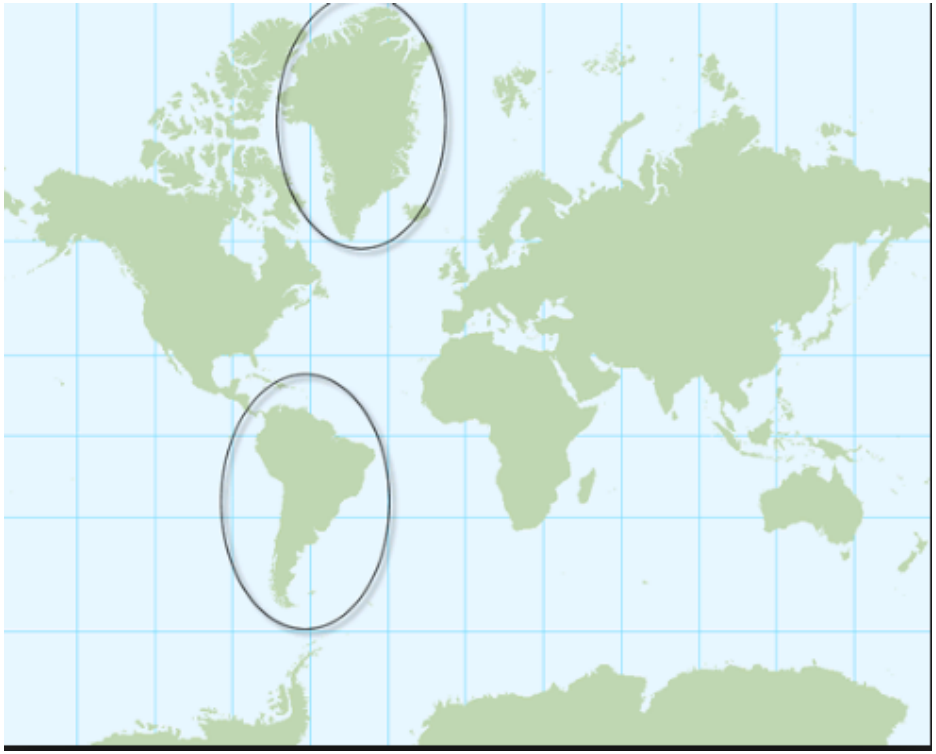
Geographer’s Tools

Globes

- Accurate shape of the Earth
- Shows distances correctly
- Not portable and does not show much detail.

