



SUPPORTING A NEW GENERATION OF ENTREPRENEURS:  
CREATING A NEW ECONOMY

***April 7, 2011***

***High-Impact Firms and Jobs in South Carolina***

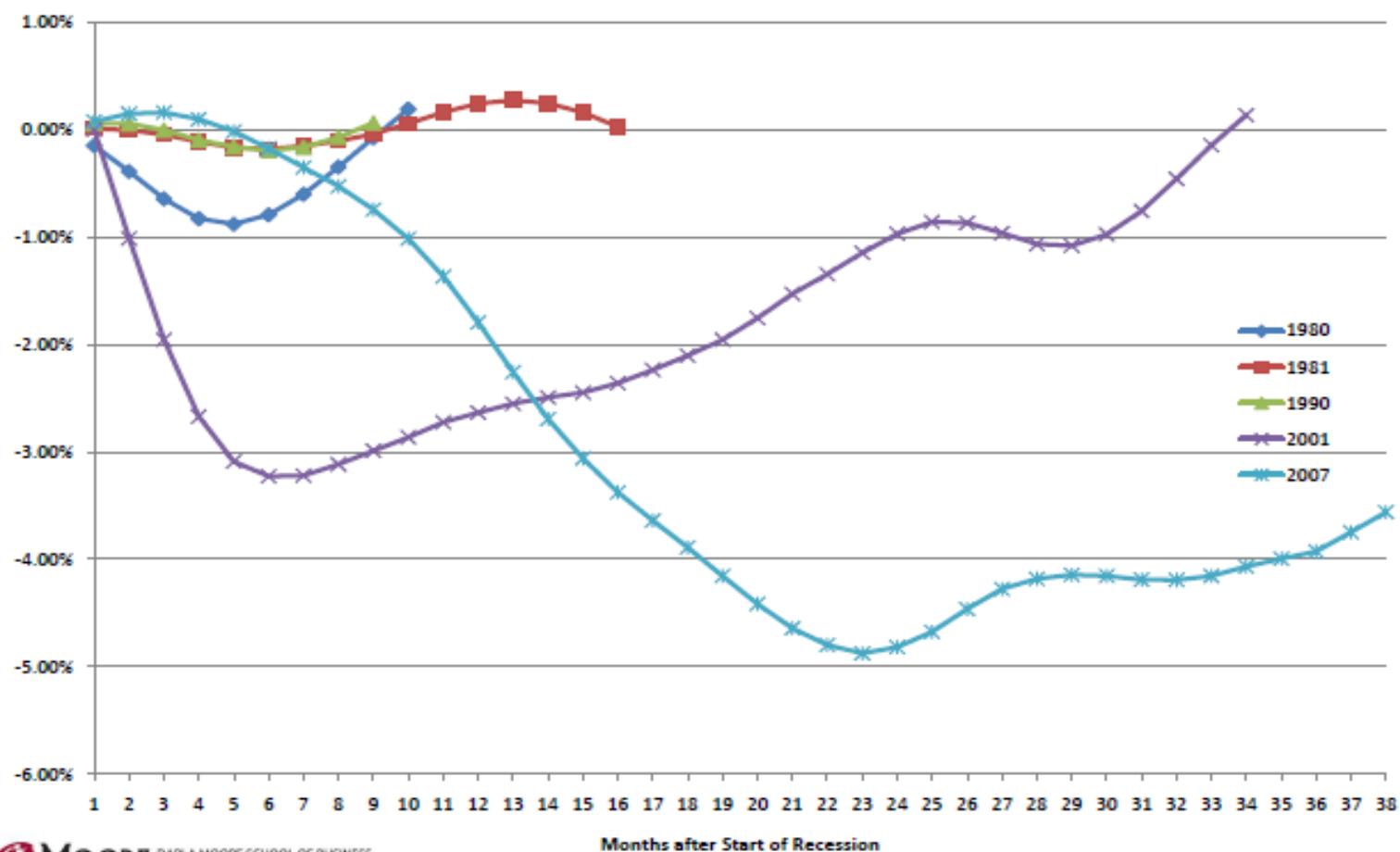
**Doug Woodward**  
**Professor of Economics**



# Theme: *Jobs, Jobs, Jobs*

1. Small businesses create jobs.
2. Entrepreneurs cultivate private business activity and jobs.
3. High-impact, local firms generate a high share of jobs.

## Percentage Change in SC Total Employment since Start of Recession



# Jobs Imperative

- Biggest challenge facing the state.
- Federal stimulus is over this year.
- Now up to private sector.

But what kinds of *private* firms  
create jobs?

# Saving Grace

- Private sector is dynamic
  - Creative destruction
- New businesses, entrepreneurs
- Business ecosystem evolving

# Business Ecosystem

- Firm Births
  - Entrepreneurs and employment creation
- Firm Survivability
  - Employment stability and expansion





# Buffalo









# Large and Small Business: No Conflict

- True: Buffalo like to get their own way (sometimes).
- No wonder: Can add 1000s of jobs
  - We want the jobs
  - Knock-on effects for small businesses

*Yet doesn't small businesses create most jobs?*

# What we know about small firms and jobs

Private businesses and entrepreneurs widely regarded as essential to regional economic growth.

