,556 1,622 543 565 25.5 25.6 60 63 3.7 4.1 5.2 5.9		

Source: Census 2003 Zip Code Business Patterns; ICIC Inner City Zip Code Definitions; Claritas, US Dept of Labor BLS, BCG analysis

⁽¹⁾ Retail sales data is for 1997 and 2002 in 2006 dollars

⁽²⁾ Median income from 2000 and 2005, and are both quoted in 2005 dollars

DEVELOPING INNER CITY RETAIL PROJECTS <u>Harlem</u>

Development step	Developer approach	
Site identification	Identified site early and pioneered development	"Was clear to me that there was a tremendous opportunity here. This was an area were new retail hadn't been built since the 20'syet this was not clear to most people"
Site assembly & acquisition	Exercised patience and persistence during initial development	"It took years to convince the city and other owners to sell to us, we were interested in this site since the mid-80's"
Retailer recruitment & approval	Selected retailers that filled unmet need	"The city didn't believe that retail could succeed at first. But we knew the unmet retail need was enormous – residents told us"
		"The community wanted certain retailers in their neighborhood"
Community approval	Built relationships with strong CDC	"Our favorable relationship with the Harlem Development Council (HDC) is what convinced the city to approve our deal"
		"HDC is apolitical, and a strong force in the community"
	Used community support to help with site assembly	"We bought most of the needed parcels but the city was being uncooperative with the last parcel – due to political infighting"
		"With help from the community, we convinced the city to sell"
Financing / incentives	Worked to find initial public financing assistance	"The initial subordinated loan from the Upper Manhattan Enterprise Zone (UMEZ) gave banks the commitment they needed to give us the rest of the financing"

Inner City Retail Development Implications

- The inner city represents a \$120B market for retailers, about ~5% percent of the US retail market
- There is an ~\$40B demand gap which means that there is still significant opportunity out there for retailers to enter the inner city
- Successful retailers and cities have recognized the opportunity and successfully pursued it
- There are valuable lessons from the front line on how to succeed in IC retail development
 - For retailers willingness to experiment, adapt format, product mix, and operations
 - For developers focus resources on IC, leverage community groups
 - For Cities clear hurdles for development, focus investment around targeted sites, develop comprehensive marketing plan

Inner City Economic Development The Role of Land and Land Development

 Shortage of sites for businesses and business expansion is a leading constraint to inner city economic development

ISSUES

- Getting land into productive use at reasonable cost
- Allocating and preserving land for retail, commercial, and industrial uses
- Enhancing the productivity of sites for business
 - Access
 - Parking
 - Infrastructure



• Brownfields development is on the front line of inner city revitalization