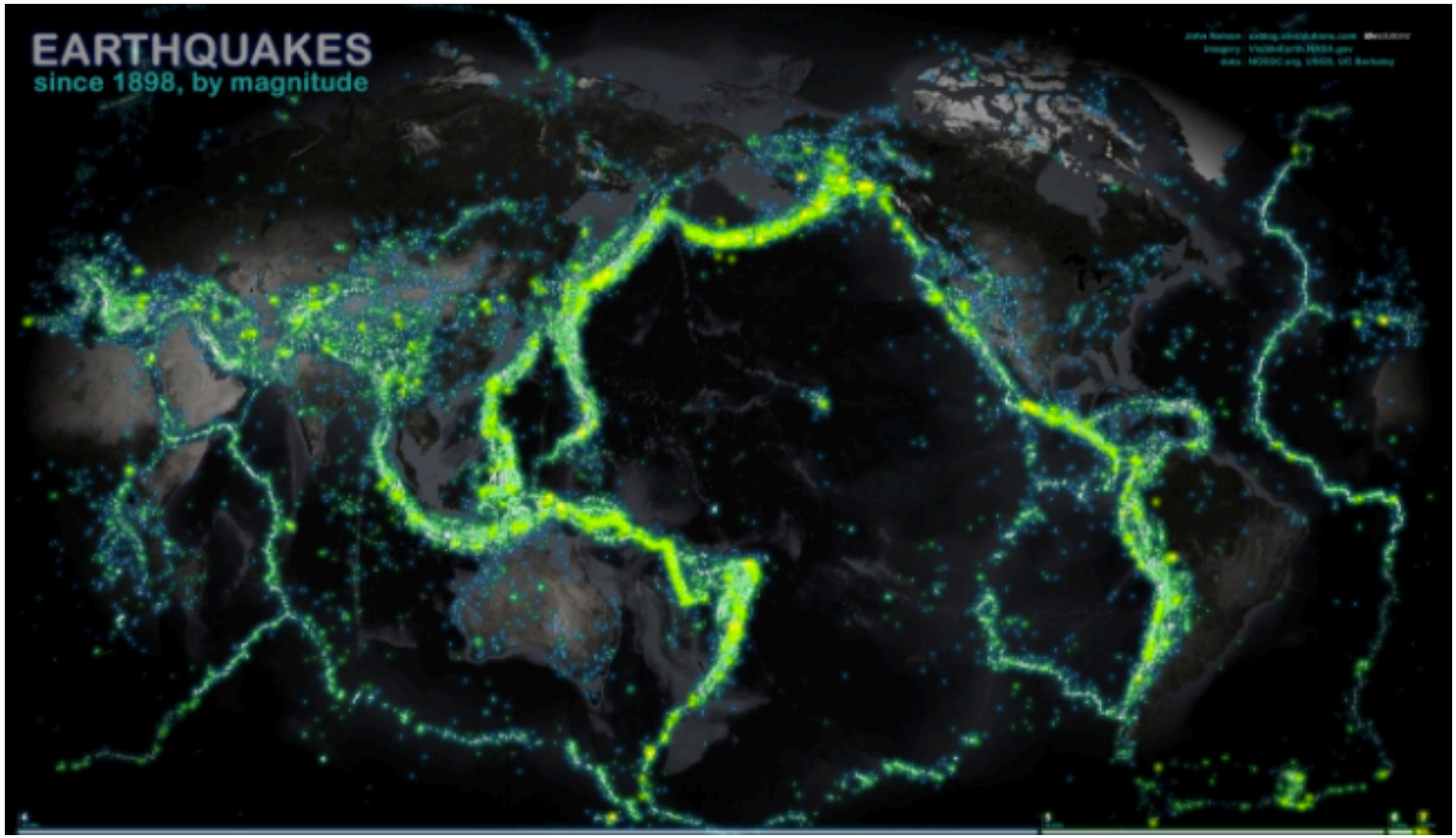
Distortion

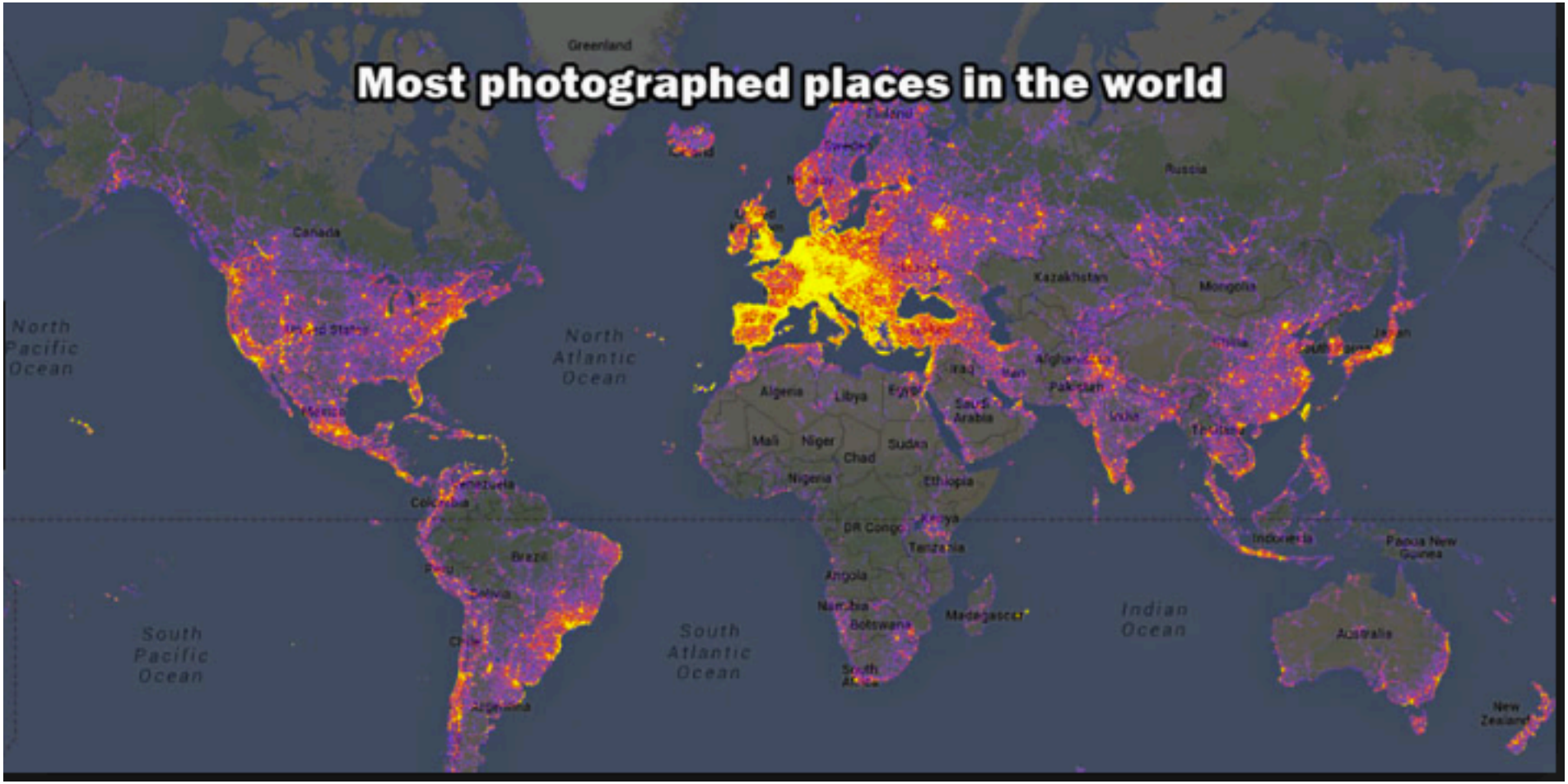
- Maps represent a round earth on a flat surface. The physical reality is incorrect. The map might represent the shapes or distances incorrectly.

