

# Map Elements

# Map Elements

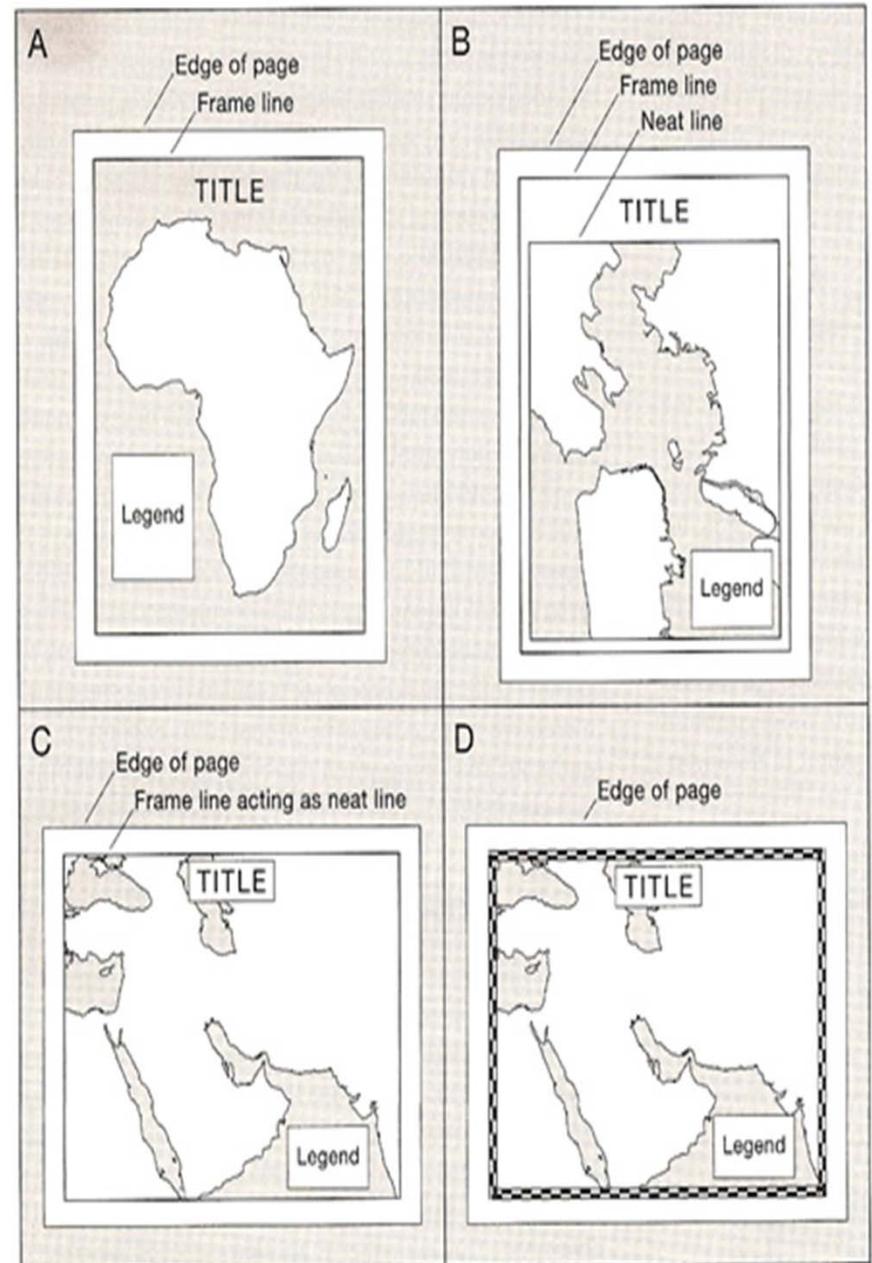
## **Common set of map elements:**

- Frame line and neat line
- Mapped area
- Inset
- Title and subtitle
- Legend
- Data source
- Scale
- Orientation

# Frame Line/ Neat Line

## Used to organize the map's contents

- Define its extent
- Frame line: encloses all other map elements
- Neat line: used to crop the mapped area



# Mapped Area

- Composed of thematic symbols and base information
- Size is dependent on several factors
  - Page size
  - Margins
  - Space for other elements
- As large as possible without being too close to other elements

# Inset

- Serves multiple purposes
  - Enlarges an important congested area
  - Locating primary market area
  - Shows related trends or areas



