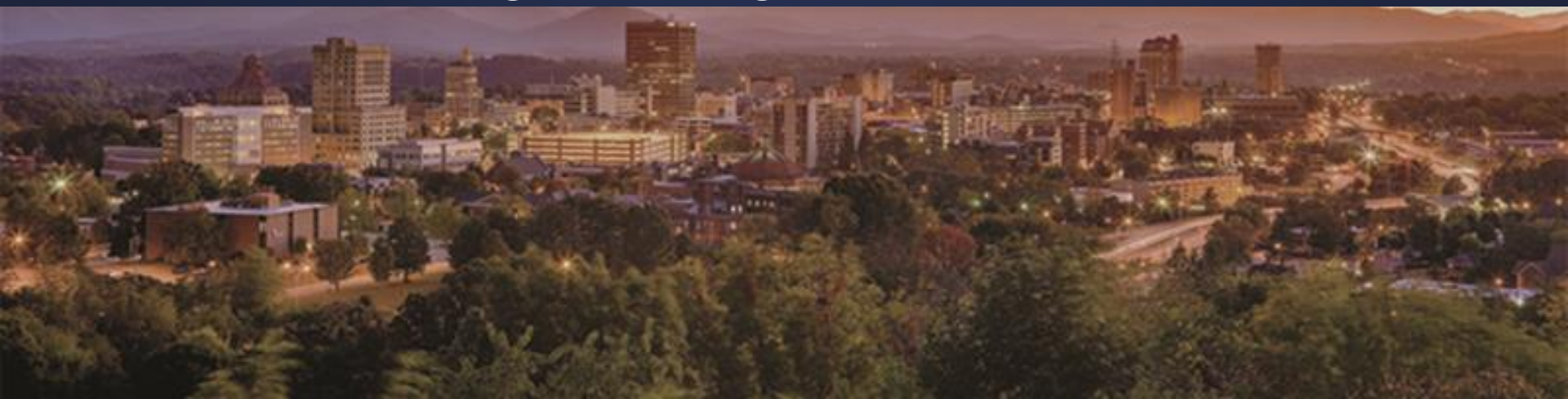




# North Carolina State Demographic Data

Michael E. Cline, PhD  
State Demographer  
North Carolina Office of  
State Budget & Management

August 24, 2017



# Office of State Budget & Management (OSBM) Demographic & Economic Analysis Section

- **Revenue Forecasting**
  - General Fund, Highway Fund, Highway Trust Fund
  - For Governor's Budget, Negotiated Budget, Drastic Changes
  - Reviewed continuously for economic changes
- **Expenditure Projections for Enrollment-Based Programs**
  - Medicaid
  - Child Welfare and Social Services
  - Education Enrollment Projections
- **Administrative Rule Analysis**
  - Economic Impact/Cost Benefits
- **Ad-Hoc Data Driven Policy Analysis**
  - Governor's Initiatives
  - Response to Legislative Proposals
- **Census Coordination Activity**
- **Demographic Estimates & Projections**



# Office of State Budget & Management (OSBM)

## Demographic & Economic Analysis Section

### Census Coordination & State Demographic Analysis

- Census Liaison (Bob Coats)
  - Coordinate Census Activity with Governor's Office, State Agencies and Local Governments
    - LUCA
    - Complete Count
  - State Data Center Lead
  - LINC (Log Into North Carolina)



# Office of State Budget & Management (OSBM)

## Demographic & Economic Analysis Section

### Census Coordination & State Demographic Analysis

- State Demographer (Mike Cline)
  - FSCPE Coordination with Census Bureau
  - Demographic Analysis
  - Advise & Assist Governor's Office & State Agencies in Planning
  - Population Estimates & Projections
    - Certified Municipal & County Estimates
    - Standard/Revised County and Municipal Estimates
    - County Projections (20 Year Horizon)



# Municipal Boundary Differences of Municipal (Incorporated Place) Population Estimates for July 1, 2016 Population Estimates

Census Bureau	NC Standard (&Revised)	NC Certified Estimates
January 1, 2016	July 1, 2016	July 1, 2017
Source: Census Bureau BAS	Source: NC Demographic Information Survey	



# General Differences of County Population Estimates

Census Bureau	North Carolina OSBM
<b>County Estimates</b>	
Component Method (Administrative Records)	Average of: (1) Adjusted Census Estimates (2) Ratio/Correlation for Household Population 0-64 (+ GQ + Census 65+)
<b>Municipal (Incorporated Place) Estimates</b>	
Housing Unit	Weighted Average of: (1) Constant Share (Rate of change same as county) (2) Partitioned Change (1) Core City (Boundary as of 2000) (2) Inner Edge (Area annexed from 2000-2010) (3) Outer Edge (Post 2010 Annexed Areas) (3) Housing Unit Shares
GQ 1 Year Lag	GQ Current Year

# Population Projections

- Age (Single Years of Age, 0 – 99 and 100+)
- Sex
- Race (American Indian/Alaska Native, Asian, Black, White)
- Hispanic Origin (Total, White, Non-White)
- Population Estimates 2010-2016 and Projected from 2017 – 2037 (for projects to be released in October) (20 year projection horizon)
- Forecast models of time series trends (1990-2016)
  - ARIMA or Exponential Smoothing
  - Cohort Model to “Age” population



# Release Schedule (Current)

- Provisional Municipal & County Estimates (Late August)
- Certified Municipal & County Estimates – September 15, 2017 (Statutory Deadline)
- Standard & Revised Municipal Estimates – September 22, 2017
- Population Projections – October 15, 2017



