



## NORTH CAROLINA GLOBAL HEAT MAP: ABOUT THE DATA

The Center for International Understanding serves North Carolina by promoting awareness, expanding understanding, and empowering action through global education. CIU's programs for business, policy, and education leaders aim to make North Carolina the most globally engaged state in the nation.

We give special thanks to the sponsors of this North Carolina Global Indicators Database and Map: SAS, the Local Government Federal Credit Union, the Moise and Vera Khayrallah Fund of the Triangle Community Foundation, and Quintiles. We also thank the North Carolina Department of Commerce for its assistance with this project.

For general information about the database or CIU's programs, visit our website: [ciu.northcarolina.edu](http://ciu.northcarolina.edu)

### About Our Sponsors



**SAS** is the leader in business analytics software and services and the largest independent vendor in the business intelligence market. [www.sas.com](http://www.sas.com)



**The Moise and Vera Khayrallah Fund** is a donor-advised fund created by the Khayrallahs at the **Triangle Community Foundation**, a nonprofit organization that manages \$145 million in funds established by individuals, businesses and families. The Foundation gives grants to nonprofit organizations and administers a variety of programs for the community's benefit. The Khayrallah Fund's goal is to assist multicultural and global programs in their efforts to bring people together and highlight cultural commonalities. [www.trianglecf.org](http://www.trianglecf.org)



**Local Government Federal Credit Union** serves North Carolina's local government employees, elected/appointed officials, volunteers and their families. The \$1.1 billion federally chartered credit union is a cooperative of more than 200,000 members associated with various facets of local government in North Carolina's 100 counties and 546 cities, towns and villages. [www.lgfcu.com](http://www.lgfcu.com)



**Quintiles** is the only fully integrated biopharmaceutical services company offering clinical, commercial, consulting and capital solutions. With 25,000 employees in 60 countries and global headquarters in Durham, North Carolina, Quintiles helps biopharmaceutical companies bring new medicines to patients around the world. For more information, please visit [www.quintiles.com](http://www.quintiles.com)

## **Background**

In 2008, with a grant from The William and Flora Hewlett Foundation, the Center for International Understanding (CIU) convened a public-private leadership group to strategize about positioning North Carolina to take advantage of global opportunities. The resulting bi-partisan International Business and Trade Caucus of the N.C. General Assembly was organized in 2008. It focuses on the state's current level of international activity and explores ways to strategically increase global engagement to foster economic development. CIU convened a Global Engagement Summit in early 2009 and brought together legislators with members of the business and education communities to strategize about increasing North Carolina's level of international engagement. In conjunction with Southern Growth Policies Board, CIU collected a variety of statewide global indicators from multiple sources, including trade, economic development, higher education, agriculture, tourism, and K-12 education. These indicators are included in the report [Engaging North Carolina to Engage the World](#).

This database and map are an extension of CIU's mission to make North Carolina the most globally engaged state, as well as our goal to be a trusted voice for international data that is important to North Carolina. It displays global data, broken out by the county level. Because data can change frequently, it should be viewed as a "snapshot" of what is global about each county. We plan to update the data annually, adding new data sets where possible. We hope you will find this information to be of use.

## **Frequently Asked Questions**

Why did the Center for International Understanding undertake to aggregate this data at the county level?

Statewide statistics of international indicators are currently available from various sources. In discussions with policymakers, there was often a request for international indicator data at a more specific county level. This database is an attempt to provide that county specific data and to reflect a "global snapshot" for each county.

What are the sources for this data? Data was obtained from various government, research and economic development sources – there is a specific reference under each category. The 2010 U.S. Census provides the latest demographic data.

Some of the data comes from the American Community Survey. What is this survey?

According to the U.S. Census Bureau, the American Community Survey (ACS) is an ongoing survey that provides data every year – with detailed questions about age, sex, race, family and relationships, income and benefits and more. This survey is sent to a small percentage of the population on a rotating basis and conducted every year. The data is presented in 1-year, 3-year and 5-year estimates. We have used 5-year estimates for this database. For some of the data elements, the data was aggregated for presentation where noted.

Who created this map?

The heat map was developed by SAS and uses its fourth-generation programming language to access and transform the data for presentation by the SAS web-based, interactive visualization components. The heat map delivers highly effective visuals to gain a quick understanding of international activity in North Carolina.

How are the map colors determined?

There are five shades of blue in the legend. The counties are split into five groups with approximately 1/5 of the counties in each color group. The darkest color is assigned to the group of the counties with the highest values. The lightest color is the group with the lowest values.

How often will the data in the N.C. Global Indicators Map be updated? CIU plans to update this data annually.

Who should I contact if I want more information about the data? Please refer below to the specific category in which you have an interest for the best contact.