# Title/Subtitle: Thematic maps

- Title: Succinct description of the maps theme
- Subtitle: Further explains the title (*optional*)

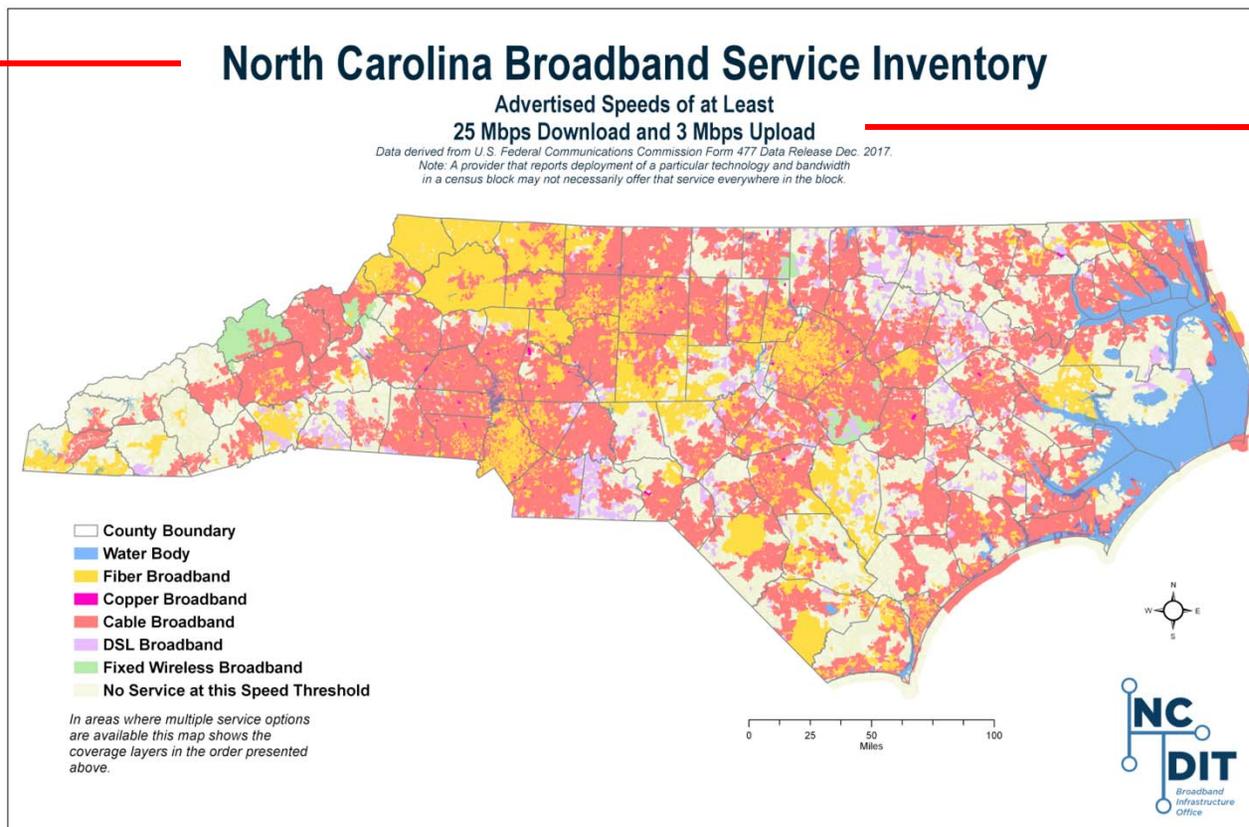
**Title**

## North Carolina Broadband Service Inventory

Advertised Speeds of at Least  
25 Mbps Download and 3 Mbps Upload

Data derived from U.S. Federal Communications Commission Form 477 Data Release Dec. 2017.  
Note: A provider that reports deployment of a particular technology and bandwidth  
in a census block may not necessarily offer that service everywhere in the block.