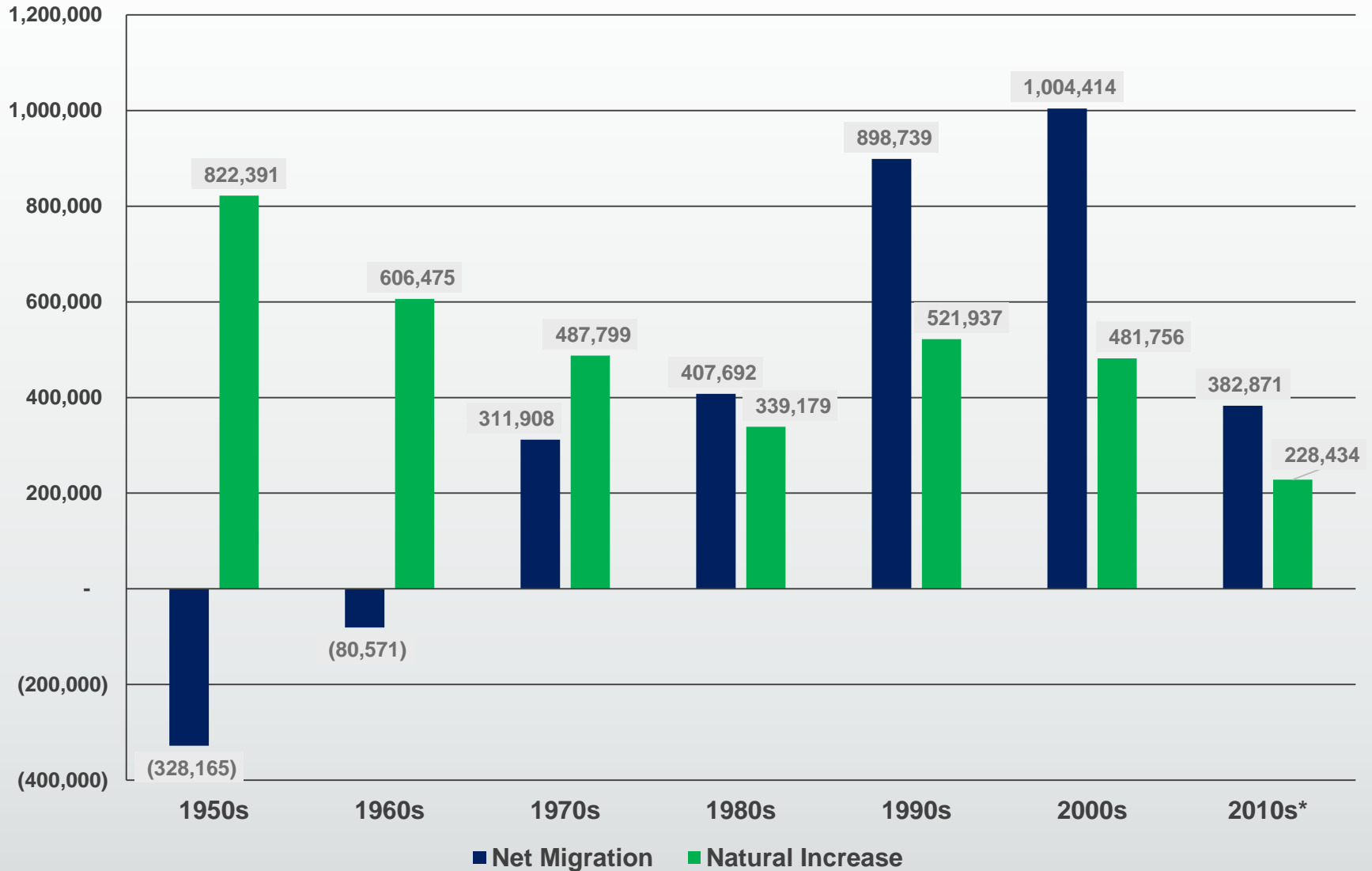


# Future Plans

- Re-work website
- Evaluation of Estimates Models (Post-2020 Census)
- Change in Projection Model & Evaluation
  - Different Method?
  - Projections beyond 20 years
  - Change to Hispanic Origin projections?
  - Incorporate Alternative Scenarios



## Components of Change by Period, 1950-2016

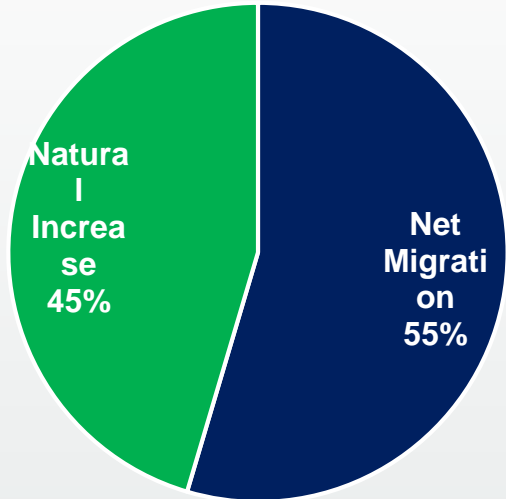


Source: U.S. Census Bureau, Decennial Censuses; Applied Population Laboratory, University of Wisconsin-Madison 2013 (<http://www.netmigration.wisc.edu>); and \*U.S. Census Bureau Population Estimates, Vintage 2016 (April 1, 2010 – July 1, 2016).