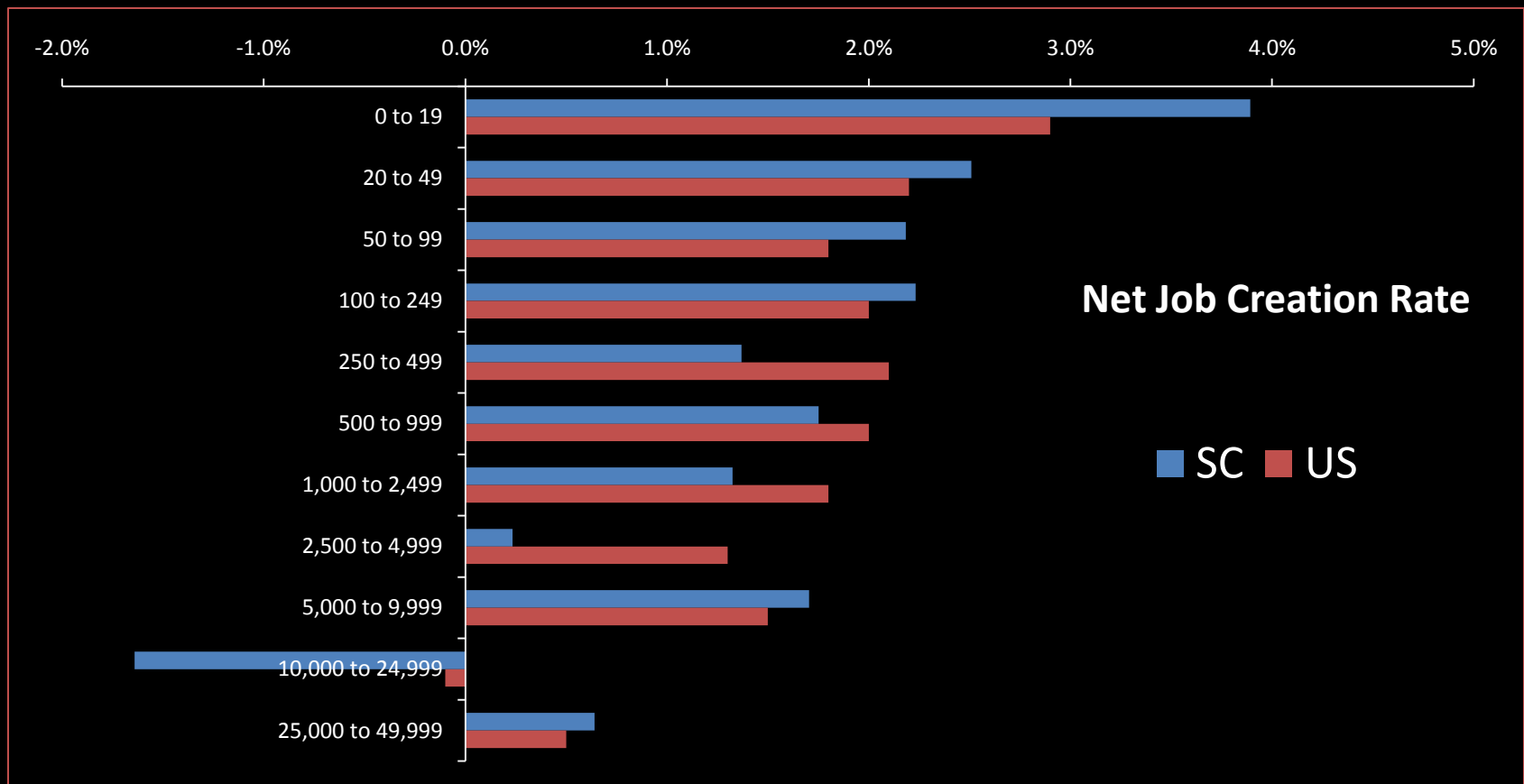
Small firms viewed as important generators of new jobs.

# Basic Facts on Small Firms and Jobs

- Small firms account for 26.3% of total employment in **South Carolina**.
  - *But 51% of all net employment gains in South Carolina.*
- Small firms account for 27.2% of total employment in the **United States** overall.
  - *Compared with 45% of net employment gains for the U.S overall.*

# Small Firm Size and Job Creation

South Carolina compares well to the U.S. in average net job creation rates, especially for small firms.





# Local Firms Matter Too

- Evidence that a strong local, small firm concentration leads to higher economic growth.
  - Higher productivity and flexibility to adapt to specific local changes in the environment.
  - Owners of businesses who reside in the community highly likely to have the interests of the community directly in mind.

# Local vs. Nonlocal Firms in South Carolina

- A local firm is headquartered in South Carolina.
- Local firms account for two thirds of total employment in South Carolina.

	Nonlocal	Local
Average Share of Employment	33.8%	66.2%
Average Share of Gross Job Creation	31.4%	68.6%
Average Share of Gross Job Destruction	31.7%	68.3%

# Another view of Business and Jobs: Gazelles and High-Impact Firms

- Gazelles defined by Professor David Birch (MIT)
  - rapid growth in revenue.
  - most are small and medium-sized.
- Expanded firm definition Professor Zoltan Acs (George Mason, SBA)
  - beyond gazelles, rapid revenue growth.
  - adjusted by employment size and growth.
- Professor Acs findings for high-impact firms:
  - High-impact firms represent a small share of all firms.
  - *but* account for most the private-sector net employment in the economy.
  - From 2002-2006 he found 2.5 percent of firms created the most jobs in South Carolina.



**Fast-running Cheetahs  
High-Impact Firms Create Jobs**



# Overview of Remaining Remarks

- Do high-impact firms generate most jobs in South Carolina?
- What are high-impact firms?
  - Industries, clusters?
  - Geographic concentration?
  - Age of firm?

# Local High-Impact Firms

- A high impact firm must:
  - double its sales in at least four years and
  - have an employment growth quantifier of at least two.
    - Job growth rate multiplied by its absolute change.
- Use 2004-08 to measure sales growth.
- Include only firms with local headquarters.
  - 95 percent of high-impact establishments are local



# High-Impact Local Firms and Jobs 2004-2008

	Total	Non-High Impact	High- Impact	High- Impact Share
Number of Firms (2004)	193,435	188,297	5,138	2.7%
Total Employment (2004)	1,807,061	1,755,594	51,467	2.8%
Gross Job Creation	454,000	402,875	51,125	11.3%
Gross Job Destruction	379,386	378,079	1,307	0.3%
Net Job Creation	74,614	24,796	49,818	66.8%

# Success of High-Impact Firms and Jobs

- The high-impact firm employment was just over 100,000 in 2008.
- About 51,500 was the 2004 job tally.
- In four years, from 2004 to 2008, the total high-impact employment about doubled.



