

# *The Economic Impact of SC Tech*

*Exploring the Size and Scope of the Tech Cluster in the Palmetto State*



*Joseph Von Nessen, Ph.D.*

*Research Economist*

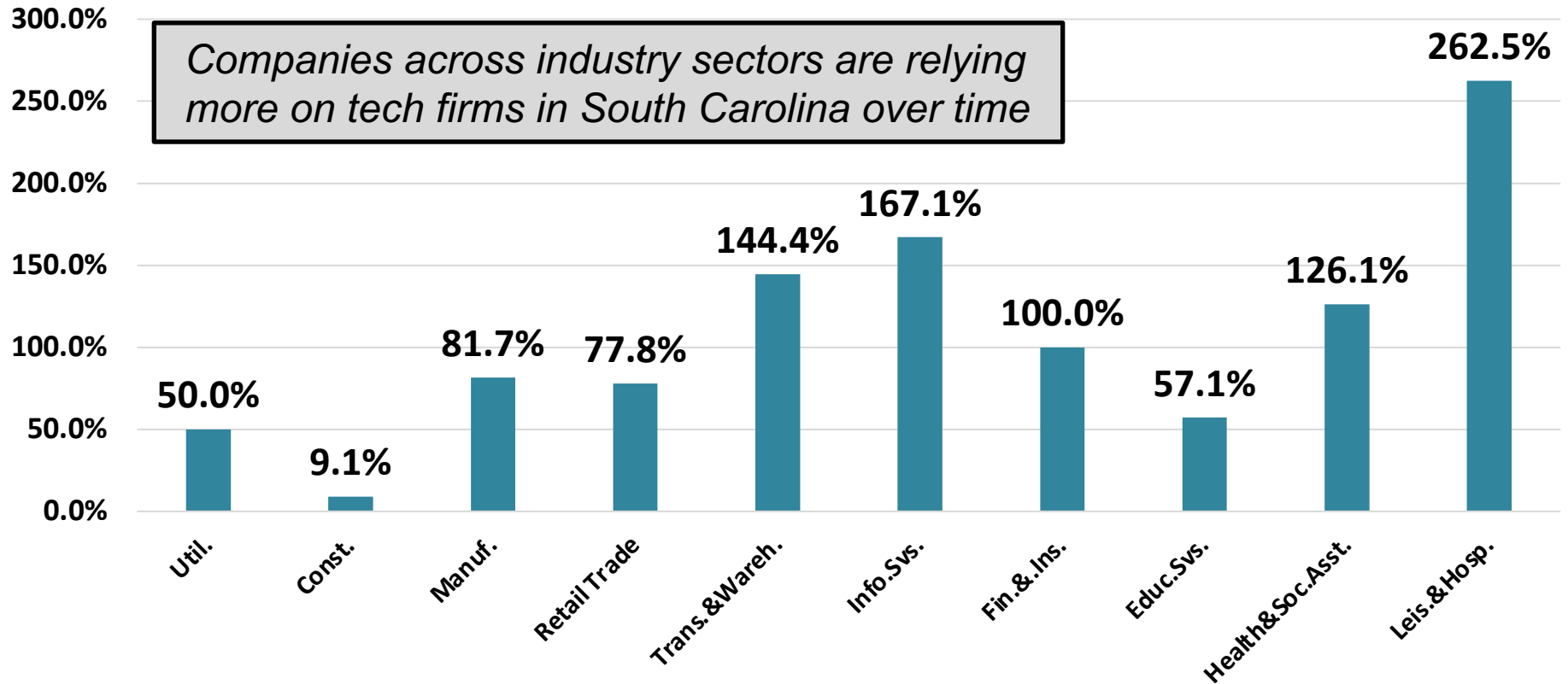
*December 2020*

[joey.vonnessen@moore.sc.edu](mailto:joey.vonnessen@moore.sc.edu)

*The Tech Cluster is challenging to define even as it permeates most of the state's economy*