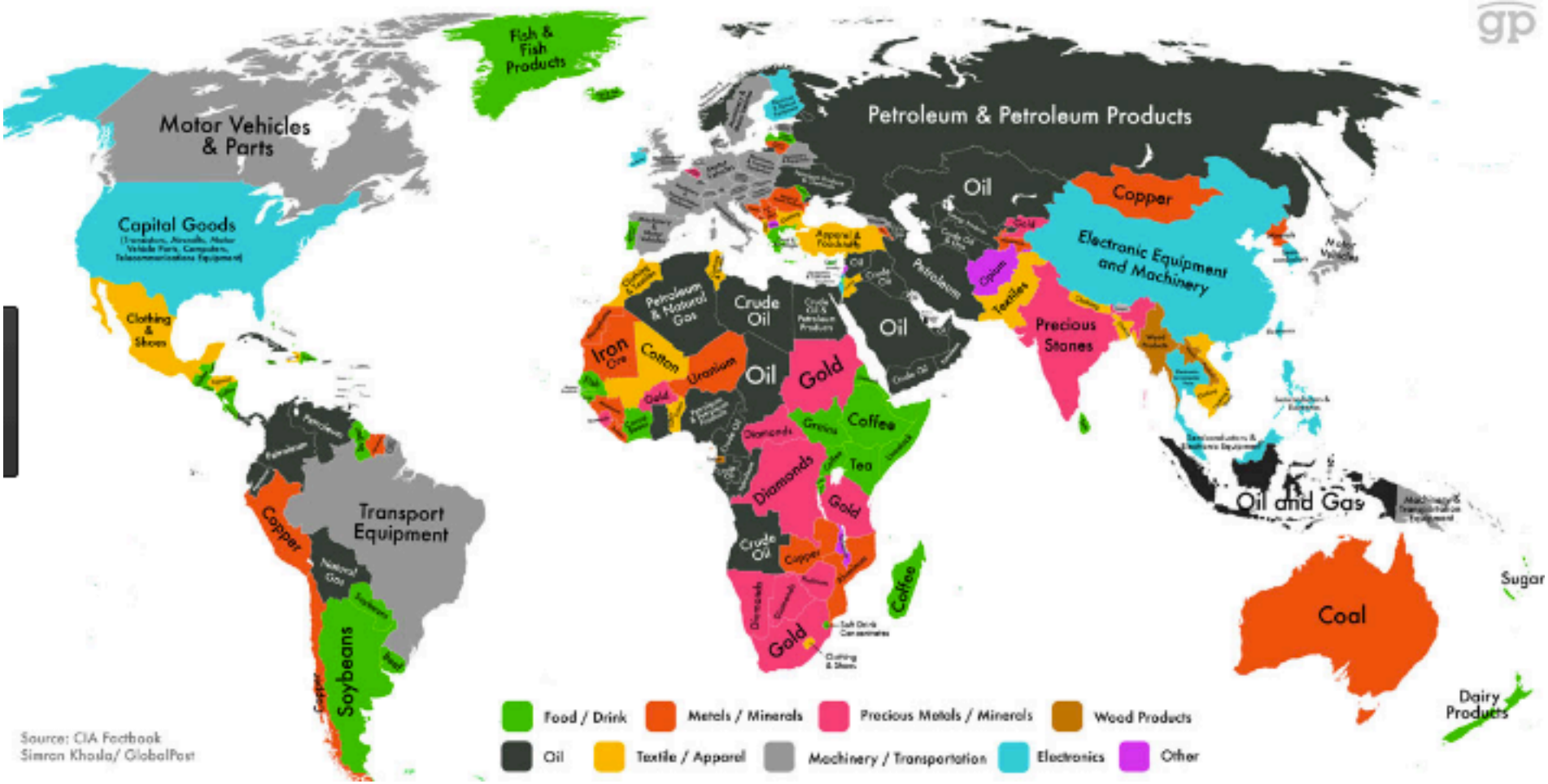


Maps

- Show small details about our Earth
- Portable, and easy to use




Most photographed places in the world
Greenland
Russia
Canada
North Pacific Ocean
North Atlantic Ocean
Kazakhstan
Mongolia
Algeria
Libya
Mali
Niger
Chad
Sudan
Nigeria
Ethiopia
Tanzania
Angola
Namibia
Botswana
Madagascar
Brazil
Peru
Bolivia
Chile
Colombia
Venezuela
South Pacific Ocean
South Atlantic Ocean
Indian Ocean
Australia
Indonesia
Papua New Guinea
New Zealand

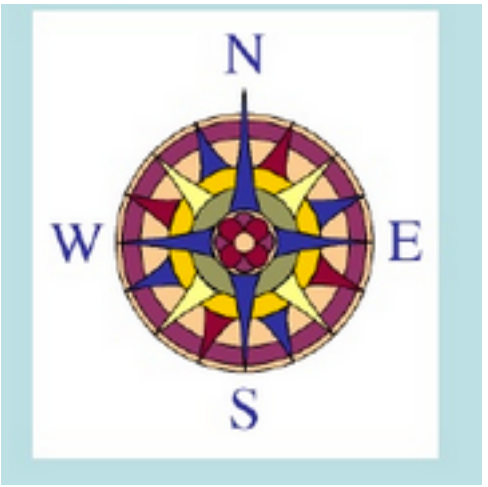

Fish & Fish Products
Motor Vehicles & Parts
Capital Goods
Clothing & Shoes
Petroleum & Petroleum Products
Oil
Copper
Electronic Equipment and Machinery
Textiles
Precious Stones
Petroleum & Natural Gas
Crude Oil
Iron Ore
Cotton
Uranium
Gold
Coffee
Tea
Diamonds
Oil and Gas
Transport Equipment
Soybeans
Coal
Sugar
Dairy Products
Food / Drink
Metals / Minerals
Precious Metals / Minerals
Wood Products
Oil
Textile / Apparel
Machinery / Transportation
Electronics
Other
Source: CIA Factbook
Simran Khosla/ GlobalPost

