Lab 10: Map Assessments

Compare and contrast these 8 pairs of maps. Consider the purpose and cartographic elements of each. Evaluate each map. Which is the better map in each pair? Which of the 16 maps is the overall winner? Justify your answers.

***Your final responses for each pair of maps should in separate paragraphs, then write a final paragraph justifying which of the 16 maps is the overall winner (9 paragraphs total) consisting of complete sentences. Use the questions asked on pp. 24-25 in your *Making Maps* textbook by Krygier and Wood as a guide. Be as thorough as possible (remember to consider map elements, visual hierarchy, color choice, text font style/size).**

***This lab is due by 1159pm on Tuesday (Nov. 13th). Please email your responses in a PDF file (with your name, data, and section #) to your TA via your TAMU email. The email heading should read: Lab#_LastName_FirstName_GEOG232_Section#.**

1. On Table: Official state highway maps
   a. Texas
   b New York

2. Online: Bathymetry maps available at davidrumsey.com
   a. The Floor of the Oceans by Bruce Heezen and Marie Tharp, Office of Naval Research (1976)
https://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~231252~5508520:World----Ocean-Floors-and-Land-Reli?sort=pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no&qvq=w4s:/what%2FBathymetry;sort:pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no;lc:RUMSEY~8~1&mi=4&trs=34
   b. World Ocean Floor by National Geographic (1981)
https://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~231755~5509024:World----Ocean-Floors?sort=pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no&qvq=w4s:/what%2FBathymetry;sort:pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no;lc:RUMSEY~8~1&mi=28&trs=34

3. On Table: Government agency topographic maps
   a. British Ordnance Survey Landranger 169 of Ipswich
   b. USGS topo sheet of Boulder CO with separate Topographic Symbols key.

4. Online: Texas Population maps. Available from Center for Geospatial Technology, Texas Tech University
   a. Population Trends by County in Texas 1900 to 2000 by the Center for Geospatial Technology at Texas Tech (2005)
http://www.depts.ttu.edu/geospatial/center/Arch/CGSTARCHWeb/JPEGs/PopGainLoss.jpg
   b. Population Density by County in Texas 2000
http://www.depts.ttu.edu/geospatial/center/Arch/CGSTARCHWeb/PDFs/PopulationDensity.pdf

5. On Table: Navigation charts
   a. Maritime: NOAA navigation chart of the Mississippi Sound
   b. Aviation: FAA map of Los Angeles

6. Online: Historic maps of the Gold Fields of Alaska available at davidrumsey.com
   a. The Gold and Coal Fields of Alaska by the U.S. Geological Survey (1898)
https://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~2240~170030:The-Gold-and-Coal-Fields-of-Alaska-?sort=Pub_List_No_InitialSort%2CPub_Date%2CPub_List_No%2CSeries_No&qvq=w4s:/when%2FAlaska%2BGold%2BRush;sort:Pub_List_No_InitialSort%2CPub_Date%2CPub_List_No%2CSeries_No;lc:RUMSEY~8~1&mi=1&trs=14
   b. Map of the New Alaska Gold Fields Issued by the Seattle Daily News (1901)
https://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~2197~200063:Map-Of-The-New-Alaska-Gold-Fields-?sort=Pub_List_No_InitialSort%2CPub_Date%2CPub_List_No%2CSeries_No&qvq=w4s:/when%2FAlaska%2BGold%2BRush;sort:Pub_List_No_InitialSort%2CPub_Date%2CPub_List_No%2CSeries_No;lc:RUMSEY~8~1&mi=12&trs=14

7. On Table: Environmental and ecosystem maps
    a. Adirondack Park
    b. USGS Seasonal Land Color Regions

8. Online: Stylized and creative tourism maps. Available at davidrumsey.com.
    a. Air Afrique Map of the World (1960)
https://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~302621~90073455:-Air-Afrique-Map-of-the-World-?sort=pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no&qvq=w4s:/what%2FPictorial%2Bmap;sort:pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no;lc:RUMSEY~8~1&mi=43&trs=4048
    b. Florida (2008)
https://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~290401~90062042:Florida-?sort=pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no&qvq=w4s:/what%2FPictorial%2Bmap%2Fwhen%2F2008;sort:pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no;lc:RUMSEY~8~1&mi=1&trs=22

From p. 24 of Making Maps by Krygier and Wood:

The Whole Map

Write out exactly what the map is supposed to accomplish: does the map meet its goals?