# Pct. Increase in Reliance on Tech Firms by S.C. Industry: 2019 vs. 2010



# *Establishing the Size and Scope of the S.C. Tech Sector*

*Tech Firms vs. Tech Workers*

*Tech  
Workers*

*Non-Tech  
Workers*



*Tech Firms*

*Tech  
Workers*

*Non-Tech  
Workers*



*Non-Tech Firms*

*Tech  
Workers*



*Non-Tech  
Workers*



*Tech Firms*

*Tech  
Workers*



~~*Non-Tech  
Workers*~~



*Non-Tech Firms*

# *Three Components of SC Tech*

→ *Tech Workers Employed in Tech Firms*

→ *Non-Tech Workers Employed in Tech Firms*

→ *Tech Workers Employed in Non-Tech Firms*

## *S.C. Industries with Largest Concentrations of Tech Occupations*

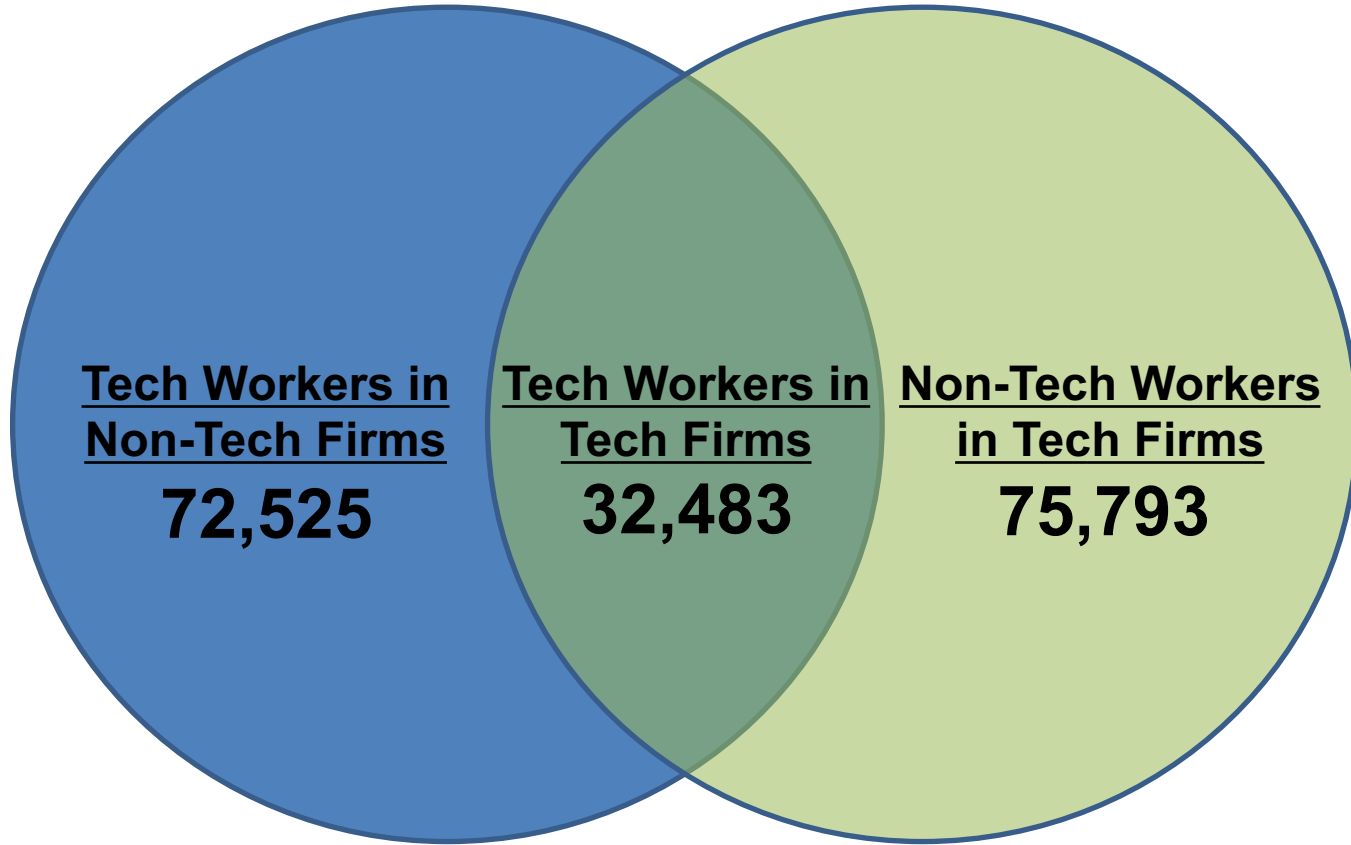
Industry	Pct. Emp. in Tech Occup.
Telecommunications (517)	31.7%
Computer and Electronic Product Manufacturing (334)	30.3%
Other Information Services (519)	21.2%
Data Processing, Hosting, and Related Services (518)	21.0%
Publishing Industries (except internet) (511)	20.8%
Broadcasting (except internet) (515)	17.0%
Motion Picture and Sound Recording Industries (512)	12.6%
Professional, Scientific, and Technical Services (541)	12.6%
Transportation Equipment Manufacturing (336)	12.4%
Electrical Equipment, Appliance, and Component Mfg. (335)	11.4%
Utilities (221)	10.9%



