North Carolina on the Move

A lesson plan for grade 4
History
Government & Civics
21st Century Interdisciplinary Theme: Financial, Economic, Business, & Entrepreneurial Literacy
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This lesson utilizes documents from the North Carolina State Government Publications Collection. Ensuring Democracy through Digital Access, a NC LSTA-funded grant project.

Learning Outcome

Students will learn how to read charts and create charts using digitized historical documents to summarize changes that have occurred in North Carolina since statehood in terms of the growth in population and transportation.

Teacher Planning

Time required: Three 45 minute class periods plus extension activities

Materials/Resources Needed

Part 1-Population growth

Internet, pencil, paper, students can make a copy of the population chart and fill it in, or you can do this on the board as a whole class. The following websites take you to direct links with the numbers; however, the charts are not as easy to read for those unfamiliar with government documents. Modeling of how to read the charts is expected in order for your students to select the material and numbers they need to complete this activity.

NC State Population for the year 2009 sec. 2.1 page 37 from the NC Dept of Public Health Records


NC State Population for the year 2000 page 36 from the NC Dept of Public Health Records


NC State Population for the year 1930 page 8 from the NC Dept of Public Health Records

http://digital.ncdcr.gov/cdm4/document.php?CISOROOT=%2Fp249901coll22&CISOPTR=34497&CISOOP1=exact&REC=1&CISOBOX=total+population note you will need students to add the births to the previous year, then the deaths 102,349 + 77,164= 179,513. 179,513-36,894=142,619 total population
http://www.osbm.state.nc.us/nkosbm/facts_and_figures/socioeconomic_data/population_estimates.shtml

Part 2- Transportation Websites


Resources Internet Search Directions

Students will be required to use the internet to search the North Carolina State Government Publications Collection located at the following address:  http://ncgovdocs.org

Type in total population into the search and the different documents will come up. Look for the NC Dept. of Public Health Records and find the years that are missing from your chart. Look at each year to find the total population. Note: early years before 1950 will need an extra step as students will need to find the last years population and will need to add the births and subtract the deaths. Give this to advanced students.

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<tbody>
<tr>
<td>Population</td>
<td>142,619</td>
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<td></td>
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<td>8,085,484</td>
<td>9,380,884</td>
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<td>Transportation</td>
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Activity Sequence

This lesson summarizes changes that have occurred in North Carolina since statehood in terms of population and growth, transportation. Land use will need to be covered in a separate lesson. Students will conduct initial research using maps and charts to research and complete the charts. (See charts below). They will then discuss in small groups and will describe the changes over time. Students will chose one of the change characteristics researched and will generate a presentation demonstrating what they have learned about changes over time. Lesson planning time is 4 - 45 min class periods, with concentration on the group development of a presentation.

Assessment
Students will be analyzing the data and graphs, and answer questions on a summative assessment about what they have learned. Advanced learners will construct a presentation of their choice using glogster, PowerPoint, or other instructional presentation method to demonstrate what they have learned about the changes in population or transportation. A rubric for the presentation will be constructed by the students and teacher prior to the development of the presentation and will be used to grade the assignment. In addition, students will be required to keep a reflective journal of their findings and what the changes have meant to the student.

Author’s Notes

The graphs and charts associated with this lesson are active links. This lesson directly correlates with the SS textbook Grade 4, Unit 3 specifically transportation-Plank Road page 89, Great Wagon Road page 32, 62, Underground Railroad 91, Wilderness Road 68,68, Automobile 102

TEXTBOOK REFERENCES: North Carolina Geography, History, and Culture Harcourt, 2008

North Carolina Essential Standards

4.G.1 Understand how human, environmental and technological factors affect the growth and development of North Carolina.

Clarifying Objectives

4.G.1.1 Summarize changes that have occurred in North Carolina since statehood (population growth, transportation, communication and land use).
The History of Transportation in North Carolina

The early settlers widened and improved the Indian trails into bridle trails and then dirt roads. In colonial times, waterways were the avenues of commerce. Almost all products moved on rivers and streams within the state, and most manufactured goods arrived by sea. When it became necessary to transport goods farther inland, local laws were passed which directed that a road be built to the nearest landing. By this piecemeal process, the state slowly acquired a system of dirt roads.

