

**2017-2018**

**HOUSE  
APPROPRIATIONS –  
INFORMATION  
TECHNOLOGY**

**MINUTES**



# Appropriations, Information Technology

Committee Chair: Representative Saine

Committee Clerk: Elise Yost



# HOUSE COMMITTEE ON APPROPRIATIONS, INFORMATION TECHNOLOGY

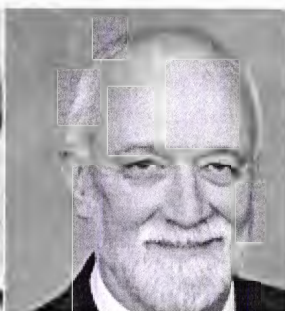
2017-2018 SESSION



**Rep. Jason Saine,  
Chair**



**Rep. Gale Adcock**



**Rep. John Autry**



**Rep. Hugh Blackwell**



**Rep. Kyle Hall**



**Rep. Jon Hardister**



**Rep. Craig Horn**



**Rep. John Torbett**



**Rep. Brian Turner**



**HOUSE COMMITTEE ON APPROPRIATIONS, INFORMATION TECHNOLOGY**  
**2017-2018 Session**

<b><u>MEMBER</u></b>	<b><u>ASSISTANT</u></b>	<b><u>PHONE</u></b>	<b><u>OFFICE</u></b>	<b><u>SEAT</u></b>
<b>Saine, Jason, Chairman</b>	Elise Yost	733-5782	1326	26
<b>Adcock, Gayle</b>	Suzanne Smith	733-5602	1213	119
<b>Autry, John</b>	Tina Riley	715-0706	1019	115
<b>Blackwell, Hugh</b>	Dixie Riehm	733-5805	541 LOB	102
<b>Hall, Kyle</b>	Cameron Dawson	733-5609	536 LOB	78
<b>Hardister, Jon</b>	Jayne Nelson	733-5191	638 LOB	39
<b>Horn, D. Craig</b>	Erin Wilson	733-2406	305 LOB	13
<b>Torbett, John</b>	Viddia Torbett	733-5868	538 LOB	41
<b>Turner, Brian</b>	Tristine Johnson	715-3012	1209	120





**Corrected #1: House Bill 254 added to agenda**

**NORTH CAROLINA HOUSE OF REPRESENTATIVES  
COMMITTEE MEETING NOTICE  
AND  
BILL SPONSOR NOTIFICATION  
2017-2018 SESSION**

You are hereby notified that the **House Committee on Appropriations, Information Technology** will meet as follows:

**DAY & DATE:** Wednesday, March 8, 2017

**TIME:** 11:00 AM

**LOCATION:** 544 LOB

**COMMENTS:** Mr. Brooks Raiford, CEO of the North Carolina Technology Association, will be presenting on the state of the technology industry in North Carolina.

The following bills will be considered:

<b>BILL NO.</b>	<b>SHORT TITLE</b>	<b>SPONSOR</b>
HB 254	Surplus Computers for Low-Income Students.	Representative Saine

Respectfully,

Representative Jason Saine, Chair

I hereby certify this notice was filed by the committee assistant at the following offices at 3:09 PM on Tuesday, March 07, 2017.

\_\_\_\_ Principal Clerk  
\_\_\_\_ Reading Clerk – House Chamber

Stephen Wiley (Committee Assistant)



**House Committee on Appropriations, Information Technology**  
**Wednesday, March 8, 2017 at 11:00 AM**  
**Room 544 of the Legislative Office Building**

**MINUTES**

The House Committee on Appropriations, Information Technology met at 11:00 AM on March 8, 2017 in Room 544 of the Legislative Office Building. Representatives Adcock, Autry, Blackwell, K. Hall, Hardister, Horn, Saine, Torbett, and B. Turner attended.

Representative Jason Saine, Chair, presided.

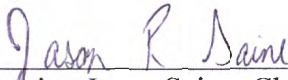
The following bills were considered:

**HB 254 Surplus Computers for Low-Income Students. (Representative Saine)**

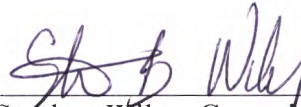
The bill was displaced.

Mr. Brooks Raiford of the North Carolina Technology Association was recognized to present on the state of North Carolina's Information Technology infrastructure.

The meeting adjourned at 11:45 AM.



\_\_\_\_\_  
Representative Jason Saine, Chair  
Presiding



\_\_\_\_\_  
Stephen Wiley, Committee Clerk



**NORTH CAROLINA HOUSE OF REPRESENTATIVES  
COMMITTEE MEETING NOTICE  
AND  
BILL SPONSOR NOTIFICATION  
2017-2018 SESSION**

You are hereby notified that the **House Committee on Appropriations, Information Technology** will meet as follows:

**DAY & DATE:** Thursday, May 25, 2017

**TIME:** 10:00 AM

**LOCATION:** 1425 LB

**COMMENTS:** Information Technology provisions of the budget will be heard.

Respectfully,

Representative Jason Saine, Chair

I hereby certify this notice was filed by the committee assistant at the following offices at 6:44 PM on Wednesday, May 24, 2017.

\_\_\_\_ Principal Clerk  
\_\_\_\_ Reading Clerk – House Chamber

Stephen Wiley (Committee Assistant)



**House Committee on Appropriations, Information Technology**  
**Thursday, May 25, 2017 at 10:00 AM**  
**Room 1425 of the Legislative Building**

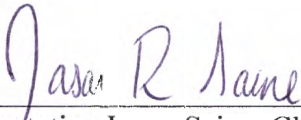
**MINUTES**

The House Committee on Appropriations, Information Technology met at 10:00 AM on May 25, 2017 in Room 1425 of the Legislative Building. Representatives Adcock, Autry, Blackwell, K. Hall, Hardister, Horn, Saine, Torbett, and B. Turner attended.

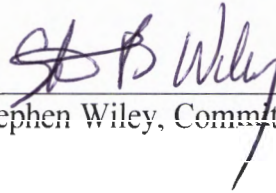
Representative Jason Saine, Chair, presided.

A discussion of the Information Technology provisions of Senate Bill 257 was held.

The meeting adjourned at 10:37 AM.



Representative Jason Saine, Chair  
Presiding



Stephen Wiley, Committee Clerk





**Ann Luck (House Legislative Assistant's Office)**

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**From:** Laura Bone (House Legislative Assistant's Office)  
**Sent:** Monday, June 04, 2018 01:57 PM  
**To:** Laura Bone (House Legislative Assistant's Office)  
**Subject:** <NCGA> House Appropriations, Information Technology Committee Meeting Notice for Tuesday, June 05, 2018 at 11:00 AM  
**Attachments:** Add Meeting to Calendar\_LINC\_ics

**NORTH CAROLINA HOUSE OF REPRESENTATIVES  
COMMITTEE MEETING NOTICE  
AND  
BILL SPONSOR NOTIFICATION  
2017-2018 SESSION**

You are hereby notified that the **House Committee on Appropriations, Information Technology** will meet as follows:

**DAY & DATE:** Tuesday, June 5, 2018

**TIME:** 11:00 AM

**LOCATION:** 544 LOB

**COMMENTS:** The House Appropriations IT Committee will be meeting along with the Senate Appropriations on General Government and IT to hear the "State of the Industry Report" by Brooks Raiford of NC TECH. Secretary and State Chief Information Officer for the NC Department of Information Technology Eric Boyette will also be present. There are no bills in the House Appropriations IT Committee and there will be no votes taken. This is a presentation only.

Respectfully,

Representative Jason Saine, Chair

I hereby certify this notice was filed by the committee assistant at the following offices at 1:56 PM on Monday, June 04, 2018.

\_\_\_\_ Principal Clerk  
\_\_\_\_ Reading Clerk – House Chamber

Laura Bone (Committee Assistant)



**House Committee on Appropriations, Information Technology**  
**Tuesday, June 5, 2018 at 11:00 AM**  
**Room 544 of the Legislative Office Building**

**MINUTES**

The House Committee on Appropriations, Information Technology met at 11:00 AM on June 5, 2018 in Room 544 of the Legislative Office Building. Representatives Adcock, Autry, Blackwell, K. Hall, Hardister, and Saine attended.

Representative Jason Saine, presided.

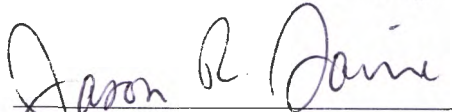
Chairman Jason Saine called the meeting to order and recognized the Pages and Sergeant at Arms serving the committee. Following those introduction, Chairman Saine recognized Brian Gregory and Brooks Raiford of NC Tech.

Brooks Raiford presented the **"State of the Industry Report," which is filed with the minutes as ATTACHMENT I.** At the conclusion of Mr. Raiford's presentation, Representative Dulin asked a question regarding NCtech.org. Mr. Raiford delivered the response.

Eric Boyette, Secretary and State Chief Information Officer for the NC Department of Information Technology delivered a presentation titled, **"Current DIT Initiatives" which is filed with the minutes as ATTACHMENT II.** At the conclusion of Mr. Boyettes presentation, Representative Alexander raised a question as to where we are on expanding Broadband. Mr. Boyette delivered a response. Another question was raised by Representative Blackwell regarding the NC Department of Information Technology and its involvement with the NC Department of Health and Human Services. Mr. Boyette delievered a response, noting that they are working to help the Department of Health and Human Services on the tech side. Representative Autry then asked a question regarding the definition of broadband. Mr. Boyette responded, saying they follow the definition made by the Federal Communications Commission.

