Transportation in South America

Cities
- Buenos Aires
- São Paulo
- Rio de Janeiro
- Lima
- Bogotá
- Caracas
- Brasília
- Lima
- Montevideo

Capitals
- Buenos Aires
- São Paulo
- Rio de Janeiro
- Lima
- Caracas
- Brasília
- Cochabamba
- La Paz

Roads
- Trans-Andean Highway
- Pan-American Highway
- Trans-Amazon Highway

Railroads
- The Strait of Magellan

Airports
- Buenos Aires
- São Paulo
- Rio de Janeiro

Major Rivers
- Rio Negro
- Madeira
- Tapajós
- Xingu
- Tocantins
- São Francisco
- Paraguay
- Parana
- Salado
- Uruguay
- Magdalena
- Amazon

Lakes
- Lake Titicaca

Countries
- Argentina
- Brazil
- Bolivia
- Chile
- Colombia
- Ecuador
- Guyana
- French Guiana
- Paraguay
- Peru
- Suriname
- Uruguay
- Venezuela
- Guyana
- Brasil

Map by: Henry Xu 10/15/2016
The Chesapeake Bay area is a vital region in our country, nestled between multiple states and next to our nation's capital. Because of its population and infrastructure, it requires a massive amount of energy, and multiple techniques are employed to power everything. Below are a collection of maps that show the different types of coastal energy facilities and their capacities in the amount of megawatts the facility can put out. The red "Danger" expanses are areas restricted off by the United States' Government, and show where live ammunition and military drills occur, representing possible hazards and disruptions.
This map presents data on two major aspects of transportation for assessing transportation behaviors in different states. Each state is colorized corresponding to its reported average commute time, and a pie chart is shown in order to detail the state's mode share. Datasets created by the American Community Survey, and retrieved from SocialExplorer (http://www.socialexplorer.com/)

Map Created by: Cameron Low
Author: Rebeccah Sharpe 10-15-2016
Sources: Georgia GIS Clearinghouse and Atlanta Department of Planning and Community Development GIS

Atlanta is the capital of Georgia and serves as the center of activity for the state. Not only do all of the major interstates travel through or around the city, there are many attractions within the city limits. The map in the top right shows major bike routes, parks and libraries within the city. Outdoor activities are very popular in Atlanta which is seen by the large amount of bike routes running through the city and vast sizes of parks scattered around.

The large amount of libraries in Atlanta show that there is a large population living in or around the city. Typically libraries are located for a large amount of people to access, and having such a large number of libraries concentrated in the city compared to the rest of the state shows the large difference in population in Atlanta compared to the rest of Georgia.

Some of the major parks and libraries are labeled in the atlanta map in the top right corner.
The Atlanta Schools Science index ranks Atlanta schools by the amount of students in each school and the proximity to parks and lakes. This algorithm ranks schools to form a rating on opportunity for a hands on environmental science class.

Environmental science has increasingly been offered for science credit in public schools. This class offers students the ability to learn about a large amount of subjects that include but are not limited to: climate change, population growth, and pollution. By having schools close to parks and lakes, the students are able to have short field trips to learn, in person, about environmental science topics.

The Top 9 Schools in no particular order are:

- Sutton Middle School
- Morningside Elementary
- Grady High School
- Cleveland Elementary
- Therrell High School
- Kimberly Elementary
- Yound Middle School
- Peyton Forest Elementary
- Benjamin S. Carson Preparatory

Author: Rebecca Sharpe
After the Great Recession of 2007 and 2008, US business and economy have struggled to thrive in the post-recession era. However, over the past few years, there has been an enormous awakening of small-businesses and startups. Businessmen and fresh college grads are starting to move away from the giant machines that are corporations to the fast-paced, exciting world of the startup culture.