**Subtitle**

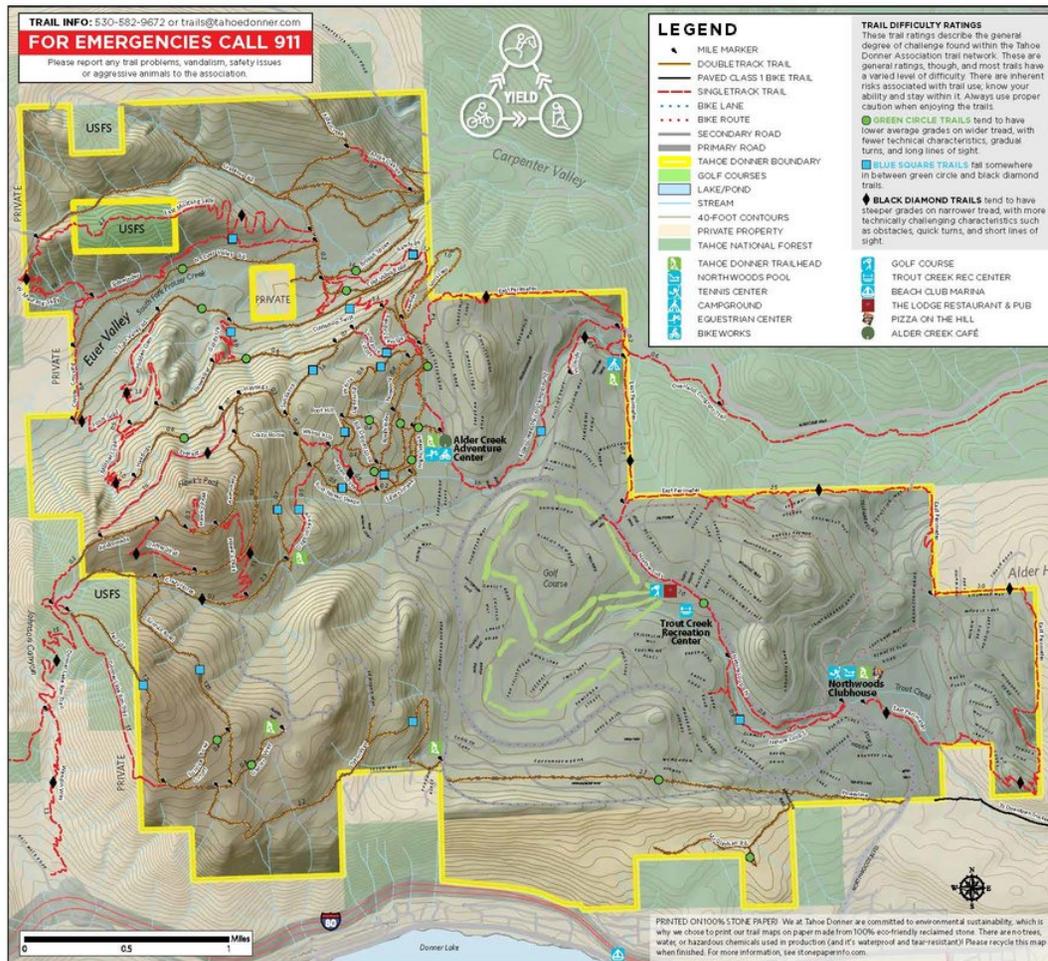


# Title: General Reference--

- Statement of region being represented

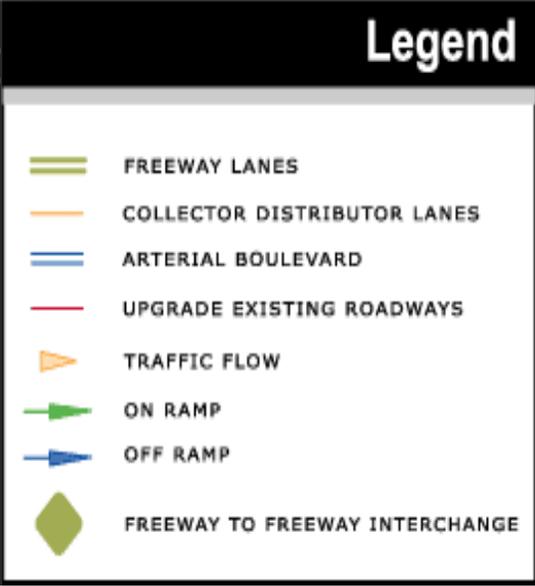


## TAHOE DONNER TRAIL SYSTEM



# Legend

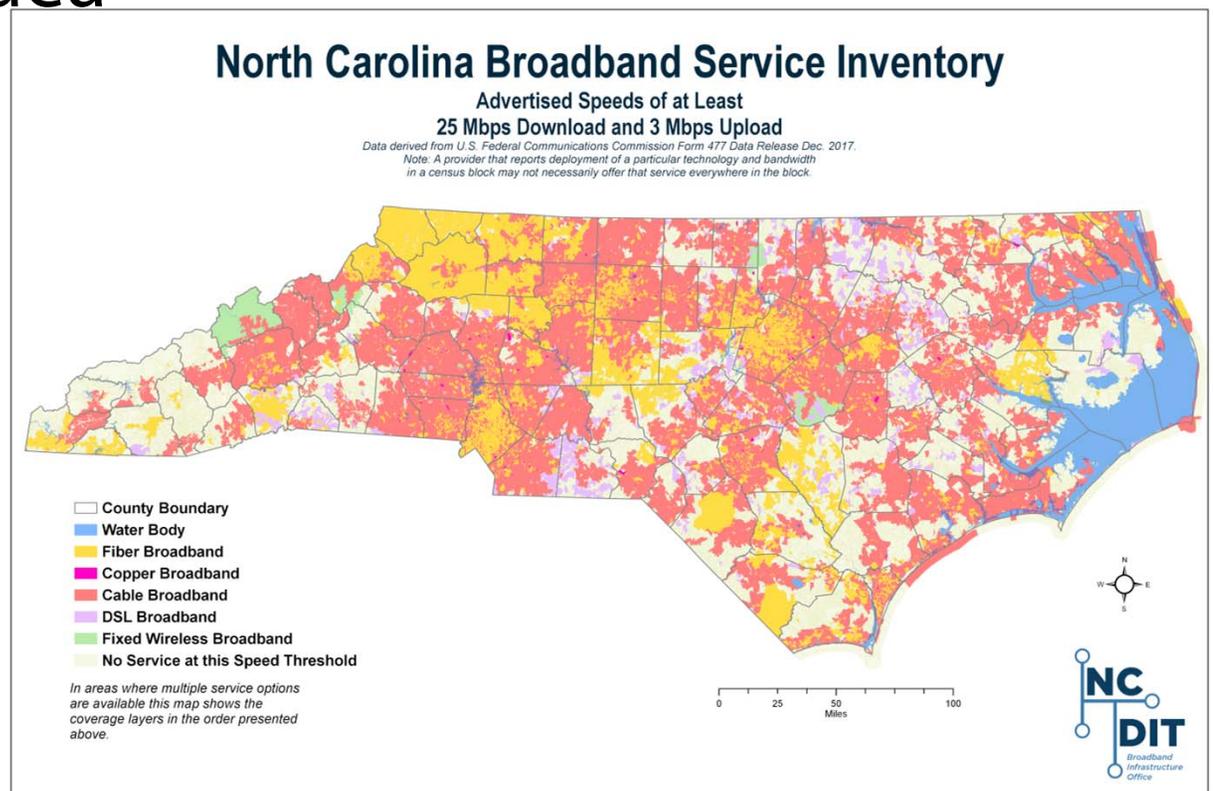
- Defines all the thematic symbols on a map
- Symbols placed on the left and defined on the right
- What symbols to leave out:
  - Symbols that are self-explanatory
  - Not directly related to the map



Legend	
	FREEWAY LANES
	COLLECTOR DISTRIBUTOR LANES
	ARTERIAL BOULEVARD
	UPGRADE EXISTING ROADWAYS
	TRAFFIC FLOW
	ON RAMP
	OFF RAMP
	FREEWAY TO FREEWAY INTERCHANGE

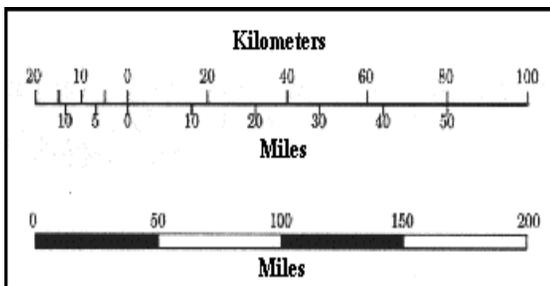
# Data Source

- Indicates where data were obtained
- Give general idea
- Be plain, subtle, concise