May I use this data in presentations or printed materials? We hope you will find this county-level data to be useful. If you decide to use it in presentations or printed collateral, we would appreciate a reference to the Center for International Understanding and our web site, [ciu.northcarolina.edu](http://ciu.northcarolina.edu)

***Disclosure: All data included in the N.C. Global Indicators Dataset was obtained from secondary sources, and references are noted. Because the data is obtained from secondary sources, the Center for international Understanding (CIU) does not control and cannot guarantee the relevance, timeliness, or accuracy of these outside materials. CIU makes every effort to provide accurate and complete information; however, certain data points were estimated where noted, and various data may change prior to updating. CIU provides no warranty, expressed or implied, as to the accuracy, reliability or completeness of furnished data.***

### **ABOUT THE DATA**

The 2010 U.S. Census credited North Carolina with a population of 9,535,483—an 18.5% jump from ten years ago. Not only has the number of foreign-born citizens increased, but also our economic dependence on tobacco and furniture has transitioned to a more diversified economy with biotechnology, pharmaceutical, energy and even gaming sectors.

In a global economy, international engagement at all levels is essential for promoting economic growth and providing jobs. Every day, legislators and local leaders are confronted with policy challenges that require international insight. Business leaders from companies large and small collaborate and compete with entrepreneurs all over the world. And our education institutions are charged with developing and inspiring a citizenry and workforce capable of thriving in this increasingly interdependent world.



The Center for International Understanding created this North Carolina Global Indicators Database and Map to assist its leaders and citizens with gaining a better understanding of what is happening globally at the local level. The map includes data in various categories that demonstrate global engagement. It also includes a statewide snapshot that uses selected data from population demographics, education, business, and agriculture to provide an overview of global engagement in all counties. If one looks at the data for each of the 100 counties, you will find that there is something “global” going on in every corner of our state.

## **POPULATION DEMOGRAPHICS**

The purpose of the Population Demographic dataset is to provide general context and show the relative changes in population in general, as well as changes in the foreign born population.

Much of the data was obtained from the U.S. Census Bureau ([www.census.gov](http://www.census.gov)) and the American Community Survey ([www.census.gov/acs](http://www.census.gov/acs)), described by the Census Bureau as an ongoing survey that provides data every year -- giving communities the current information they need to plan investments and services. Information from the survey generates data that help determine how more than \$400 billion in federal and state funds are distributed each year.

### **Population Demographics**

1990 Total Population, 2000 Total Population, 2010 Total Population, 1990 – 2000 Percent Change in Population, 2000-2010 Percent Change in Population, 1990-2010 Percent Change in Population – from the 2010 Census Data. Source: [www.factfinder2.census.gov](http://www.factfinder2.census.gov)

Foreign Born Population refers to people who were not U.S. citizens at birth. Foreign Born Population, 2010 Percent Foreign Born Population Source: 2006-2010 American Community Survey 5-Year Estimates: Selected Social Characteristics in the United States: 2006-2010 ([www.census.gov/acs/www/](http://www.census.gov/acs/www/))

In-Migration from Foreign Countries, Out-Migration to Foreign Countries: This data is from public IRS tax return data. It captures the number of people (as of April 15 of the given year) who lived abroad for part of the year and were North Carolina residents for the other part of the year 2007-2008. Information may be accessed through North Carolina’s Economic Development Intelligence System ([edis.commerce.state.nc.us](http://edis.commerce.state.nc.us))

Latino/Hispanic Population describes the largest immigrant community in North Carolina. The population totals and percentages can be found in the 2010 US Census ([www.factfinder2.census.gov](http://www.factfinder2.census.gov)). Public School Enrollment is available at the Education Statistics Access System at <http://www.ncpublicschools.org/data/reports/>. The Latino birth rate suggests where the demographics may be headed in the future. This information was gained through a special request to the NC Department of Health and Human Services.

### **Place of Birth**

The World Region of Birth for Foreign Born data was obtained from the 2006-2010 American Community Survey 5-Year Estimates: Selected Social Characteristics in the United States: 2006-2010

For reference, the countries included in each World Region are noted below.

Europe: United Kingdom, Ireland, Sweden, Austria, France, Germany, Netherlands, Greece, Italy, Portugal, Spain, Czechoslovakia, Hungary, Poland, Romania, Belarus, Russian, Ukraine, Bosnia and Herzegovina, Yugoslavia

Asia: Eastern Asia, including China (including Hong Kong, Taiwan), Japan, Korea, South Central Asia, including Afghanistan, Bangladesh, India, Iran, Pakistan, South Eastern Asia, including Cambodia, Indonesia, Laos, Malaysia, Philippines, Thailand, Vietnam, Western Asia, including Iraq, Israel, Jordan, Lebanon, Syria, Turkey, Armenia

Africa: Eastern Africa, including Ethiopia, Middle Africa, Southern Africa, including South Africa, Western Africa, including Ghana, Nigeria and Sierra Leone.