# Examples from 2008

Company	City
CANAL INSURANCE COMPANY	GREENVILLE
USLC (Cloth Cutting, Bolting)	SPARTANBURG
COX INDUSTRIES (Furniture)	ORANGEBURG
K W ASSOCIATES (Beer Wholesale)	COLUMBIA
AMERICAN LAFRANCE SC (Ambulances)	LADSON
CAROLINA AUTO AUCTION INC	WILLIAMSTON
TOWER HOMES INC (Construction)	TAYLORS
FORCE PROTECTION INC (Military Vehicles)	LADSON
LINDE MTL HDLG N AMER CORP (Forklifts)	SUMMERVILLE
CONTRACT ENVIRONMENTAL SVCS	EASLEY
Q2 ADMINISTRATORS LLC (Medical Claims Service)	COLUMBIA

# High-Impact Firms Change

- Cheetah firms differ over time periods.
- Blue-Cross/Blue Shield and Sonoco were examples from previous periods.

# High-impact Industries

- Data cleansed
  - Some industries removed
    - Only private sector
    - No non-profit, religious institutions
    - No banks and utilities
- High-impact firms span many industries.

# Top Industries for High-Impact Firms

Industry	Employment 2008	Employment Share
Professional, Scientific, and Technical Services	11,230	11.09%
Administrative and Support Services	10,119	9.99%
Specialty Trade Contractors	9,392	9.27%
Food Services and Drinking Places	6,171	6.09%
Construction of Buildings	4,359	4.30%
Real Estate	4,310	4.26%
Merchant Wholesalers, Durable Goods	4,186	4.13%
Merchant Wholesalers, Nondurable Goods	3,480	3.44%
Ambulatory Health Care Services	3,026	2.99%
Social Assistance (Child and Adult Care Centers primarily)	3,017	2.98%
Repair and Maintenance	2,760	2.72%
Machinery Manufacturing	2,375	2.34%
Accommodation	2,194	2.17%
Heavy and Civil Engineering Construction	2,051	2.02%

# Traded Clusters and High-Impact Firms

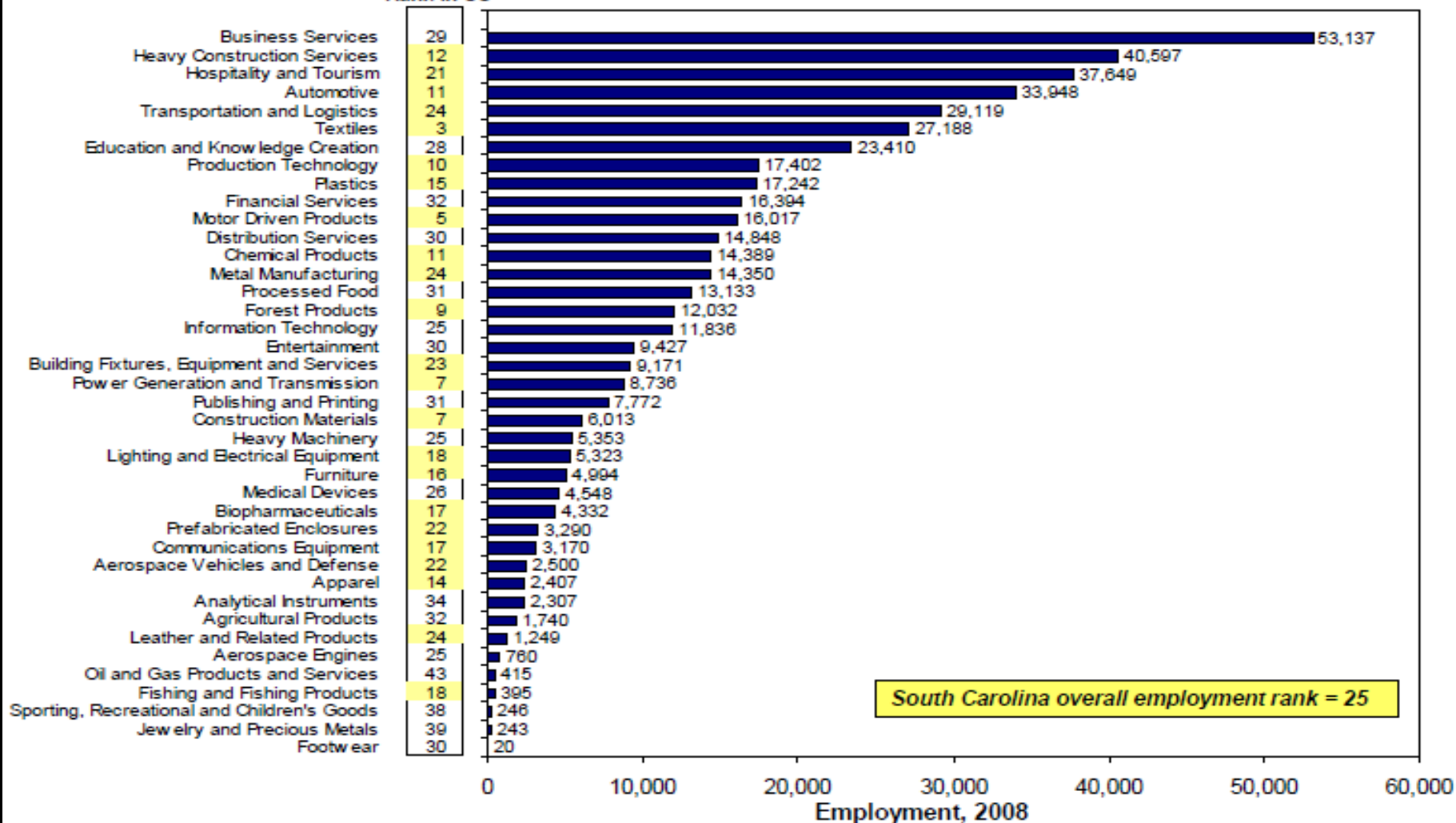
Do high-impact firms generate new sales from  
*outside* South Carolina?

