



North Carolina Tomorrow Video

Introduction: The following text is featured in the “North Carolina Tomorrow” video produced for The University of North Carolina Tomorrow Commission, and highlights major trends and challenges facing North Carolina. Sources for these facts are available upon request.

North Carolina Tomorrow

- In 2006, the Charlotte, Research Triangle, and Piedmont Triad regions accounted for nearly 62% of the state’s population and 64% of all jobs in the state
- In 2005, average annual wages were highest in the Charlotte and Research Triangle regions (above \$40,000), and lowest in the Northeast region (under \$27,000)
- In the last 15 years, the Research Triangle region’s population grew at the fastest rate in the state: 59%. The Northeast Region grew the slowest: 13%
- In the last 15 years, North Carolina’s Hispanic population has grown by almost 600%. White and African American populations have grown by about 20%

Jobs of Tomorrow

- In the future, North Carolina’s workforce will grow the most in two areas – highly skilled (college graduates) and low skilled (high school dropouts)
The middle class is shrinking
- The fastest growing high-wage job sectors in North Carolina include medical professions and computer engineers
- The fastest shrinking job sectors include farmers, word processors, and computer operators
- By 2014, North Carolina will need:



41,000 more nursing professionals
34,000 more public school teachers
23,000 more computer and technology professionals
10,000 more accountants and auditors
3,300 more Social Workers

- By 2014, North Carolina will need:

Over 400,000 new workers with at least a bachelor's degree

North Carolina's colleges and universities (both public and private) are expected to produce only 254,000 of these workers

Higher education would have to produce over 15,000 more graduates each year to fill this gap

- Baby Boomers are aging . . .

Today, in North Carolina's non-immigrant workforce:

1 out of every 5 workers is over age 61

Today, in North Carolina's public universities:

1 out of every 5 faculty members is over age 61

This year, in America:

Over 10,000 people will turn 55 . . .every day

Skills of Tomorrow

- About 60% of available jobs in the US require skills possessed by only 20% of the workforce. . .almost 50% of US high school students lack basic competence in math
- By 2012, more than 40% of manufacturing jobs will require post-secondary education
- By 2015, about 85% of new jobs in the US will require education beyond high school
- By 2020, the shortage of workers with college-level skills in the US will increase to over 14 million



- Writing skills are essential, in today's economy . . .

Writing weaknesses of incoming students cost American campuses \$1 billion a year

Writing weaknesses of professional employees cost American businesses \$3.1 billion a year

- 63% of employers nationally think most college graduates lack skills needed to succeed in today's global economy . . .61% of college graduates nationally think their college education did not prepare them for success in today's global economy

Competing in the Global World of Tomorrow

- In China, more than 50% of undergraduate degrees are in fields of science, technology, engineering, and math . . .In the US, only 16% of degrees are awarded in these fields
- About 33% of North Carolina's college aged students are enrolled in college – only 69% of the rate in Korea . . .North Carolina also lags behind Greece, Finland, Belgium, Ireland, and Poland
- Foreign students make up 27% of all US graduate students . . .And 41% of all science and engineering majors
- 90% of employers think colleges and universities need to improve the quality of student achievement to ensure the US's global competitiveness

Our Environment Tomorrow

- North Carolinians spent \$23.2 billion on energy in 2004
7% of total state economic activity - \$16 billion of this was shipped to other states/nations . . . benefiting *their* economies
- NC is particularly vulnerable to effects of climate change
80% of NC's greenhouse gases come from energy sources



1 foot rise in sea level would devastate eastern NC with up to tens of billions of dollars in total losses

- NC water demand is expected to grow 36% over next two decades \$17 billion in additional water and sewer infrastructure will be required to meet this demand – almost all by local governments
- The UNC system is the single largest user of electricity and water in NC 70% - 80% of state government energy use is by UNC institutions – almost \$14 million a month for power and water in FY 05-06

Health Care Tomorrow

- Every day in North Carolina, 2,300 people are admitted to a hospital . . . 279 of those are AVOIDABLE by preventative care, self-care or timely primary care
- Every day in North Carolina, 28 new jobs are created in health care . . . and 16 manufacturing jobs disappear
- Every day in North Carolina, 2 new doctors, 8 new nurses and 2 other licensed health practitioners start practice in the State . . . We need 3 new doctors and 10 new nurses to keep up with what we have
- Every day 3 North Carolina University graduates leave for medical school in another state and 2 of those will not return

The Children of Tomorrow

- Out of every 100 8th-graders in North Carolina:
58 graduate from high school
38 attend college
28 return for a second year
18 graduate from college
- There are 200,000 students enrolled in UNC Campuses . . . One-third of these students come from just four counties: Wake, Mecklenburg, Guilford, and Forsyth
- By 2017, there will be 80,000 more students enrolled in UNC campuses



- Minority students make up 43% of total public school enrollment in our state. . .and 85% of the enrollment in North Carolina's 50 lowest performing public schools
- Over half of minority children in North Carolina live in households earning less than \$30,000 per year
- African American males make up 14% of total public school enrollment in our state . . . and
 - 22% of high school dropouts
 - 30% of special education students
 - 8% of Honors students
 - 9% of full-time college students
- A black male high school dropout will earn \$620,000 less in his lifetime than a black male college graduate
- In the past four years, over half of the new students in North Carolina's public schools were Hispanic
- By 2017, 30,000 more students will graduate from North Carolina public high schools . . . 22,000 of them will be Hispanic
- The majority of Hispanic children in North Carolina live in households:
 - Earning less than \$30,000 per year
 - That don't own their home
 - Whose parents don't have a college education
- 83% of all public school elementary and secondary teachers in North Carolina are white
 - 78% of all public university faculty in North Carolina are white
- In the last 5 years, real wages for college graduates have grown by 4% . . .and those of high school dropouts have fallen by 10%
- High school dropouts earn \$800,000 less than college graduates over their lifetime
- High School Dropouts make up almost half of
 - Heads of households on welfare
 - Prison populations



- 50% of all teen mothers drop out of high school and never return
- Teen fathers are 40% less likely to graduate from high school than other students
- Each teen birth in North Carolina costs taxpayers \$18,000 per year
- From 1999-2004, gang activity grew in North Carolina . . .
To 387 gangs
With 8,500 members
Some are as young as 8 years old
- This year, North Carolina taxpayers will spend about
\$ 5,300 educating one public school student
\$10,000 educating one public university student
\$ 25,000 housing one inmate in prison
\$ 92,000 housing one juvenile offender in a Youth Development Center
However, a full four year scholarship to UNC Chapel Hill for one student
will cost \$60,000.
- A child's ability to achieve academically is influenced by
Income
Region
Parents' education level
Community resources
Social influences
. . .not the color of her skin or gender

How Can We Transform Tomorrow?

- Deliver 21st century education at all levels
- Stimulate economic transformation
- Fuel research and development innovations
- Provide support to businesses
- Grow high-quality, healthy, attractive communities
- Inspire leaders and citizens of Tomorrow

Tomorrow Starts Today.

How Can The University of North Carolina Help?