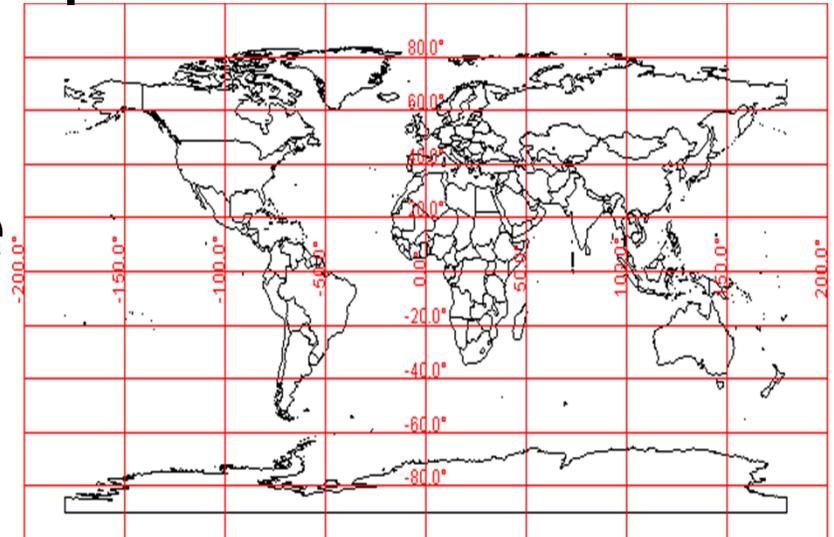
# Scale and Bar Scale

- Amount of reduction that has taken place
- Representative fraction is ratio of map distance to Earth distance
- Bar Scale resembles a ruler that can easily be used to measure distances on a map
  - Should be included if distance information enhances map user's understanding of the theme



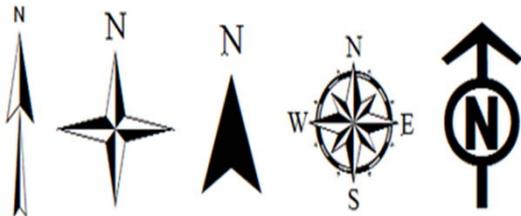
# Orientation

- Refers to indication of north on a map
  - Graticule
  - North Arrow
- Always needs to be included if true north NOT on the top
- Navigation maps, surveying always include orientation as well