- About 48% of total high-impact employment is found in traded sectors identified by the Porter Cluster Mapping Project.
- Mostly heavy construction services and business services.

# Composition of the South Carolina Economy

## Employment by Traded Cluster, 2008

Rank in US



Note: Ranks are among the 50 US states plus the District of Columbia.

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

NOA 2011 - South Carolina

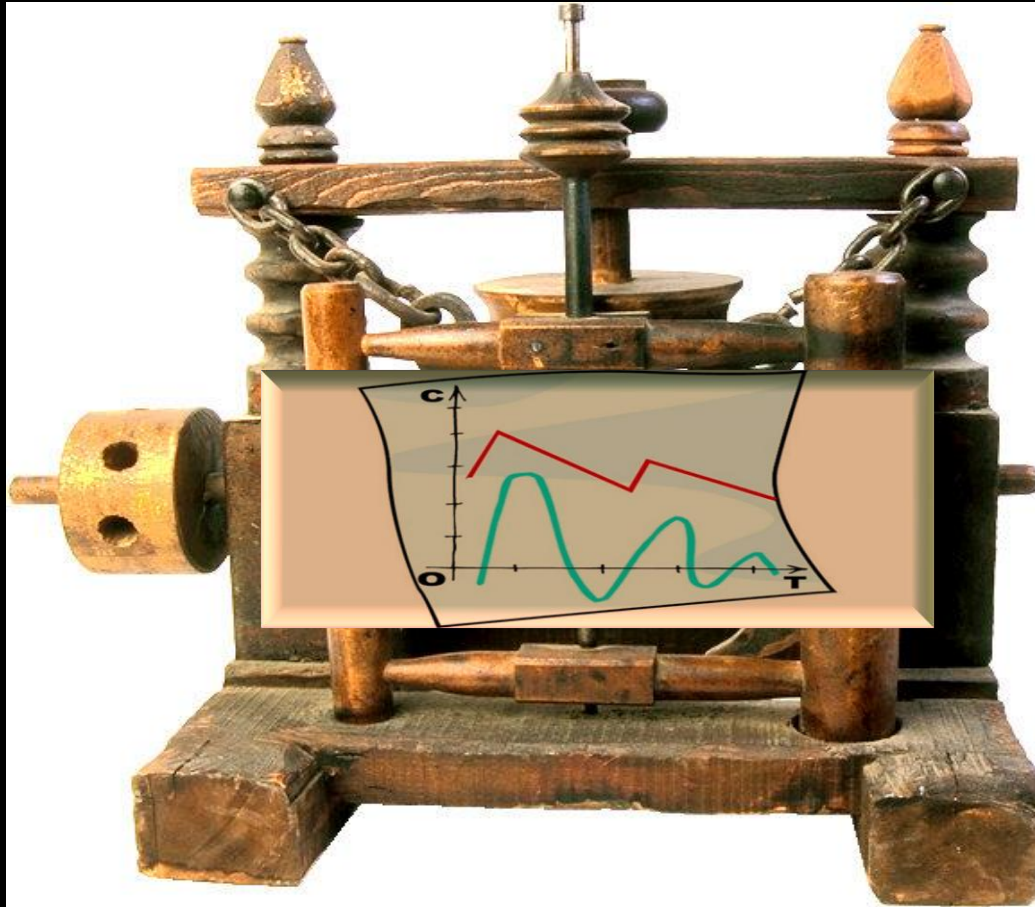
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# What about Small Business and High-Impact Firms?



Torture data long enough ...



*it will confess.*

# Employment Change by Employment Size (2004-2008)

Firm Employment Size	Employment Change	
	Non-High Impact	High Impact
1-19	126,766	20,389
20-49	-2,858	9,730
50-99	-11,240	4,925
100-249	-19,226	4,995
250-499	-23,287	3,994
500-999	-21,012	5,785
1,000-2,499	-23,397	0
2,500-4,999	-19,611	0
5,000-9,999	-4,515	0
10,000-25,000	23,176	0

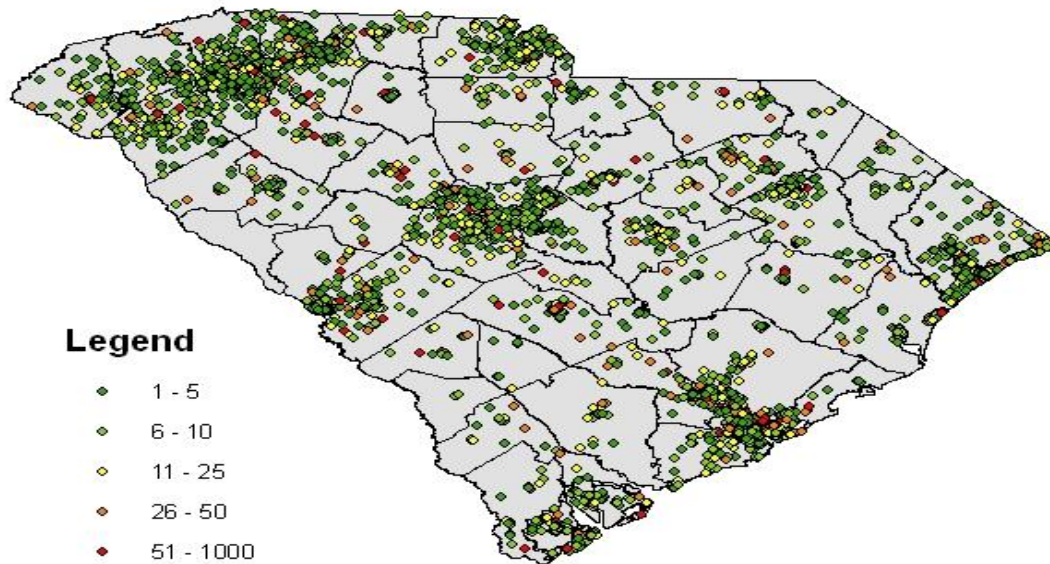
# Confession: Larger Cheetahs are Strong