Oceania: Australia and New Zealand, Melanesia, Micronesia, Polynesia

Latin America includes Central and South America: Caribbean, including Barbados, Cuba, Dominican Republic, Haiti, Jamaica, Trinidad and Tobago, Mexico, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Peru, and Venezuela

North America: Canada

### **Ancestry**

According to the U.S. Census Bureau, Ancestry refers to a person's ethnic origin or descent, "roots," or heritage, or the place of birth of the person or the person's parents or ancestors before their arrival in the United States.

In this category, we included breakout numbers for the largest ancestry groups only. For reference the following countries are included in each subset.

Middle Eastern (Arab)

European (Czech, Danish, Dutch, English, French- except Basque, French Canadian, German, Greek, Hungarian, Irish, Italian, Lithuanian, Norwegian, Polish, Portuguese, Scotch-Irish, Scottish, Slovak, Swedish, Swiss, Ukrainian, Welsh)

Russian (Russian)

African (Sub-Saharan African)

Hispanic or Latino Ancestry - According to the American Community Survey, Hispanic ancestry is not included as a choice in the question on Ancestry (“What is this person’s ancestry or ethnic origin?”). This data is obtained in a specific question (“Is Person of Hispanic, Latino, or Spanish origin?”) This data has been incorporated here under the Ancestry segment.

Asian Ancestry – Asian is included in the question: What is the person’s race? Respondents may choose, Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Native Hawaiian, Guamanian or Chamorro, Samoan, Other Pacific Islander or other Asian. This data has been incorporated here under the Ancestry segment.

## **EDUCATION AND FOREIGN LANGUAGES**

### **Languages Spoken at Home**

This data refers to how many people speak a language other than English at home. Source: U.S. Census, American Community Survey. While the Census Bureau codes 382 individual languages and language groups, we have selected Spanish and a few other general categories to display in our dataset.

What are other Indo-European Languages? The Indo-European languages include languages as diverse as Latin, Greek, English, Spanish, French, and Russian. Indo-European languages are spoken throughout the world.

What are Asian and Pacific Islander Languages? Asian languages include Chinese, Vietnamese, Korean, Japanese, Cambodian and more. Pacific Islander languages include Native Hawaiian, Samoan, Fijian and more.

### **Enrollment in Foreign Languages**

#### **K-12 Enrollment in Foreign Language Immersion Programs**

The Center obtained this data by contacting either the district foreign language coordinator, or individual schools. Of the 20 counties that have programs, we obtained data from 15 of these; five did not respond to our inquiries. Several counties include information from at least one school, but we may not have the specific information from other schools with immersion programs in that county.

- A good website for information on these programs can be found at [http://seclang.ncwiseowl.org/resources/dual\\_language\\_immersion\\_programs/](http://seclang.ncwiseowl.org/resources/dual_language_immersion_programs/)

#### **K-12 Enrollment in Spanish Language Courses**

#### **K-12 Enrollment in Chinese Language Courses**

#### **K-12 Enrollment in Other Foreign Language Courses**



This data represents the number of K-12 public school students taking a foreign language in school and was obtained from the N.C. Department of Public Instruction (DPI). We've included breakouts for both Spanish and Chinese. The category "Other Foreign Languages" includes Latin, German, French, Russian, Arabic, Japanese, and Korean.

For more information on K-12 data, contact Karl Pond ([karl.pond@dpi.nc.gov](mailto:karl.pond@dpi.nc.gov))

#### **08-09 Foreign Language Degrees Awarded at N.C. Independent Colleges**

#### **08-09 Foreign Language Degrees Awarded at UNC System Colleges**

#### **08-09 Foreign Language Degrees Awarded at N.C. Community Colleges**

This data represents the number of graduates completing a degree in any foreign language offered at these institutions. The data totals were included in the county in which the educational institution is located. For example, data from Guilford College and UNC-Greensboro was included in Guilford County totals.

- Sources for this data include:
  - US Department of Education, Institute of Education Sciences, National Center for Education Statistics, Integrated Postsecondary Education Data System, <http://nces.ed.gov/ipeds>

#### **International Students in N.C. Colleges**

#### **International Students at N.C. Independent Colleges**

#### **International Students at UNC System Colleges**

#### **International Students at N.C. Community Colleges**

This data represents foreign students enrolled in all degree programs in the independent colleges, UNC system colleges or North Carolina community colleges. We do not have specific data on the home countries of these students.