Are you sure a map is necessary?

Is the map suitable for the intended audience? Will the audience be confused, bored, interested, or informed?

Look at the map in its final medium: does it work? Has the potential of a black-and-white or color design been reached?

Is the map, its authors, its data, and any other relevant information documented and accessible to the map reader?

Look at the map and assess what you see; is it:

confusing or clear
interesting or boring
lopsided or balanced
amorphous or structured
light or dark
neat or sloppy
fragmented or coherent
constrained or lavish
crude or elegant
random or ordered
modern or traditional
hard or soft
crowded or empty
bold or timid
tentative or finished
free or bounded
subtle or blatant
flexible or rigid
high or low contrast
authoritative or unauthoritative
complex or simple
appropriate or inappropriate

Given the goals of the map, are any of these impressions inappropriate?

The Map's Data

Do the data serve the goals of the map?

Is the relationship between the data and the phenomena they are based on clear?

Does the map symbolization reflect the character of the phenomena or the character of the data?

Does the origin of the data – primary, secondary, tertiary – have any implications?

Are the data too generalized or too complex, given the map's goals?

Is the map maker's interpretation of the data sound?

Are qualitative and quantitative characteristics of the data effectively symbolized?

Have the data been properly derived?

Has the temporal character of the data been properly understood and symbolized?

Is the scale of the map (and inset) adequate, given the goals of the map?

What about the accuracy of the data? Are the facts complete? Are things where they should be? Does detail vary? When were the data collected? Are they from a trustworthy source?

Have you consulted metadata (data about data)?

Does the map maker document copyright issues related to the data?

Is the map copyright or copyleft licensed?

The Map's Framework

What are the characteristics of the map's projection, and is it appropriate for the data and map goals? What is distorted?

Is the coordinate system appropriate and noted on the map?

From pl 25. Of Making Maps by Krygier and Wood:

The Design of the Map

Does the title indicate what, when, and where?

Is the scale of the map appropriate for the data and the map goals? Is the scale indicated?

Does textual explanation or discussion on the map enhance its effectiveness?

Does the legend include symbols that are not self-explanatory?

If the orientation of the map is not obvious, is a directional indicator included?

Are authorship and date of map indicated?

Are inset and locator maps appropriate?

Is the goal of the map promoted by its visual arrangement, engaging path, visual center, balance, symmetry, sight-lines, and the grid?

Has the map been thoroughly edited?

Does the map contain non data ink?

Has detail been added to clarify?

Do the data merit a map?

Do variations in design reflect variations in the data?

Is the context of the map and its data clear?

Are there additional variables of data that would clarify the goals of the map?

Do visual differences on the map reflect data differences?

Do important data stand out as figure, and the less important as ground, on the map? Are there consequences of data not included on the map?

Have visual difference, detail, edges, texture, layering, shape and size, closure, proximity, simplicity, direction, familiarity, and color been used to reflect figure-ground relationships appropriate to the map's goals?

Are the level of generalization and the data classification appropriate, given the map's goals?

Do map symbols work by resemblance, relationship, convention, difference, standardization, or unconvention? Are the choices optimal for the map's goals?

How do the map symbols relate to the concepts they stand for? Is the relationship meaningful?

Have the map symbols been chosen to reflect the guidelines suggested by the visual variables?

If symbolizing data aggregated in areas, is the most appropriate method used? How will the choice affect the interpretation of the map?

What do the words on your map mean? How do they shape the meaning of the map?

Has the chosen typeface (font) and its size, weight, and form effectively shaped the overall impression of the map as well as helping to symbolize variations in the data?

Does the arrangement of type on the map clarify, as much as possible, the data and the goals of the map?

Do color choice and variation reflect data choice and variation on the map?