- Larger high-impact firms create a lot of jobs relative to their overall employment size.
- Not as many firms, but the 250-1,000 size adds a lot of jobs

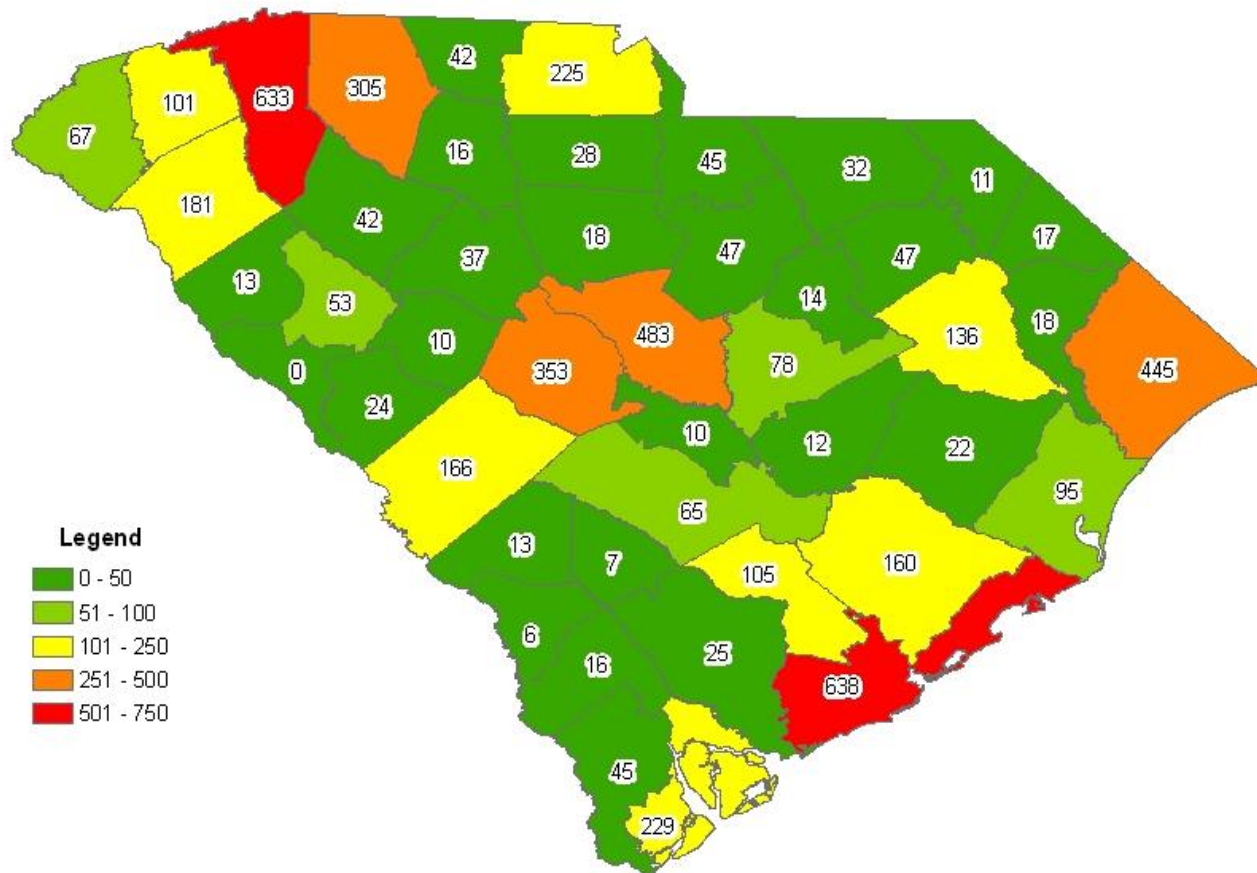
# High-Impact Firm Geography in South Carolina