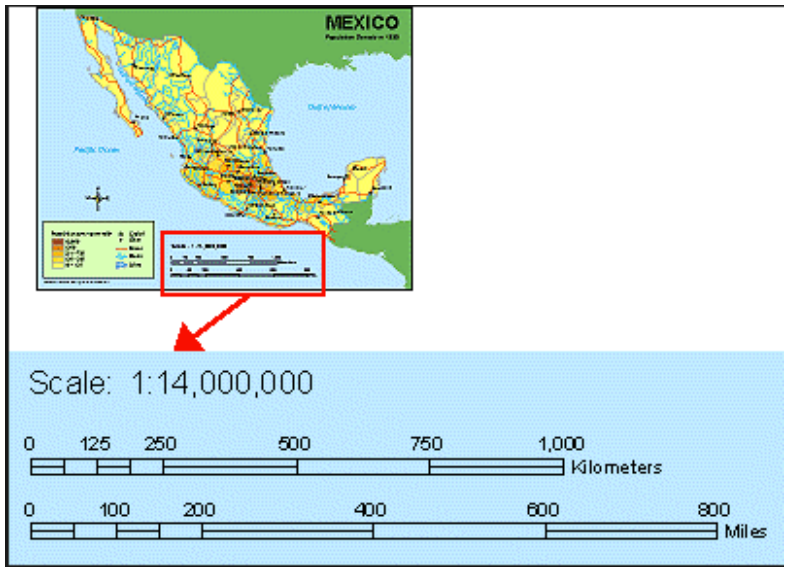

JAMES WINTZ GROUP
WHERE THE BRIBES ARE
Penalties in U.S. Government FCPA Cases Since 1977
SECTORS
All Sectors
Energy
Manufacturing
Defense & Aero
Consulting, Misc.
Health & Pharma
Telecomm.
Agriculture
Infrastracture
ABOUT
All Cases
FCPA Penalty Amounts by Country
$0
$1.70 Billion
The darker red a country is, the higher the FCPA penalties paid for activities there.


A THRILLSEEKERS GUIDE TO SIX FLAGS FIESTA TEXAS!
Lone Star Spectacular
Rockville!
CRACKERJAK CANYON
FIESTA BAY
Spassburg
American Parade Grounds
The Ol' Waterin' Hole
Six Flags
Fiesta Texas
PARK ENTRANCE
Sports, Swim and Kiddie Pools
MAP LEGEND
Health Services/First Aid
ATM
Hospitality Center
Lockers
Guest Relations
Restrooms/Water Fountains/Public Telephones
Mother's House
Stroller and Wheelchair Rentals
Season Pass Redemption Center

Parts of a Map

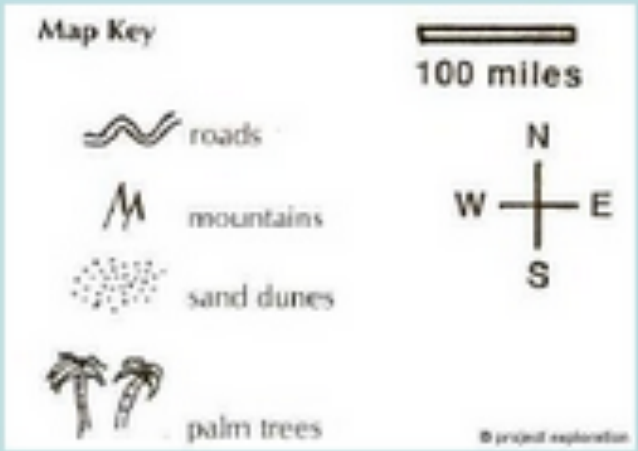
- Title
- Compass Rose
- Key (legend)
- Scale