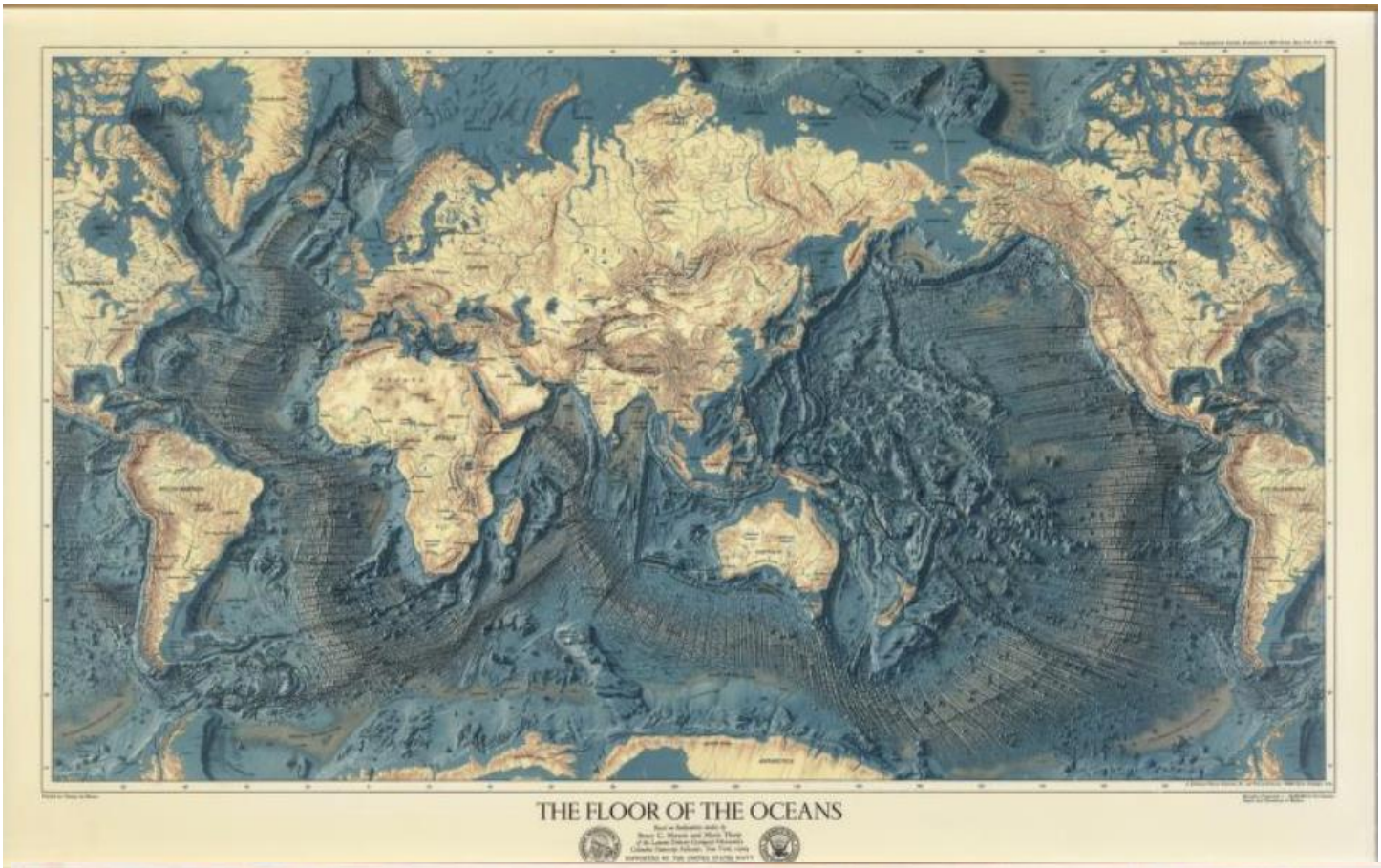
Is color necessary for the map to be successful? Does color add anything besides decoration?

Do color choices grab viewer's attention while being appropriate for your data?