## Urban!

## SC High Impact Firms Employment 2008



## High Impact Firms 2004-2008

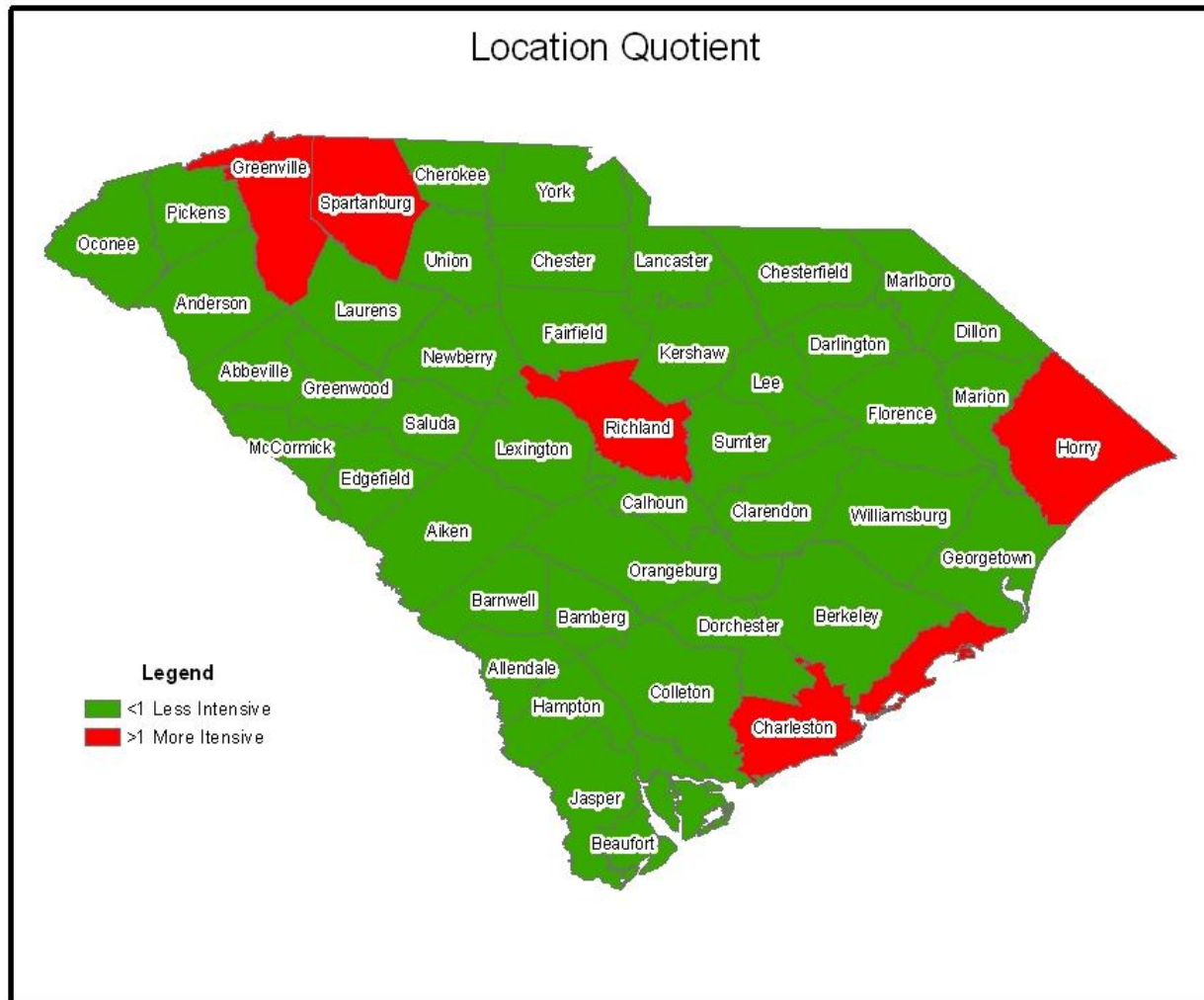


# S.C. County Geographic Concentration

- What areas get *more than* their expected share of high-impact firms?
- Intensity: The next slide shows the share of county high-impact employment (2008) over the county share of total private employment.



# High-Impact Firm Intensity



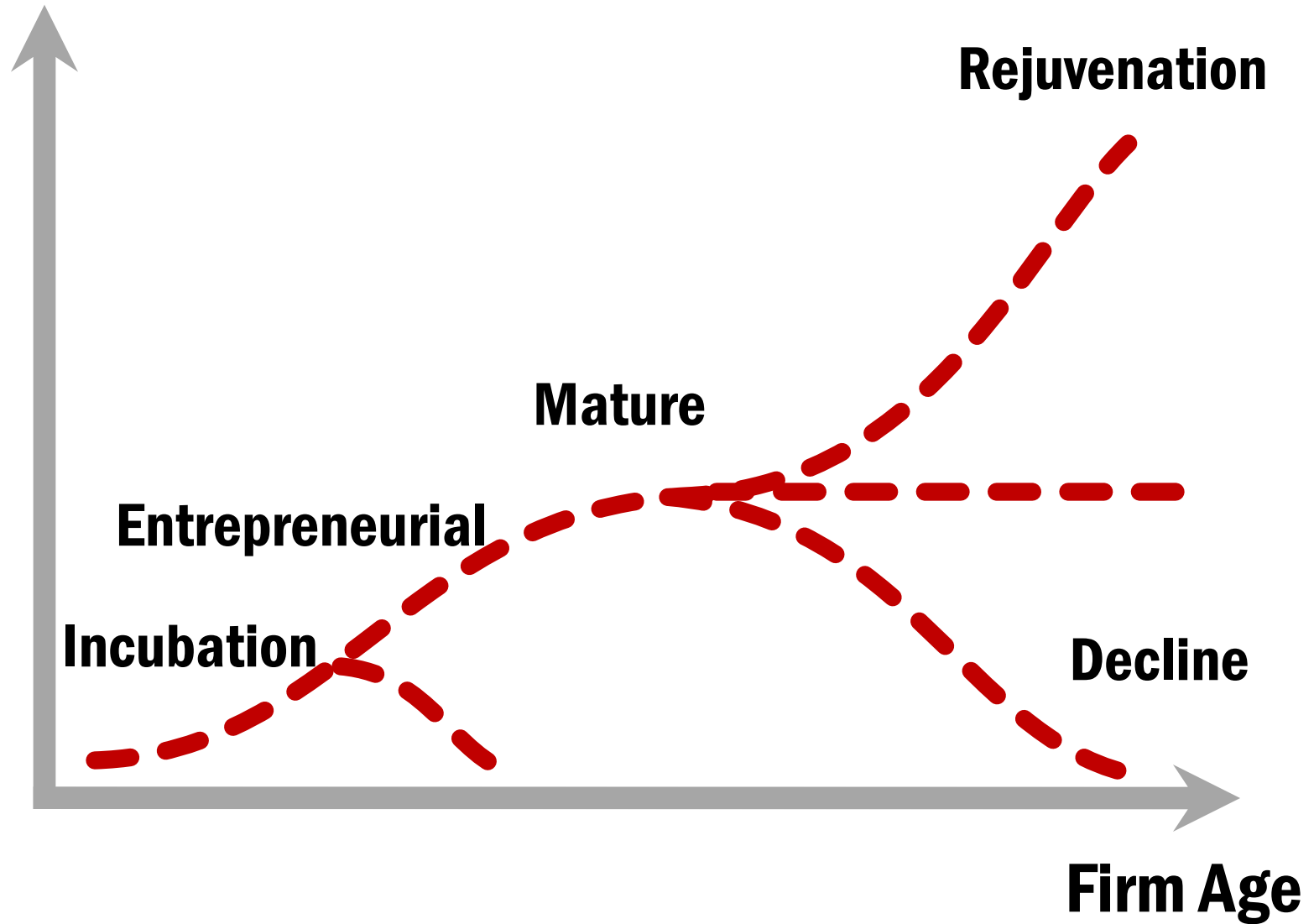
# High Impact and Age

- High-impact firms add jobs across the firm age classes.
- High-impact firms more reliable job generators as they age.