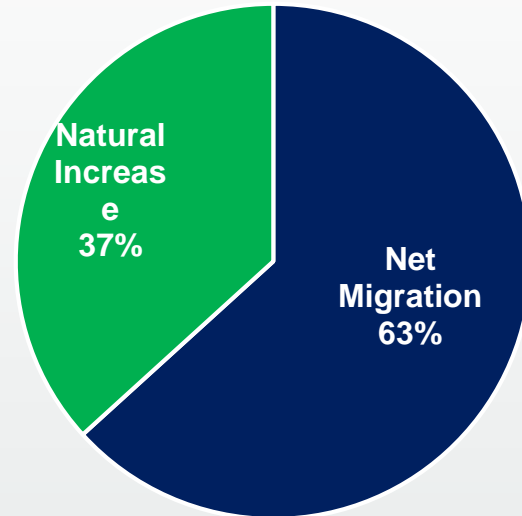


# Components of Change by Period, 1980-2016

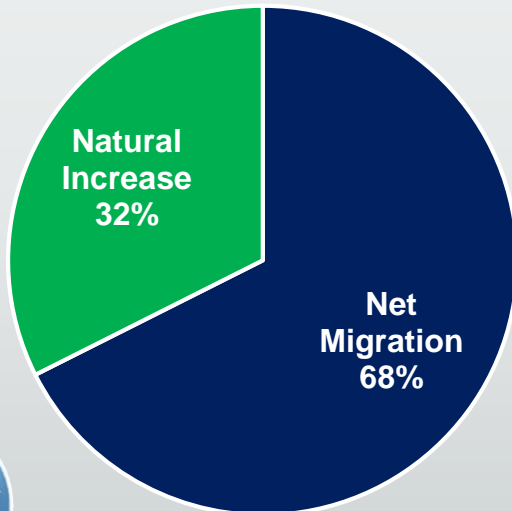
1980-1990



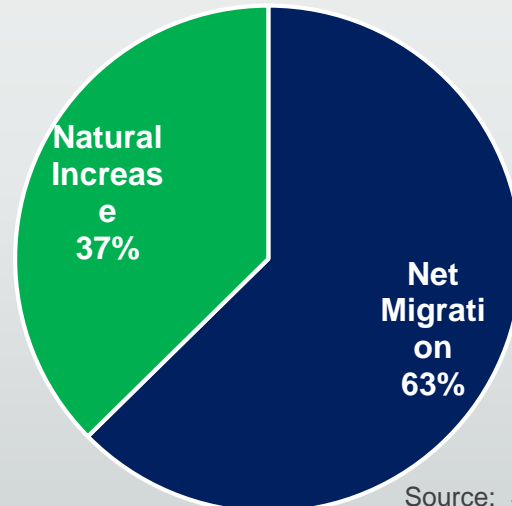
1990-2000



2000-2010



2010-2016

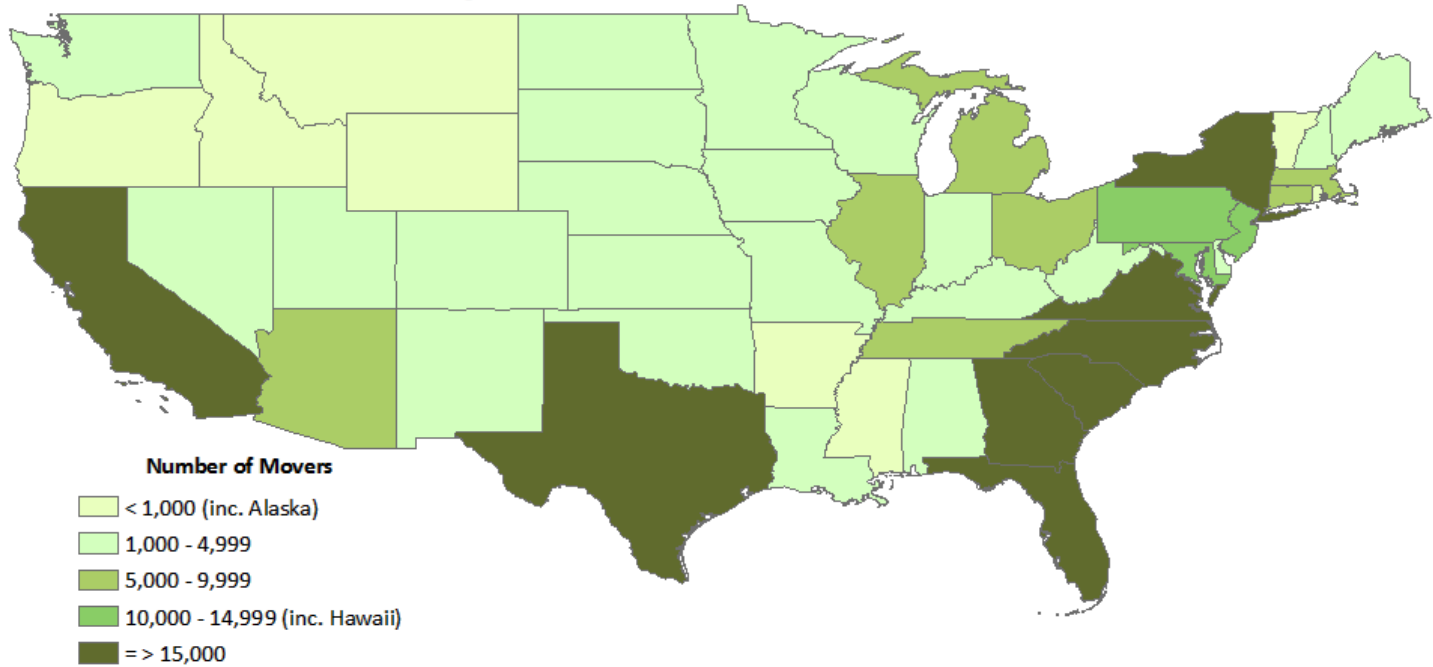


Source: See Previous Slide.



# Migration

**Number of Movers to North Carolina in 2015  
by State of Residence 1-Year Earlier**



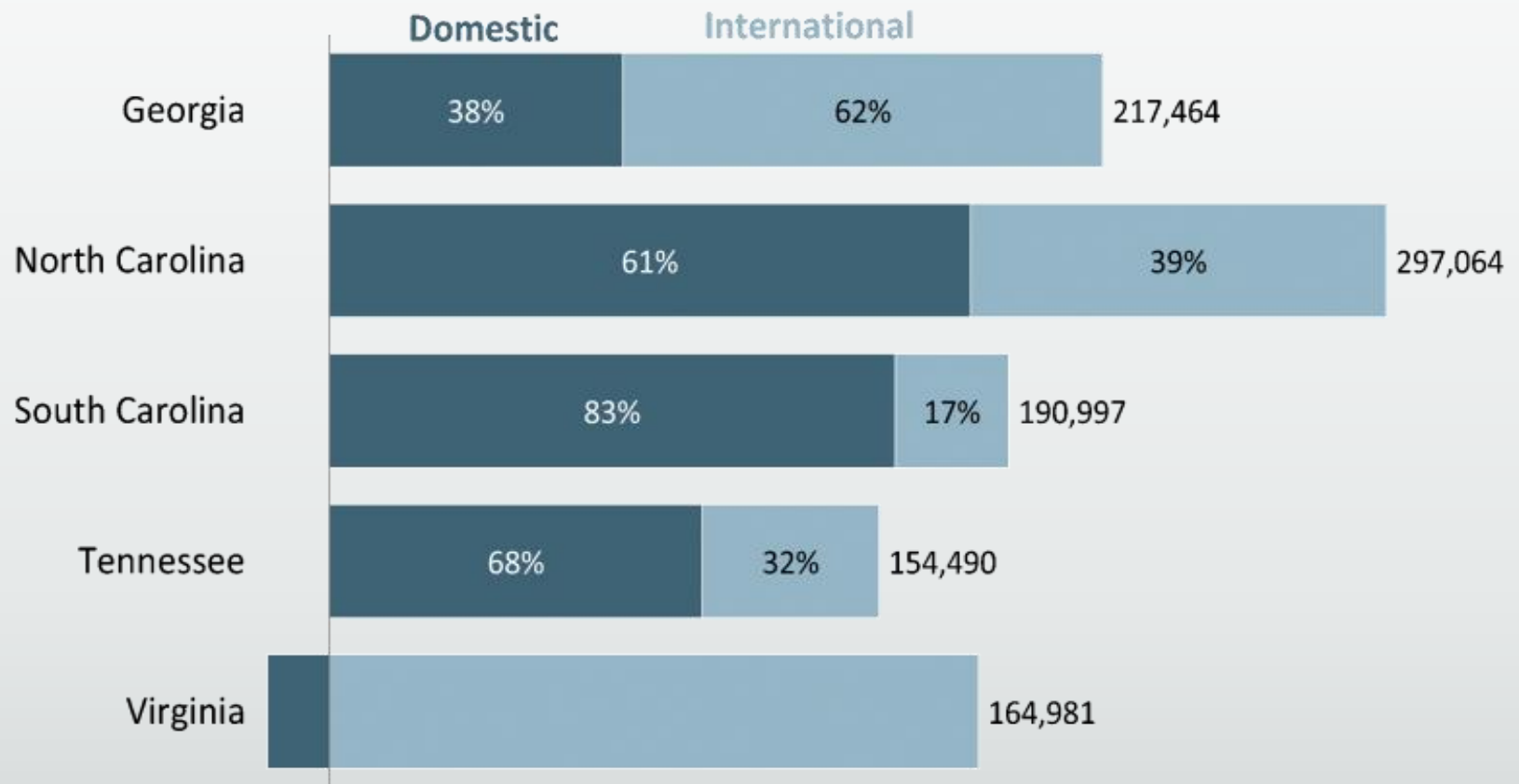
Data from 2015 ACS, US Census Bureau, Population 1 year and over