The Kauffman Index: Startup Activity provides a way of looking at startup activity across time and geographies in the United States. Instead of accepting the index values provided by the Kauffman algorithm, I decided to create my own index based on startup population density, rate of new entrepreneurs entering the workforce, and percentage of entrepreneurs coming from previous employment. Growth rates and current measures factor into the final index value assigned to each state.
Health and Affordability

The map below aids in assessing levels of medical coverage based on economic status in the Atlanta Region. The map analyzes affordable areas and prevalence of medical resources such as hospital and emergency medical services. Affordable areas are defined as areas where the average housing payments are less 30% of income. A rating system was created for this map that takes into account these factors, focusing attention on areas not meeting preferred ratings of 1-2.
With the wealth of interstates and airports across the United States, one should take advantage of the magnificent National Parks located throughout the country. Some of the most famous parks are the Grand Canyon in northern Arizona and Yosemite National Park in central California. These parks are beautiful year-round and are well worth the long distance for those living on the East Coast.
Noise Pollution:
Takes place when there is either excessive amount of noise or an unpleasant sound that causes disruption.

Causes:
Noise pollution continues to grow in extent and severity as a result of population growth and urbanization.

Major Sources:
Sustained growth in highway and air traffic

Indexing
Noise pollution in each county was evaluated based on two criterias: number of airports and annual traffic volumes on California state highway network. Counties with more airports and larger traffic volumes such as Los Angeles and San Diego, are said to have extreme level of noise pollution.

Data Source: Caltrans, USGS, Geospatial Data Gateway
Bolivia is historically a mining country. Indigenous group has been mining the mountains for silver for centuries. Intensive mining activities started since Spanish conquest. However, mining activities can cause severe impacts on the environment, such as water pollution and also human health. This map shows the spatial distribution and severity of mining contamination and the possible impacts on major rivers (which are usually urban water sources) and major populated areas.

Map by: Qianye Mei
05/01/2016
Sources: ESRI, OpenStreetMap, Natural Earth
School Location Score in Atlanta

When selecting a school, considering the location relative to other geographic features is very important. In this map, schools are categorized by a location score. The higher the score, the better the location. This location score takes into account the school's proximity to parks, lakes, and undeveloped land, while using multipliers based on the type of school as well as the total enrollment. For example, a school with more than 500 students has a multiplier of two, as the more students also signifies a larger benefit or risk. Parks and lakes are benefits, while underdeveloped land is a risk.

Total score = (proximity to park * type of school + proximity to lake - proximity to undeveloped land * type of school) * enrollment multiplier

Schools in Atlanta

Location Rating
- 0 - 5
- 6 - 10
- 11 - 16

Freeways
City Boundaries

0 2 4 8 Miles

Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community
This map shows some of the major facilities, roadways, and districts of the islands of Hawaii. Each district is labeled and has indicators for the shelters, police and fire stations. The roadway connecting these facilities is also shown on the map.
The Grand Canyon of the Yellowstone is the primary geological feature within the park's canyon district, measuring roughly 20 miles long, up to 1,200 ft in width and 4,000 ft in depth. The canyon encompasses the Lower Falls, one of the most photographed features in the park, and requires only a short 3/8 mile hike down to reach the edge of the falls.

Old Faithful erupts every 65 - 92 minutes, the most frequent of the large geysers within the park. Eruptions can last between 1 - 5 minutes, expelling up to 8,400 gallons of bowling water 184 feet high. Old faithful is located in the Upper Geyser Basin and is in walking distance of several other geysers and various park attractions, and can also be viewed or reached from nearby hiking and bike trails.

Hayden Valley is the primary spot to see wildlife in the park, with regular sightings of buffalo herds, elk, and the occasional grizzly bear. The park also has several overlooks that offer a panoramic view of the beautiful valley scenery.
A 14er is a mountain with 14,000 Ft in elevation or above. This is a map of Colorado with the different classes of 14ers in how easy it is to climb and the airports and roads leading to them.
The Savannah Port is home to the largest single-terminal container facility of its kind in North America, consisting of two modern, deep water terminals, the Garden City Terminal, and the Ocean Terminal. The Garden City Terminal is the fourth busiest container handling facility in the United States, encompassing more than 1,200 acres and moving millions of tons of containerized cargo annually. This is made possible by its access to the Savannah River and the railroad lines.