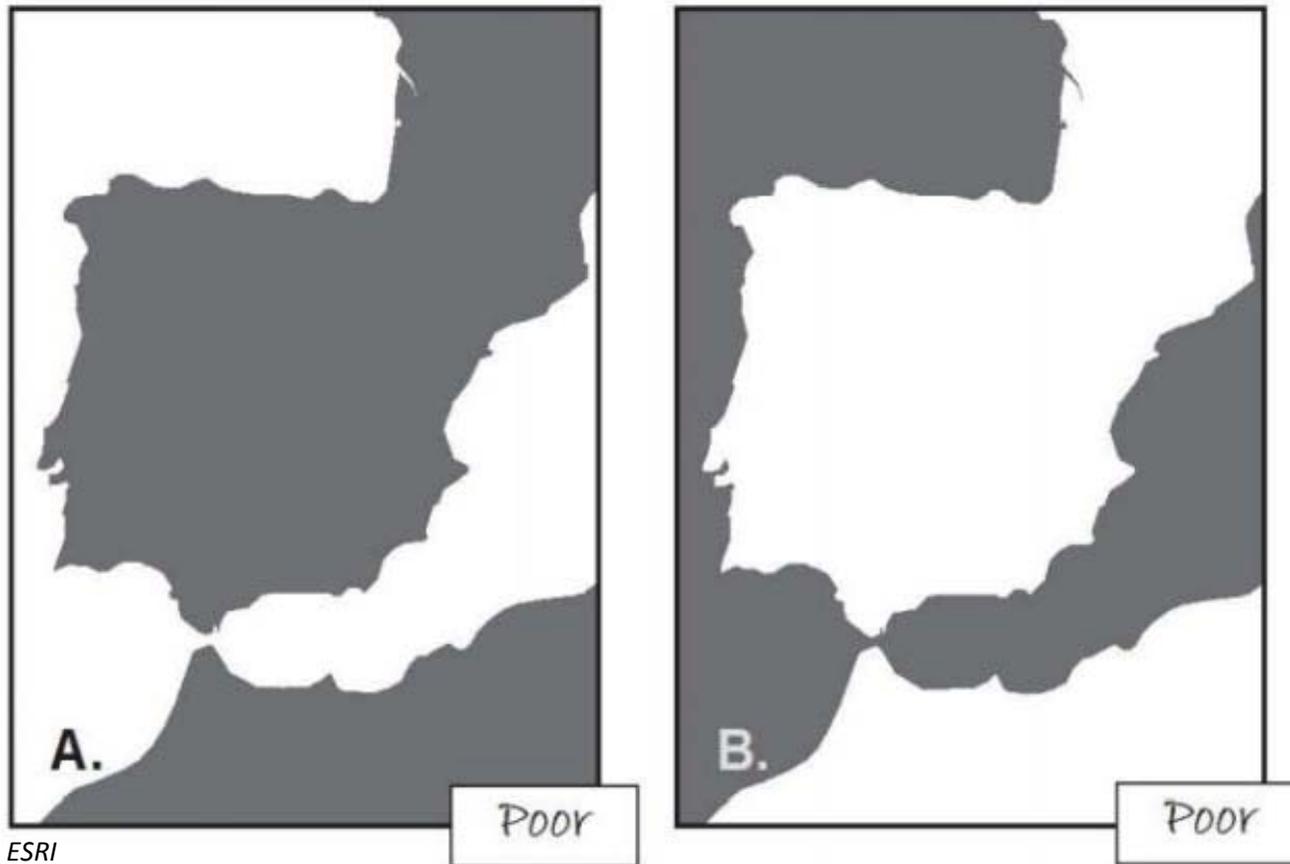
# Orientation symbols

- Should be simple and subtle, not attract attention
- Only North *needs* to be indicated
- Compound North arrows should be reserved for navigation with compass