The Chairman recognized Senator Jeff Tarte, who announced the creation of a formal tech caucus.

The Chairman delivered closing remarks and the meeting adjourned at 12:08 p.m.

  
\_\_\_\_\_  
Representative Jason Saine, Chair  
Presiding

  
\_\_\_\_\_  
Elise Yost, Committee Clerk

Attachments to the Minutes:  
I State of the Industry Report  
II Current DIT Initiatives

###



## ATTENDANCE

## Appropriation, Information Technology

2017-2018 Session

[illegible]





# State of Technology 2018





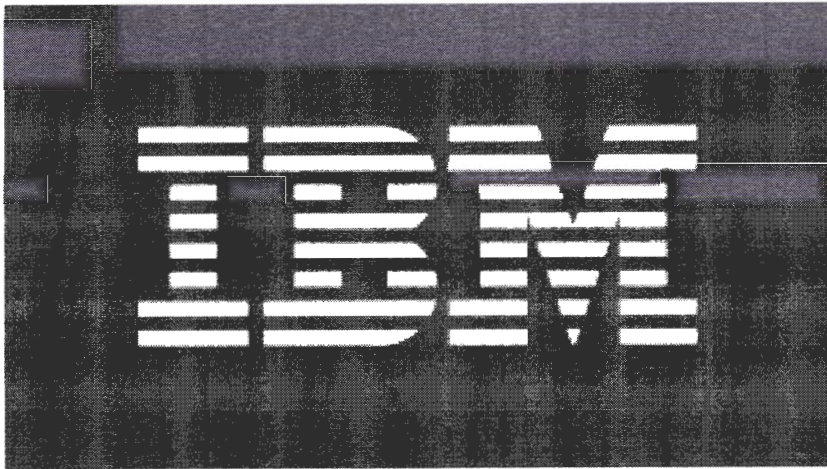


# Methodology

- 87 separate 6-digit NAICS code sectors to characterize the Total Technology Sector
- The Total Technology Sector was further broken down into four sub-categories:
  - **Energy Technology**
  - **Environmental Technology**
  - **Life Sciences**
  - **IT, Telecom, Hardware & Software (Tech Core)**
- 65 separate 5-digit Standard Occupational Classification (SOC) codes
- Economic Modeling Specialists International (EMSI), based on the Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages



# The Difference Between Tech Industry Workers and Tech Occupational Workers



87 separate 6-digit NAICS



65 separate 5-digit  
(SOC) codes





# Tech Industry in North Carolina- 2016

Percentage of Total North Carolina Economy

**Employees**

247,208



5.8%

**Establishments**

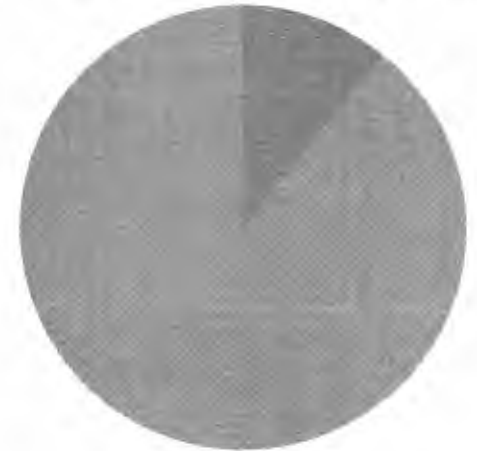
18,868



7.0%

**Wages**

\$25,409,000,000



11.1%



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# Makeup of Tech Industry

Percentage of Total North Carolina Tech Sector

**Energy**

13,198



5%

**Environmental**

22,738



9%

**Life Sci.**

77,299



31%

**IT**

133,974



54%



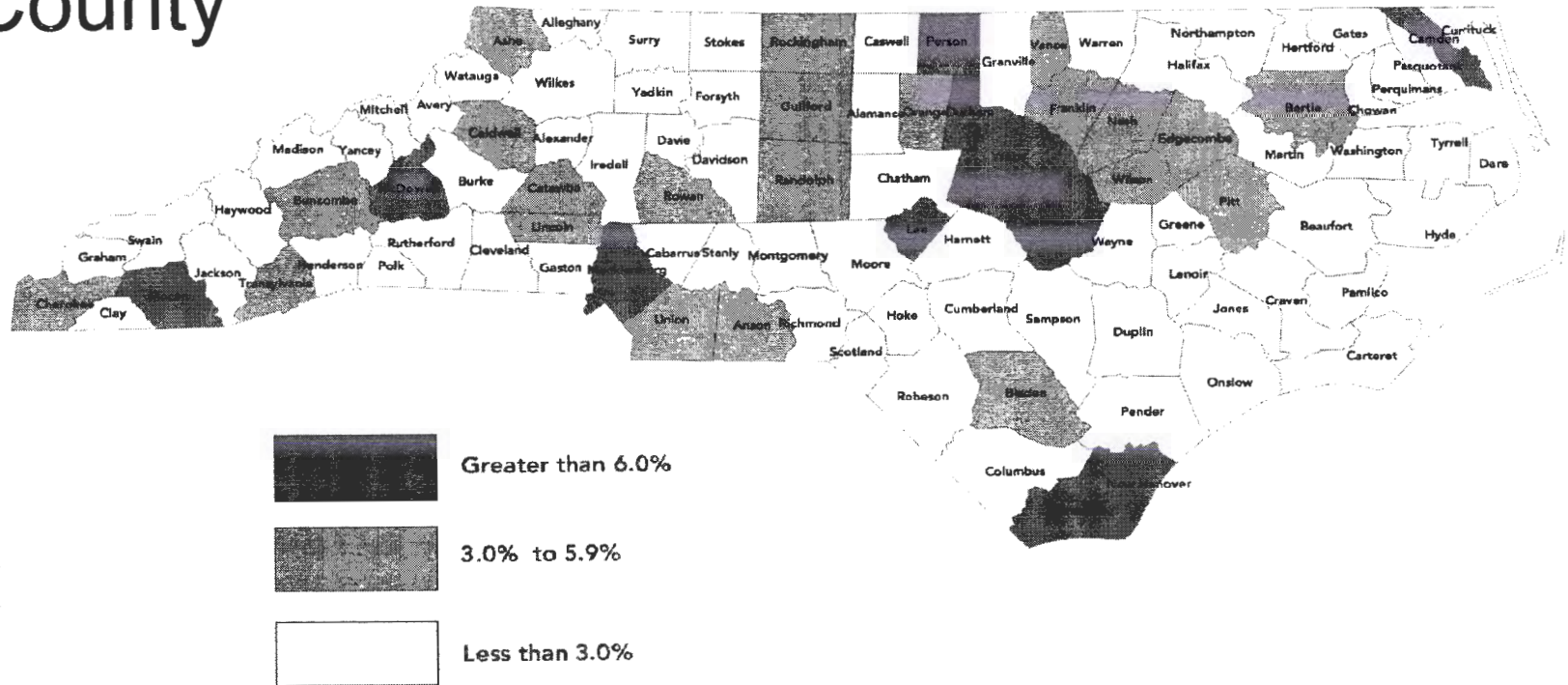
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# Tech Industry Jobs by County in North Carolina



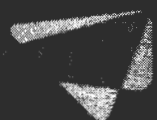
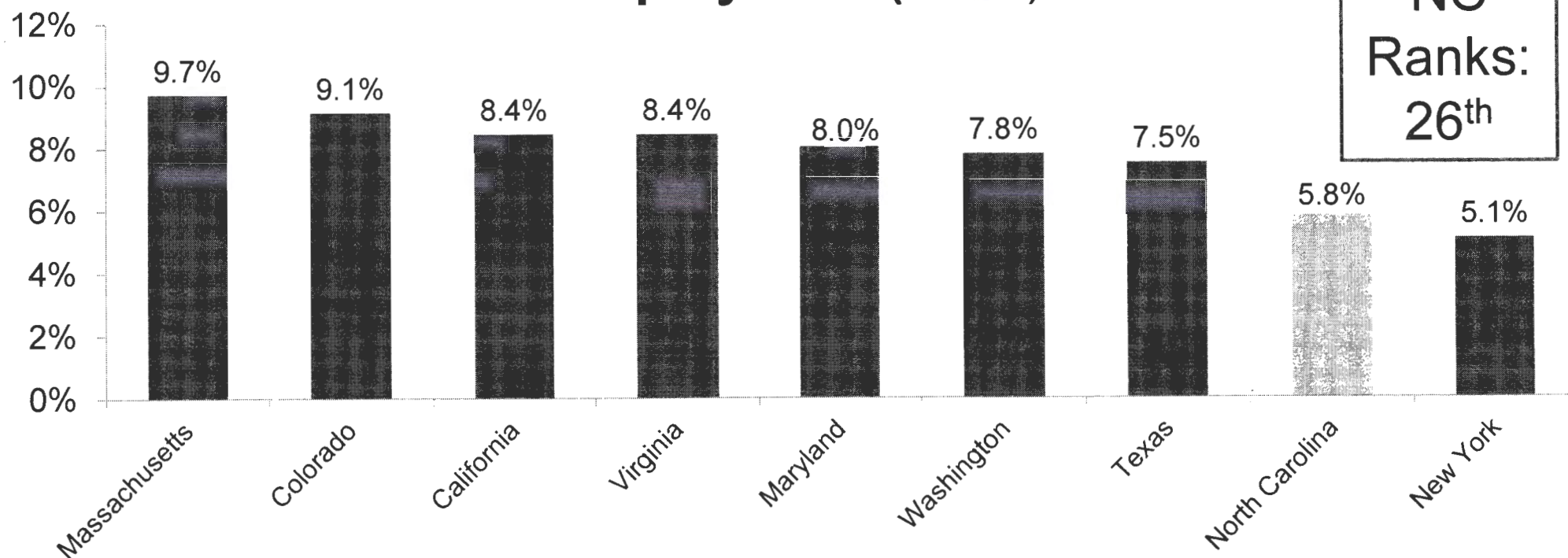