Georgia Ports Authority:
(http://www.gaports.com/About.aspx)
Approximately 10,000 earthquakes occur in California per year. Many of these are not even noticeable, but some of the more powerful ones destroy infrastructure in major cities. Los Angeles is one of those major cities that has to deal with the disasters caused by earthquakes. Fault lines are tectonic plates that are interacting with each other and are where the earthquakes occur. The last major earthquake in the LA area was in 2014 and costed the county $10.6 million. Disaster routes which are shown on the map are highways that are not as close to the faults, and are where access roads allow for evacuation. It is dangerous because infrastructure such disaster routes and airports are often destroyed, which prevents proper evacuation and disaster relief.
Zoo Atlanta can be found in the heart of Grant Park. It is a hidden gem of the city that can take you across the globe from the planes of Africa to the Asian Forest.
This map shows the Carbon Dioxide emission per capita of the United States and highlights the states with higher emission rate. USA has a much higher rate of Carbon Dioxide emission rate compared to the rest of the world. Americans constitute 5% of the world's population but consume 24% of the world's energy.
The Severity of Large Fires in the United States

This map indicates the location and severity of all large fires in the United States and Alaska from 1984 to present. Large fires are classified as being greater than 1,000 acres in the western U.S. and greater than 500 acres in the eastern U.S. The map also identifies extreme fires greater than 250,000 acres, most of which are located on the West Coast and Alaska.

The data on these documented large fires is collected by the Monitoring Trends in Burn Severity (MTBS) project, conducted through a partnership between the U.S. Geological Survey National Center for Earth Resources Observation and Science and the USDA Forest Service Remote Sensing Applications Center.

Source: US Forest Service, Department of Agriculture
Map by: Henry Xu 12.05.2016
Some people prefer to live with people of the same race and ethnicity, while others enjoy neighborhoods with varied backgrounds.

The map shown ranks the neighborhoods based on their diversity. The races included in the calculation are Asian, Black, Hispanic, and White.

The more evenly distributed races are, the higher the neighborhood is ranked. As seen in the map, the northern and southern extremities of Atlanta are not as racially diverse as the central portion of the city.
Georgia Emergency Room Visits

ER Visit Rate (per 100k)
- 56001 - 87857
- 48001 - 56000
- 42001 - 48000
- 35001 - 42000
- 4304 - 35000

Hospitals

Data obtained from GA Dept of Public Health
Map by Merq Belongilot
The purpose of these maps is to provide insight on what factors might contribute to the location of emergency responders (police stations and hospitals) in Washington, D.C.. Although the locations of the emergency responders, which are depicted as yellow points, are spread out relatively evenly, it can be seen that there is a cluster surrounding the middle of the city. This area has a high population density with a low average income, and there's also a large amount of criminal incidents reported. These three factors provide some insight on why the city might have emergency responders around this area, and also where the city would want to put new ones in place.

http://opendata.dc.gov
The map shown below finds habitats ideal for moose in the State of Washington based on tree cover and distance from whitetail deer habitat.

Tree cover is an important aspect of moose habitats for various reasons. Moose's diets mainly consist of leaves, twigs, bark, and shrubs. In the summer months, trees provide cover from the sun. In the winter months the trees provide cover from heavy snowfall, as well as allowing the moose to have a source of food when high snow covers the shrubs that they feed on in warmer months.

Recent studies have shown that moose population tends to decline when in the presence of a high population of whitetail deer. This is because whitetail deer can become host to a brain worm (P.tenius) that they are largely unaffected by, but these worms can have extreme negative consequences for moose. Because of this, it is ideal for moose to live outside the range of whitetail deer habitat, considering on the map below that deer generally tend not to wander more than 7000m outside of their habitat.
Do you want to move to the beautiful coast of Florida? Do you like living in a big city? Are you terrified of Hurricanes? Well then Cape Coral is just the town for you! Our Mapping experts have analyzed Florida and have discovered that Cape Coral is the only city with a population over 100,000 that lies within a "low risk" county for hurricanes!

What makes us low risk you ask? Check it out for yourself! Lee county has only been hit directly by a hurricane 28 times in recorded history! Compare that to many of the other Florida Counties and we have a great record.

So come enjoy our pristine beaches, calm intercoastal waterways, and wonderful city.
There is a clear pattern between level of education and poverty in Georgia. The map on the left shows the percentage of the population in each county who attained at least a high school degree. The map on the right shows the poverty rate in each county. The two attributes are inversely related, as can be seen when comparing the two maps.