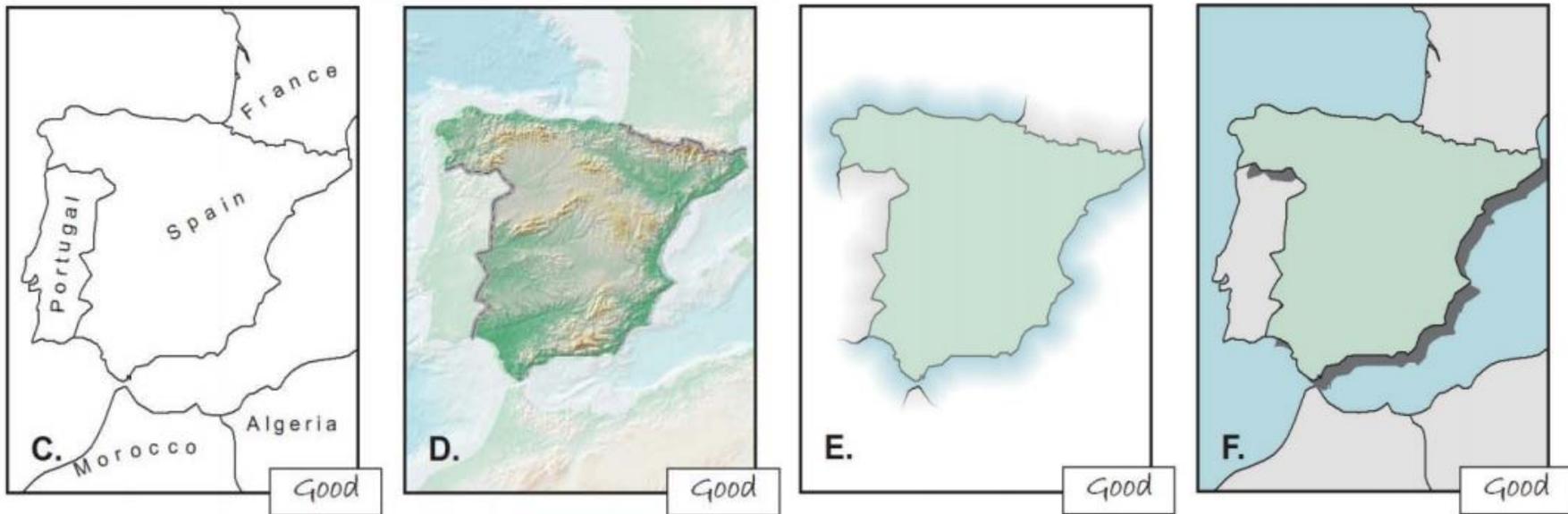
# Figure-Ground Relationships

*Easily distinguish between the main figure on the map and the background*



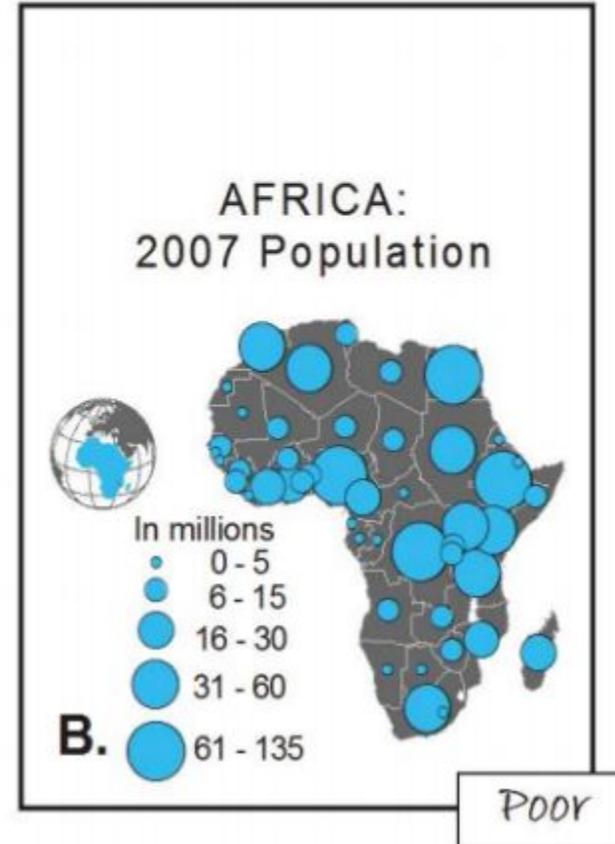
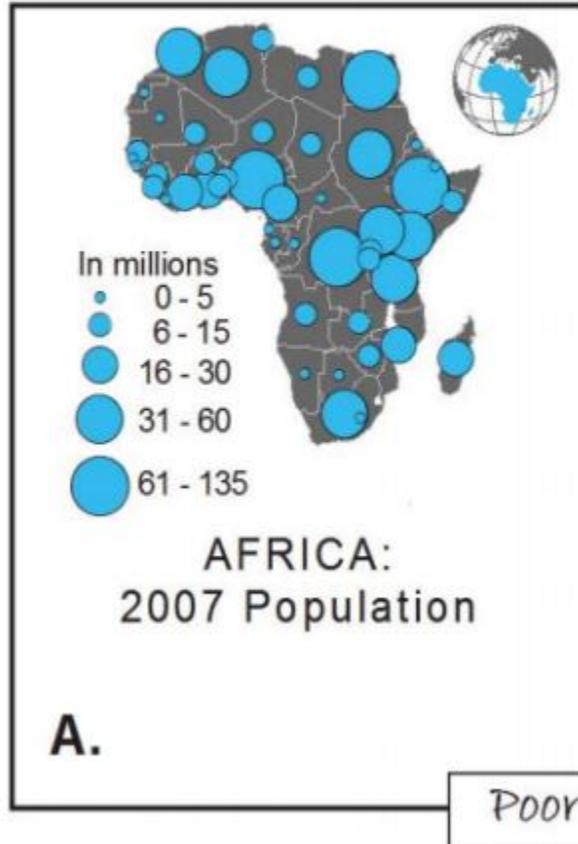
Source: Aileen Buckley, ESRI