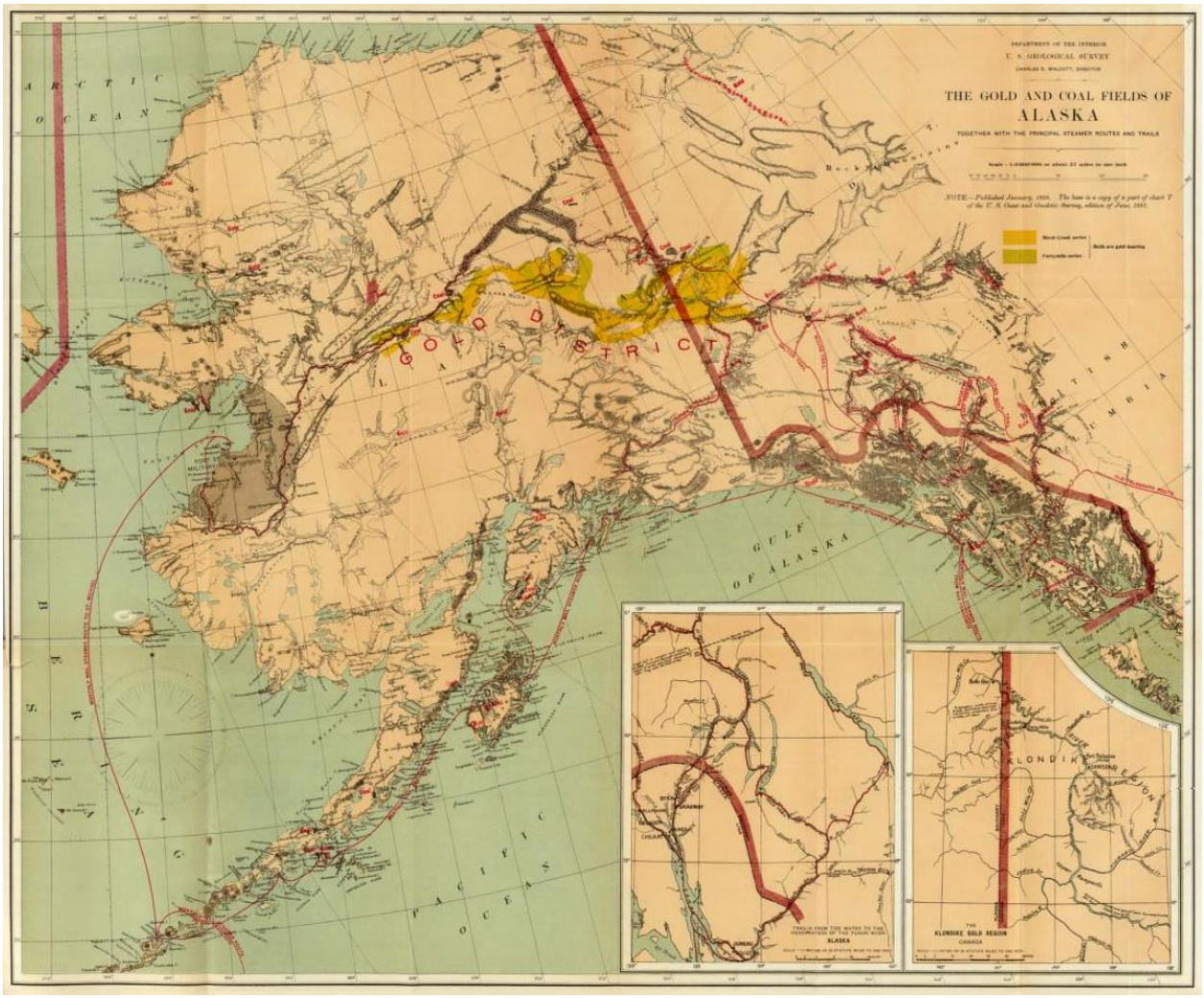
Does the map's design reflect the conditions under which it will be viewed?

Are color interactions and perceptual differences among your audience accounted for?

Have symbolic and cultural color conventions been taken into account and used to enhance the goals of the map?