## Average Annual Earnings per Worker by Subsector, 2016

Tech Category	North Carolina	North Carolina (w/ Purchasing Power)	National Average
Energy Tech	\$131,115	\$155,719	\$142,015
Environmental Tech	\$97,923	\$107,373	\$78,113
Life Sciences	\$111,168	\$121,896	\$120,368
IT	\$109,807	\$120,403	\$133,276



# Technology Sector Employment as a Percentage of Total Employment (2016)



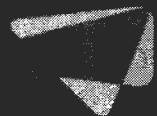
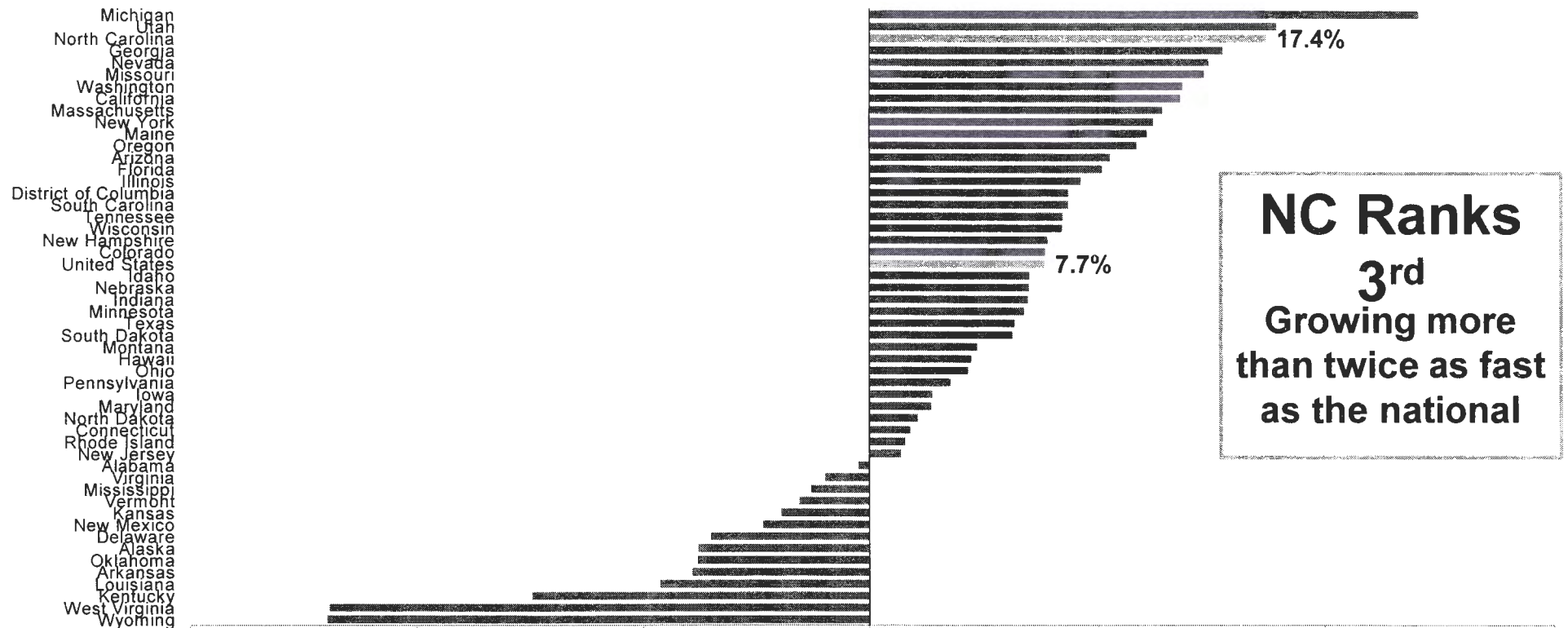
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# Tech Sector Employment Growth, 2011-2016



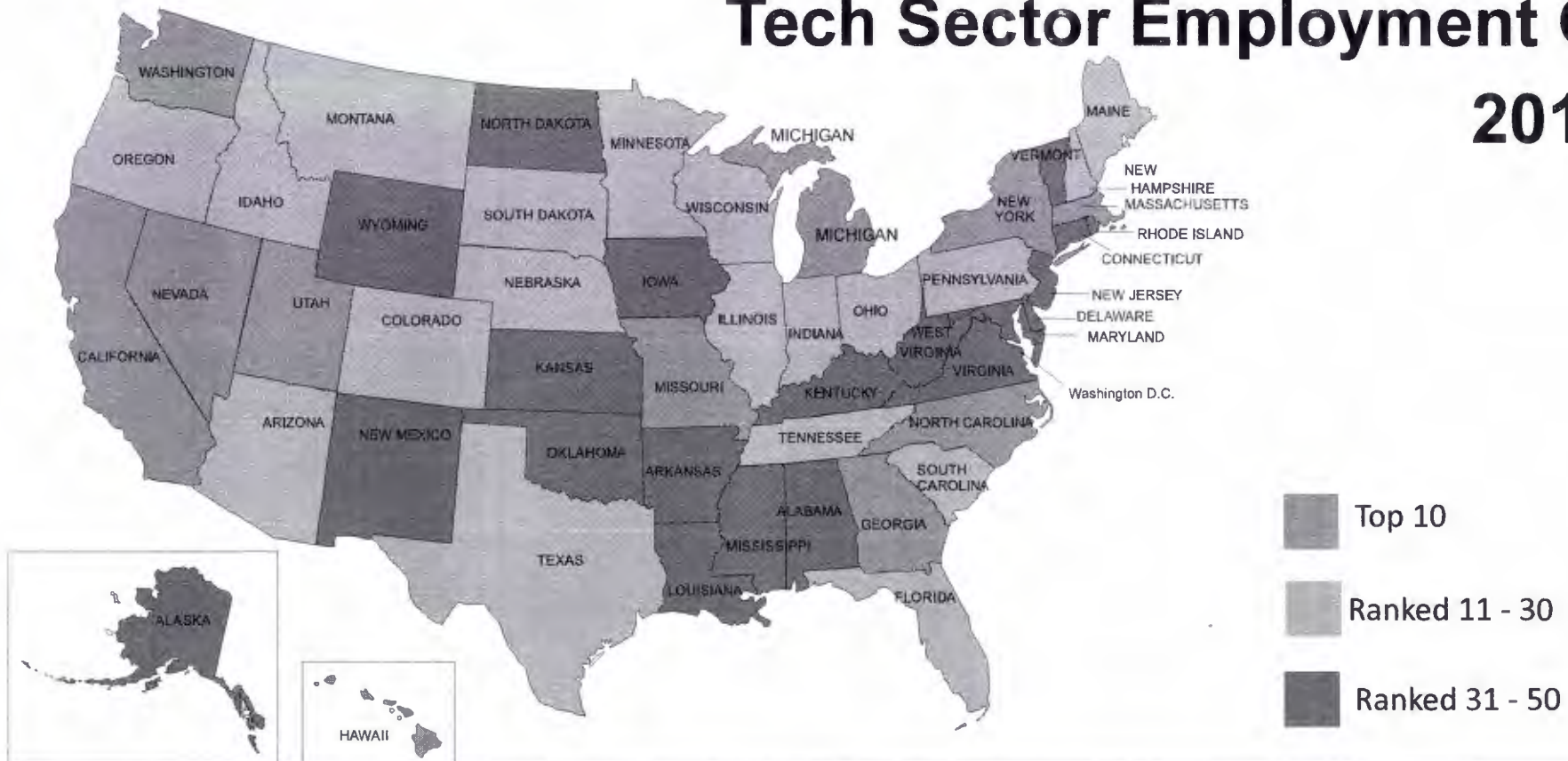
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# Tech Sector Employment Growth 2011-2016