# Migration (cont'd)

## More Migration to North Carolina vs Neighbors in Recent Years

Net Domestic and International Migration, April 2010 to July 2015

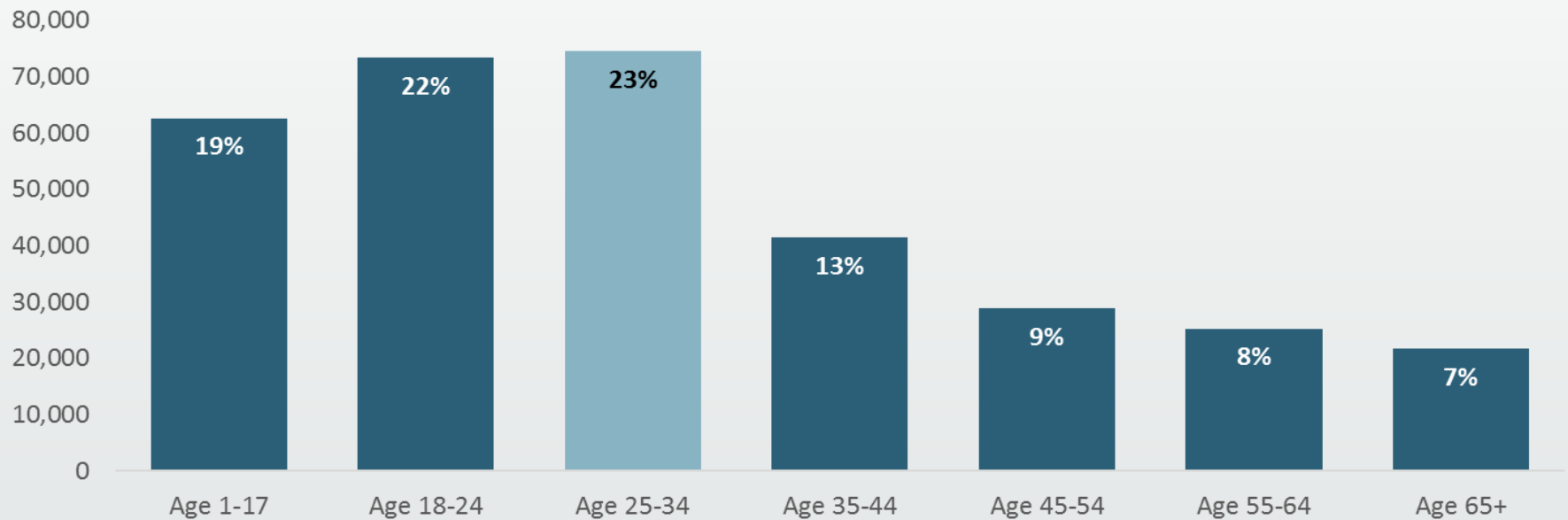


Source: US Census Bureau, Population Estimates



# Migration (cont'd)

## Children & Young Adults Dominated Distribution of Movers into the State in 2015

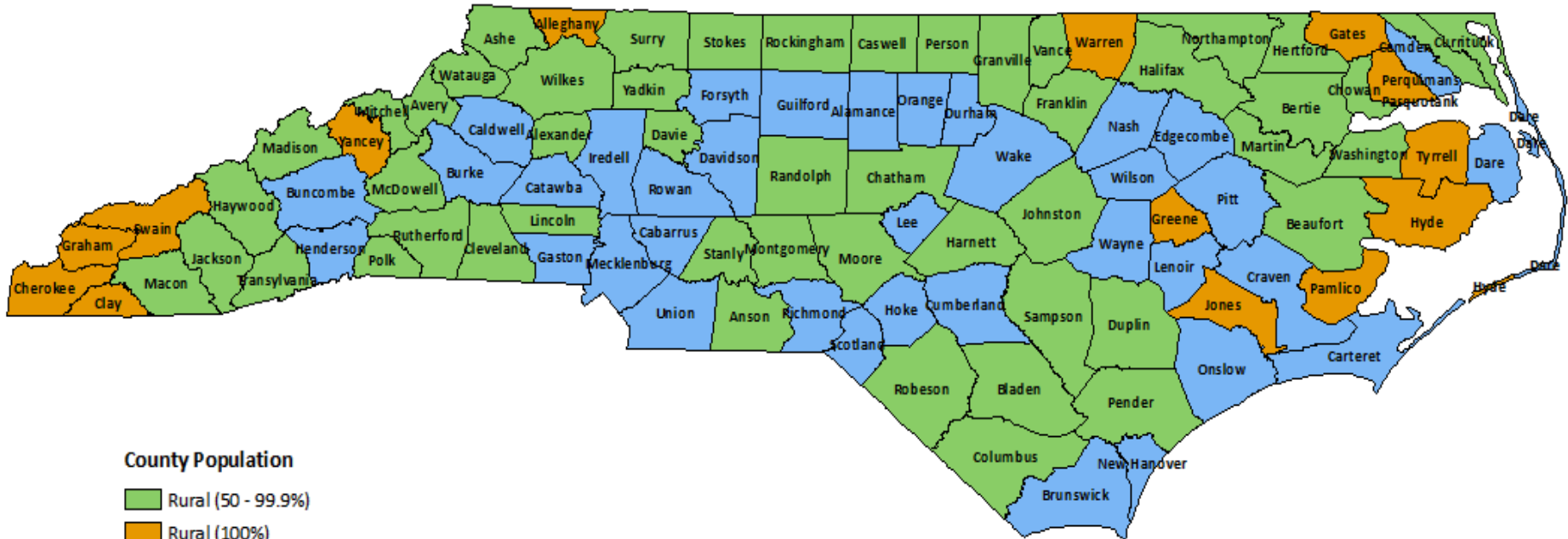


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates



# Rural v. Urban

## North Carolina County Rurality Levels 2010



### County Population

- Rural (50 - 99.9%)
- Rural (100%)
- Urban (More than 50.1%)