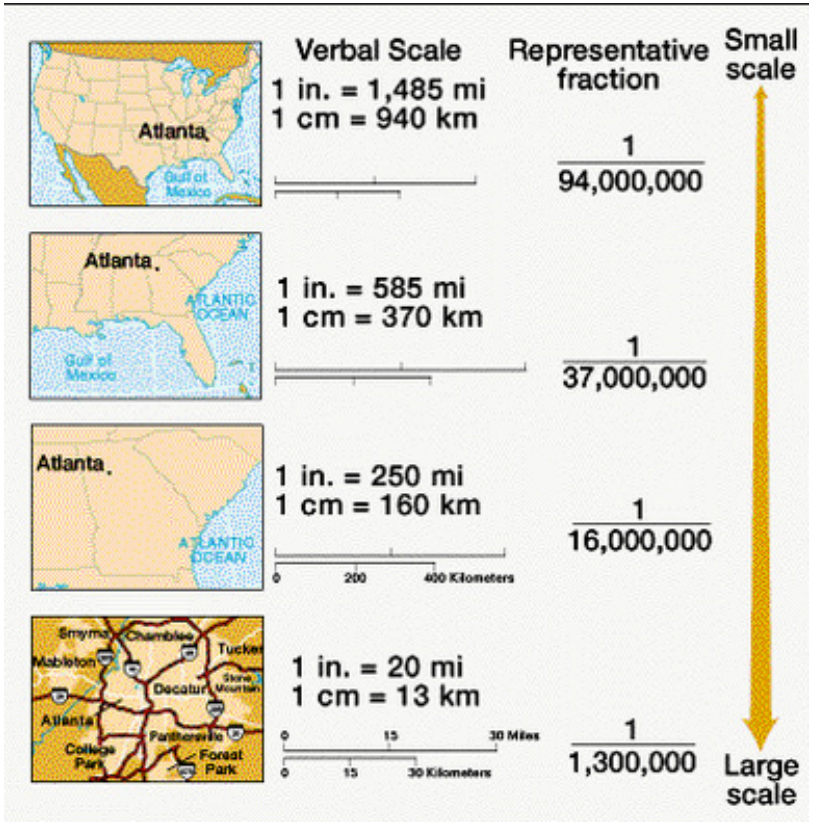
Map Key or Legend

- The objects on a map are represented using **symbols**. A symbol is a picture on the map that represents something in the real world. Maps use a **key**, or **legend** to explain the meaning of each of the symbols used in the map. These keys usually show a small picture of each of the symbols used on the map, along with a written description of the meaning of each of these symbols.