# Largest S.C. Tech Occupations

SOC Code	SC Employment (2019)
Computer User Support Specialist (15-1232)	8,240
Computer Systems Analysts (15-1211)	7,650
Industrial Engineers (17-2112)	7,490
Network and Computer Systems Admin. (15-1244)	6,100
Mechanical Engineers (17-2141)	5,890
Telecommunications Equip. Install & Repair (49-2022)	3,800
Computer and Information System Managers (11-3021)	3,460
Computer Programmers (15-1251)	2,850
Computer Network Support Specialists (15-1231)	2,250
Electrical Engineers (17-2071)	2,250
Computer Numerically Controlled Tool Operators (51-9161)	2,050

Source: BLS Occupational Employment Statistics, May 2019

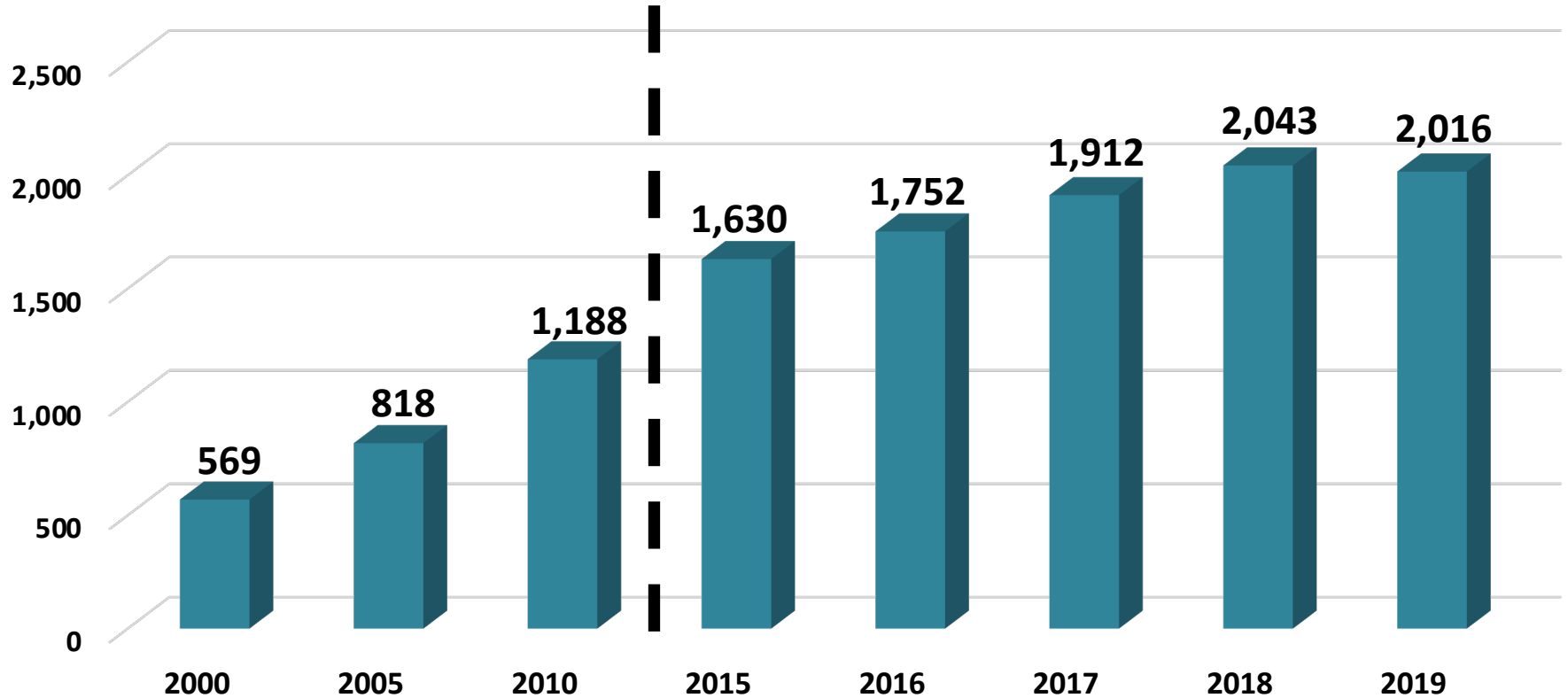


Total Tech Workers  
**105,008**

Total Workers in Tech Firms  
**108,276**

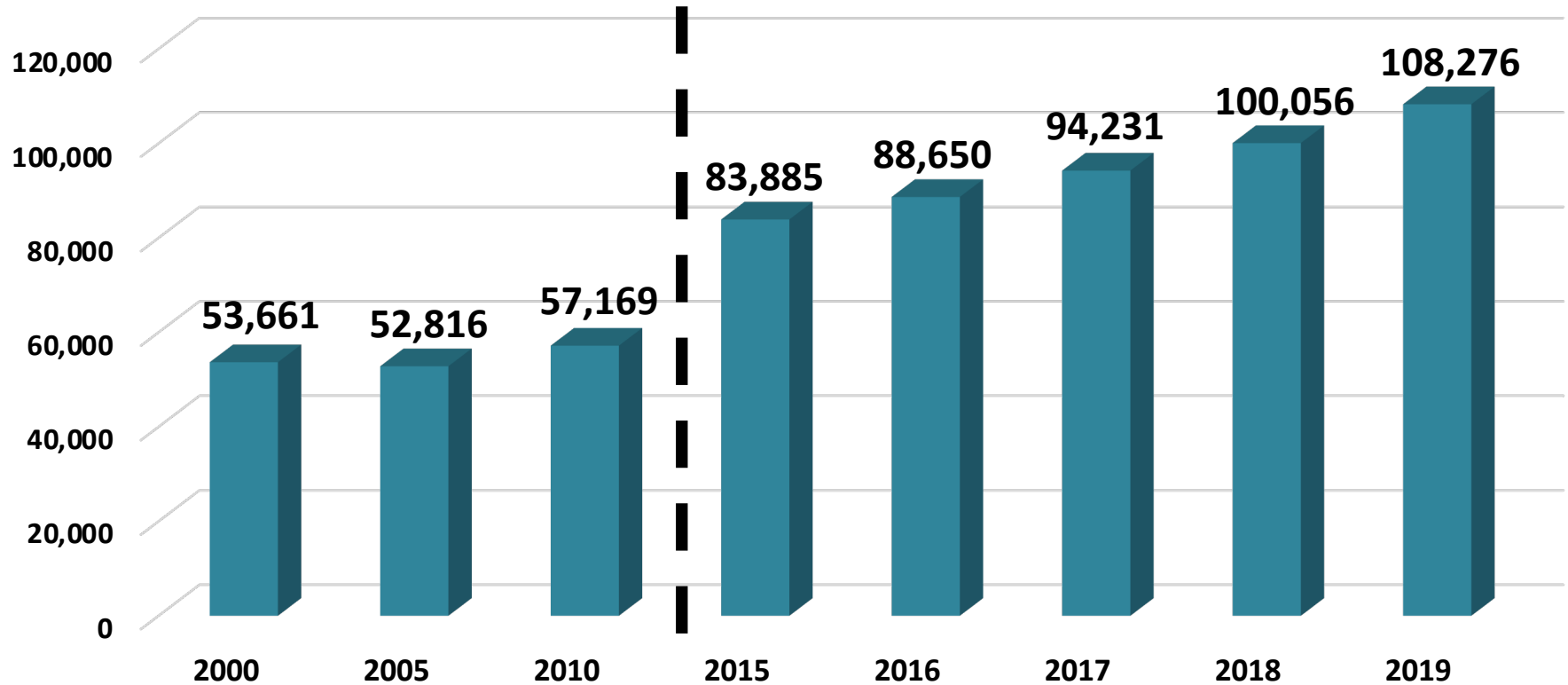
Total Employment of S.C. Tech  
**180,801**