North Carolina Office of State Budget and Management



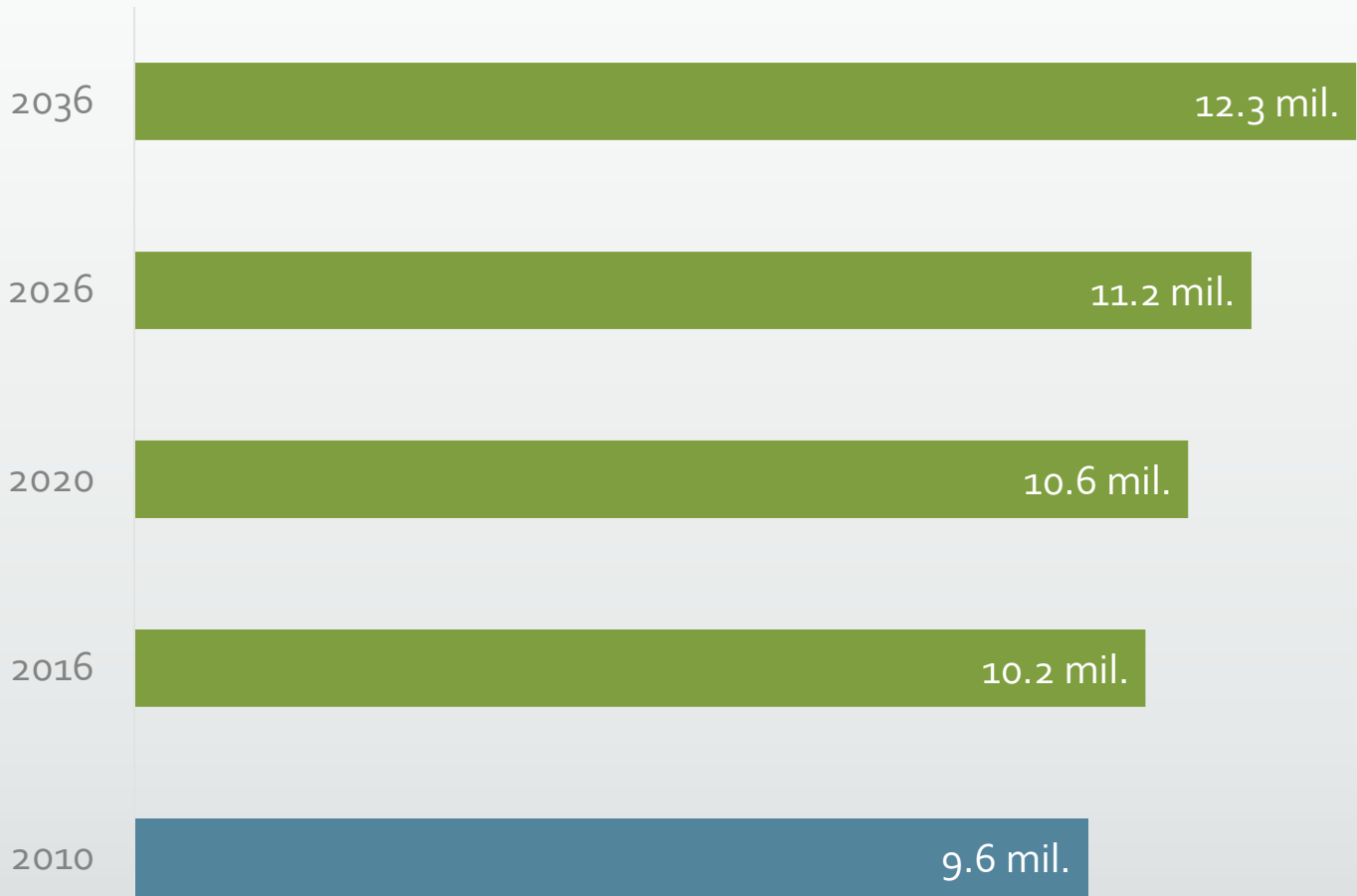
# Rural v. Urban (cont'd)

Rural*	Measure (Five-Year Estimate, 2011-2015)	Urban
28.4%	Percent of Total Population	71.6%
43.3	Median Age	38.6
53.6%	Now Married	51.9%
28.0%	Living Alone	27.8%
66.8%	Born in North Carolina	59.1%
15.9%	Bachelor's Degree or Higher	23.2%
49.0%	Civilian Employed (16 and Over)	54.4%
20.1%	Total Poverty Rate	18.1%
29.9%	Children (Under 18) Poverty Rate	26.4%
12.2%	Seniors (65 and Over) Poverty Rate	9.7%
15.6%	Uninsured Rate	14.7%
\$39,541	Median Household Income	\$45,772
<b>\$128,952</b>	<b>Median Home Value</b>	<b>\$153,625</b>