Scale

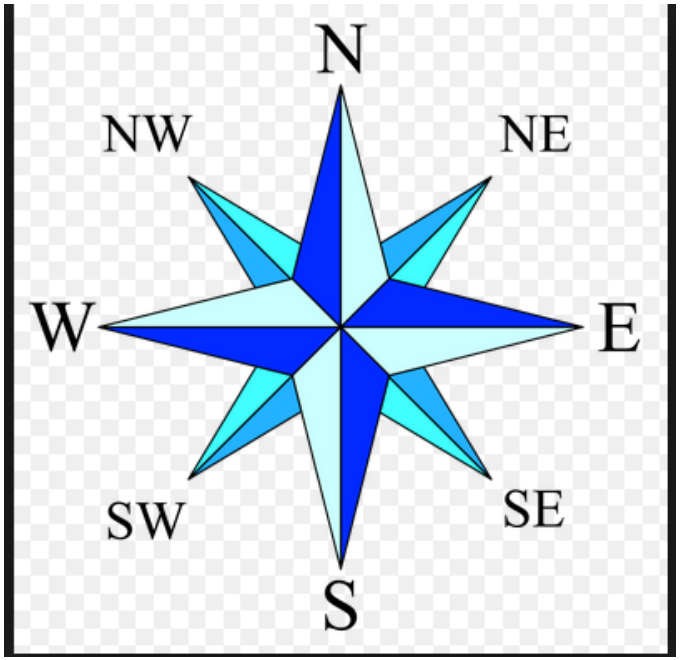
Bar Scale

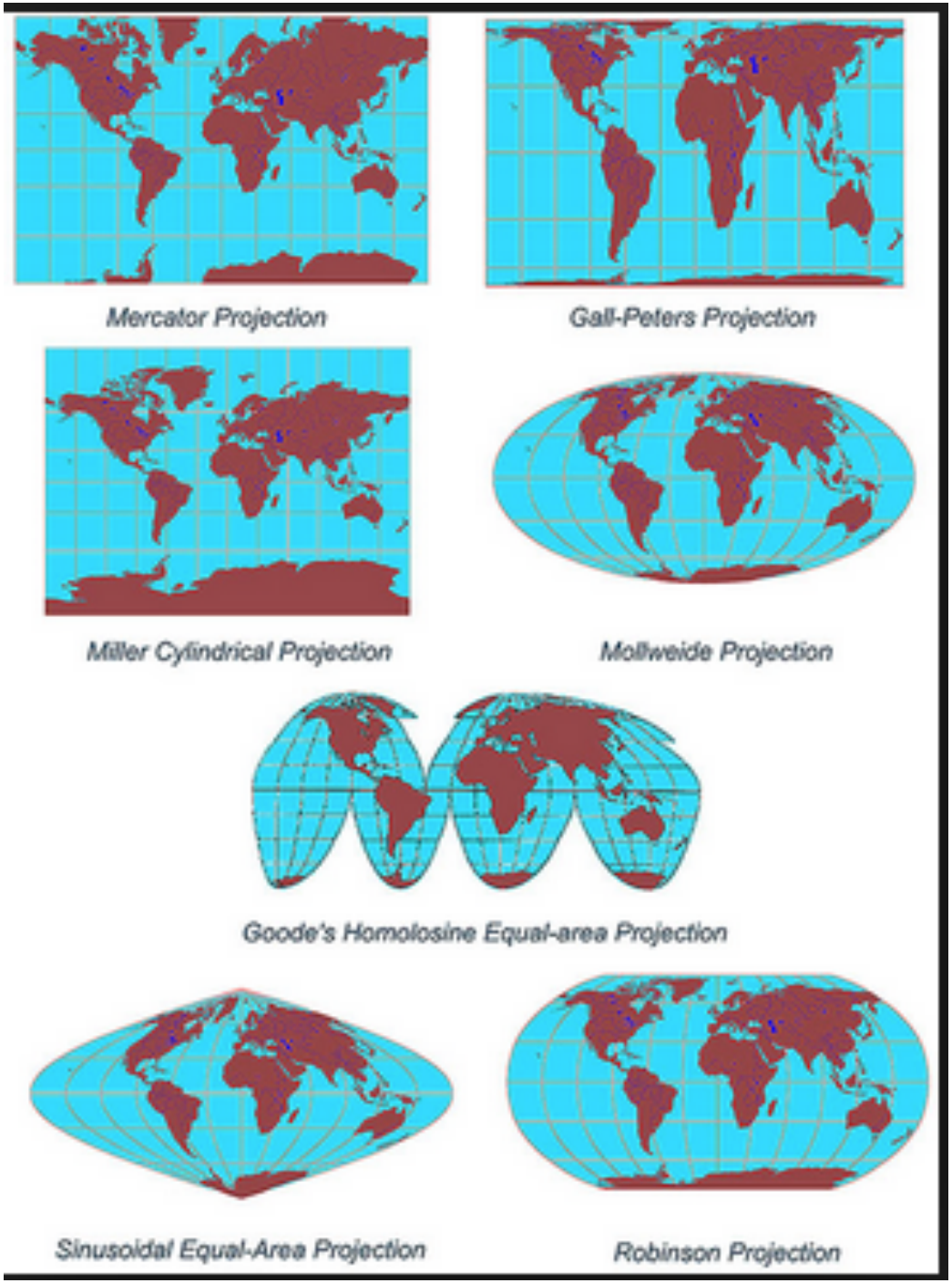


a ratio which compares a measurement on a map to the actual distance between locations identified on the map

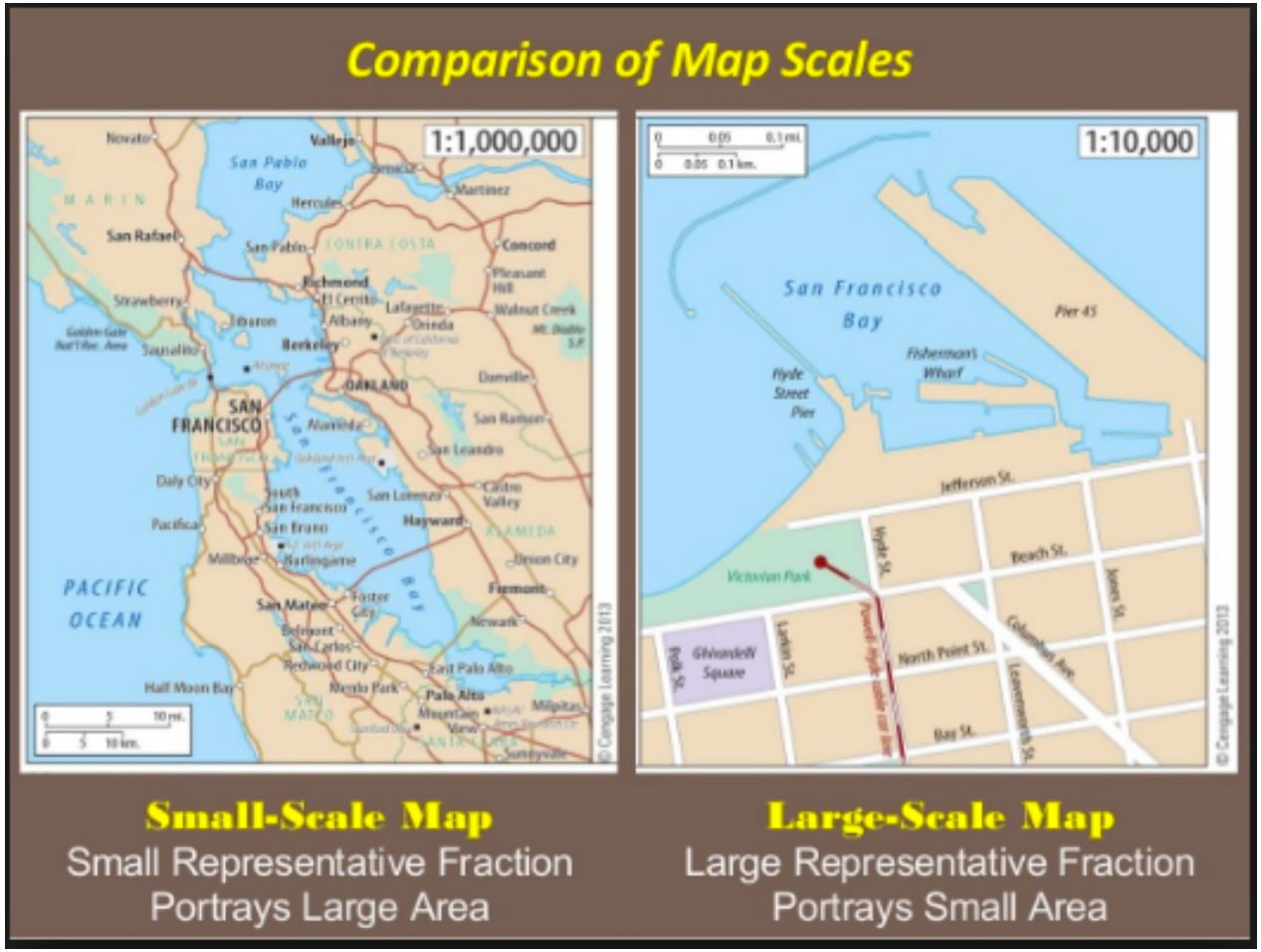
Compass Rose

- Shows the cardinal and intermediate directions on a map.
- Cardinal: North, South, East, and West
- Intermediate: NE, SE, NW, SW
- North and South always!