# *A Growing Number of S.C. Tech Firms*

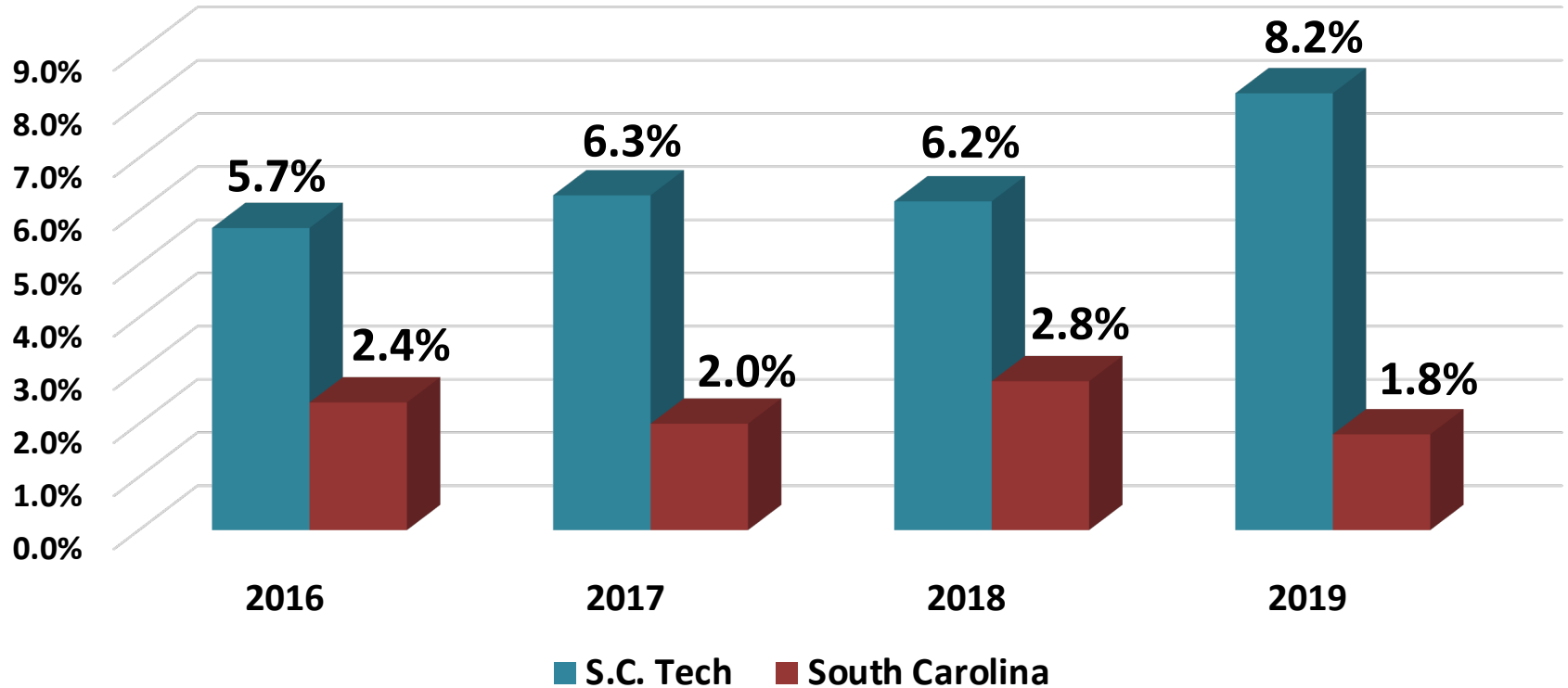


Source: D&B and S.C. Council on Competitiveness

# Increasing Employment Among S.C. Tech Firms



# Employment Growth Among S.C. Tech Firms



Source: D&B and BLS, Quarterly Census of Employment and Wages Annual Avg.