# High-Impact Net Employment by Firm Age (2004-2008)

	Net Change
	High-Impact Firms
Births	
0-1 years	<b>12600</b>
2-3 years	<b>7775</b>
4-6 years	<b>7244</b>
7-9 years	<b>5136</b>
10-13 years	<b>4072</b>
14-18 years	<b>4514</b>
>19 years	<b>8477</b>

# Firm Employment and Sales



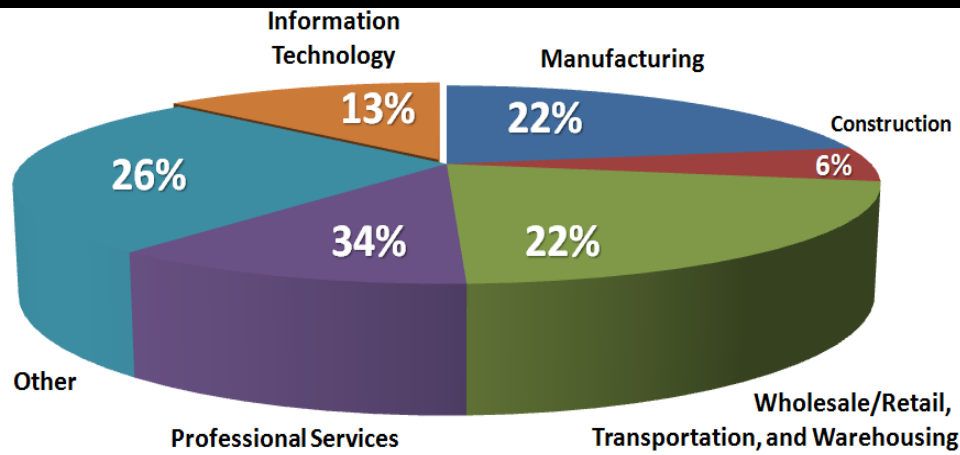
# South Carolina is Not “Scaling Up” Firms At the Same Rate as Neighboring States

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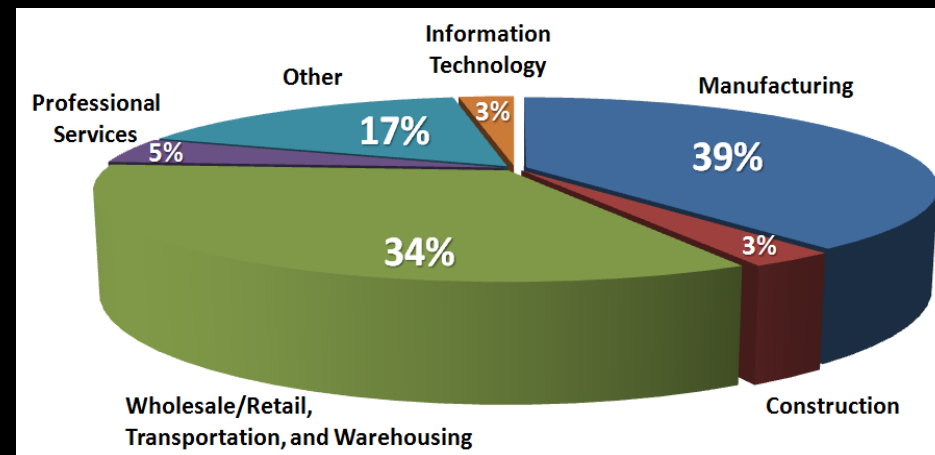
## Since 1984:

- Only 11 companies have been established in South Carolina that now have \$100 million-plus in annual sales.
- Only 42 now have \$25 million or more in annual sales.
- South Carolina’s ratio of these of these \$25 million-plus firms is much lower than in neighboring states.

# Percentage of Revenue by Industry Segment (For Companies Established After 1984) That Now Have *\$25 Million or More in Annual Sales*



**FL-GA-NC-VA**



**SOUTH CAROLINA**

**SOURCE:** Compiled from Hoover's company database

# Possible Reasons for Firm Survival and Growth

## 1. Urbanization

- Specialized services
- Specialized labor pools
- Existing headquarters

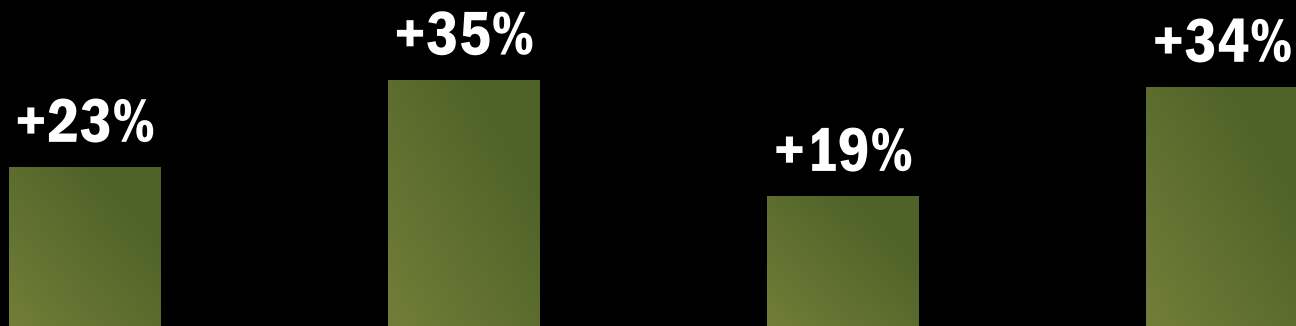
## 2. Clusters

- Spatial concentration of related businesses
- High productivity and innovation



# European Study of Clusters

**With increased numbers of  
neighbouring firms in the same sector.**



# Summary of Key Findings

- Small business create a large share of jobs.
- A select number of local, high-impact firms create many new jobs in the state.
- High-impact firms spread across industry sectors.
- High-impact firms are highly urban.
- About half are in traded sectors of the economy.
- South Carolina is not retaining local, big revenue generating firms.