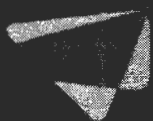
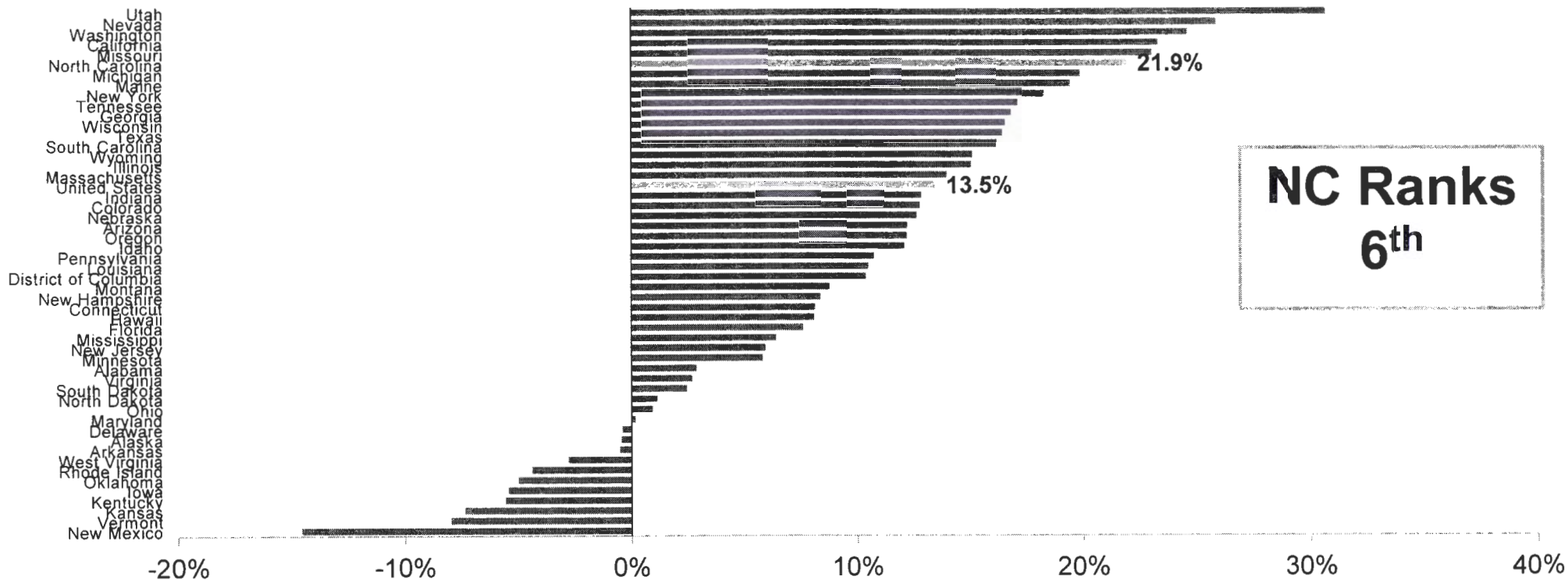
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# IT Sector Employment Growth, 2011-2016

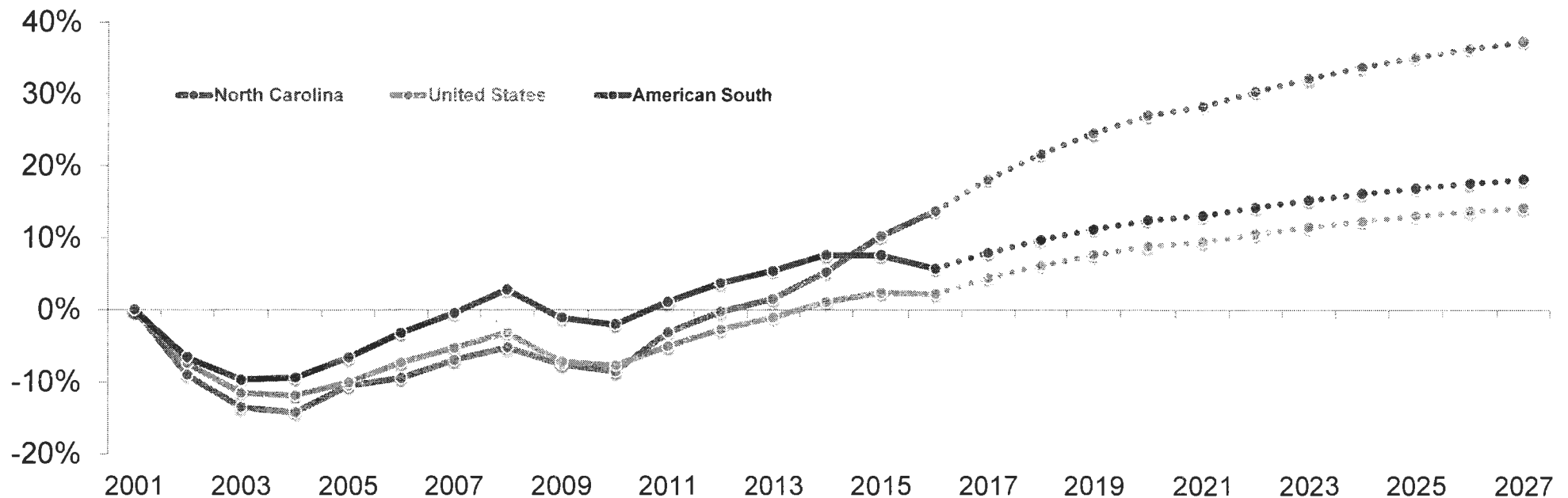


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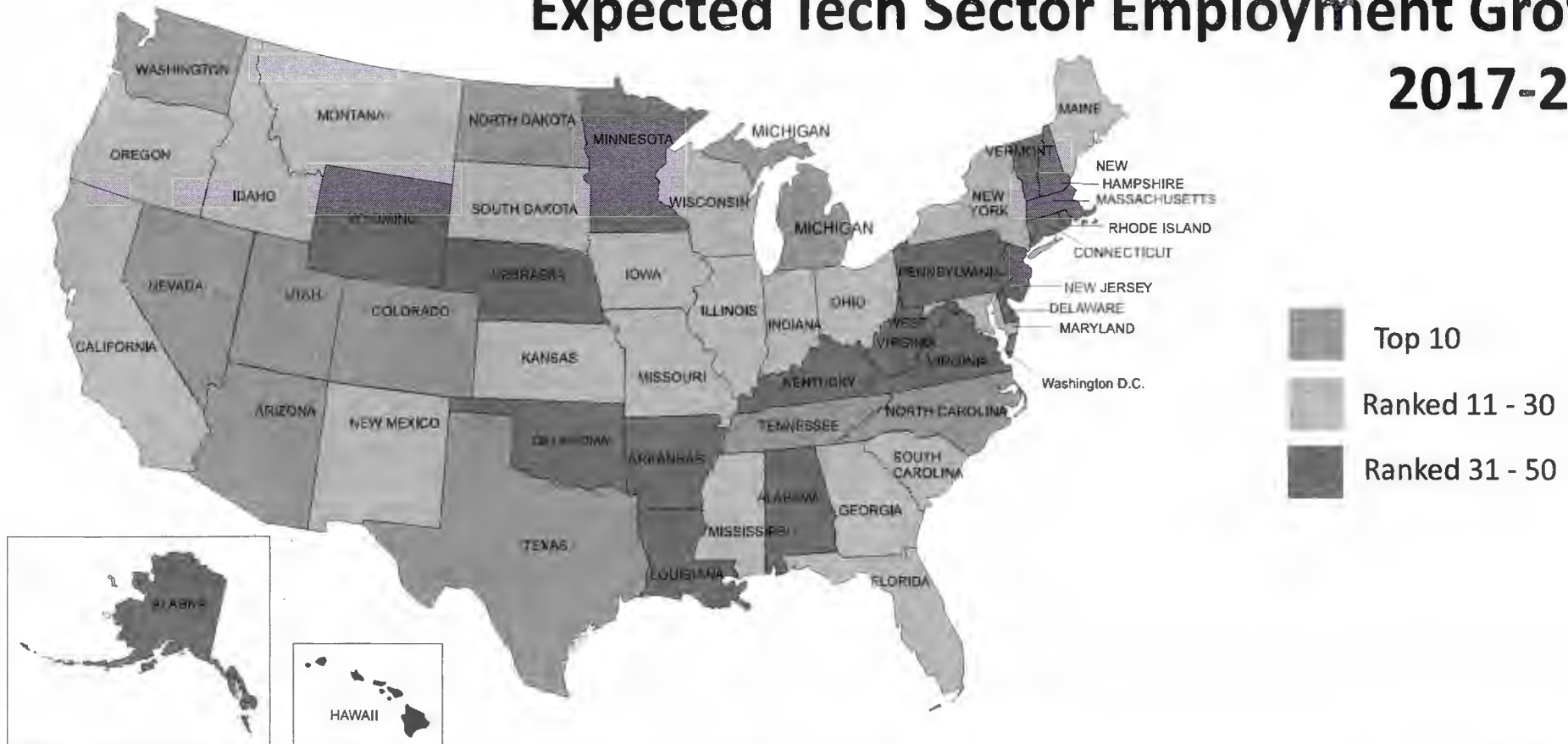