# Figure-Ground, Improved

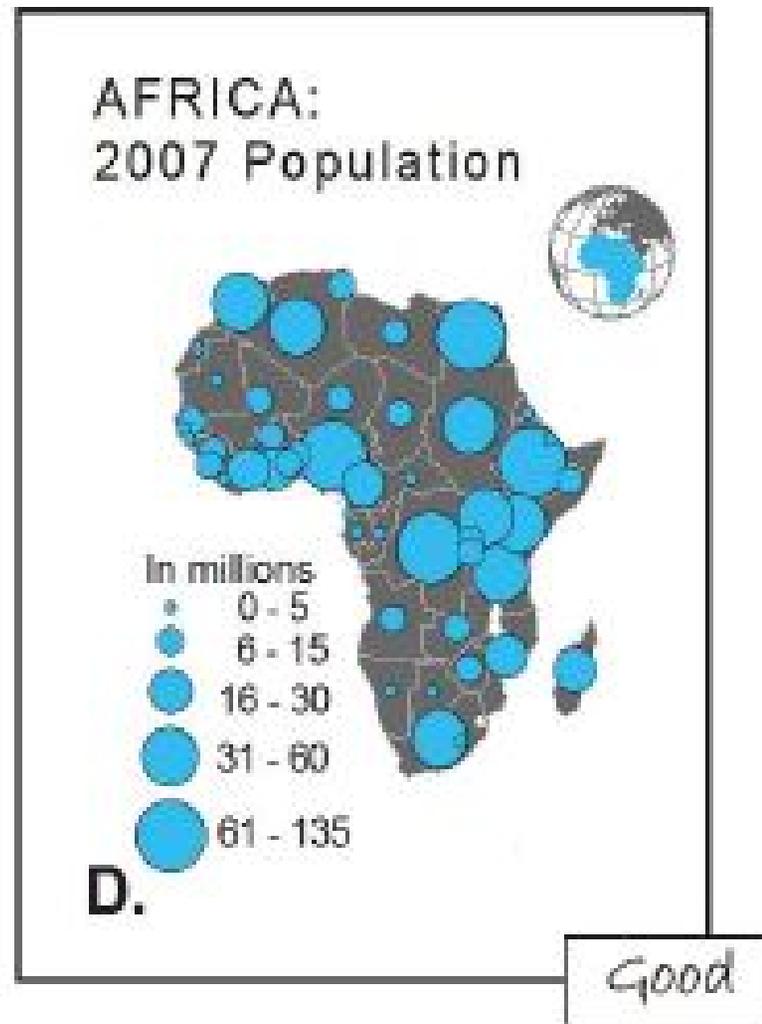
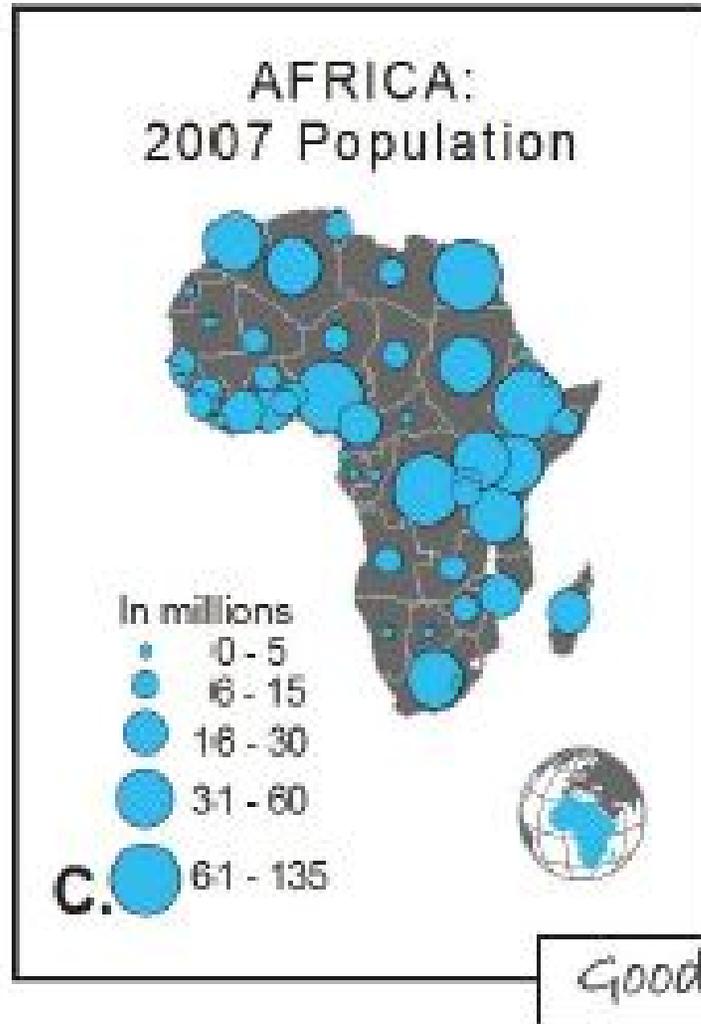


# Balance

*Organization of the map and other elements on the page layout*



# Balance



# Balance Guidelines

- Centrally located elements have less weight than those to one side
- Objects in the upper half appear heavier than those in the lower half
- Objects on the right side appear heavier than those on the left side
- Weight appears to increase with increasing distance from the center
- Isolated elements have more weight than grouped elements
- Larger elements have greater visual weight
- Red is heavier than blue
- Bright colors are heavier than dark
- Regular shapes seem heavier than irregular shapes
- Compact shapes have more visual weight than unordered, diffuse shapes
- Forms with a vertical orientation seem heavier than oblique forms

- Arnheim, 1969