As the population of the state grew, so did the demand for roads. From 1830 onward, a new element was introduced into the picture—railroads, representing the newest and most efficient means of travel. In the 1850s, transportation took yet another turn when the state invested in plank roads, which did not prove financially practical.

With the coming of the Civil War, transportation improvements in North Carolina ground to a halt. During the war, the existing railroads were used heavily for military purposes. Renovations and improvements were delayed during the early years of the Reconstruction period because of poor economic conditions in the state. By 1870, the state gave up on assistance to railroads and left their further development to private companies. In 1895, the Southern Railway acquired a 99-year lease on the piedmont section of the North Carolina Railroad while eastern routes fell to the Atlantic Coast Line and the Seaboard Air Line Railway.

In the early years of the 20th century, the principal emphasis was on the further development of the investor-owned railroads. In 1911, there were railroads covering 4,608 mi (7,414 km); by 1937 this figure had increased, if only slightly, to a total of 4,763 (7,663 km). By 2000, railroad track in North Carolina had decreased to 3,360 route mi (5,407 km). Two Class I railroads operate in the state, along with 14 local and eight switching and terminal lines. In 1998, these railroads shipped more than 122 million tons of rail freight through the state. The Carolinian and Piedmont, both state-owned trains, provide daily, round-trip passenger-rail service between Charlotte and Raleigh. The Carolinian also offers continuing service to the Northeast. Amtrak provides passenger service to most large North Carolina cities. Each year more than 325,000 rail passengers begin or end their trips at one of North Carolina's 16 Amtrak stations.

By the second decade of the century, the building of roads received new emphasis. It was during this period that North Carolina earned the label "the Good Roads State." In 1915, the Highway Commission was created, and in 1921 the General Assembly approved a $40 million state highway bond to construct a system of hard-surface roads connecting each of the 100 county seats with all of the others. The new hard-surface roads soon proved ideal for automobiles and trucks. More highway bonds were approved to pay for a statewide system of paved highways, giving the state more roads by the end of the decade than any other southern state except Texas. The state government took over the county roads in 1931.

In 2000, North Carolina had 99,813 mi (160,633 km) of public roads. There were 6,305,150 motor vehicles registered in the same year, including 3,743,066 automobiles, 2,448,806 trucks, and 30,631 buses. Licensed drivers numbered 5,690,494. The major interstate highways are I-95, which stretches north–south across the coastal plain, and I-85, which parallels it across the
piedmont. I-40 leads from the mountains to the coast at Wilmington, and I-26 and I-77 handle north–south traffic in the western section. I-73 and I-74 add 325 mi (523 km) of interstate highway and will handle north–south traffic in the eastern section of the state.
Transportation in the North Carolina Economy

Supporting Document- EOG Type Questions (based on chart above)

Name: __________

1. In between the years 2001 and 2002 did air transportation increase or decrease?
   a) increased  c) no change
   b) decreased  d) no answer

2. Look at the graph for water transportation, after the year 2001, after what year did it decrease?
   a) 2002  c) 2006
   b) 2007  d) 2003

3. About how many millions were spent on air transportation in 2007?
   a) 1 million  c) 3 million
   b) 2 million  d) 4 million

4. Between the year 1997 and 2007 explain what the trend was in truck transportation.
   a) increased by over 10 million  c) increased by one million
   b) decreased  d) no change, it stayed the same

5. Rail transportation shows an increase in which set of years?
   a) 1997-1998  c) 2005-2006
Transportation Activity for North Carolina

(Note: teachers will need to sign up for the site prior to the lesson)

Go to the website:
http://exchange.smarttech.com/search.html?q=planes%2C+trains&subject=All+subjects&grade=All+grades&region=en_US  or under the smarttech home page, type in planes, trains under the search. The first one that comes up is a digital photo library that demonstrates 16 examples of transportation. Ask students to mark in their journals when they see one that they have ridden on. Chart the types using the chart sample below or make your own. Now ask students to reflect on what they have learned, and also what types of transportation they think will increase will increase in the future.

This lesson plan can be adapted and expanded for Grades 8 and 12 please refer to this website for an in depth lesson plan already constructed using Wilmington, NC as an example.

Transportation Lesson grade 8,12
http://docsouth.unc.edu/classroom/lessonplans/gtts/transportation.html