# Long Term Technology Sector Trends (Percentage Change in Employment Post 2001)





# Expected Tech Sector Employment Growth 2017-2022



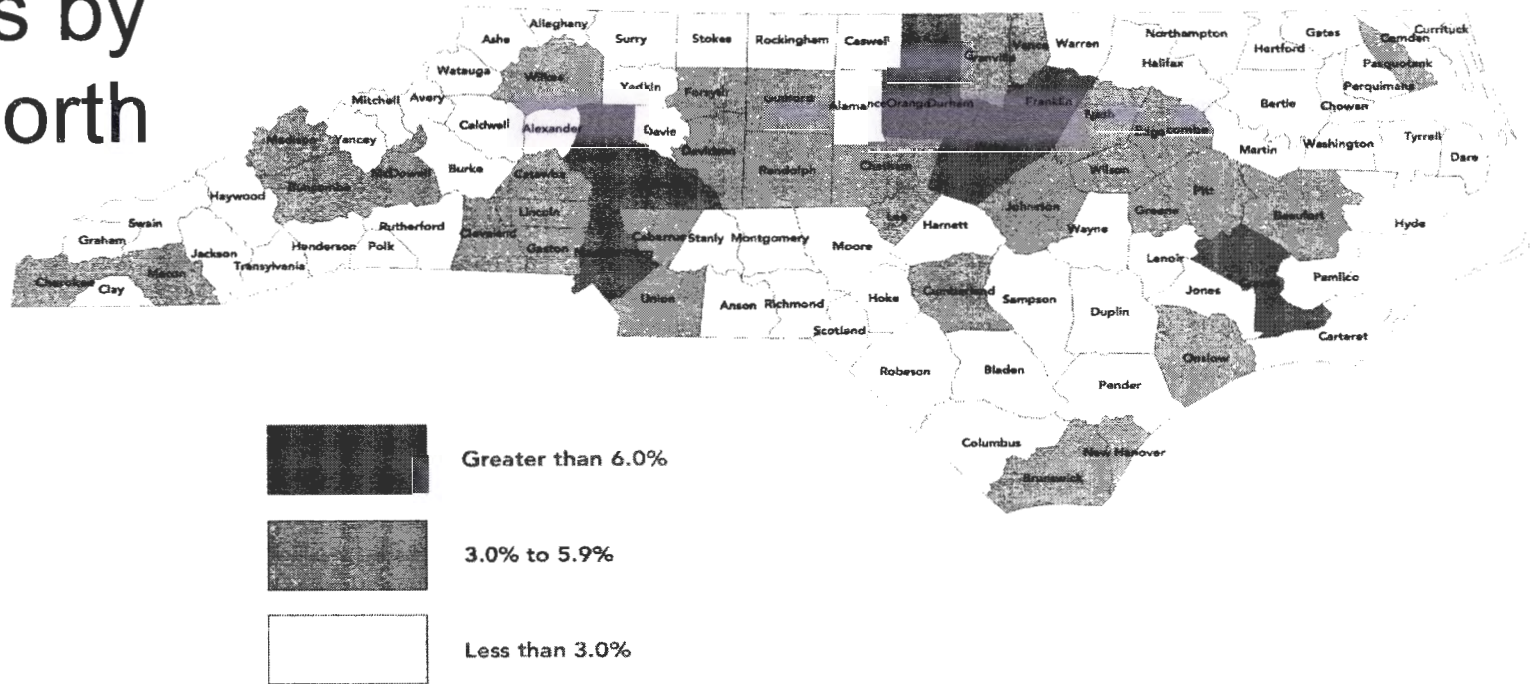
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# Tech Occupations by County in North Carolina



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# Tech Occupations

WASHINGTON  
OREGON  
IDAHO  
NEVADA  
CALIFORNIA  
UTAH  
ARIZONA  
MONTANA  
WYOMING  
COLORADO  
NEW MEXICO  
TEXAS  
NORTH DAKOTA  
SOUTH DAKOTA  
NEBRASKA  
KANSAS  
MINNESOTA  
WISCONSIN  
ILLINOIS  
INDIANA  
OHIO  
PENNSYLVANIA  
NEW JERSEY  
DELAWARE  
MARYLAND  
VIRGINIA  
WEST VIRGINIA  
KENTUCKY  
TENNESSEE  
NORTH CAROLINA  
SOUTH CAROLINA  
GEORGIA  
ALABAMA  
MISSISSIPPI  
LOUISIANA  
FLORIDA  
MAINE  
VERMONT  
NEW HAMPSHIRE  
MASSACHUSETTS  
RHODE ISLAND  
CONNECTICUT  
Washington D.C.

ALASKA

HAWAII





# How Competitive Is North Carolina?



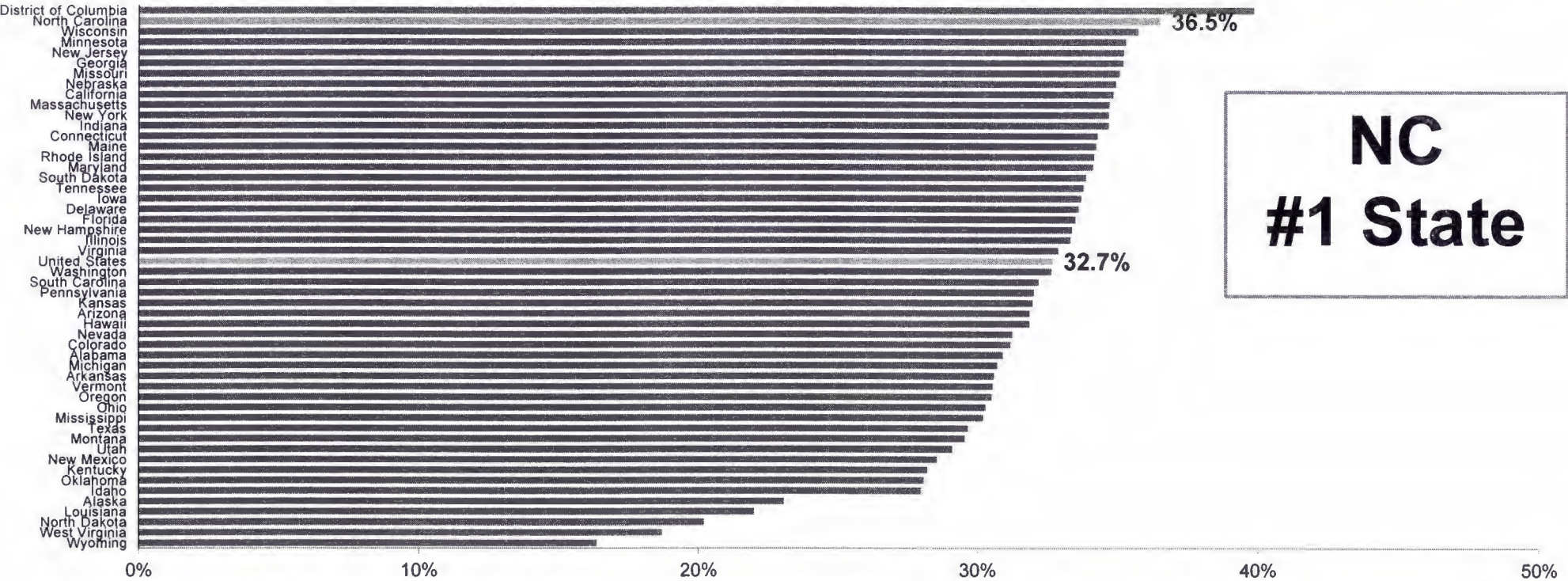
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# Percentage of Women Working in Tech Industry



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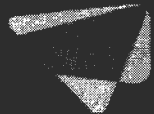
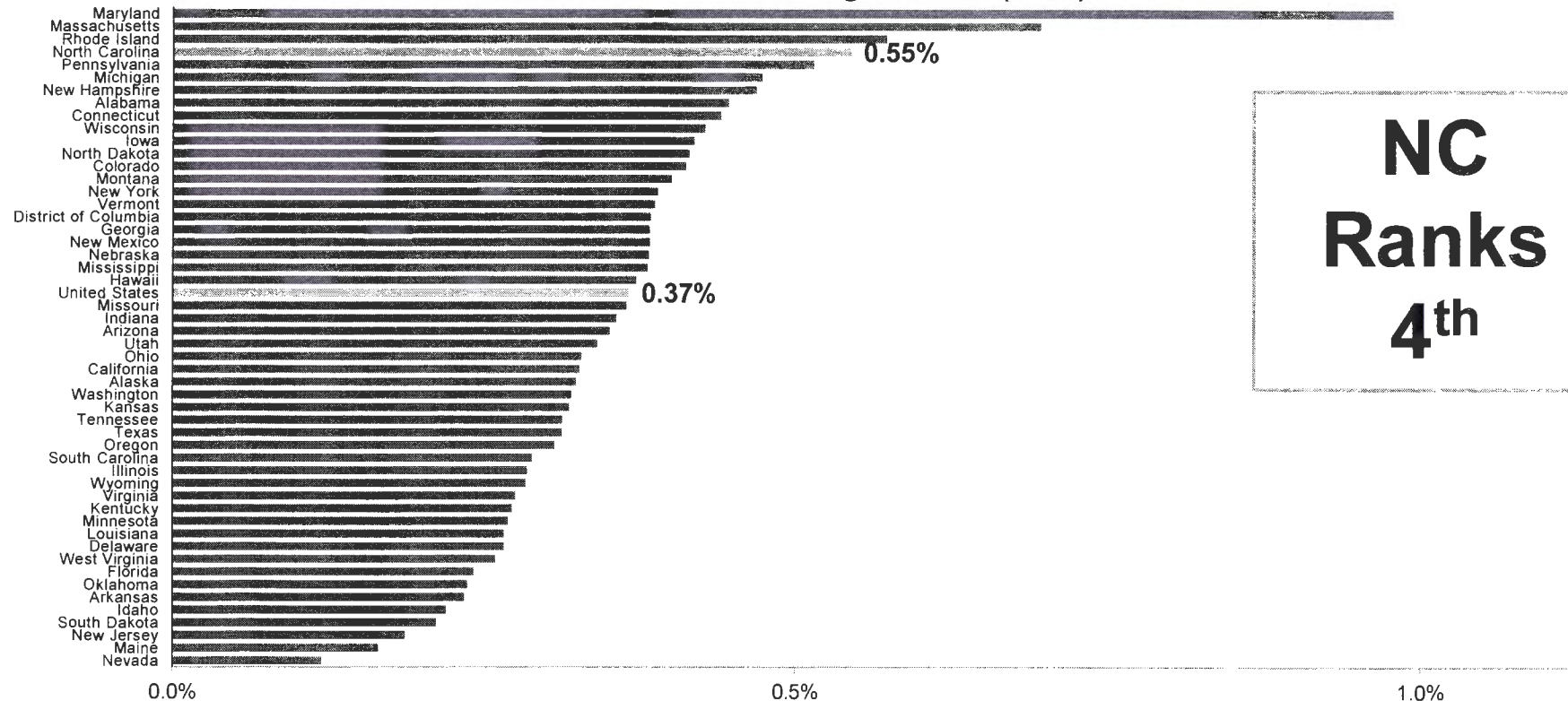
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# Higher Education R&D in Science & Engineering Fields Intensity