Mercator Projection
Gall-Peters Projection
Miller Cylindrical Projection
Mollweide Projection
Goode's Homolosine Equal-area Projection
Sinusoidal Equal-Area Projection
Robinson Projection

Small and Large Scale Maps

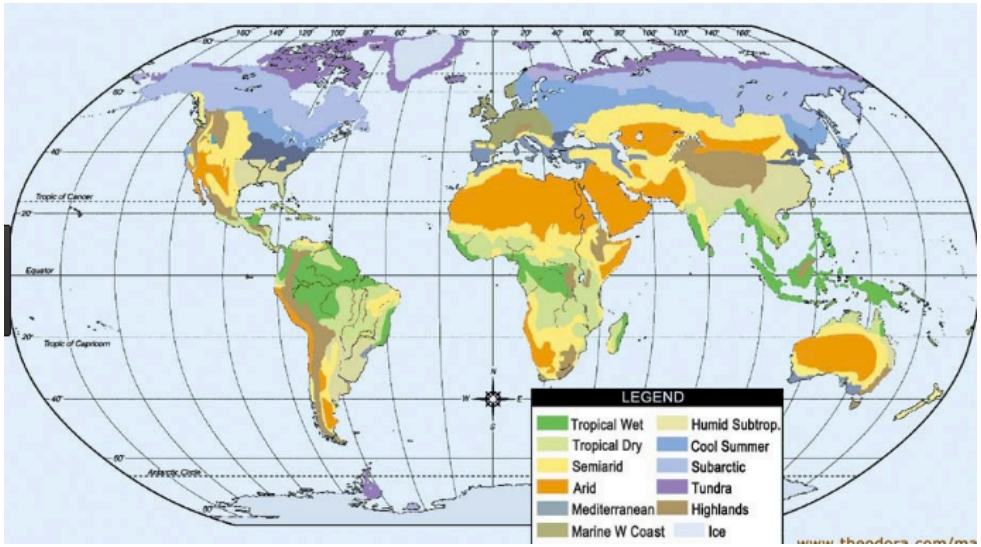


Types of Maps

- **<u>General Purpose:</u>** Show human and physical features. Examples: Political (shows countries and states) and Physical (shows landforms) Maps

Thematic Maps "theme"

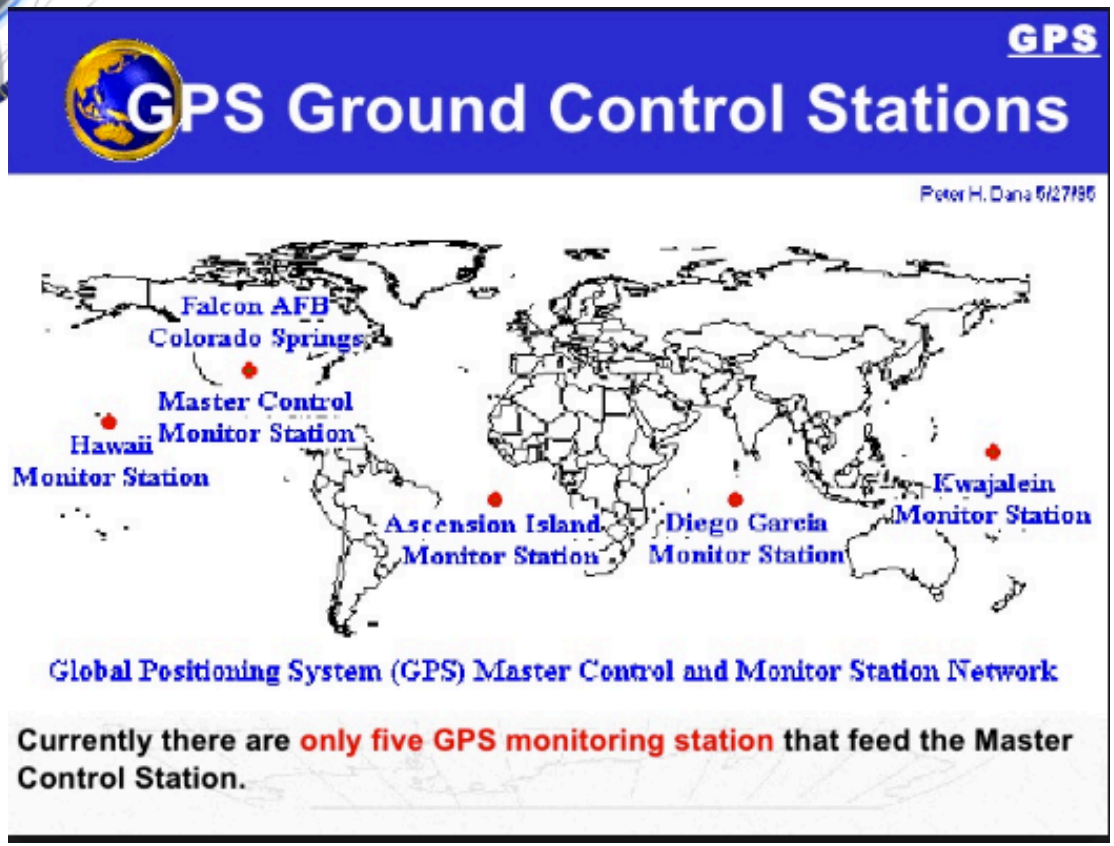
- Special maps with many different kinds of information.
- Examples: Climate, Vegetation, land use…
- Look at the atlas at your desk for examples.