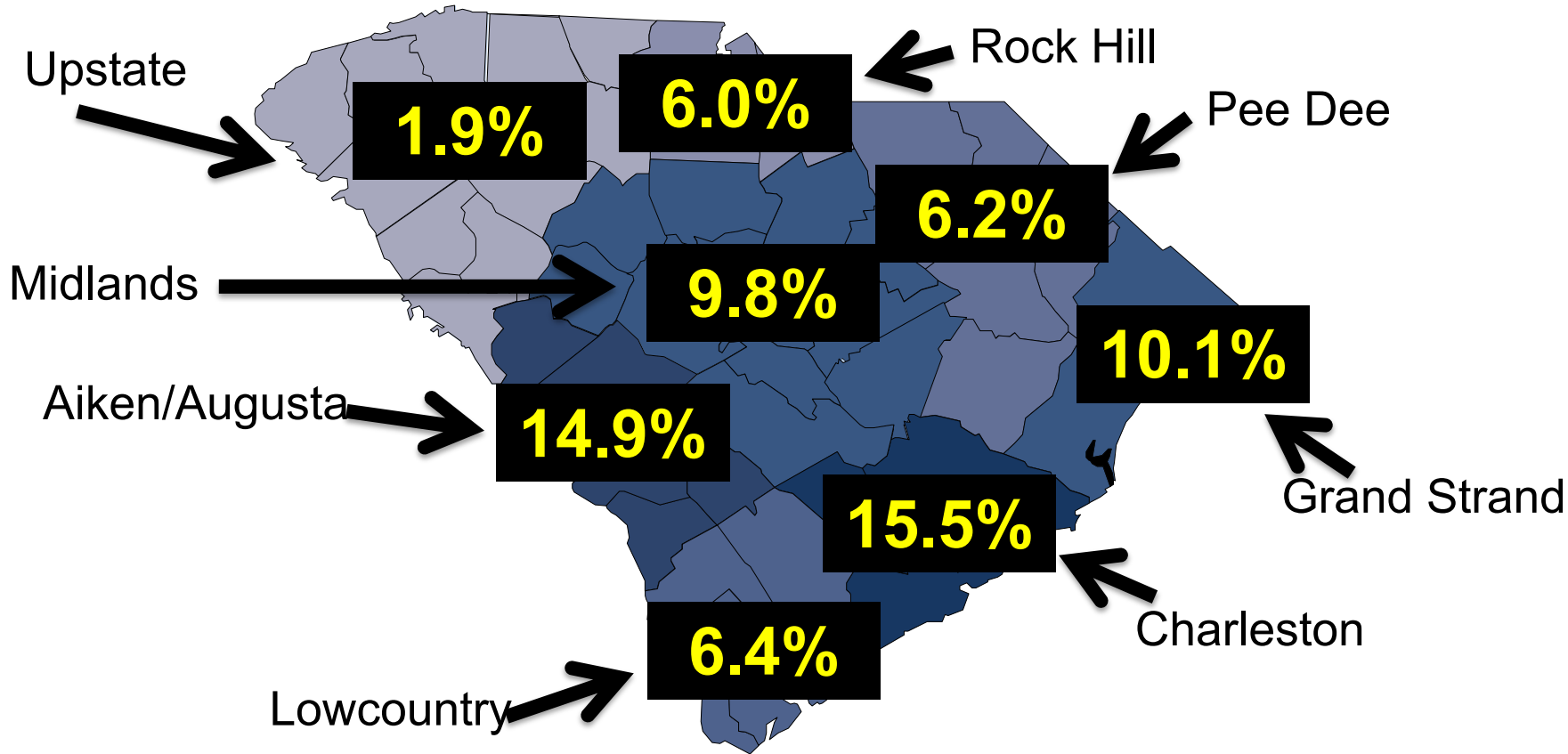
# Number of Firms by Line of Business (2019)

Line of Business	# of Firms	Percent of Firms
Custom Computer Programming Services	214	10.6%
Computer Related Services	129	6.4%
Freight Transportation Arrangement	98	4.9%
Computer Integrated Systems Design	97	4.8%
Colleges and Universities	91	4.5%
Telephone Communication, Except Radio	83	4.1%
Radiotelephone Communication	71	3.5%
Computer and Software Stores	71	3.5%
Computers, Peripherals, and Software	68	3.4%
Commercial Physical Research	65	3.2%