R&D As A Percentage of GDP (2016)



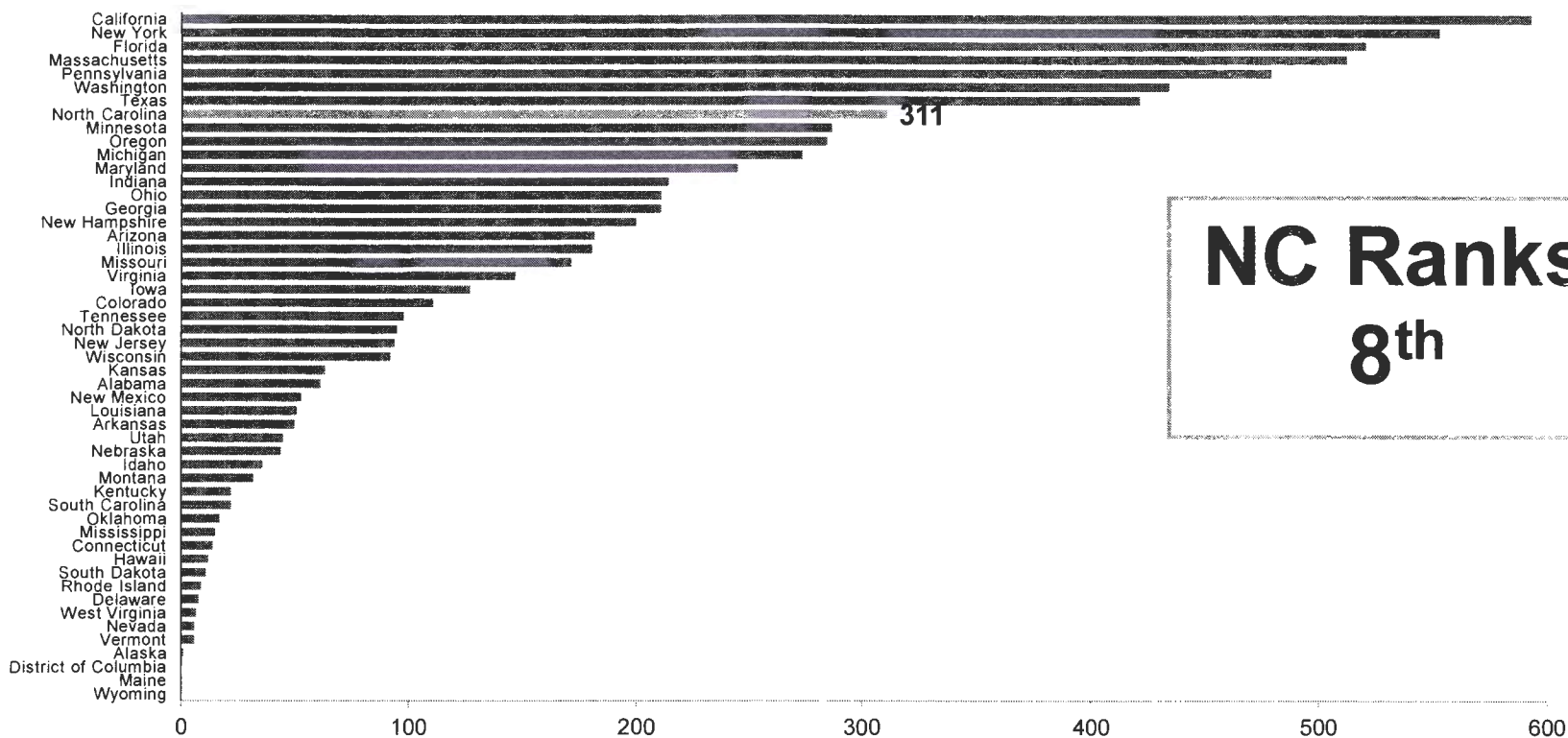
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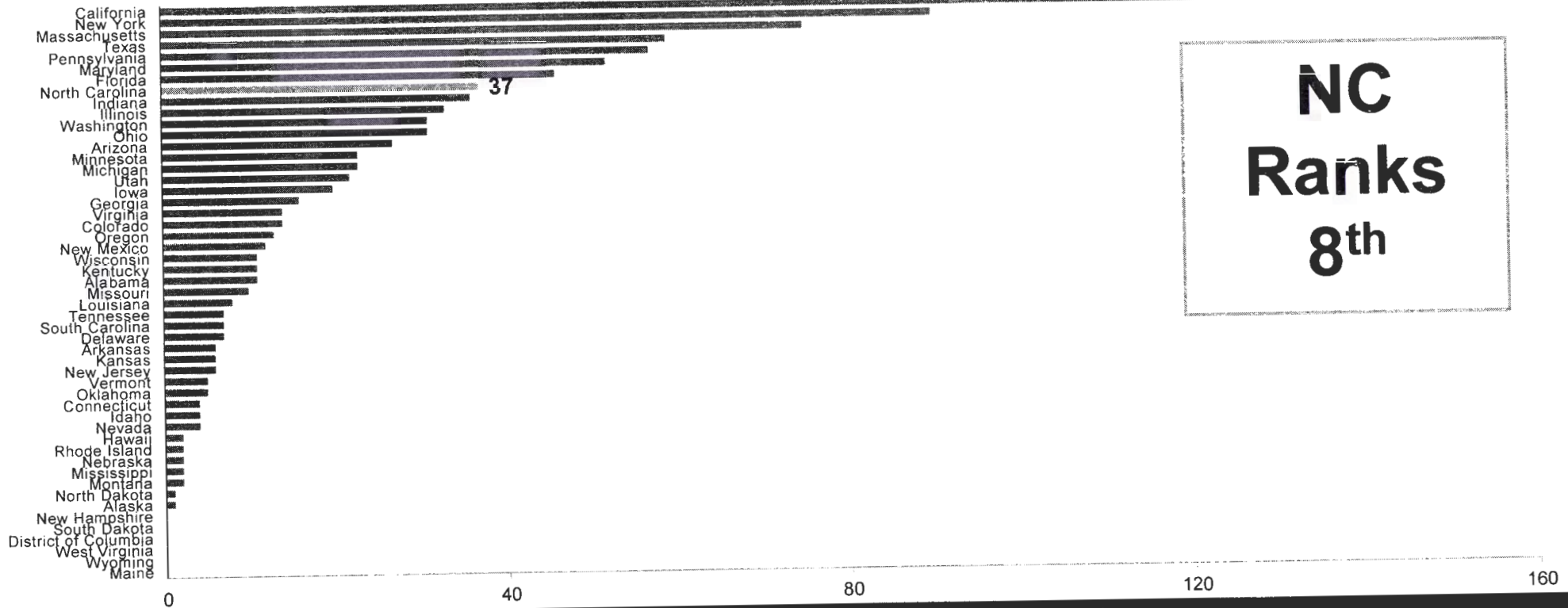


