## The NC Economy Today & In the Future



#### "The future is always here; it's just not evenly distributed."

**William Gibson** 



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#### North Carolina Payroll Employment Year over Year Percentage Change





Source: Bureau of Labor Statistics/Haver Analytics

#### **All States 1-Year**

**Total Employment Percentage Change Sept 2016 to Sept 2017** 





## USA & North Carolina Unemployment Rate





Source: Bureau of Labor Statistics/Haver Analytics

#### Percentage Change in Jobs 2011 –2016 By State





Source: US Bureau of Labor Statistics

# Change in Personal Per Capita Income 2011-2016





# Change in Per Capita GDP 2011-2016





# Hyper-Competitiveness







#### **Top Factors for Companies**

- **Considering New Investment** 
  - (1) Availability of skilled labor
  - (2) Highway accessibility
  - (3) Labor costs
  - (3) Proximity to major markets
  - (3) State & local incentives
  - (3) Available land
  - (3) Tax exemptions
  - (8) Energy availability and costs
  - (9) Proximity to suppliers
  - (10) Training programs/Technical schools <sup>8</sup>
  - (11) Availability buildings
  - (12) Accessibility to a major airport



2012

- 1) Highway Accessibility
- 2) Labor Cost
- 3) Avail. Skilled Labor
- 4) Corporate Tax Rate
- 5) Occupancy Costs
- 6) State/Local Incentives
- 7) Energy Avail./Cost
- 8) Tax Exemptions
- 9) Proximity to Markets
- 10) Low Union Profile



# Transformations





# People, Wealth and Jobs Continue to Concentrate





#### U.S. employment, metro and nonmetro areas, 2007-2016 (quarterly)

#### Employment, index (2008 Q1=100)



Notes: Data are seasonally adjusted. Shaded area indicates recession period. Source: USDA, Economic Research Service using data from Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS).



# **Population Growth More Concentrated**

#### NC Change in Population 2011 - 2016 North Carolina Average 5.1%





Source: US Census Bureau

## NC Metro % Non-Farm Employment Growth September 2016 - September 2017





Source: US Bureau of Labor Statistics

#### Southern States 1-Year

Professional & Business Services Employment Changes Sept 2016 to Sept 2017





Source: US Bureau of Labor Statistics

## Concentration of County Jobs in Professional, Scientific and Technical Services





Source: NC Dept of Commerce QCEW 1st quarter 2017

#### PROJECTED CHANGE IN LABOR FORCE AGE POPULATION Ages 25 – 64 2016 - 2036 North Carolina state average 14.8%





Source: NC Office of State Budget and Management

#### Strong Workforce Growth Across the Country





Sources: Decennial Census Counts, \*Weldon Cooper Center National Population Projections

## Workforce Growth Concentrates





Sources: Decennial Census Counts, \*Weldon Cooper Center National Population Projections

# Technological Is Reinventing Every Business





#### North Carolina Manufacturing Jobs and Manufacturing GDP Growth

1997 – 2016 (normalized as percent of levels in 1997)





Source: US Bureau of Labor Statistics QCEW US Bureau of Economic Analysis GDP

Technology is rapidly replacing jobs that are hard to fill



Cleaning the Upper Arm

Home Health

Realtime



Agriculture





## Advanced Industries for NC's Future



![](_page_23_Picture_2.jpeg)

#### Advanced Industries for NC's Future

![](_page_24_Picture_1.jpeg)

#### 50 Industries 383,572 jobs in North Carolina 11% Growth in the past 3 years

![](_page_24_Figure_3.jpeg)

![](_page_24_Picture_4.jpeg)

#### Largest Advanced Industries in North Carolina

- 1. Computer Systems Design
- 2. Management Scientific/Technical
- 3. Architectural/Engineering
- 4. Scientific R&D
- 5. Pharma/Medicine Manf
- 6. Motor Vehicle Parts Manf
- 7. Software Publishing
- 8. Data Processing/Hosting
- 9. Medical/Diagnostic Labs
- 10. Navigat/Measuring Instrument Manf (11,900)
- 11. Power Generation/Transmission
- 12. Computer/Peripheral Manf

(51,910) (42,936) (33,404) (21,008) (20,656) (17,337) (13,139) (13,139) From 2013-2016 these 12 industries added 35,898 net new jobs

Other Fastest growing industries include;

- Aerospace Manf
  - Ship & Boat Building
  - Machinery Manf
- (10,784) (10,126)

(12,605)

## Annual US Employment Growth By Sector 2016-2026

![](_page_26_Figure_1.jpeg)

![](_page_26_Picture_2.jpeg)

Source: US Bureau of Labor Statistics

# Available, Skilled Labor is the Place Differentiator – Without it, You Lose

![](_page_27_Picture_1.jpeg)

![](_page_27_Picture_2.jpeg)

![](_page_27_Picture_3.jpeg)

![](_page_27_Picture_4.jpeg)

# USA Workforce Growth Slows

![](_page_28_Figure_1.jpeg)

![](_page_28_Picture_2.jpeg)

Sources: Decennial Census Counts, \*Weldon Cooper Center National Population Projections

## Decomposition of Real GDP

![](_page_29_Figure_1.jpeg)

![](_page_29_Picture_2.jpeg)

#### USA Typical Entry-Level Education Requirement as Percent of Total Employment – May 2016

![](_page_30_Figure_1.jpeg)

![](_page_30_Picture_2.jpeg)

Source: US Bureau of Labor Statistics, September, 2017 "Employment Trends by Typical Entry-level Education Requirements"

#### Typical Entry-Level Education Requirement Change in Total Employment by Sector – May 2010 – May 2016

![](_page_31_Figure_1.jpeg)

![](_page_31_Figure_2.jpeg)

post secondary education

![](_page_31_Picture_4.jpeg)

Source: US Bureau of Labor Statistics, September, 2017

"Employment Trends by Typical Entry-level Education Requirements"

# Education Requirements For New Jobs 2016-2026

Projected job growth in percentage terms, 2016-2026, by degree

![](_page_32_Figure_2.jpeg)

![](_page_32_Picture_3.jpeg)

Source: US Bureau of Labor Statistics

# Employment Growth 2004-2014 By Type of Job

![](_page_33_Figure_1.jpeg)

# What Skills Do You Need To Be Successful in a Rapidly Changing World?

![](_page_34_Figure_1.jpeg)

![](_page_34_Picture_2.jpeg)

![](_page_35_Figure_0.jpeg)

#### Source: PolicyInterns.com

## Workforce Complexity Paralysis

![](_page_36_Figure_1.jpeg)

# Imagine a business trying to engage the system

North Carolina Workforce Development Boards

![](_page_36_Figure_4.jpeg)

# **Prepare For Accelerating Change**

- Population growth will slow, diversify and concentrate in fewer places
- Technology will change every industry (faster, smaller, personalized, cheaper, mobile, integrated)
- People will need more skills to compete, but education will begin to morph due to technology (quantifiable credentials)
- The middle of every industry in under threat
- Competition more intense- Winners & Losers- Talent and Tech

![](_page_37_Figure_6.jpeg)

![](_page_37_Picture_7.jpeg)

![](_page_38_Picture_0.jpeg)

![](_page_38_Picture_1.jpeg)

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![](_page_38_Picture_4.jpeg)

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" Leadership and learning are indispensable to each other."

John F. Kennedy

![](_page_38_Picture_8.jpeg)

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