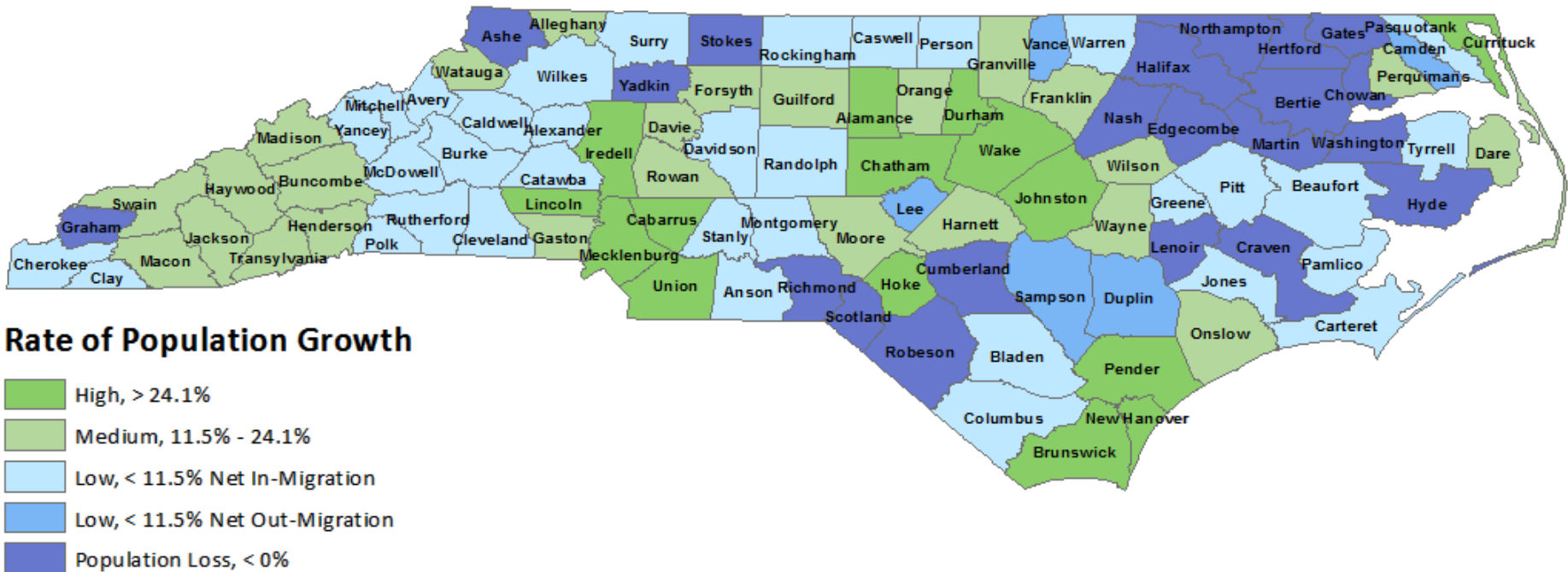


# Total Population Growth

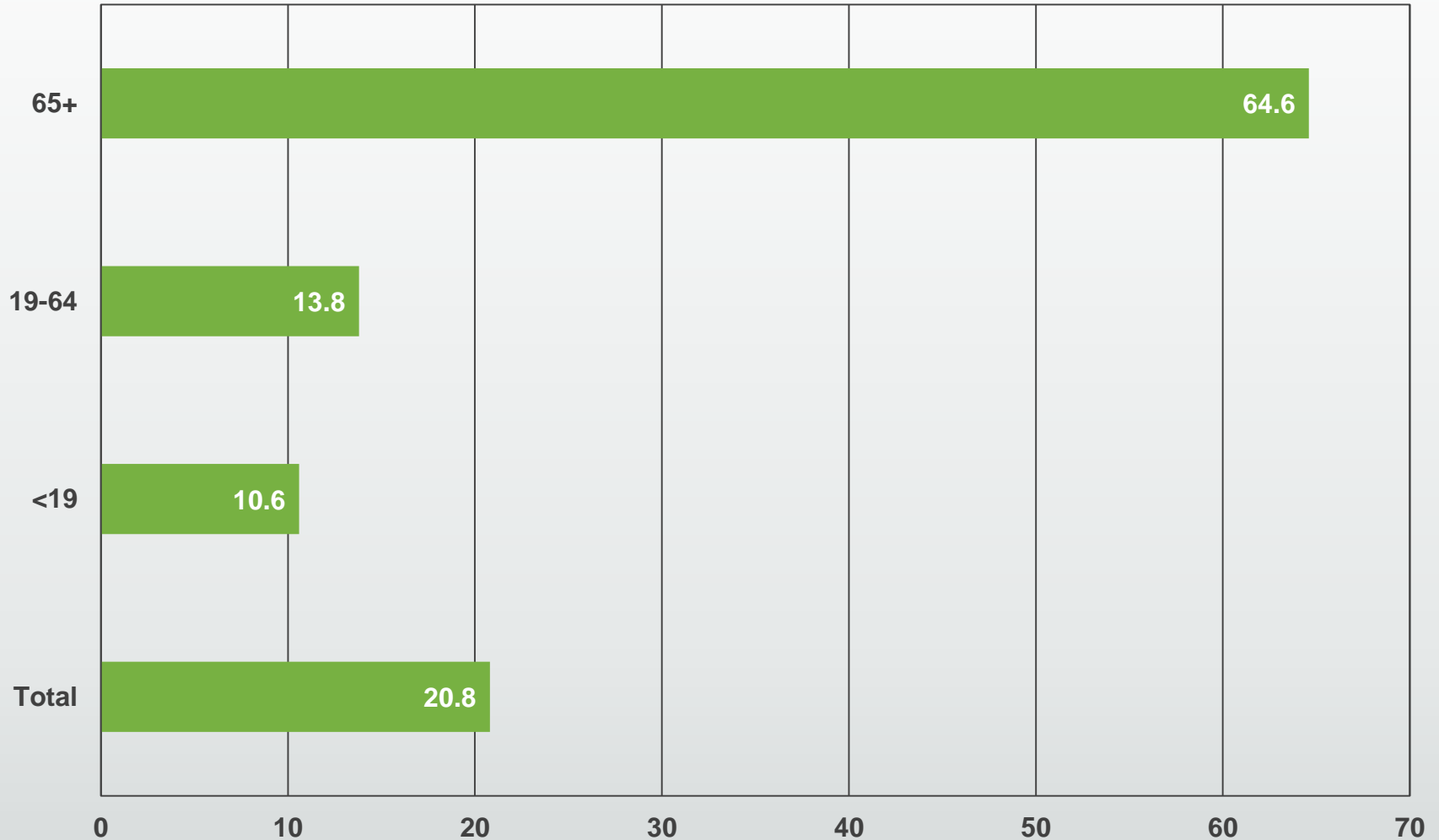


# County population projected growth

## Population Growth, 2016-2036



# Projected Percent Change in Population by Major Age Groups, 2016-2036



Source: NC OSBM Population Projections, Vintage 2016.