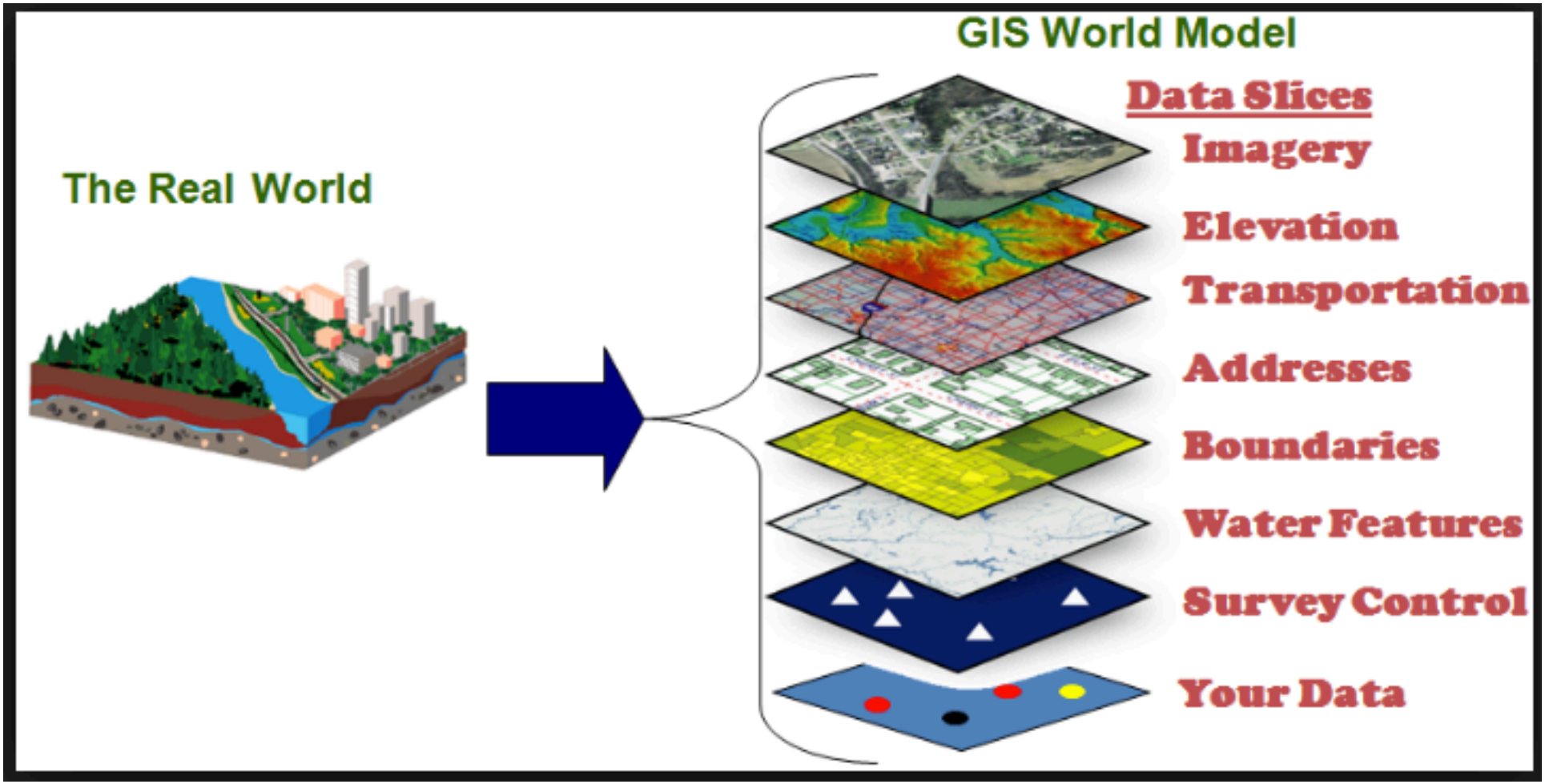


Geospatial Technologies

- Technology that helps humans gather information about the human and physical environment.
- Examples:
  - Global Positioning System (system of system of satellites, control system, and devices) to identify exact location of places on Earth.
  - Geographic Information Systems: a combo of hardware and software to gather, store, and analyze geographic information.
  - Remote Sensing: satellite sensors all over the Earth used to collect data


4.8
Exit 3: M271 (A3057/Romsey)
M3
94
Arrival
8:49
Speed
63
70
GARMIN nüvi


GPS
GPS Ground Control Stations
Peter H. Dana 6/27/95
Falcon AFB
Colorado Springs
Master Control
Monitor Station
Hawaii
Monitor Station
Ascension Island
Monitor Station
Diego Garcia
Monitor Station
Kwajalein
Monitor Station
Global Positioning System (GPS) Master Control and Monitor Station Network
Currently there are only five GPS monitoring station that feed the Master Control Station.


GIS World Model
The Real World
Data Slices
Imagery
Elevation
Transportation
Addresses
Boundaries
Water Features
Survey Control
Your Data