# Technology Licenses and Options Executed From Universities (2016)

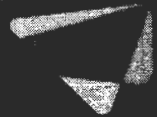




# Start-Ups From Universities (2016)



**NC  
Ranks  
8<sup>th</sup>**



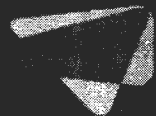
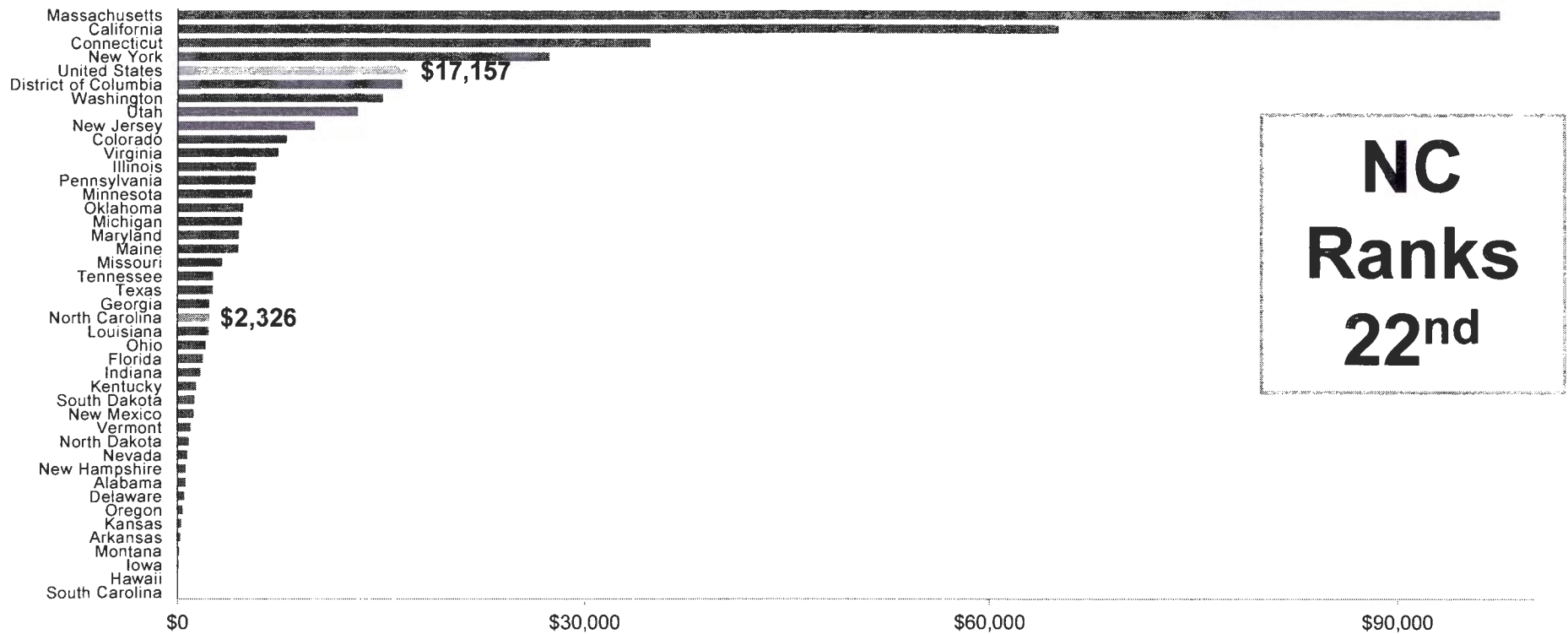
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# Venture Capital Funding Per \$1 Million of GSP, 2011-2016



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# Flash Survey Results

- 88% of respondents believe that 2017 was a 'good' or 'great' year for the tech sector in North Carolina, **20% higher than 2016**.
- When asked about their own businesses, 30% of respondents said 2017 was a 'great' year (**up from 20% in 2016**) and almost half of respondents thought 2017 was a 'good' year for their company.
- **All respondents expected their business to grow or stay the same in 2018. No respondents believed their business would experience contraction in 2018.**



North Carolina

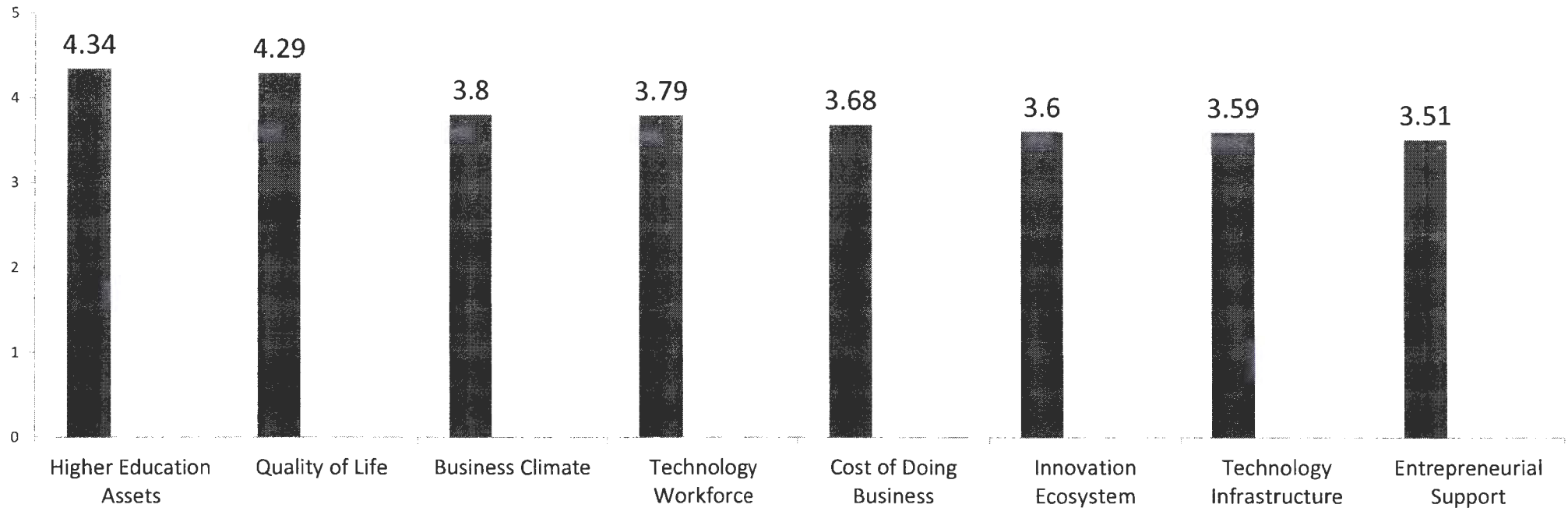
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# Flash Survey Results

## Factors Impacting the Competitive Position of North Carolina



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# Overall North Carolina IT Sector Rankings

Metric	Value	Rank
IT Sector as a Percentage of Total Employment (2015)	3.1%	17
IT (Tech Core) Employment Growth (2011-2016)	21.9%	6
Expected IT Sector Employment Growth (2017-2022)	10.7%	5
Average Annual Wage for IT Sector Employees with Purchasing Power (2016)	\$120,403	10

Indicates a state ranking of 15<sup>th</sup> or higher

Indicates a state ranking between 16<sup>th</sup> and 35<sup>th</sup>

Indicates a state ranking greater than 36<sup>th</sup>





# Overall North Carolina Tech Sector Rankings

Metric	Value	Rank
Technology Sector Location Quotients (2016)	0.94	23
Technology Sector Employment Growth (2011-2016)	17.4%	3
Average Annual Wage for Technology Sector Employees with Purchasing Power (2016)	\$120,919	9
Percentage of Women in the Technology Workforce	36.5%	2 (1)
Tech Industry Diversity Index	71.86	21

Indicates a state ranking of 15<sup>th</sup> or higher

Indicates a state ranking between 16<sup>th</sup> and 35<sup>th</sup>

Indicates a state ranking greater than 36<sup>th</sup>







# Overall North Carolina IT Sector Rankings

Metric	Value	Rank
Percentage of Tech Occupations As a Total of All Occupations (2016)	6.8%	20
Tech Occupations Growth (2011-2016)	16.5%	6
Expected Tech Occupations Growth (2017-2022)	9.8%	7
Median Hourly Earnings Adjusted for Purchasing Power (2016)	\$41.07	5

Indicates a state ranking of 15<sup>th</sup> or higher

Indicates a state ranking between 16<sup>th</sup> and 35<sup>th</sup>

Indicates a state ranking greater than 36<sup>th</sup>



<b>Metric</b>	<b>Value</b>	<b>Rank</b>
<b>Total R&amp;D As a Percentage of GSP (2014)</b>	2.3%	19
<b>Business Performed R&amp;D as a Percentage of Private Industry Output (2014)</b>	2.0%	16
<b>Higher Education R&amp;D in S&amp;E Fields as a Percentage of GDP (2016)</b>	0.55%	4
<b>Patents Issued per 1,000 Science &amp; Engineering Workers, 2015</b>	17.8	19
<b>Venture Capital Funding Per \$1 Million of GDP (2011-2016)</b>	\$2,326	22
<b>Technology Licenses and Options Executed from Universities (2016)</b>	311	8
<b>Start-Ups from Universities (2015)</b>	37	8
<b>SBIR and STTR Funding Per \$1 Million of GDP (2011-2016)</b>	\$116	19
<b>Average Number of New Entrepreneurs (2016)</b>	0.34%	15
<b>Small Business Opening Rate vs. Closing Rate (2015)</b>	1.52%	17
<b>Completed STEM Education Programs per 1,000 Enrolled Students (2016)</b>	28.6	14
<b>Percent Change in Tech &amp; STEM Education Program Completions (2011-2016)</b>	26.3%	22
<b>Average In-State Tuition Cost (2017-2018)</b>	\$7,385	8
<b>State Spending Per Student for Higher Education (2017)</b>	\$10,598	7