# Population and Population Change by Age Group, 2016 and 2036

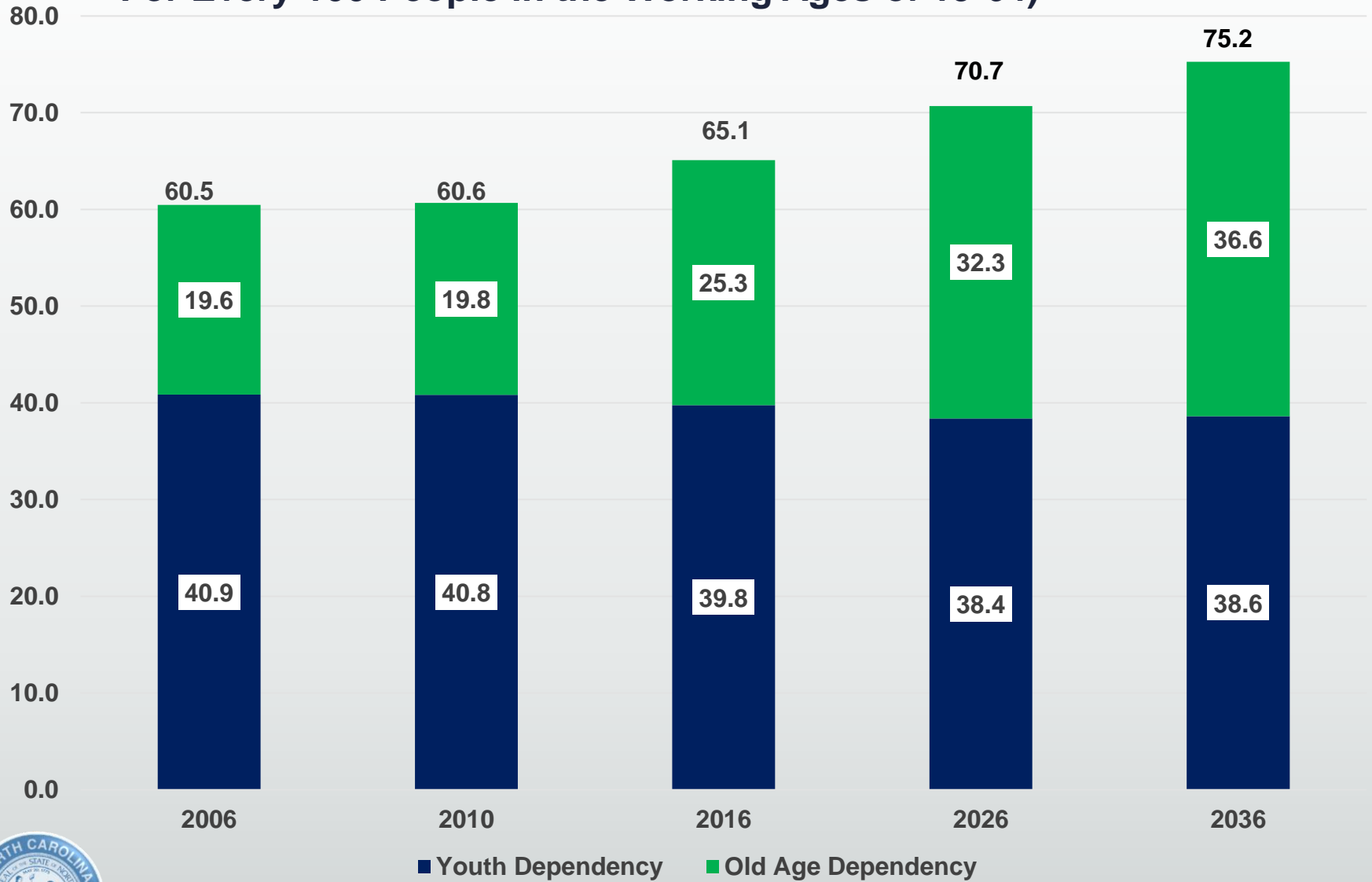
Age Group	2016	2036	Change 2016-2036	
			Numeric	Percent
Total	10,157,505	12,272,264	2,114,759	20.8
<19	2,446,281	2,704,703	258,422	10.6
19-64	6,152,961	7,002,844	849,883	13.8
65+	1,558,263	2,564,717	1,006,454	64.6

Source: NC OSBM Population Projections, Vintage 2016.



# Dependency Ratios, 2006 – 2036

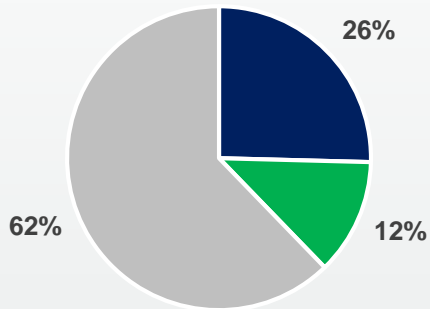
(Number of People in Dependent Ages For Every 100 People in the Working Ages of 19-64)



Source: NC OSBM Population Projections, Vintage 2016.