For more information, contact: Frances Fontaine, Director of Research and Collaborative Programs, N.C. Independent Colleges and Universities (NCICU) [fontaine@ncicu.org](mailto:fontaine@ncicu.org)

For more information, contact Bonnie B. Derr, International Programs Coordinator – UNC-General Administration, [bbderr@northcarolina.edu](mailto:bbderr@northcarolina.edu)

For more information, contact Megen Hoenk, Director of Marketing and External Affairs – NCCC, [hoenkm@ncccommunitycolleges.edu](mailto:hoenkm@ncccommunitycolleges.edu)

#### **International Sister Cities in N.C.**

Sister Cities International promotes peace through mutual respect, understanding, and cooperation by focusing exchanges and public programs on sustainable and economic development, youth and education, arts and



culture, and humanitarian assistance. More information about Sister Cities International can be found at [www.sister-cities.org](http://www.sister-cities.org). This data shows the number of official Sisters Cities in a given North Carolina county as of 2012.

### **INTERNATIONAL BUSINESS DATA**

**These international data were collected with the assistance of the Policy, Research and Strategic Planning Division of the North Carolina Department of Commerce.**

#### **North Carolina Importers and Exporters**

This data represents the number of companies in any given county importing or exporting goods as of June 2011.

Data source: PIERS Global Trade Database (<http://www.piers.com/>) Note: this database is not publicly available.

\*Note: this data does not include service exports and imports, or goods not shipped by water-borne vessels.

#### **Estimated Value of Imports and Exports by County**

Data source: PIERS Prospects™ (<http://www.piers.com/>) Export value by county is generated based on the total (estimated) export value of exporters in the county. Some exporters have no export value because they haven't exported in the 12-month period (March 2010 to April 2011). Import value is also generated in the same method. In some cases, these values include the agricultural export data compiled in the Agriculture and Commodity Export Data section.

#### **# Foreign Owned Company Sites**

This data provides information on businesses that have sites in North Carolina and are foreign-owned. Data is from the Dun & Bradstreet (D&B) and UniWorld firm directories. Firms do not pay to be listed in these databases. Please note the firm databases may not reflect current company information and may not represent a comprehensive listing of all foreign companies in North Carolina.

- D&B uses a variety of sources, including public records, trade references, newspapers and publications, telephone interviews and others. For more information about D&B, visit <http://www.dnb.com>
- UniWorld's primary sources of information are the parent company annual reports, telephone surveys, press releases and other public and private sources. For more information about UniWorld, visit <http://www.uniworldbp.com>

### **Estimated Number of N.C. Employees at Foreign Company Sites**

This data provides estimates on the number of employees at the foreign-owned company sites in North Carolina counties. Data source is from Dun & Bradstreet firm database only. Please note number of company employees is estimated by D&B and may not represent exact number of employees.

### **International Companies with US headquarters in N.C.**

This data provides estimates of the number of international businesses with sites in other countries and a U.S. headquarters in North Carolina. Note the parent company is international.

- Data source is Dun & Bradstreet ([www.dnb.com](http://www.dnb.com)) and UniWorld ([www.uniworldbp.com](http://www.uniworldbp.com)) business databases. Companies do not pay to be listed in these databases. Please note the firm databases may not represent a comprehensive listing of all foreign companies with headquarters in North Carolina. D&B uses a variety of sources, including public records, trade references, newspaper and publications, telephone interviews and others. UniWorld's primary sources of information are the parent company annual reports, telephone surveys, news releases and other public and private sources.

Note: another good source for business data is North Carolina's Economic Development Intelligence System [edis.commerce.state.nc.us](http://edis.commerce.state.nc.us)

### **Agriculture and Commodity Export Data**

The data on pork, poultry, cotton, sweet potatoes, soy beans, and tobacco was compiled from information given in the Agricultural Statistics - 2011 Annual Statistics Book under Crop Statistics. The total export numbers were taken from the WISERTrade database.

Data on forest products is based on Forest Inventory Analysis (FIA) and Timber Product Output (TPO) Data (US Forest Service), WiserTrade Export Data, as well as NC State University Extension Forestry's publication [2011 Income of North Carolina Timber Harvested and Delivered to Mills](#). Includes HS Codes 44 (Articles of Wood), 47 (Wood Pulp) and 48 (Paper). County estimates (allocation %) were calculated by using the same percentage of the statewide total as used in NCSU 2011 Delivered Income Report.

### **Participants in CIU Programs**

Since 1979, CIU has educated North Carolinians about global issues. Some of our programs involve international travel with teachers, policy leaders, and community leaders. Others work with North Carolinians in the state—such as our Confucius Classrooms program, which teaches Chinese to K-12 students in North Carolina. These figures reflect the number of participants in each program since its inception. To learn more about these and other CIU initiatives, please visit our website at [ciu.northcarolina.edu](http://ciu.northcarolina.edu)