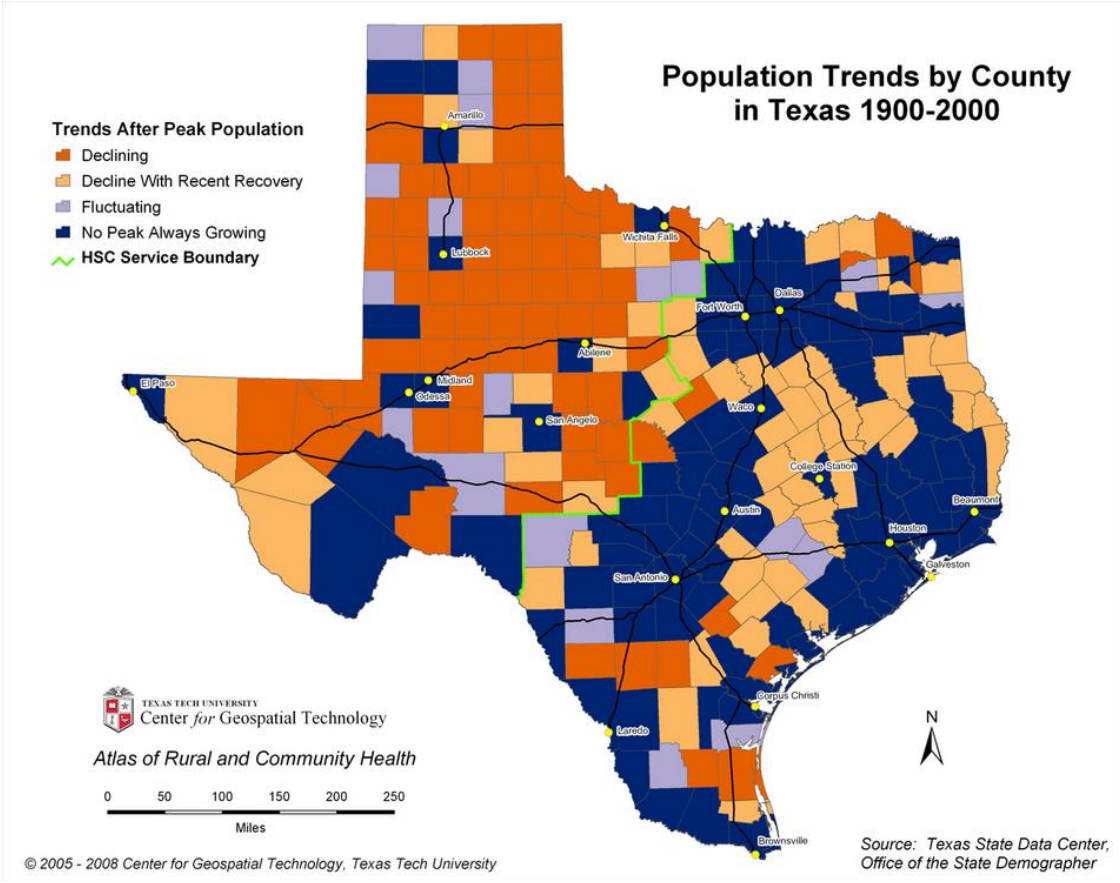


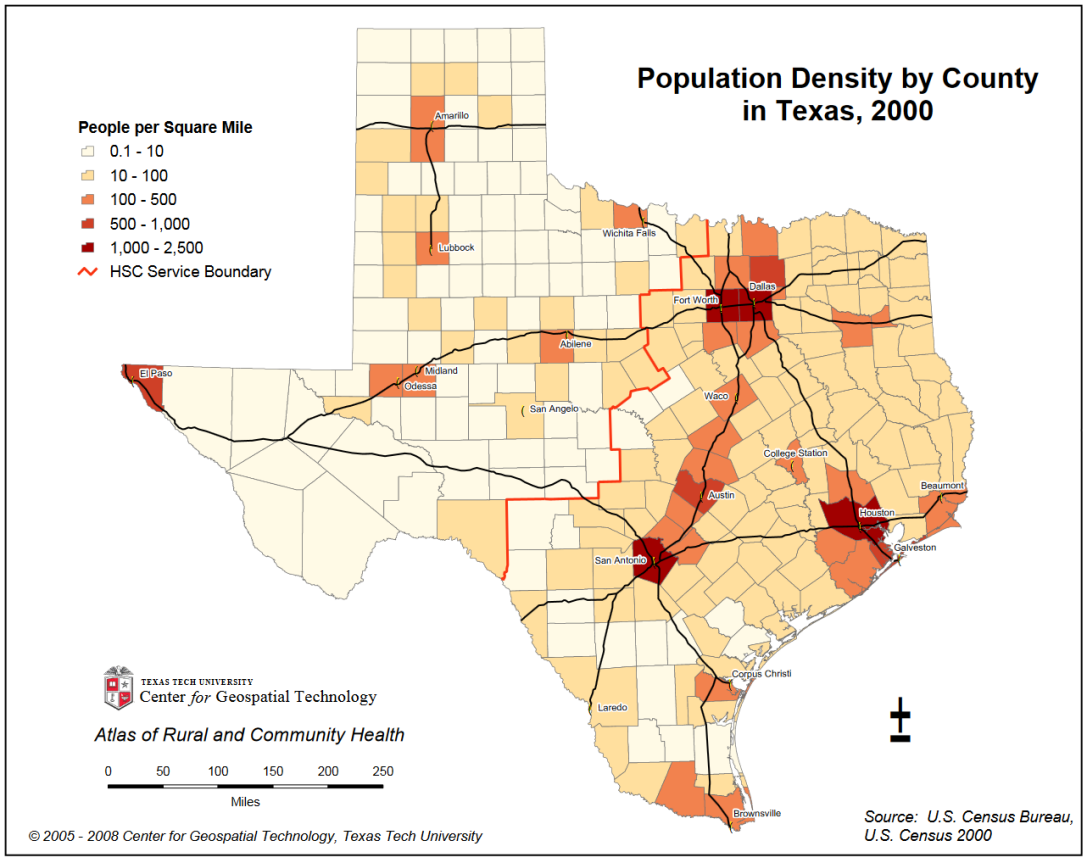
THE FLOOR OF THE OCEANS


DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR
THE GOLD AND COAL FIELDS OF
ALASKA
TOGETHER WITH THE PRINCIPAL STEAMER ROUTES AND TRAILS
NOTE.—Published January, 1899. The base is a copy of a part of chart T of the U. S. Coast and Geodetic Survey, edition of June, 1897.
GOLD DISTRICT
ARCTIC OCEAN
GULF OF ALASKA
PACIFIC OCEAN
KLONDIKE
THE KLONDIKE GOLD REGION
CANADA
ALASKA