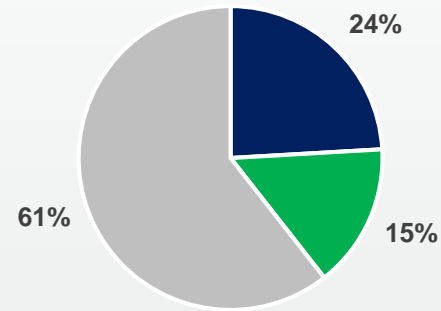
# Change in Age Characteristics, 2010 - 2036

2010



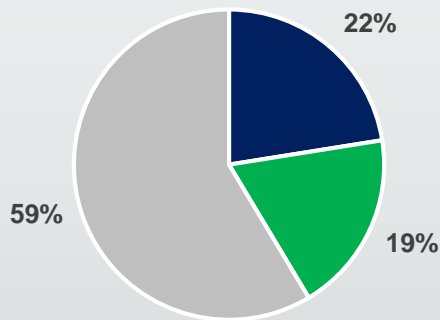
■ <19 ■ 65+ ■ 19-64

2016



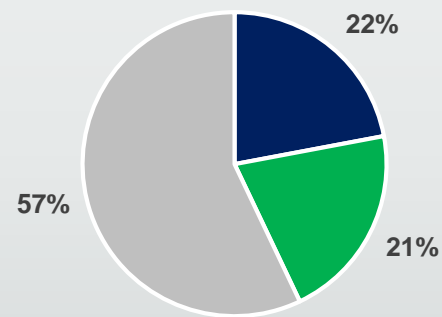
■ <19 ■ 65+ ■ 19-64

2026



■ <19 ■ 65+ ■ 19-64

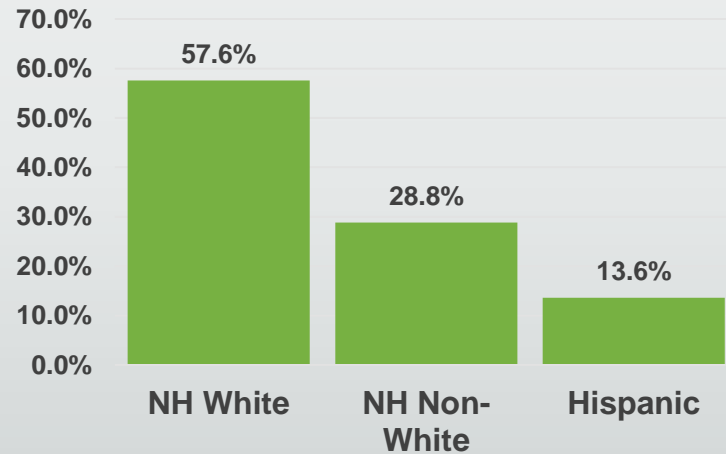
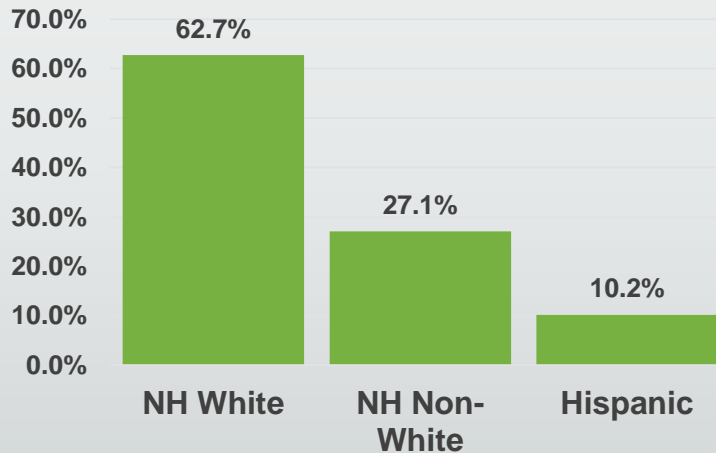
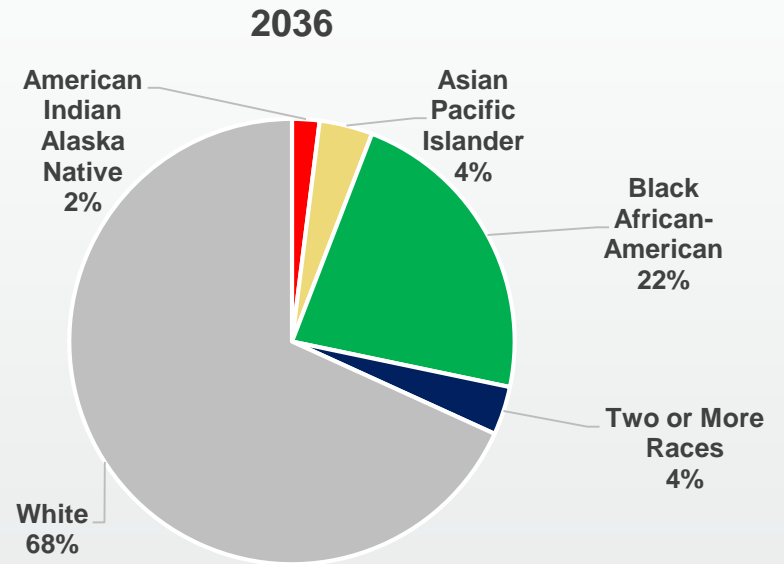
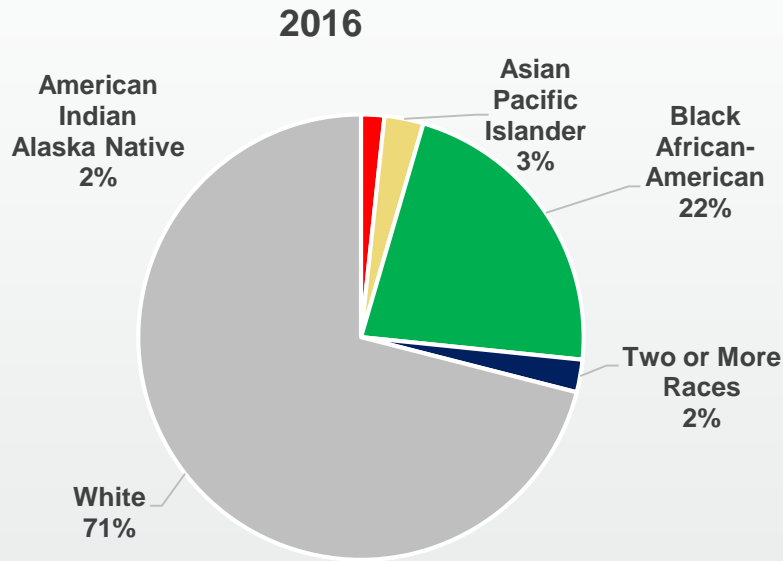
2036



■ <19 ■ 65+ ■ 19-64



# Population by Race and Hispanic Origin, 2016 and 2036



Source: NC OSBM Population Projections, Vintage 2016.



# Thank you for your attention!

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