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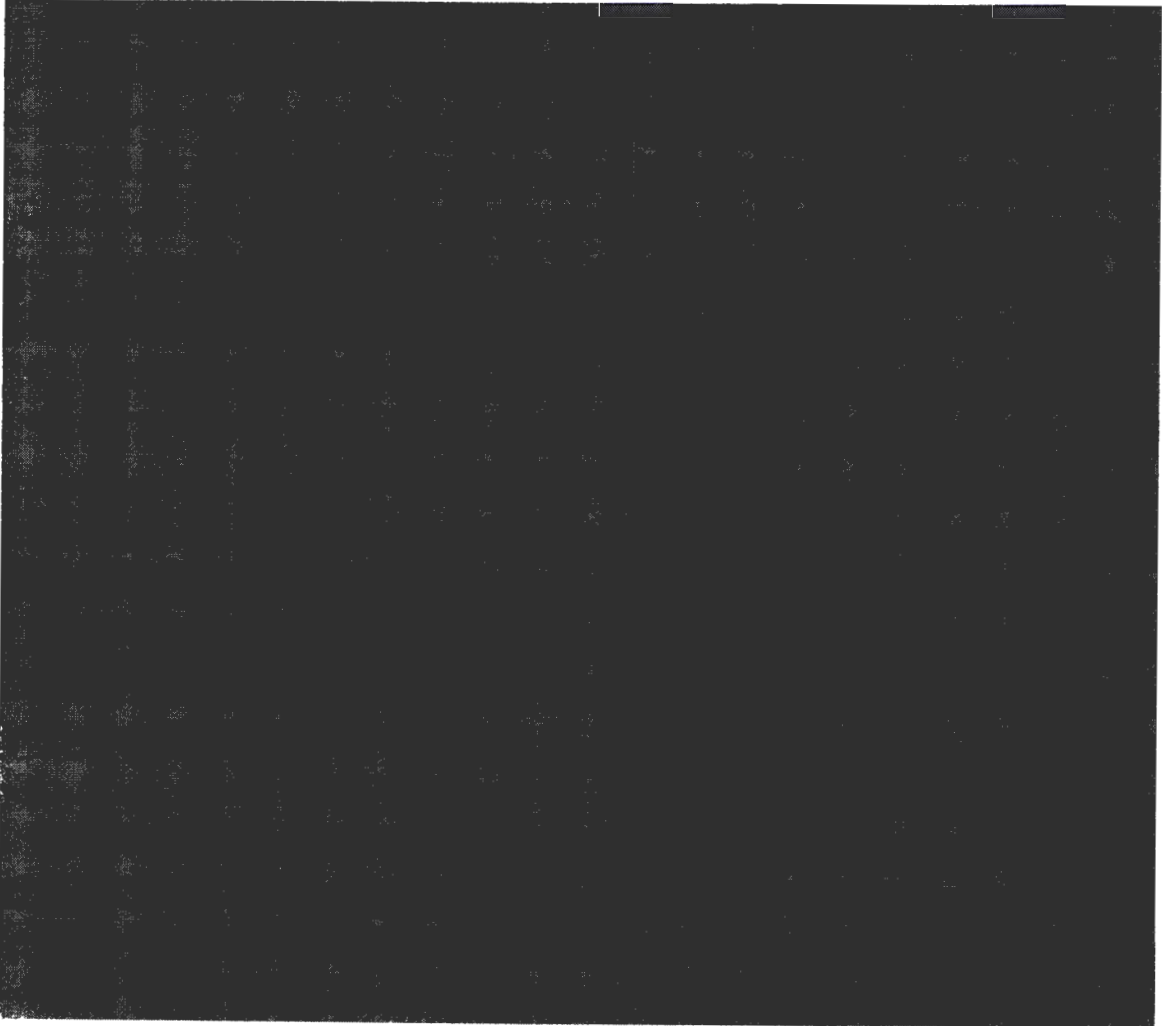
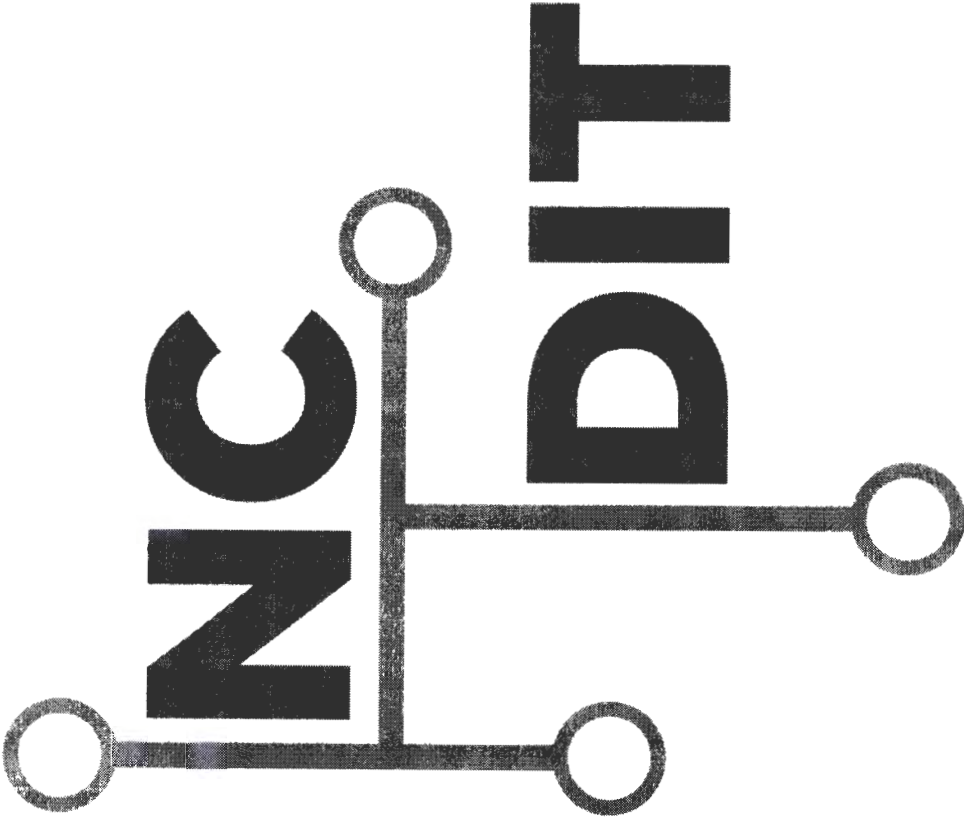


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Association









# Services

- Next Generation IT Service Management – moving to ServiceNow
- Next Generation Identity Access Management – RFP releasing soon
- Identity Management enhancement to meet authentication needs of select groups which may include blockchain technology
- Stronger collaboration with vendor partners as a team vs silos





# Cybersecurity

- Security for citizen engagement with the State of North Carolina
  - HTTPS mandate for all forward facing agency websites
- Private/Public Partnership for the veterans Cyber Workforce
  - Partnering with Cisco and other industry leaders on the development of a pilot Cyber training and employment program – similar to our partnership with ISG
- NGA Cyber Policy Academy
  - NC selected for the NGA Cyber Policy Academy – only 4 states
  - Outcome expected would be recommendation/improvements to State Cyber laws, Statewide Cyber Disruption Plan, etc.





# State Solutions

- **Enterprise Portfolio Management**
  - PoC completed to replace old technical architecture and system design document using our iServer platform, which currently stores metadata (costs mainly) for applications
  - Coupled with TouchDown, this effort will enable the State to have a clear view of the IT portfolios (application, project, infrastructure) and enable more efficient, effective application lifecycle management.





# State Solutions

- **Communities of Practice Established**
  - PowerBI and Business Analysis
    - In support of the BA Community of Practice, a BA Foundations training curriculum (<https://it.nc.gov/services/it-business-analysis/ba-foundations-training-class>) has been developed and has been updated to include BA training for iServer data entry
  - DIT developed dashboards for project execution, procurement and exceptions and are enabling these dashboards for agency CIOs and other executive staff to consume for up-to-date status and more efficient/effective decision making







# State Solutions

- **Digital Commons**
  - Digital Commons platform was moved to AWS at the beginning of FY 2018
  - The AWS transition has included benefits in terms of substantial cost savings (reduced costs 40% by using Reserved Instances)
  - All NC Cabinet Agency websites, except DOT, will be on or in the progress of moving to the Digital Commons platform by the end of the fiscal year
    - Currently there are approximately 45 websites hosted (15-20 added this past year alone) on the platform
    - Some of the new features available to agencies include: charts, maps, graphics visualizations (via CSV upload); changes to theme(s) to enable increased design flexibility, accessibility enhancements, and more





# Procurement

- **IT Infrastructure Solutions Contract**
  - 22 responsive bids received and evaluated
  - 11 new contracts awarded to date
  - 11 awards pending negotiation of exceptions to terms and conditions
- **Commercial Off the Shelf Software:**
  - Award to reseller(s) pending negotiation of End User License Agreements with approximately 150 software manufacturers.
- **Cloud Service Broker**
  - Response to Request for Best and Final Offer due from vendor June 7





Let's Connect!



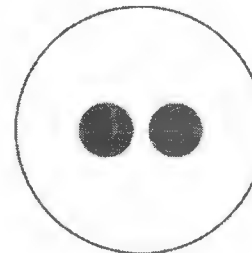
**@NCDIT**  
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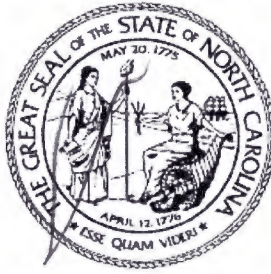


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## Joint Appropriations on General Government and Information Technology

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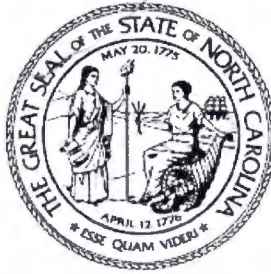
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Justin Armstrong	Accenture
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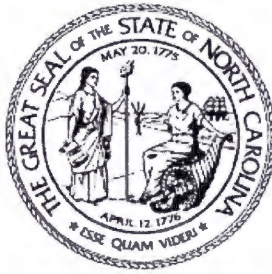
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