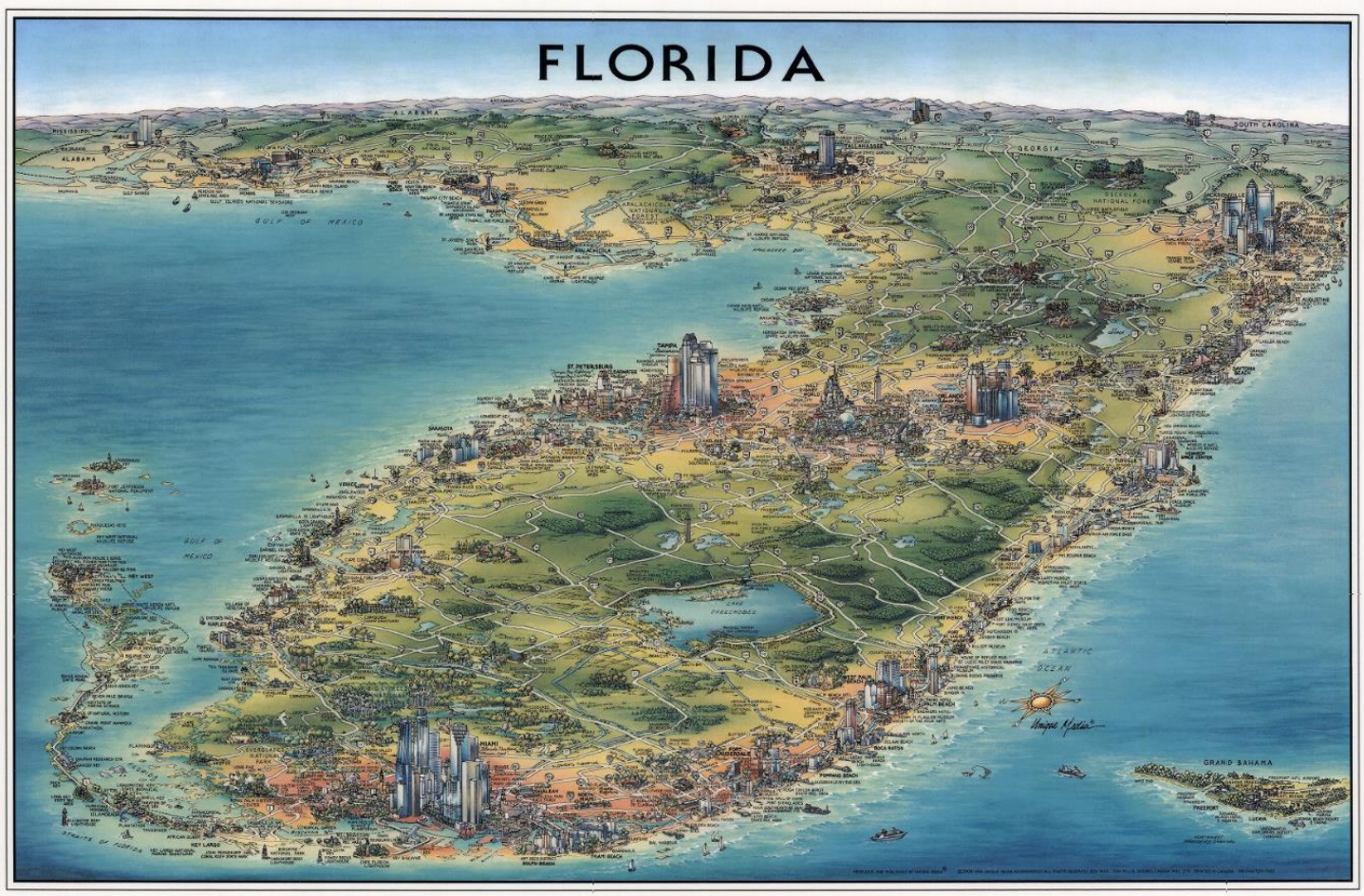

MAP OF THE
NEW ALASKA GOLD FIELDS
SHOWING THE
KOUGROCK, BLUESTONE, COUNCIL CITY, NOME AND COPPER RIVER DISTRICTS.
COMPILED BY J.G. TEMPLE,
FROM FIELD NOTES MADE ON THE GROUND, FROM THE LATEST GOVERNMENT SURVEYS, AND FROM THE MOST RELIABLE AUTHORITIES.
JAN., 1901.
UNEXPLORED
COAL
TUNDRA
SAW TOOTH MOUNTAINS
BEHRING SEA
ISSUED BY
THE SEATTLE DAILY TIMES
SEATTLE, WASHINGTON.
PRICE 50¢.
MAP OF
COPPER RIVER
AND VICINITY
DOLPHIN BAY

Search Note


Population Trends by County
in Texas 1900-2000
Trends After Peak Population
Declining
Decline With Recent Recovery
Fluctuating
No Peak Always Growing
HSC Service Boundary
Amarillo
Lubbock
Wichita Falls
Dallas
Fort Worth
Abilene
El Paso
Midland
Odessa
San Angelo
Waco
College Station
Austin
Beaumont
Houston
Galveston
San Antonio
Corpus Christi
Laredo
Brownsville
N
TEXAS TECH UNIVERSITY
Center for Geospatial Technology
Atlas of Rural and Community Health
0 50 100 150 200 250
Miles
© 2005 - 2008 Center for Geospatial Technology, Texas Tech University
Source: Texas State Data Center,
Office of the State Demographer


Population Density by County
in Texas, 2000
People per Square Mile
0.1 - 10
10 - 100
100 - 500
500 - 1,000
1,000 - 2,500
HSC Service Boundary
Amarillo
Lubbock
Wichita Falls
Dallas
Fort Worth
Abilene
El Paso
Midland
Odessa
San Angelo
Waco
College Station
Austin
Beaumont
Houston
Galveston
San Antonio
Corpus Christi
Laredo
Brownsville
TEXAS TECH UNIVERSITY
Center for Geospatial Technology
Atlas of Rural and Community Health
0 50 100 150 200 250
Miles
© 2005 - 2008 Center for Geospatial Technology, Texas Tech University
Source: U.S. Census Bureau,
U.S. Census 2000


AIR AFRIQUE


FLORIDA
ALABAMA
MISSISSIPPI
GEORGIA
SOUTH CAROLINA
GULF OF MEXICO
TALLAHASSEE
TAMPA
ST. PETERSBURG
SARASOTA
KEY WEST
MIAMI
KEY LARGO
FORT LAUDERDALE
WEST PALM BEACH
ATLANTIC OCEAN
GRAND BAHAMA
FREEPORT