# Employment Growth by Line of Business (2019)

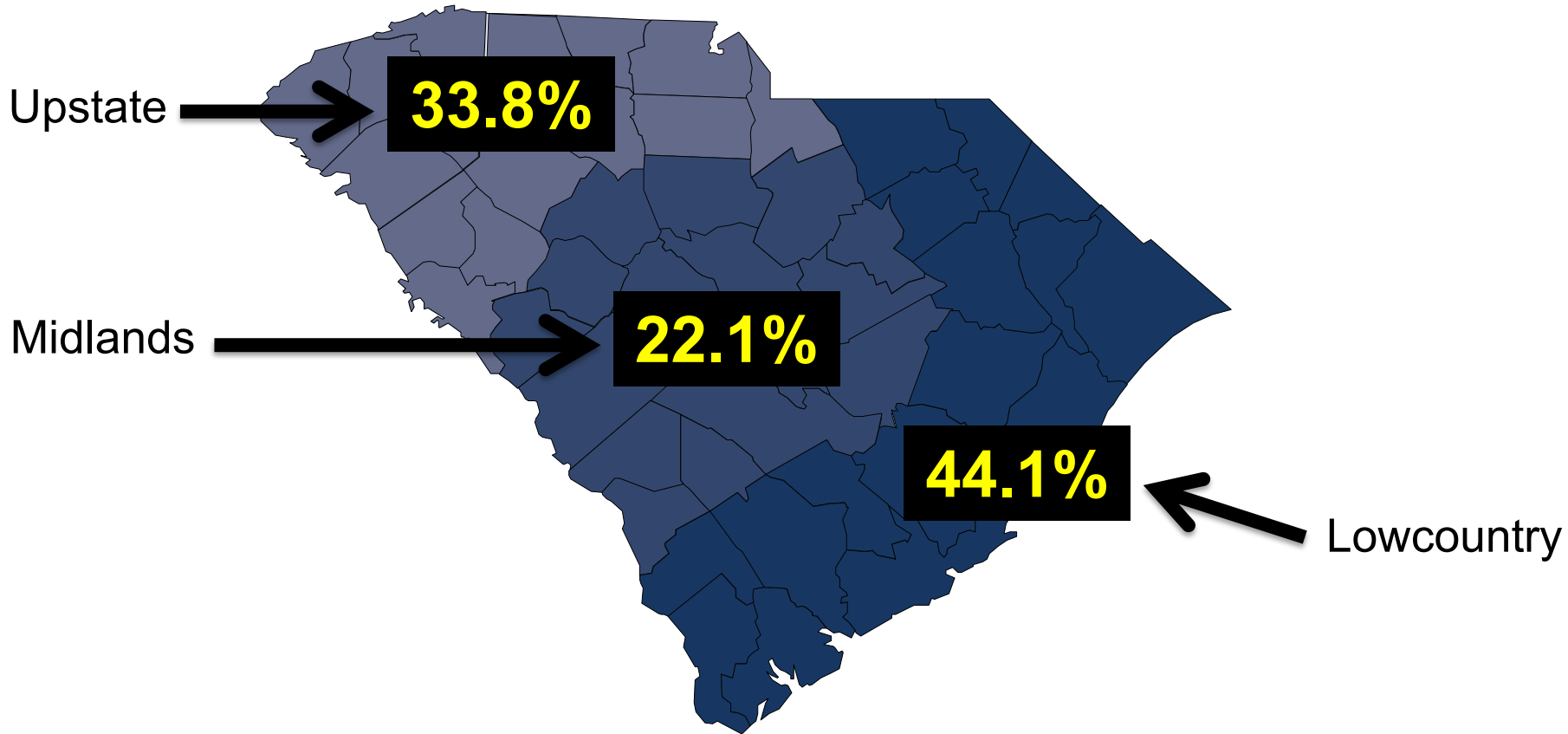
Line of Business	2018 Employment	2019 Employment	Change
Aircraft Engines and Engine Parts	2,521	4,948	2,427
Computer Peripheral Equipment	111	612	501
Marine Cargo Handling	447	808	361
Freight Transportation Arrangement	3,298	3,655	357
Electric Apparatus Equipment	3,105	3,398	293
Business Consulting, Other	132	315	183
Computer Maintenance Repair	204	315	111
Aircraft Parts and Equipment	792	852	60
Chemical Allied Products	867	925	58
Commercial Physical Research	345	369	24

# Average Annual S.C. Tech Employment Growth by Region





# *Pct. of Total Tech Employment by Region*



# *The Annual Economic Impact of S.C. Tech*

**Economic  
Output  
*\$89.0 Billion***

**Job  
Creation  
*180,801***

**Labor  
Income  
*\$14.3 Billion***

*→ S.C. Tech jobs pay an average annual wage of \$78,977, representing a 75% wage premium over the average S.C. job*