# Scaling-Up Challenge

South Carolina is not seeing its small firms that grow into large firms.

❖ \$25 million-plus in sales.

South Carolina is comparably weak in scaling up companies in information technology and professional services.

Other states seem to have an advantage because they have more existing anchor firms and clusters, which have “spun out” new companies or produced engineers and executives who started new firms.

# Acquisition Challenge

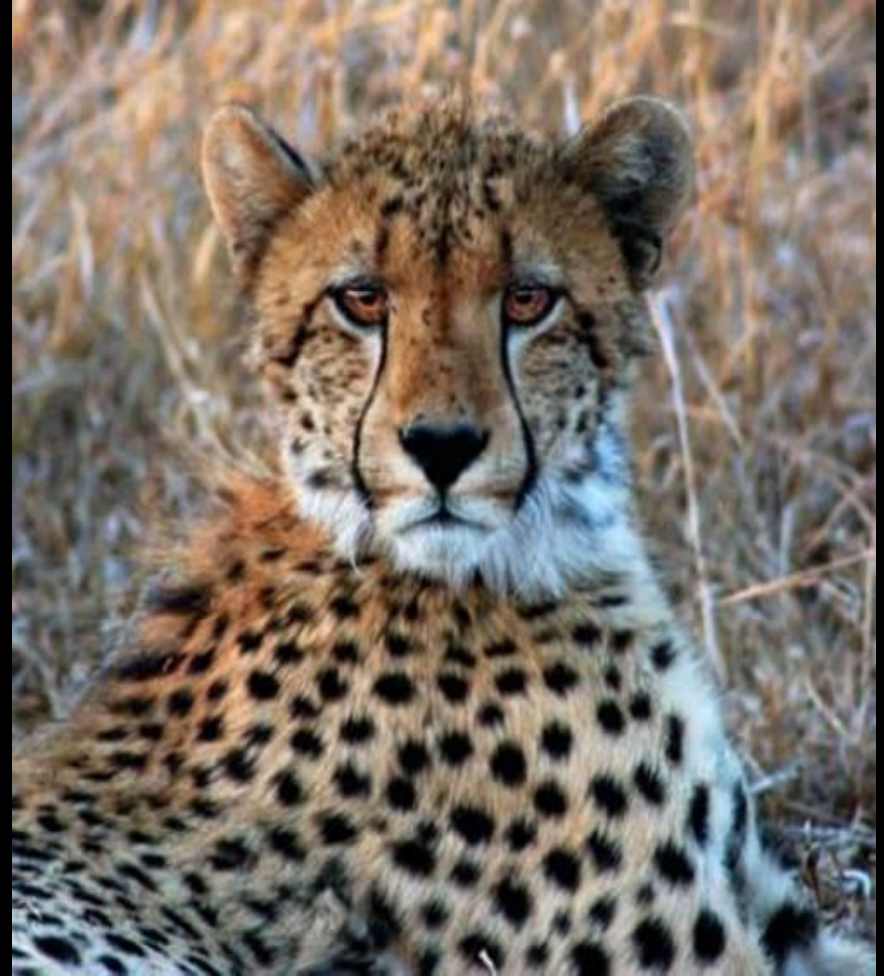
- SC has fast growing companies (i.e. professional services) like ATD, Scansource, Continental Insurance etc. being acquired by larger firms headquartered in larger metro areas.
  - Force Protection, Canal Insurance, etc. be next?
- Will higher paying HQ jobs and the related services (banking, legal) move away?
- We need examine the acquisition activity of SC high-impact and other firms scaling up over time.

# Next Study: Cougars





# Thank you!



# For More Information:

You can access the presentation, final study, and a wealth of data on our web site (Google “Moore School Division of Research”):

**Division of Research, Moore School of Business**

**South Carolina Economic Development Data  
Clearinghouse**



# ***Notes: National Establishment Time-Series (NETS) Data Used for Analysis***

- ✓ Detailed data for South Carolina business establishments (1989-2008).
- ✓ Snapshots of firm ecosystem taken every year.
- ✓ An annual census of U.S. business sales and employment.
- ✓ Allows us to understand the long-term drivers of growth and employment in South Carolina or any sub-state region.

# Notes: High-Impact Firm Definition

- ACS definition of an high-impact company (HIC) is:
  - “an enterprise whose sales have at least doubled over the most recent four-year period and which has an Employment Growth Quantifier of two or greater over the same period.”
  - An Employment Growth Quantifier is the product of a firm’s absolute change and percent change in employment.
- Our definition of HIC is slightly different from ACS. Instead of calculating the changes on sales and employment (absolute and relative) using the end points of a four year-period we use the average of the changes calculated over the latest 4 available 4-year periods. By doing this we smooth the data and hope to avoid problems that have to do with errors and delays on the reporting of employment and sales. For example, to identify HICs in the 94-98 period ACS computes the changes between the yearly values of 98 and 94. We do the same but (if available) we also compute the changes between 93-97, 92-96 and 91-95 and average these changes.
- So our definition can be loosely described as:
  - “an enterprise whose sales have on average at least doubled over the most recent four 4-year periods and which has an average Employment Growth Quantifier of two or greater over the same period.”
- Our definition of firm includes only the sum of all establishments located in S.C.
- We exclude Non-Profit Organizations, Public Administration, Religious, Grantmaking, Civic, Professional, and Similar Organizations, Utilities, Banks and Credit Unions, Educational Services, Hospitals, Offices of Physicians, Offices of Dentists and Offices of Other Health Practitioners